

Sl. no. 6

PART I

**DOCUMENTATION AND PROVISION
OF GUIDELINES
FOR DADAR PARSI COLONY,
MATUNGA CENTRAL,
HINDU COLONY
AND
KHODADAD CIRCLE PRECINCT**

SUBMITTED TO
MUMBAI METROPOLITAN REGIONAL HERITAGE COMMITTEE

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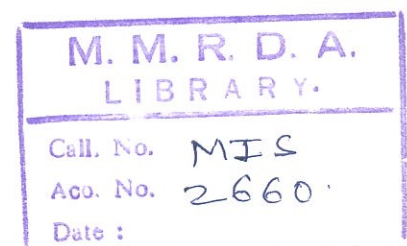
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BACKGROUND AND INTENTIONS

On June 1st 1995 the Development Control Regulation No. 67 regarding conservation of listed buildings, areas, artefacts, structures and precincts of historical, aesthetic, architectural and cultural value, came into force.

As per this regulation, Five Gardens and some area around came under the Heritage Grade III regulation, which encompasses buildings and precincts of importance for 'townscape, architectural aesthetic or sociological interest. A larger area around it was also proposed to come under this regulation, for which, however the boundaries were not set. This was done to arrest further physical deterioration of the precinct. It was understood that the urban design tools and mechanisms, which controlled the development of the precinct, needed to be reviewed and re-framed to protect and preserve the 'unique features and attributes' and also stop ongoing deterioration of the physical form.

At the outset we should recognise that this is a residential area which is composed of a physical fabric (comprising of domestic buildings and institutions) and the inhabitants. A study for conserving the precinct should include both these aspects.

This phase of the study would focus on identifying and documenting certain aspects which determine, control and influence the physical form and the community.

The study will be in five parts, the first four parts concentrate on the physical fabric, its rupture and the causes for it. The precinct will be mapped for various parameters, which will be indicative of the disruptive transformations.

1. The initial part will delineate the area of study and analyse its relationship with the city in relation to location and its linkages. The effect of these and city landuse policy on the activity of the area will also be established.
2. Historically this area was plotted and sold to various owners. However the patterns of ownership has changed bringing in a lot of changes in the precinct which would be established.
3. The next part would zoom into the physical characteristics of the precinct. It would deal with bylaws that govern the physical form and the nature of the physical fabric itself. However it will mainly confine itself to the study of the domestic fabric.
4. The urban spaces with there activities will be studied in this part.
5. The last part of the study will deal with understanding of the community, its perception and its structure.

The findings of the above could be used to come to conclusions, from where strategies to formulate guidelines could be derived.

2

RELATION WITH THE CITY

2.1 THE DIALOGUE WITH THE CITY

Built in pre-independent India, this area formed a part of the suburban developments for the working middle class population. It was primarily a plotted residential scheme with institutional and commercial developments for the residents. It was modelled on the paradigm of the garden suburb in Britain, (fig1) making it a tranquil, residential neighbourhood. The urban fabric of this neighbourhood consists of low-rise low density developments with tree-lined streets, public gardens and urban squares which form a significant core. As the suburban developments have moved northward, this area has come within limits of the inner core of Mumbai (plate 1). This has led towards a number of contradictions to its earlier nature :

1. In case of movement systems, this area from being a terminal point, has transformed to an active suburban interchange. It is situated near Dadar station, the interchange for the suburban railways. The North-South traffic corridor Dr. Baba Saheb Ambedkar road cuts across the precinct. The inter-cities bus and taxi terminus, are also situated near this precinct (fig 2).
2. The land prices in this area have shown significant increase and it is one of the highly priced residential areas now. This pressure of increased land prices, which spurs development, has been one of the prime causes of transforming the urban fabric. The increased land prices have also shown significant difference in the community patterns, where from being a middle class precinct with community distinctions, it has now transformed to an elite precinct with overlapping and blurred edges.
3. Owing to changes in the dialogue of this precinct with the rest of the city, the urban spaces, which were used by the neighbourhood, have become identifiable spaces for the city. Presently, spaces like Khodadad Circle and Five Gardens form an important part in the memory of the citizens. Neighbourhoods like Parsi Colony and Hindu Colony are often quoted as models for healthy community living.

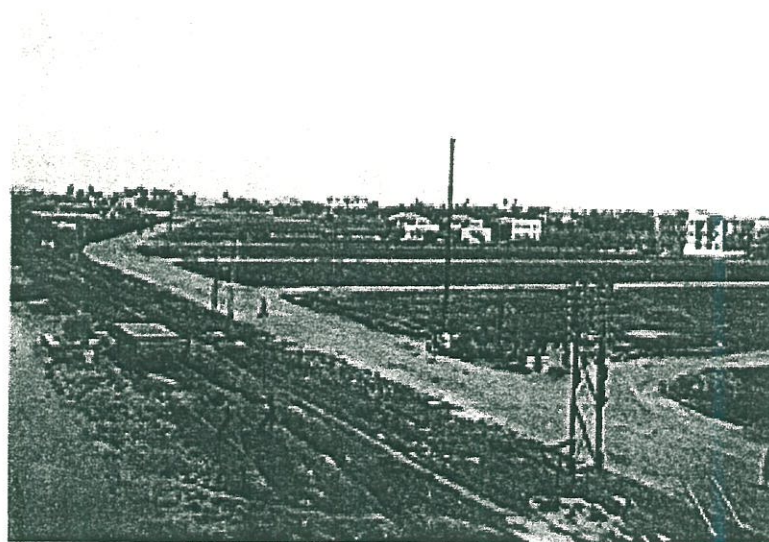


fig1

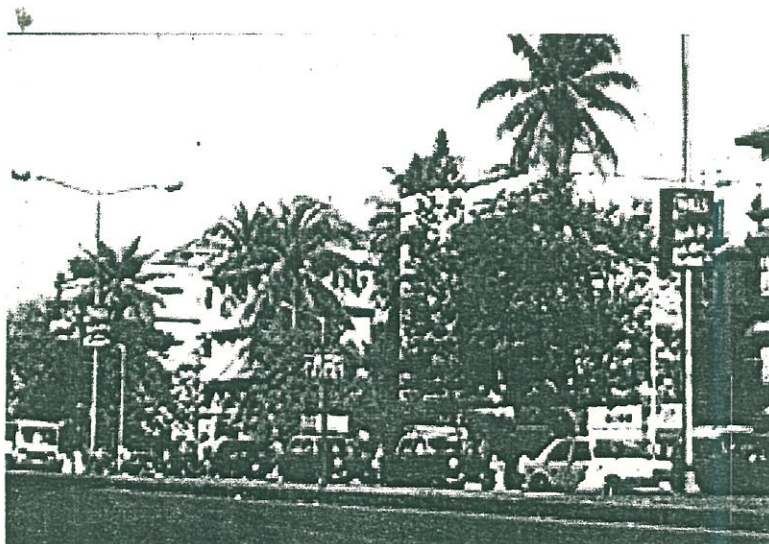
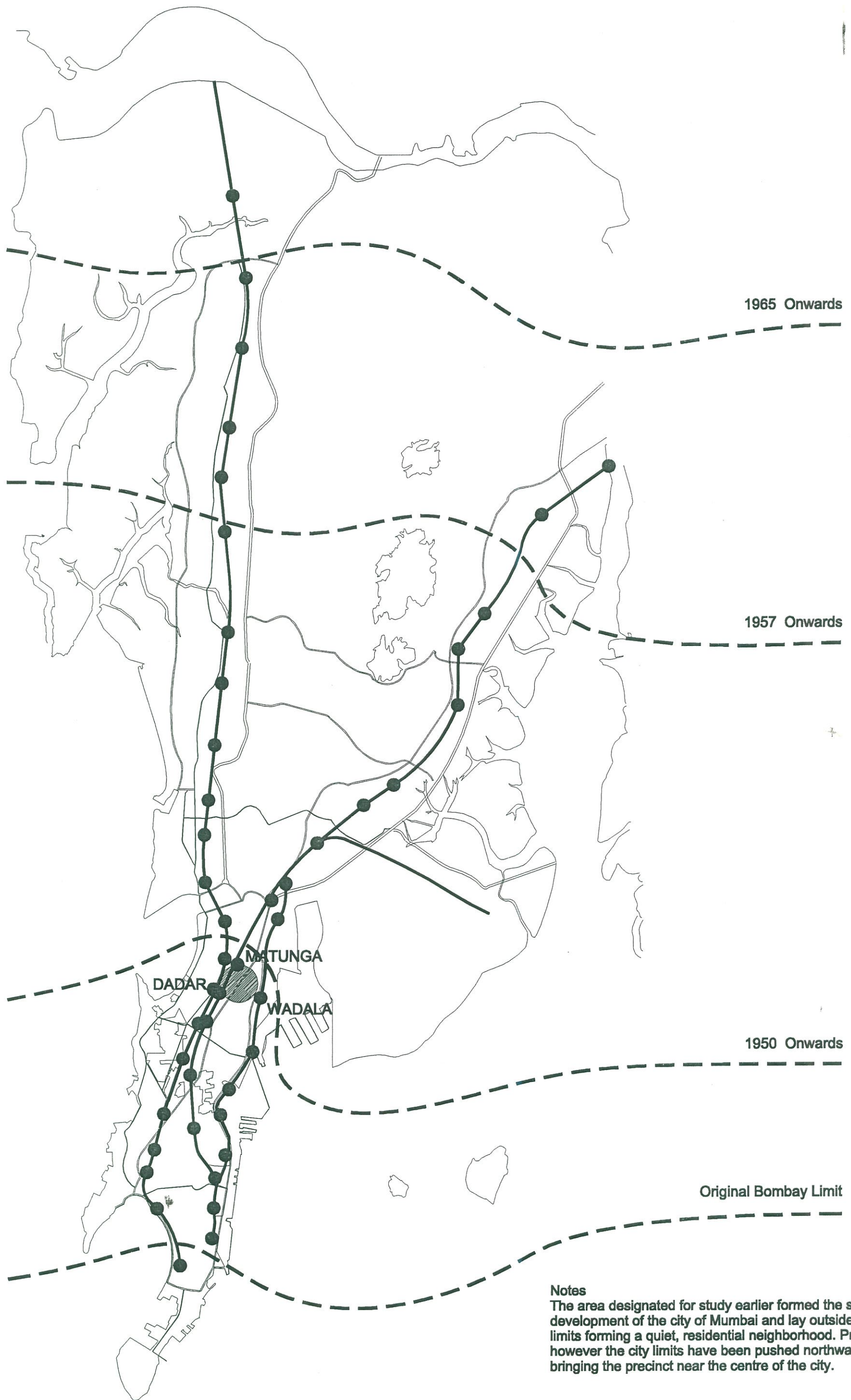


fig 2



Notes
 The area designated for study earlier formed the suburban development of the city of Mumbai and lay outside city limits forming a quiet, residential neighborhood. Presently, however the city limits have been pushed northward, thus bringing the precinct near the centre of the city.

Source of base map: Correa Charles, The New Landscape, Strand Books, (1985)



LOCATION

2.2 DELINEATION OF THE PRECINCT

Initially an area of study had to be delineated. The delineation has been done on the basis of the following criteria:

1. This area was planned as a part of a larger suburban development by the Bombay Improvement Trust between 1898 – 1900. This particular town-planning scheme was known as the Matunga Scheme V (appendix 1). At that time the plots were sold to various trusts, organisations and individual owners. Thus, within the delineated boundary, the precinct presently displays some homogeneity and interconnections in terms of built-form, ownership patterns and activities (plate 2).
2. Within, and skirting the precinct, are a number of urban spaces like Khodadad Circle, Dadar Station, Maheshwari Udyan, Five Gardens, Ruia-Poddar College and Matunga Station., which form a series of interconnected activity areas for the neighbourhood, giving it a distinct identity and holding the area together as one precinct. Thus an analysis should include these spaces and adjacent residential areas which affect it.
3. The delineation is further determined by the major movement systems, which segregate the precinct from the rest of the area viz. the central railway line on the west and the Matunga and Katrak road on the east.

However the precinct displays a lot of heterogeneity within it in terms of activity and community organisation. This makes a case to further define sub-precincts within the main boundaries.

Sub precincts could be identified on the basis of the following criteria:

1. The urban spaces show a marked difference in terms of their activities, built-form and thus need to be analysed separately from the surrounding residential areas. Each of these urban spaces could be treated as a sub-precinct.
2. The residential areas exhibit different levels of community organisations and thus need to be separated from each other (plate 3). This is primarily because individuals or trusts, representing a particular community bought the plots in the area. These areas formed homogeneous groups. The groups were subsequently separated by movement lines.



fig3



Notes

The delineation of the precinct is as per the town planning scheme, Scheme No. 5, of the Bombay Improvement Trust. It is held by the Central railway line on the west, Katrak road and Matunga road on the east, important urban spaces like the Maheshwari Udyan on the north and Khodadad circle on the south.



DELINEATION



Notes

The precinct shows a distinct community structure which can be broadly classified into five groups, which for the purpose of the study have been designated as Parsi Colony North, Parsi Colony South, Hindu Colony, Matunga South and Matunga North.

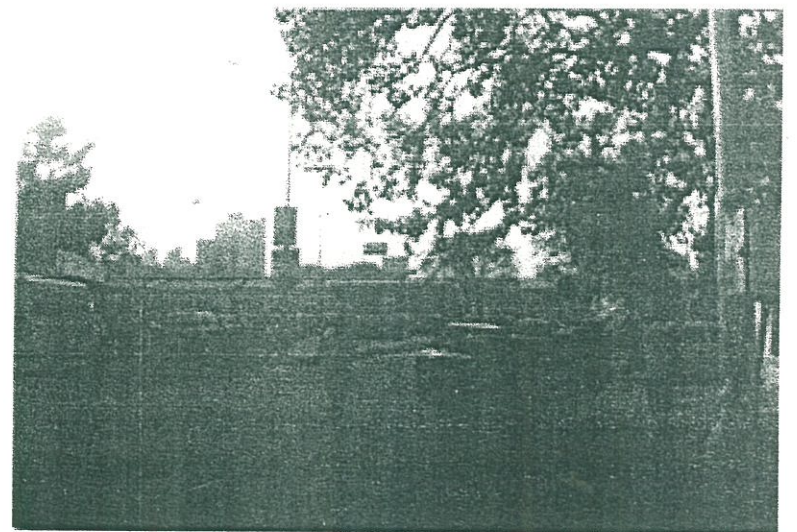


fig 4

2.3 MOVEMENT PATTERNS

Over the years this precinct has increased its connectivity with the city. The Dr. Baba Saheb Ambedkar road, which is the largest north south corridor, runs through this precinct. (fig 2). Along with this corridor, there are other subsidiary streets in the precinct, like the Laxmi Nappoo road and the Lady Jehangir road on which thoroughfare traffic move. Some of this thoroughfare movement disturbs the residential nature of the precinct. To add to this, there is traffic originating from the precinct due to a high vehicle ownership (plate 4).

(The precinct has a strong network of public transport system served by two suburban railway stations, Dadar and Matunga . The Dadar station forms an interchange between the Central and Western suburban railway line (fig 4). The precinct is well served by public bus routes. The whole precinct is within walking distance of these systems)(plate 5).

(The pedestrian traffic in this precinct originates from the station to the various educational institutes that are there (plate 6).)

PCU / HOUR LINE THICKNESS

7000



4500



3000



2000



1000



MATUNGA STATION
6000 PASSENGERS
(0830 - 1130 HRS)

DADAR STATION
22000 PASSENGERS
(0830 - 1130 HRS.)

KING'S CIRCLE

WADALA JUNCTION

BHALCHANDRA ROAD
BABASAHEB AMBEDKAR ROAD
JAME JAMSHEDJI ROAD

MANCHERJI JOSHI ROAD
ADENWALA ROAD

LADY JEHANGIR ROAD
NATHALAL PAREKH MARG
KIDWAI MARG (EAST)

ISLAND FREEWAY

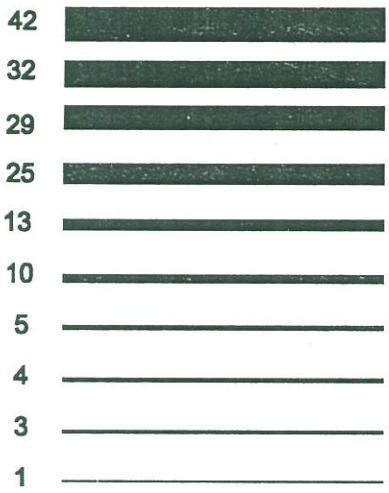
Notes
Babasaheb Ambedkar Road is a major North-South transport corridor
Subsidiary roads like Laxmi Nappoo Road, Lady Jehangir Road, Bhalchandra Road
and Telang Road act as thoroughfares disrupting the residential character of the precinct.



VOLUMES OF TRAFFIC

NO. OF
BUS ROUTES

LINE
THICKNESS



● BUS-STOP



Notes

The plate indicates the 4 stations, bus stops, bus routes in the precinct. The BEST bus routes shown in the plan reveals that Babasaheb Ambedkar Road is the main arterial road for central Mumbai. Along with these city level routes there are other routes that serve the site and are directed towards the institutional and public zones of the precinct. The four railway stations and the major N-S corridor act as important city connectors relegating the southern edge of the site as an important transport interchange.



PUBLIC TRANSPORT SYSTEMS



Notes

The pattern of pedestrian movement indicates critical points from where movement within the precinct begins or terminates and the paths that are followed. The residential areas, the institutional, public areas and Dadar station, Matunga station and King circle station are the primary points from where movement is generated or at which it terminates.



PEDESTRIAN MOVEMENT

2.4 THE LAND USE POLICY

A break-up of the land use as envisaged by the initial plan is shown (plate 7). It shows the residential areas, mixed-use areas, commercial zones, institutional zones and open spaces. However there are various changes observed in land use due to the following:

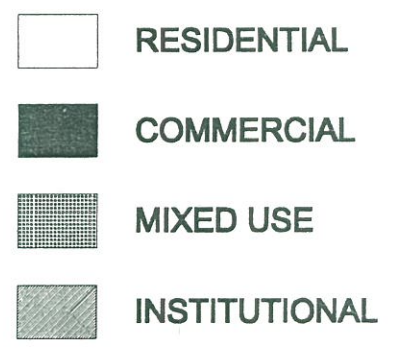
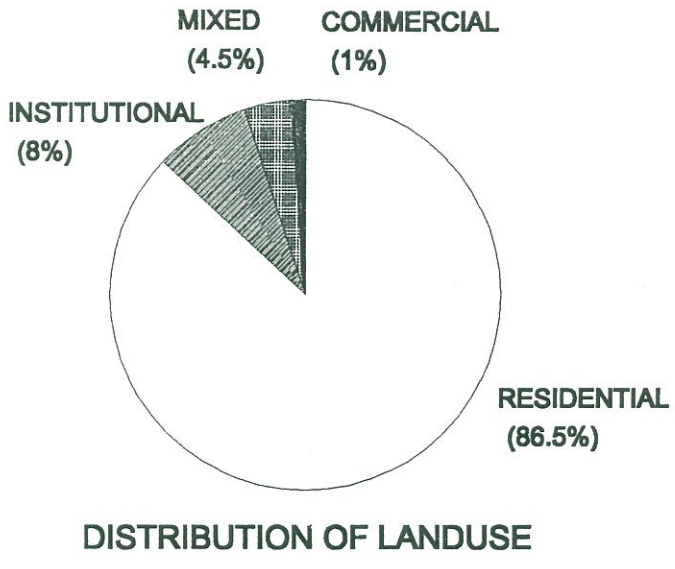
1. It has been seen that the precinct has changed its relationship with the city. This residential neighbourhood now lies near a busy interchange. This has brought some activities, like inter-city traffic interchange and hawking zones, (fig 5) which are contradictory to its residential nature (plate 8).
2. Also the precinct itself has seen changes within, like increase in car ownership and vehicles used by institutes. These changes have threatened the quality of life in the precinct (fig 6)
3. Changes in land use have occurred due to changes in city land use policy which allows professional offices in residential areas. Some pockets of residential neighbourhoods show this land use transformation. This has led to an increased requirement of parking.



fig 5



fig 6



Notes
 The overall landuse plan shows the original breakup of the landuse in the area according to residential, mixed use, commercial, institutional and open spaces.





Notes
 This plate shows incompatible land use patterns such as off-street parking of private cars and buses, taxi stands, hawking zones and an inter-city traffic interchange. These have taken shape due to factors such as the change in their relationship of the precinct to the city and due to increase in the vehicles owned by individuals and the institutions.



INCOMPATIBLE LOCATIONS OF LANDUSES

3

OWNERSHIP PATTERN

As per the town planning scheme the Bombay Improvement Trust prepared a Master Plan for the area. This area was called Matunga scheme 5 and was divided into 816 plots ranging from 300 sq m to 1000 sq. m. plot area. Initially some plots were developed by the government as institutions which served as incentives for attracting residential population. A number of residential plots were bought by private trusts, which were community based. These trusts developed charity housing and hostels on these plots for the respective communities. Individual owners from the same community preferred to buy and develop plots around their community trust owned plots. The trust also developed institutions like J.B. Vaccha school, IES school etc. as services for residents. The ownership pattern thus shows a distinct community based spatial organisation with certain pockets of the area owned by specific community like the Parsi community inhabited the eastern side of the Baba Saheb Ambedkar Road, a dominant Maharashtrian community existed on the southwestern corner of the precinct and a strong Tamil and Kutchi community occupied the northeastern corner (plate 9 & 3).

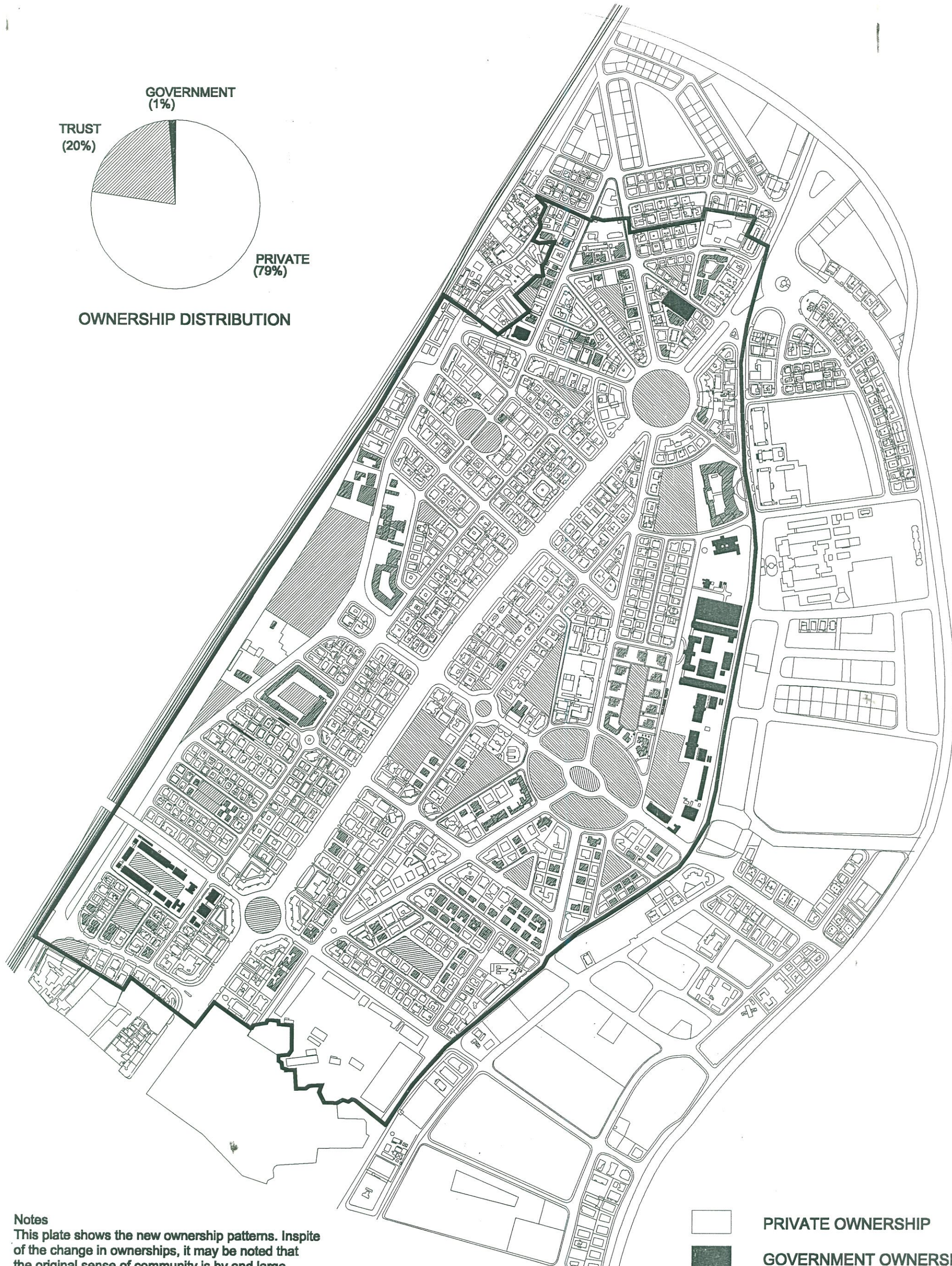
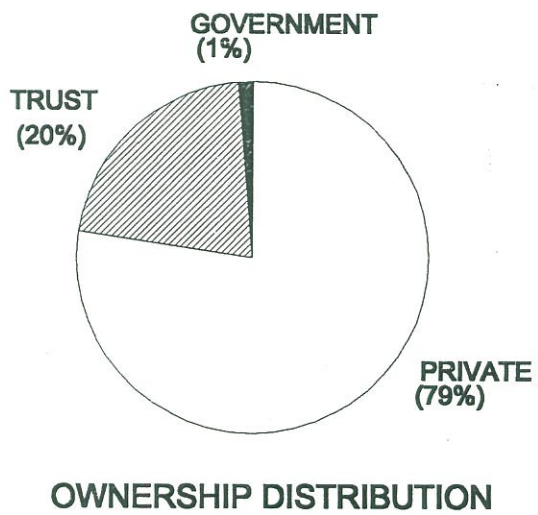
After independence, due to the precinct assuming a core location in the city, the pressures of increased land prices and possibilities of increasing developments through newer development rules, the ownerships have undergone changes with plots being sold over to real estate developers. Moreover some pockets may now exhibit a cosmopolitan nature of community organisation.

It will be seen later that change in ownership and building transformations exhibits a relationship.

It is also noted that in most cases where the is properties preserved, it belong to the government or to some community trust. This might indicate aspirations of individuals to transform their properties.



fig 7



Notes
 This plate shows the new ownership patterns. In spite of the change in ownerships, it may be noted that the original sense of community is by and large maintained except perhaps in the two areas of Matunga North and Matunga South. It was observed during the study that the trust properties and government owned properties remained unchanged, whereas most properties that had transformed belonged to individual owners.



OWNERSHIP PATTERNS

4.1 THE BUILDING BYLAWS

The initial building bylaws were framed by the Bombay Improvement Trust. These bylaws were local in nature and applied specifically to this precinct. They were based on ground coverage, building heights; front, side and rear open spaces. They reflected the Improvement Trust's approach to City planning, which used urban design tools that combined concerns of sanitation and infrastructure with those of a residential environment. However, each neighbourhood shows different and distinct character in their planning. The physical characters of each of these neighbourhoods are summed up in the appendix 3. The various indicators are the percentage of open spaces, roads, size of plots, ground coverage, and global F.S.I of the neighbourhood.

However Bombay Municipal Corporation took over the office of the B.I.T. and in 1964, along with the Development plan for Greater Bombay, the concept of F.S.I. was introduced. This led to an increase in permissible built area. The only consideration now was a blanket FSI of 1.33 and a minimum front; side and rear open spaces. This imposition of these abstract mechanisms to govern the urban form led to a rupture in the urban fabric and the character of this precinct, which was formed by building bylaws more specific to the precinct and sympathetic to its perceived needs.

A more recent bylaw is the Cess rule that allows an FSI as high as 2.5 in the case of Cess buildings, with very less set-back of building as stated in the (plate 10). This bylaw needs to be very critically analysed as it could lead to a complete rupture in the urban fabric of the precinct.

The change in the overall character of the precinct, due to new bylaws can be observed by the change in global F.S.I. The increased land prices overlapped with the concept of F.S.I and the Cess rules have led to adhoc and unsympathetic developments, which are in form of added floors, or complete new development of the nature of high rise buildings.

COMPARATIVE DEVELOPMENT CONTROL REGULATIONS

Notes
 Plate 12 shows a study of the comparison between the original set of D.C. rules and their implications on the precinct in maintaining its character as against the present set of D.C. rules.

EARLIER SET OF D.C. RULES

IMPLICATIONS

Jurisdiction Bombay Improvement trust and later under Land and Estate Department
 Makes it sensitive to site conditions

Ground coverage 1/3 of total site

Footprint of the built controlled.

Height restriction G+2

Streetscape and townscape acknowledged.

Setback Specific street frontage and requirement of neighbouring property based setbacks but not denying light, ventilation and fire protection requirements. Min of 3m all around. (refer drawing)

Streetscape and townscape acknowledged.

PRESENT D.C. RULES

IMPLICATIONS

Site seen as a part of greater Mumbai with global rules applicable which fall to recognise the physical and community structure of the site

Jurisdiction Brihanmumbai Municipal Corporation
 Jurisdiction Brihanmumbai Municipal Corporation

Ground coverage not applicable

FSI 1.33

Not very sensitive to site infrastructural problems or development. With additional FSI and relaxation of certain rules the building heights and ground coverage are affected with no sympathy towards scale or scape of the street and neighbourhood. (refer drawing)

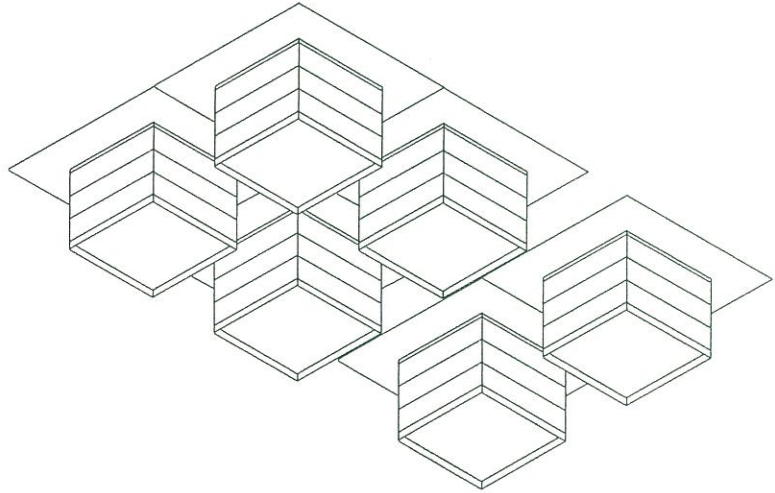
CESS FSI increased to 2.5

Height restriction not applicable

Setback Global street-frontage based setbacks depending upon light and ventilation requirements, fire protection and street widths. Set back for cess buildings are 1.5 m on the rear and the sides. In the front it is also 1.5 m unless mentioned by the rules. (refer drawing)

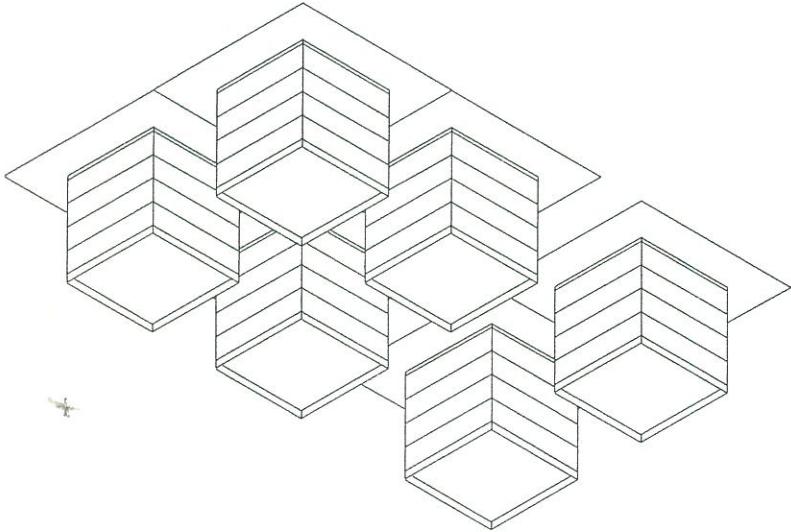
Streetscape townscape and the ensemble of the builtforms destroyed.

ORIGINAL BUILTFORM WITH 1/3 GROUND COVERAGE AND G+2 HEIGHT



BUILTFORM BEING CHANGED WITH FSI OF 1.33

A floor is added to the original structure.



IMPLICATIONS OF THE CESS RULES

Set backs decrease and built volume increases.

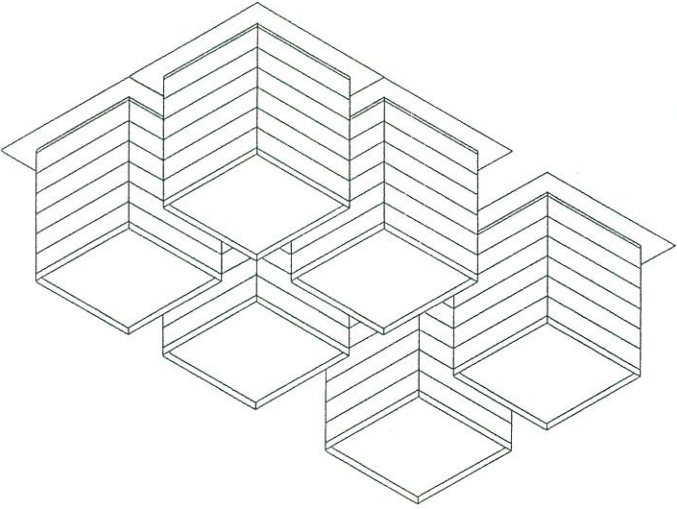


FIGURE GROUND

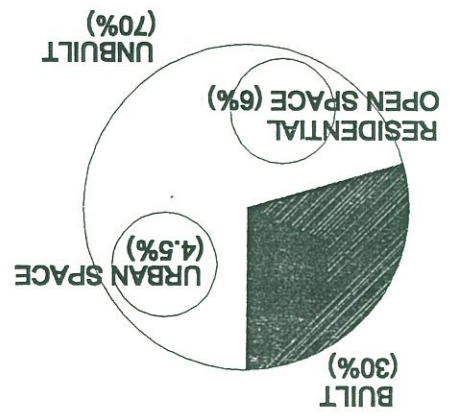
PLATE NO. 11



Notes
This plate shows changes in the open space structure by addition of built-form as in the case of the fly-over and a change in activities in these spaces.

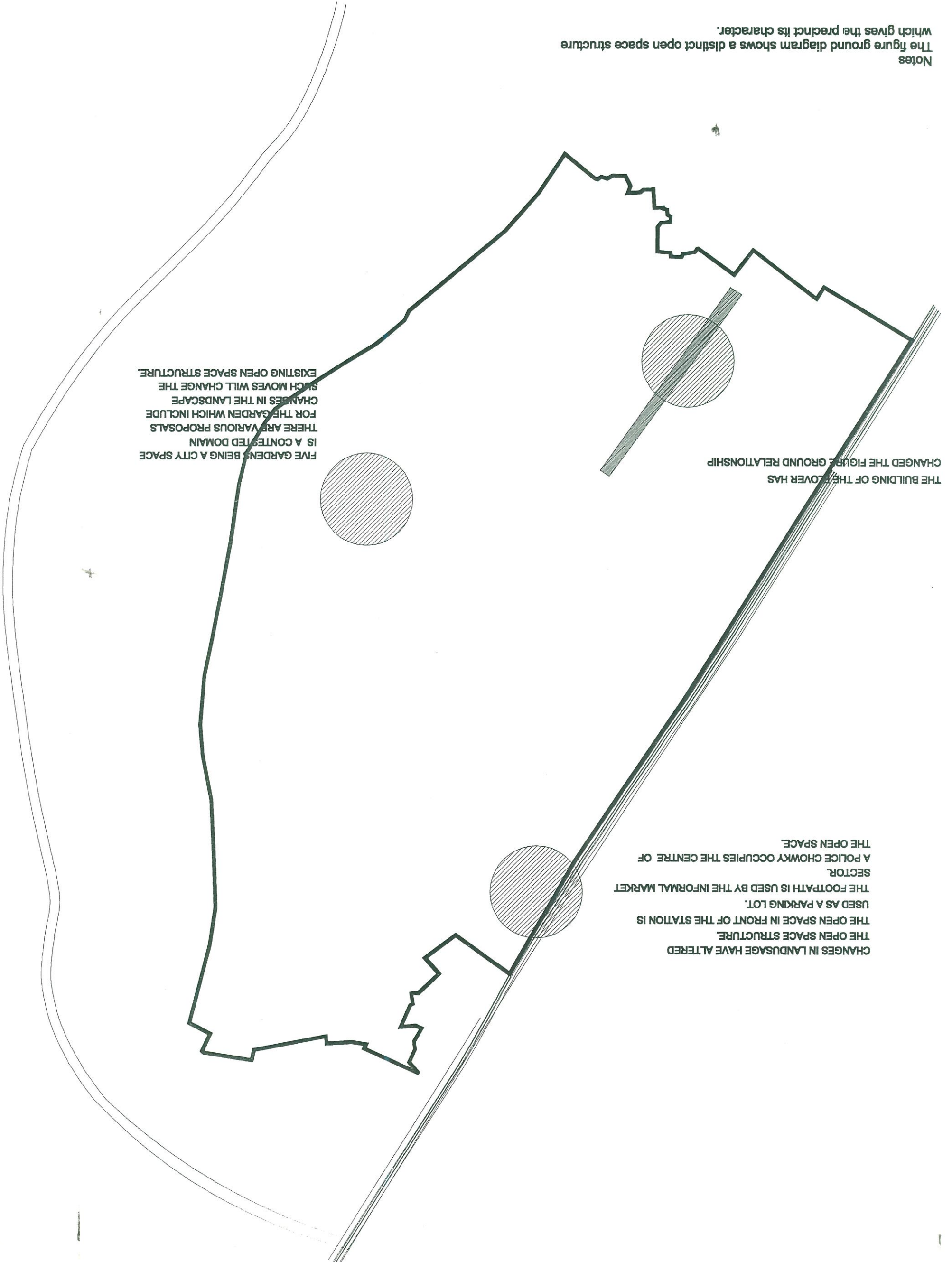


DISTRIBUTION OF BUILT AND UNBUILT AREAS



DISRUPTIONS IN FIGURE GROUND

PLATE NO. 12



Notes
The figure ground diagram shows a distinct open space structure which gives the precinct its character.

FIVE GARDENS BEING A CITY SPACE IS A CONTESTED DOMAIN THERE ARE VARIOUS PROPOSALS FOR THE GARDEN WHICH INCLUDE CHANGES IN THE LANDSCAPE SUCH MOVES WILL CHANGE THE EXISTING OPEN SPACE STRUCTURE.

THE BUILDING OF THE FLOVER HAS CHANGED THE FIGURE GROUND RELATIONSHIP

CHANGES IN LANDSCAPE HAVE ALTERED THE OPEN SPACE STRUCTURE. THE OPEN SPACE IN FRONT OF THE STATION IS USED AS A PARKING LOT. THE FOOTPATH IS USED BY THE INFORMAL MARKET SECTOR. A POLICE CHOWKY OCCUPIES THE CENTRE OF THE OPEN SPACE.

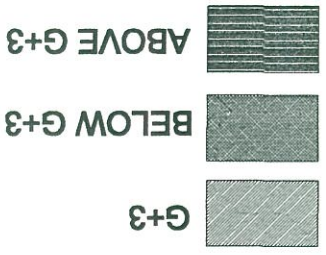


BUILDING HEIGHTS

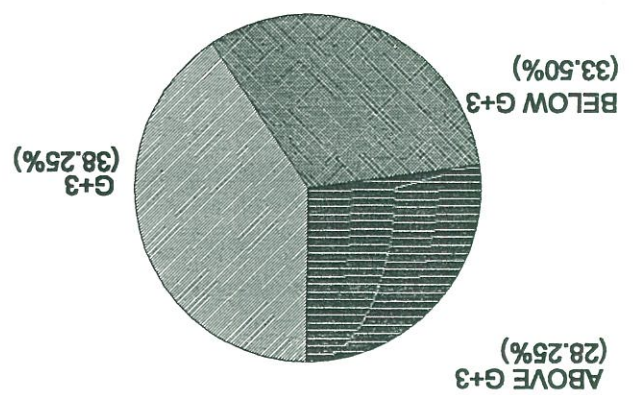
PLATE NO. 13

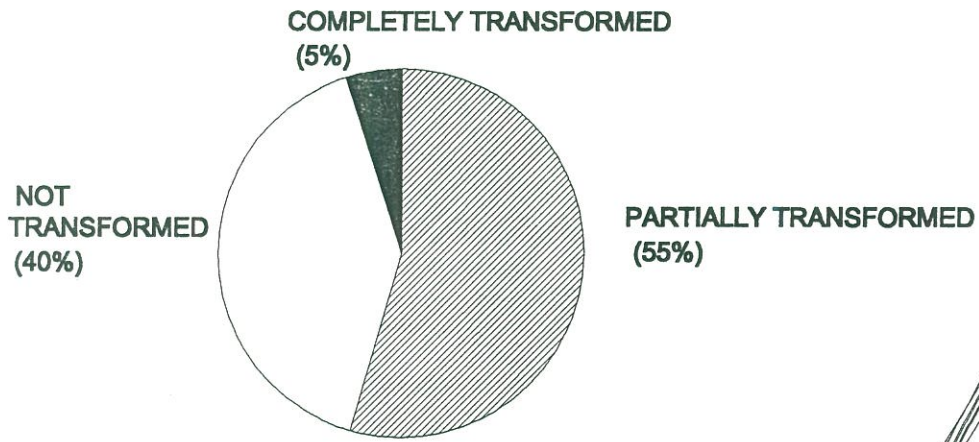


Notes
This plate shows a rupture in the fabric where building heights exceed G+3.



PERCENTAGE DISTRIBUTION OF OWNERSHIP





DISTRIBUTION OF BUILDING TRANSFORMATION



- UNTRANSFORMED
- PARTIALLY TRANSFORMED
- TRANSFORMED

Notes
 This plate indicates property that is fully transformed, (new structures), partially transformed, and not transformed at all. The study shows that 55% of the precinct is already transformed.



4.2 THE PHYSICAL FORM

The analysis of physical character of the precinct in this case will emphasise the tools, which indicate the open space-buildform relations. It will look into the figure ground relation, the change in building heights, streetscapes and the building typologies and transformations in them.

4.2.1. THE FIGURE-GROUND RELATION

This is important in analysing the open space-buildform relationship and the structure of the open spaces in the precinct (plate 11). The structure of open spaces is of utmost importance for the physical character of this place. It is formed out of gardens, tree lined streets and squares (fig 8). It lends the precinct its visual identity. However, presently there is a lot of disruption observed in this relationship due to encroachments in open spaces and change in the building heights (plate 12).

4.2.2. BUILDING HEIGHTS

Initially building height in the precinct were restricted uniformly to ground + two. However subsequently with the application of BMC bylaws, building height became a determinant of FSI. This is when it started showing ruptures with buildings as high as five and six storys being constructed (plate 13 & 14).



fig 8

4.2.3. STREETSCAPE AND SCALE

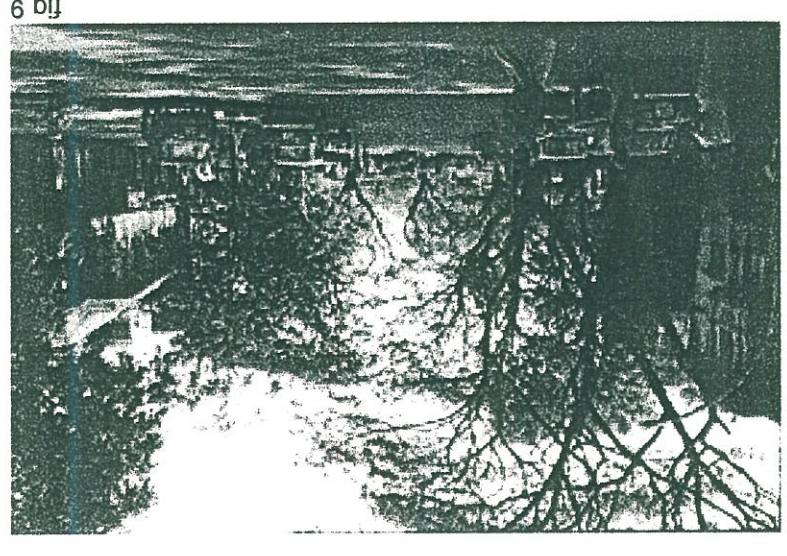
It can be noted that there is a hierarchy of streets present in this precinct (plate 15). There are three hierarchies, which have been identified that consists of the main vehicular streets, the subsidiary streets connecting the main vehicular streets and the residential streets. The physical character of these streets were characterised by their scale, use of similar paving material, uniform height of compound walls, the distinctive use of landscape and street furniture ((fig 9 & 10). The streets of each neighbourhood show differences in these above mentioned features, which lend it a distinct character (plate 16 to 28). Each representative type has been studied to observe the transformations it has undergone due to:

1. Applications of present building bylaws.
2. The absence of bylaws sensitive to the character of the precinct, like some control over the use of landscape, height of compound walls etc.

fig 10



fig 9



HIERARCHIES OF STREET

PLATE NO. 15



Notes
The plate indicates the hierarchies of streets. No 1 is the main N-S traffic corridor,
No 2 indicates the main arterial streets that feed the residential areas.
The remaining are residential streets within the particular neighbourhood.



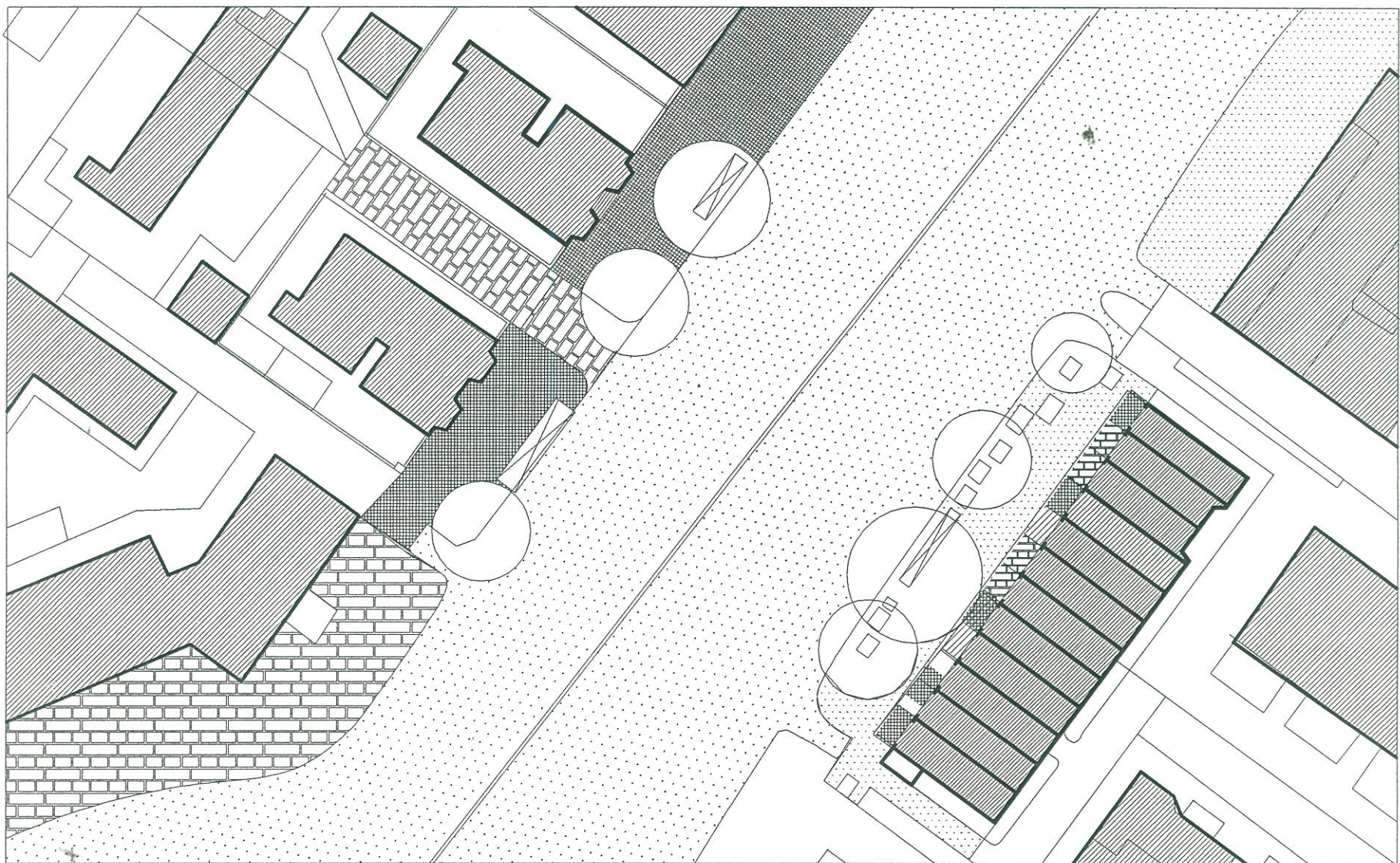
STREETS (AMBEDKAR ROAD SOUTH)

Notes
Ambedkar road is one of the main north-south corridors for the city. Since the road caters to city level traffic, transformations here are in the form of, the fly-over, urban signage and a change in landuse in terms of informal shops. Besides this other transformations are observed in building heights and street furniture, particularly paving. The disparate paving patterns are indicated on the plan.



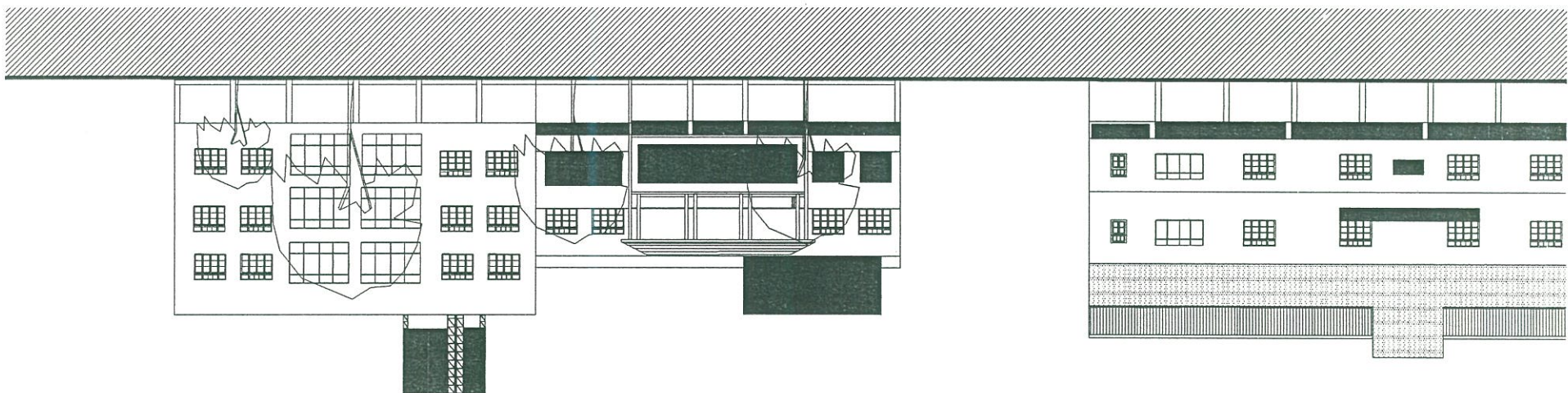
PLAN

Legend for Plan: HAWKING BUS-STOP



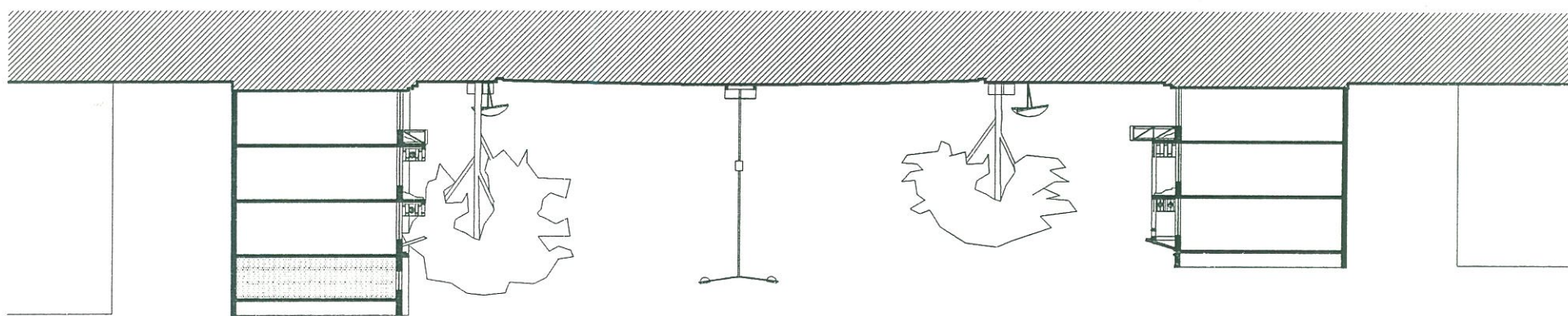
WEST ELEVATION

Legend for West Elevation: FLOOR ADDED SIGNAGES



SECTION

Legend for Section: FLOOR ADDED

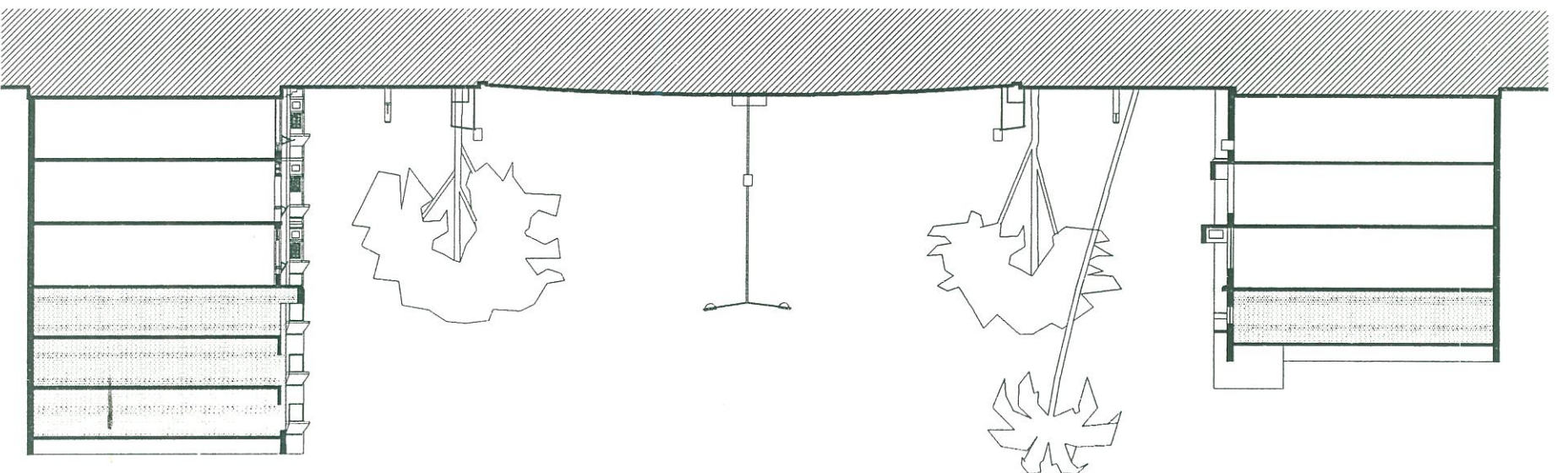
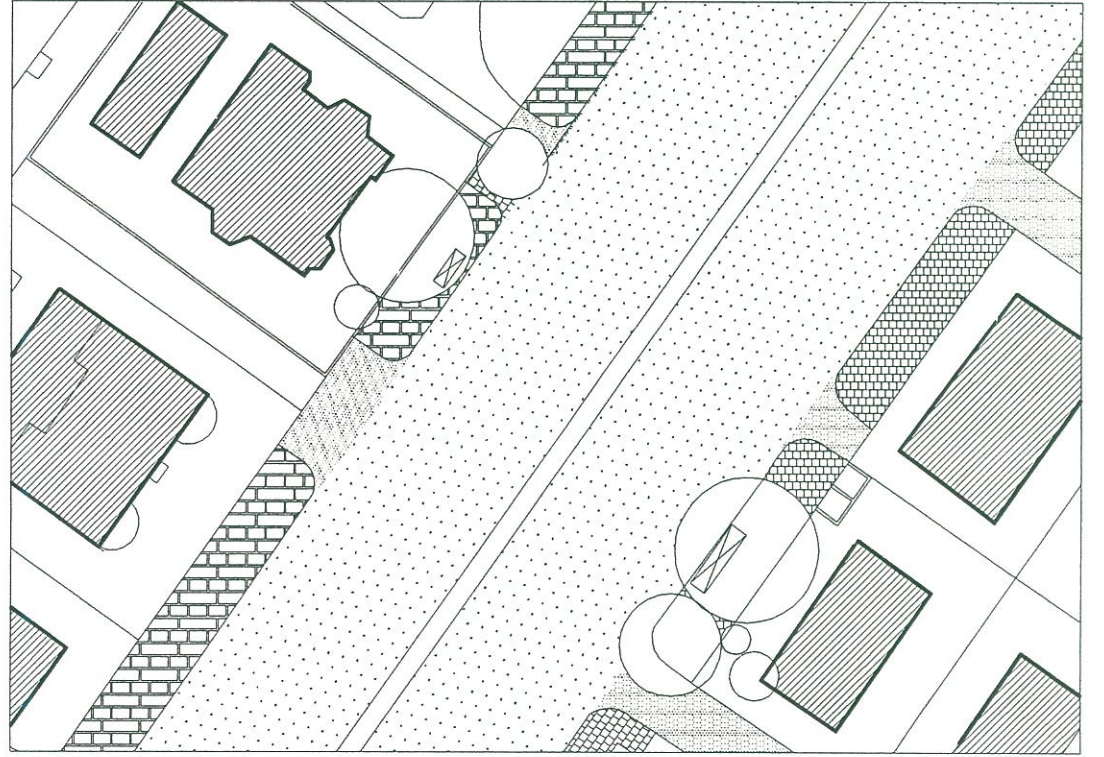


STREETS

(AMBEDKAR ROAD North)

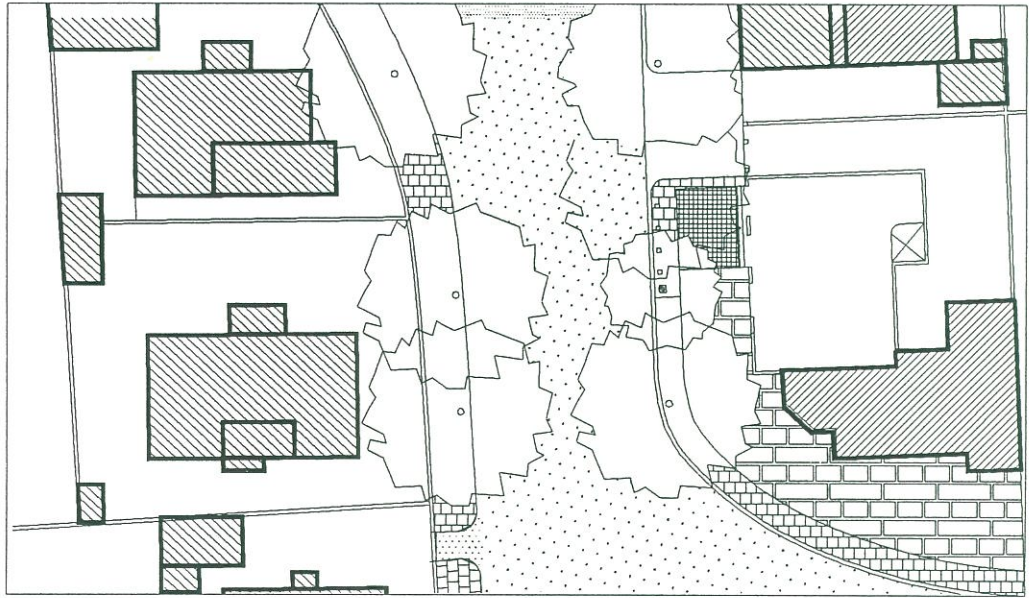
PLATE NO. 17

Notes
 This representative section is taken towards the north on Ambedkar road. Here, since there is no commercial landuse, transformations are fewer. They are in the form of building heights mainly.
 Transformations in the form of street-furniture like paving and compound walls are also found here. Paving patterns are indicated on the plan.



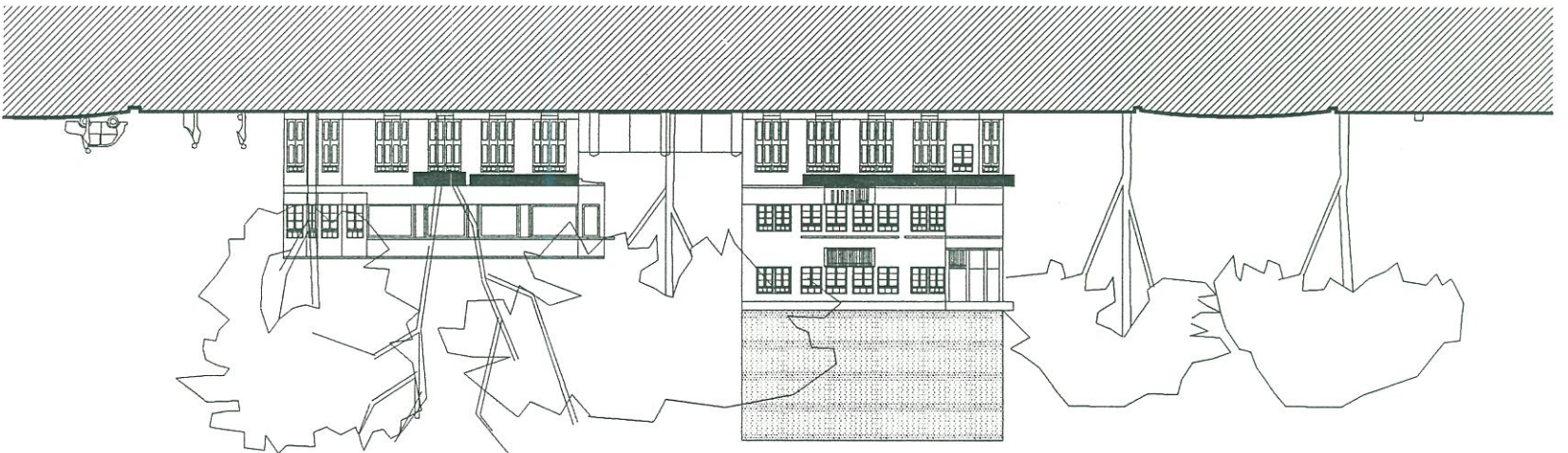
Notes
 Lady Jehangir road acts as a connector between Laxmi Napoo road on the west and Katrak road on the east. It also supports through traffic from Ambedkar road to the East Island Freeway.
 The plate shows transformations in the streetscape in the streetscape at a representative section of the Lady Jehangir Road. Transformations on this road are in the form of building heights, signage, on buildings and street furniture, particularly the disparate paving patterns as indicated in plan.

PLAN
 0 5 15 30m



WEST ELEVATION

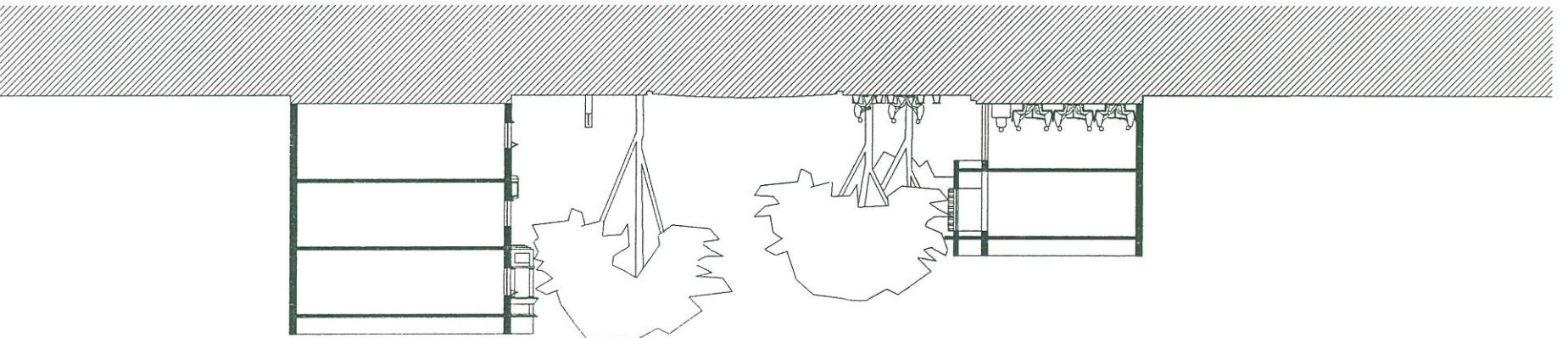
0 5 15 30m



■ FLOOR ADDED
 ■ SIGNAGES

SECTION

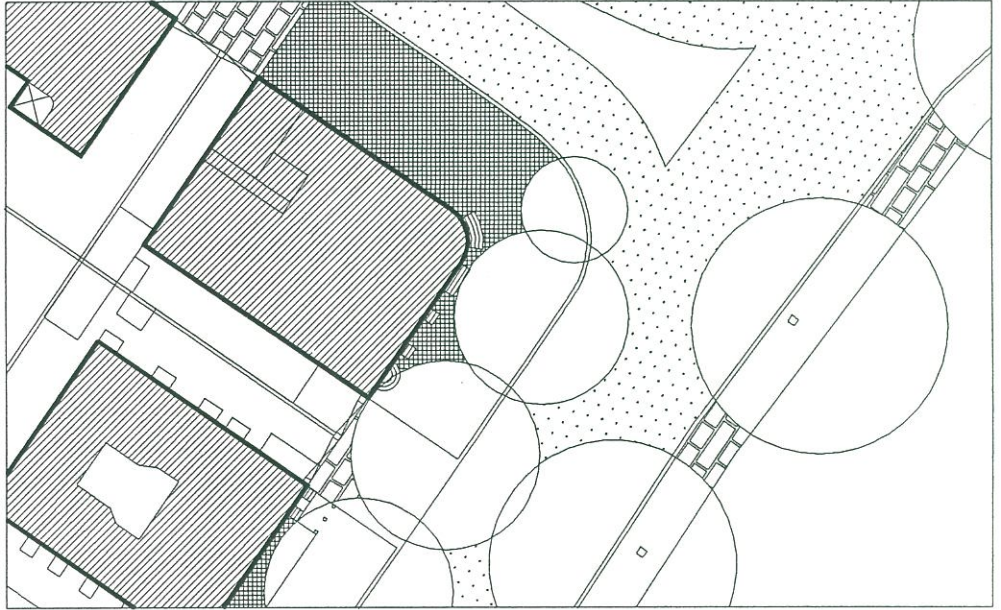
0 5 15 30m



Notes
Representative sections of Laxmi Narayan road at Dadar display a degree of transformation in terms of building height, some level of urban signage and in terms of physical landscape features. However the residential character of this part of the road is not as ruptured as it is in the parts further north, towards Matunga station.

0 5 15 30m

PLAN



0 5 15 30m

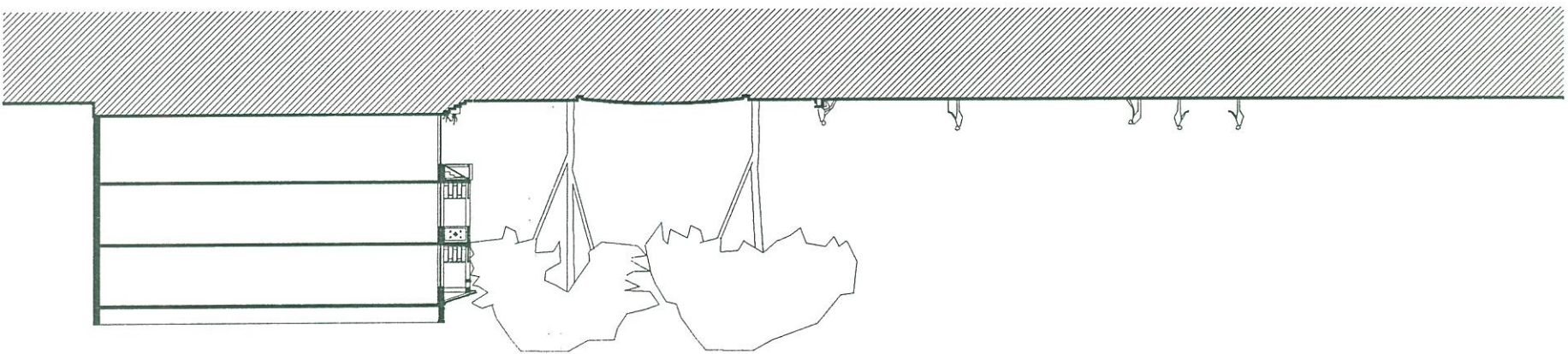
EAST ELEVATION

■ SIGNAGES
▨ FLOOR ADDED



0 5 15 30m

SECTION



STREETS

(LAXMI NAPPOO ROAD, MATUNGA)

PLATE NO. 20

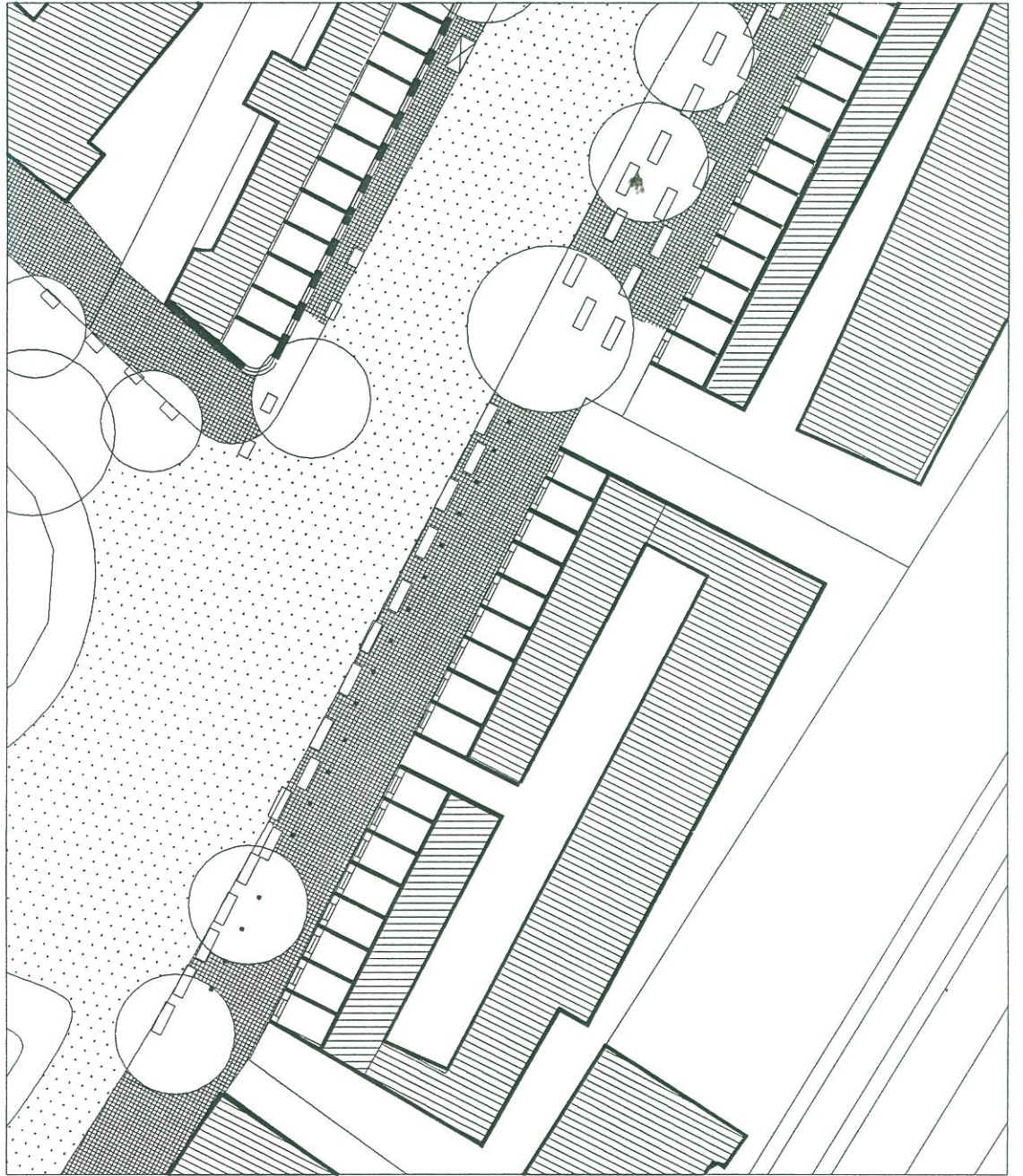
The plate shows transformations in the streetscape at Laxmi Nappoo Road at Matunga at a representative section. Transformations on this street are in the form of building heights, signages on buildings and land-use changes in the form of an informal market place and parking.

Notes

0 5 15 30m

PLAN

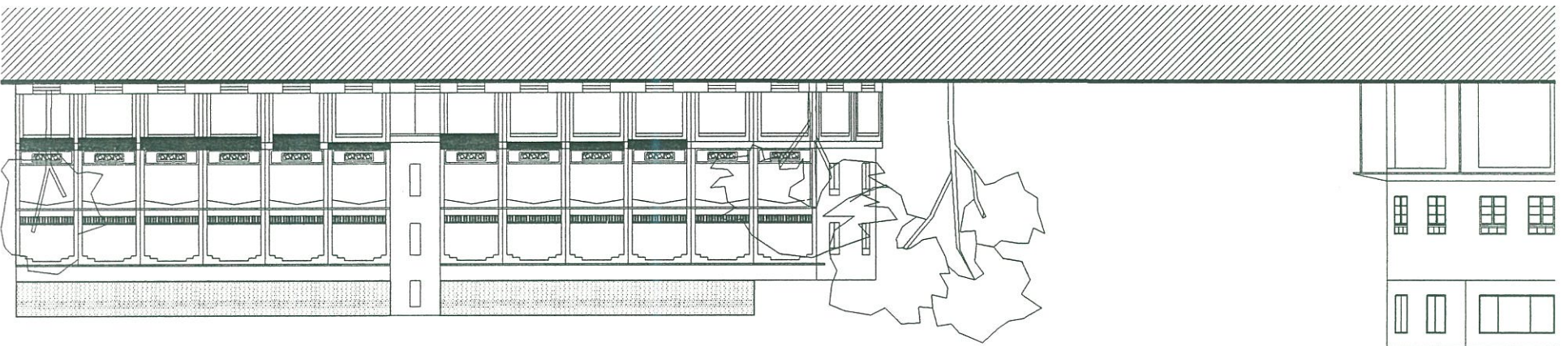
HAWKING



WEST ELEVATION

0 5 15 30m

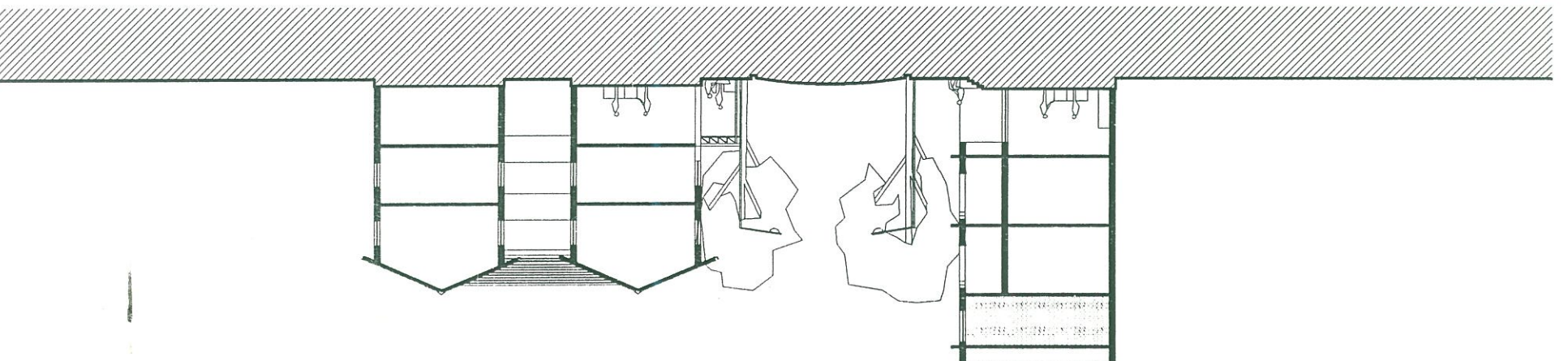
SIGNAGES FLOOR ADDED



SECTION

0 5 15 30m

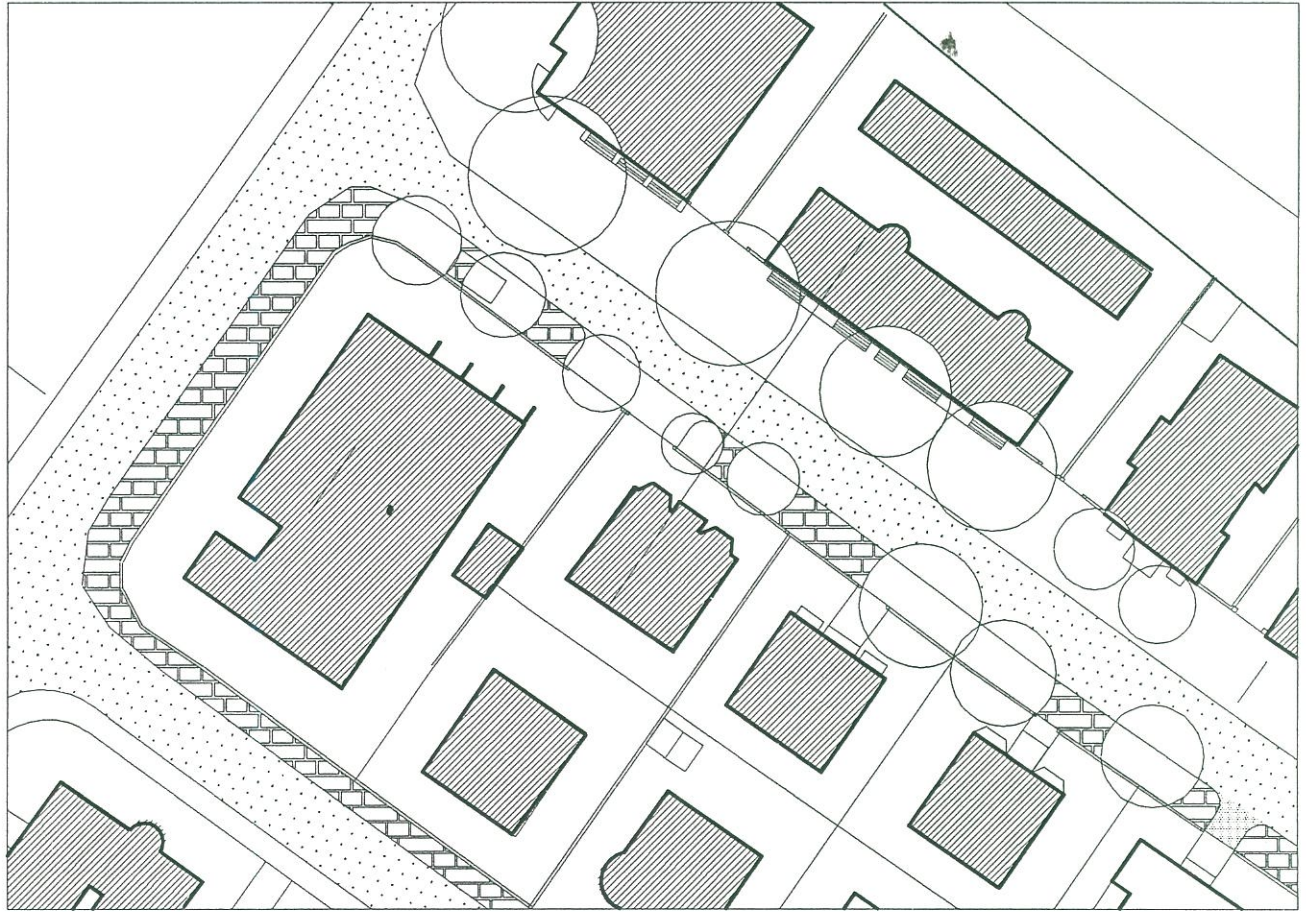
FLOOR ADDED



Notes
Hindu colony road no. 1 is a residential street. Transformations have occurred in building heights, the introduction of signages on building facades, changes in land usage such as off street parking and in the paving patterns

0 5 15 30m

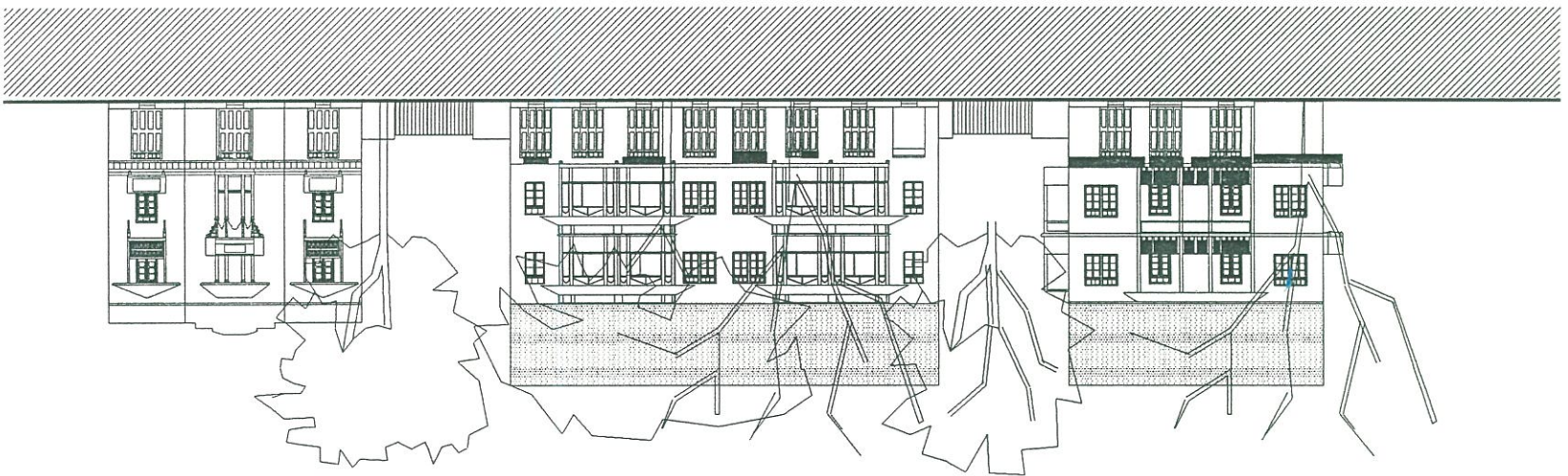
PLAN



0 5 15 30m

SOUTH ELEVATION

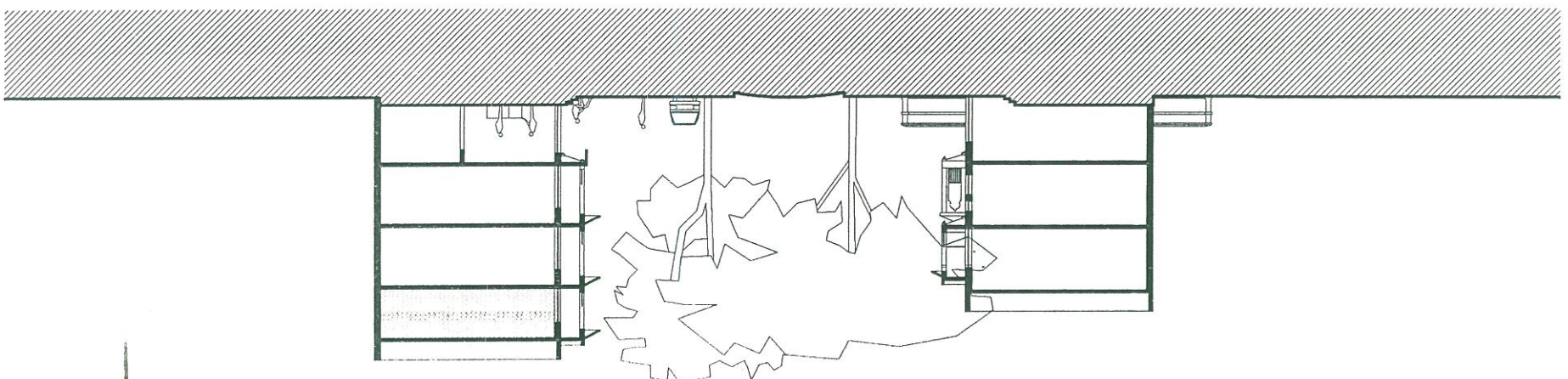
■ SIGNAGES
▨ FLOOR ADDED



0 5 15 30m

SECTION

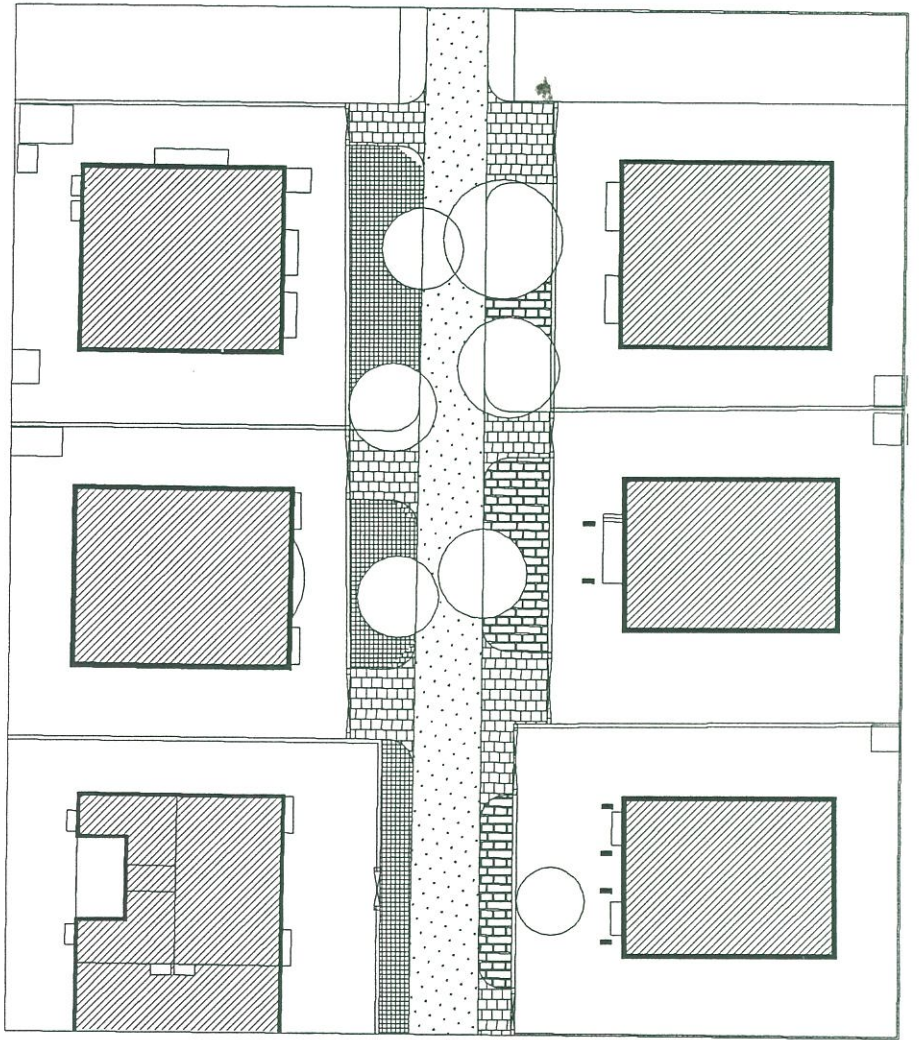
▨ FLOOR ADDED



Notes
Hindu colony road no. 5 is a residential street. Transformations have occurred in terms of addition to building heights, often through columns rising outside the original building line or by new structures. Changes have occurred in the nature of the street furniture, landscape and in usage of pavements for off street parking.

PLAN

0 5 15 30m



WEST ELEVATION

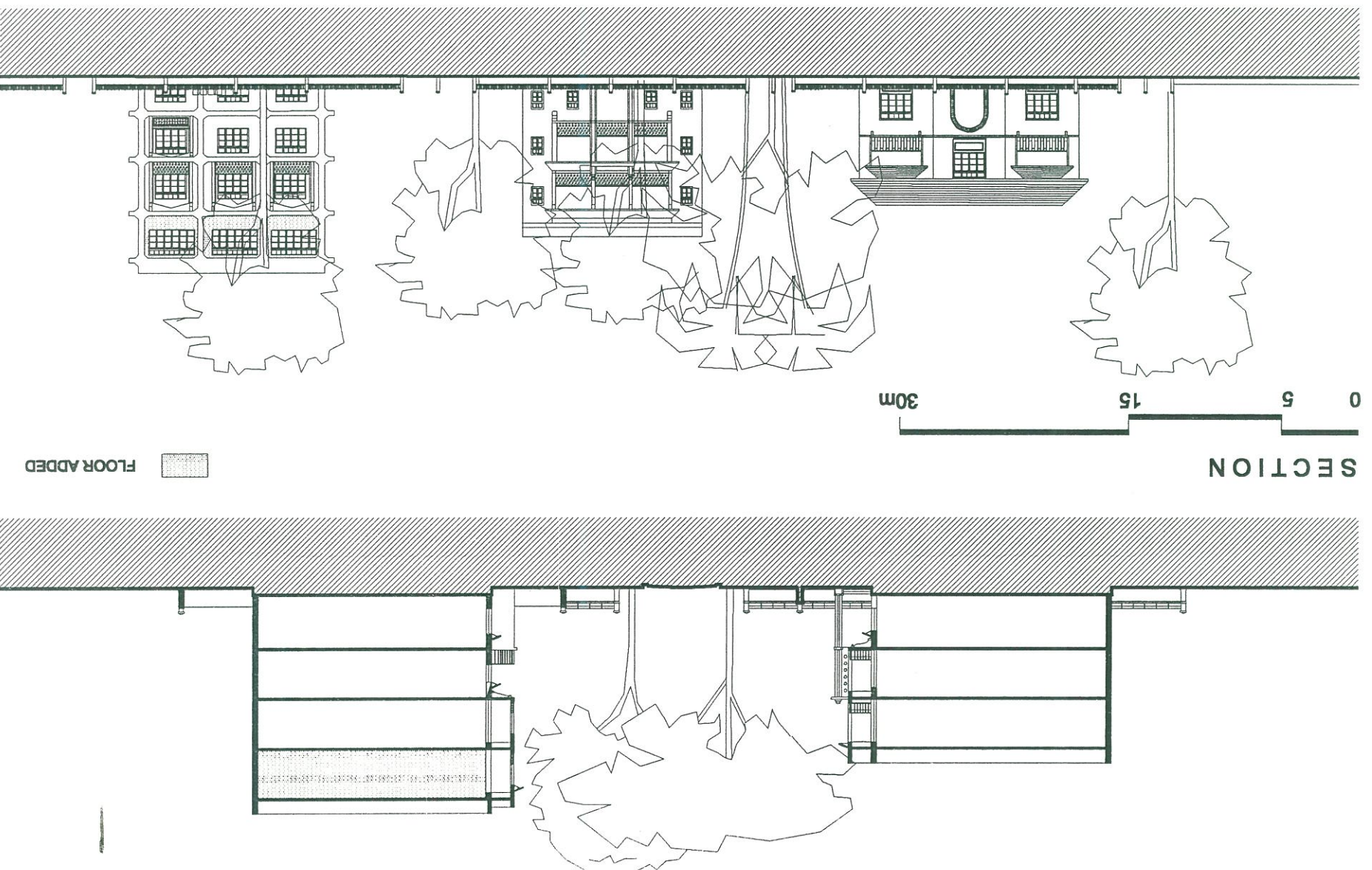
0 5 15 30m

■ SIGNAGES
▨ FLOOR ADDED

SECTION

0 5 15 30m

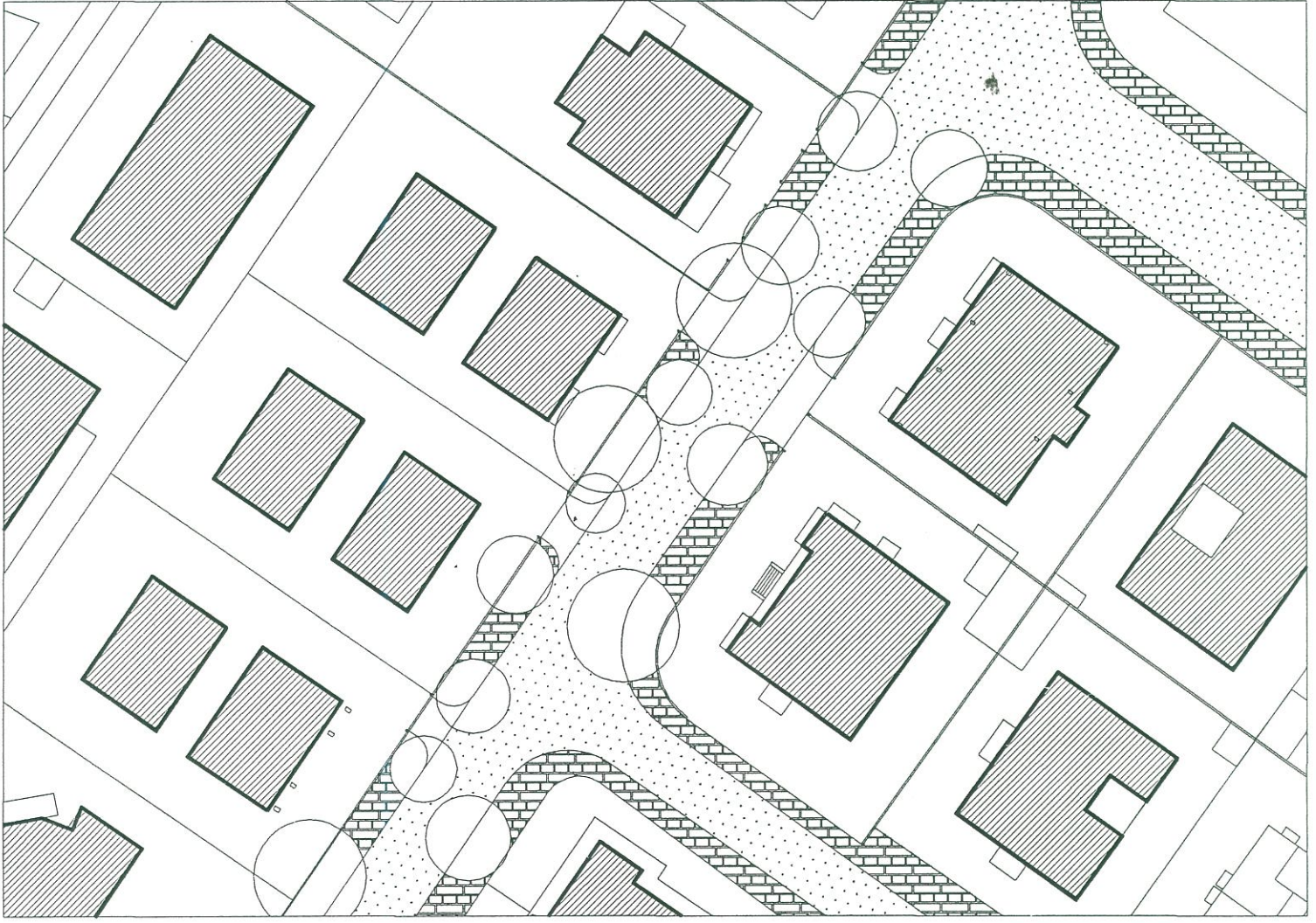
▨ FLOOR ADDED



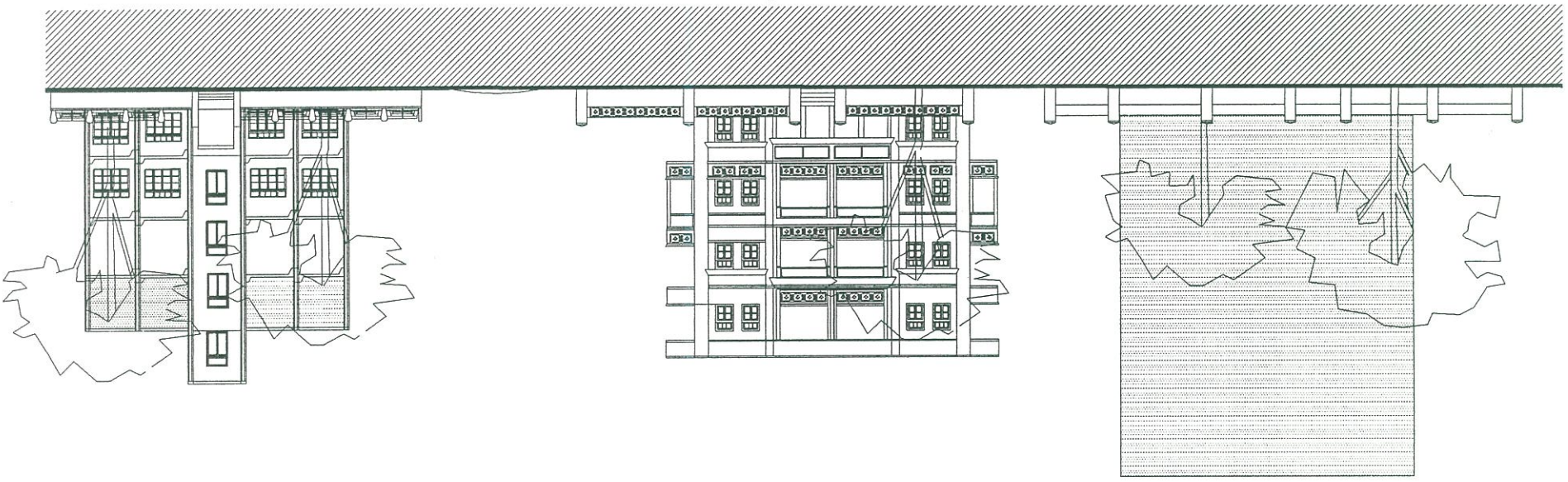
STREETS (BHALCHANDRA ROAD)

Notes
Bhalchandra Road, on account of access to Tlak Road, acts as a thoroughfare, disturbing the residential character of the precinct.
Transformations on this road are in building heights, some transformations in the form of new structures and some additions with external columns and a change in the land-use in terms of parking of vehicles of residents and their visitors.

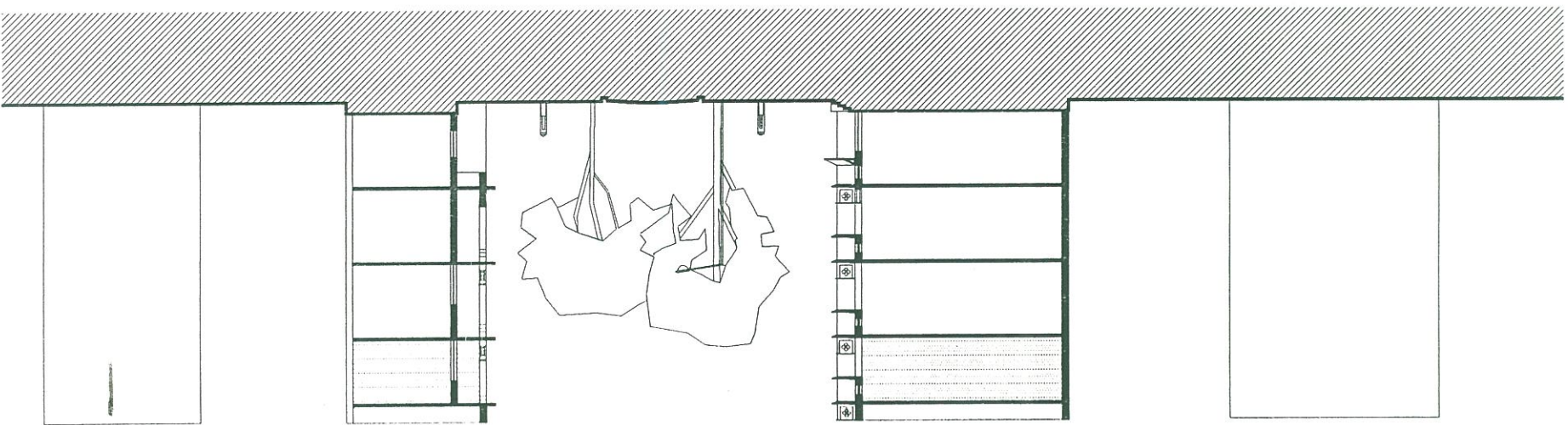
PLAN
0 5M 15M 30M



WEST ELEVATION
0 5m 15m 30m



SECTION
0 5 15 30m

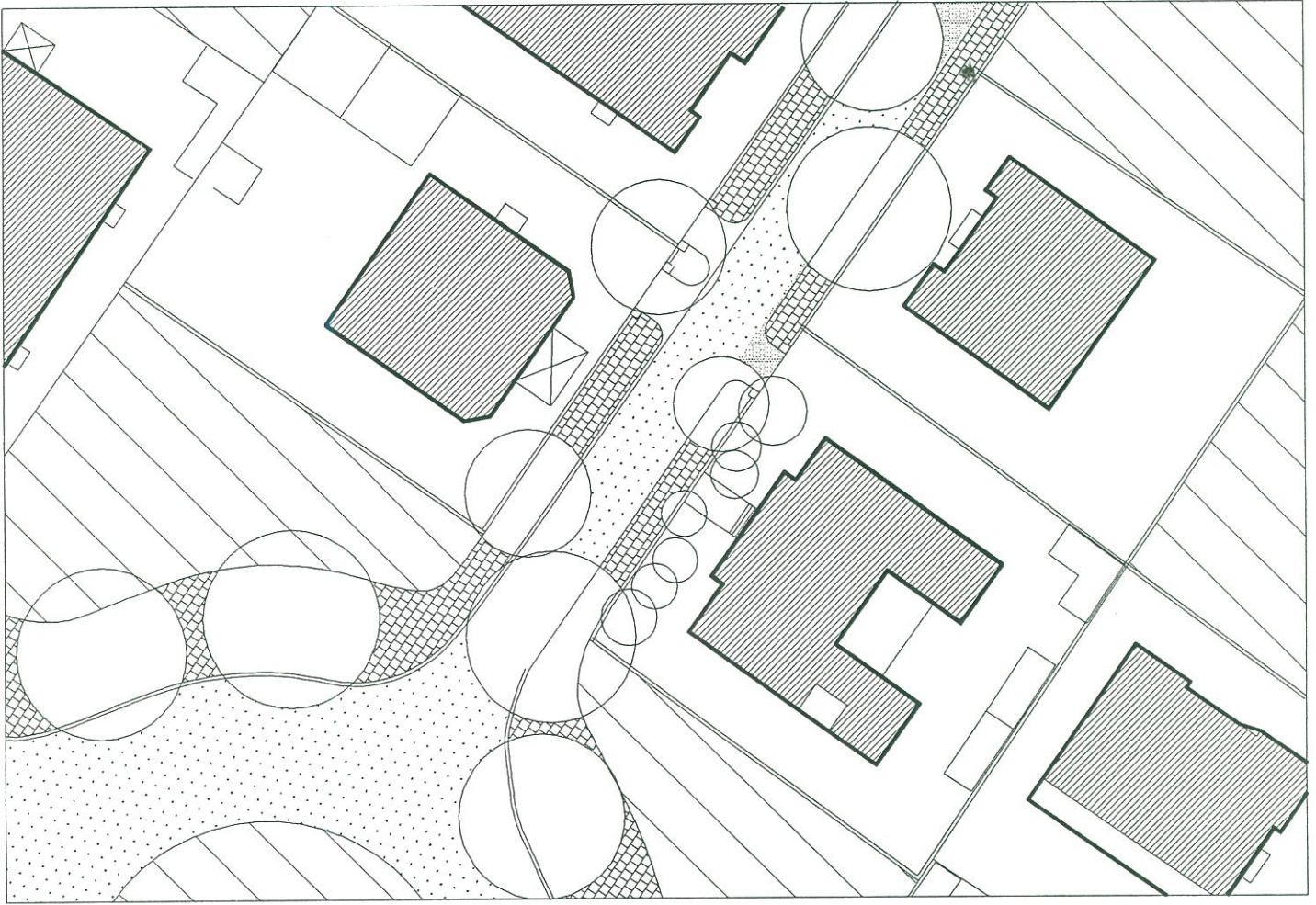


STREETS

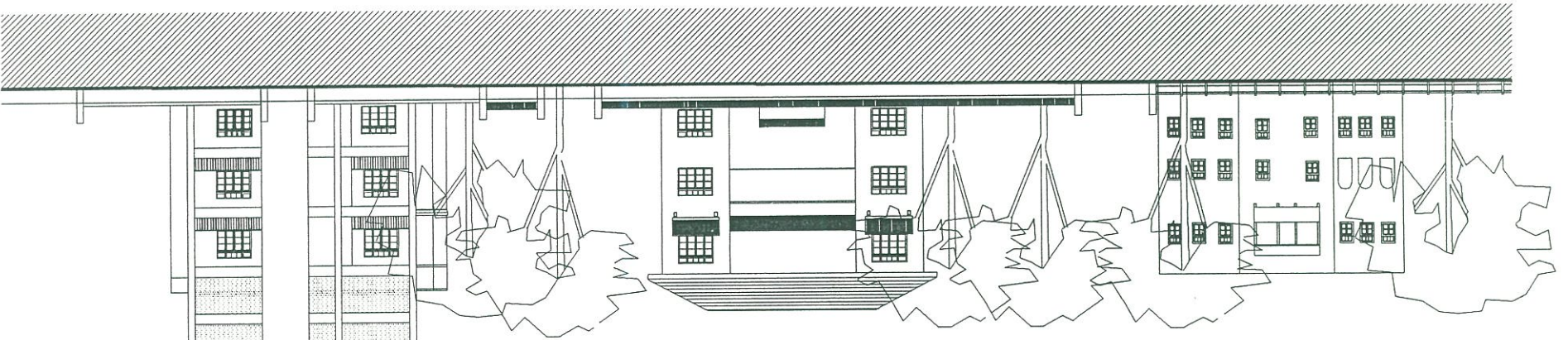
(JAME JAMSHED ROAD)

PLATE NO. 24

Notes
 Jame Jamshed Road lies in Parsi Colony and forms a residential street. The representative section taken on it shows that the transformation on this road is relatively less. At few places, however, as indicated in the elevation, the streetscape is ruptured in terms of building heights. Building height transformations are in the form of extended columns. There a few land-use changes in terms of off-street parking, however the problem is less acute than in the case of Hindu Colony.

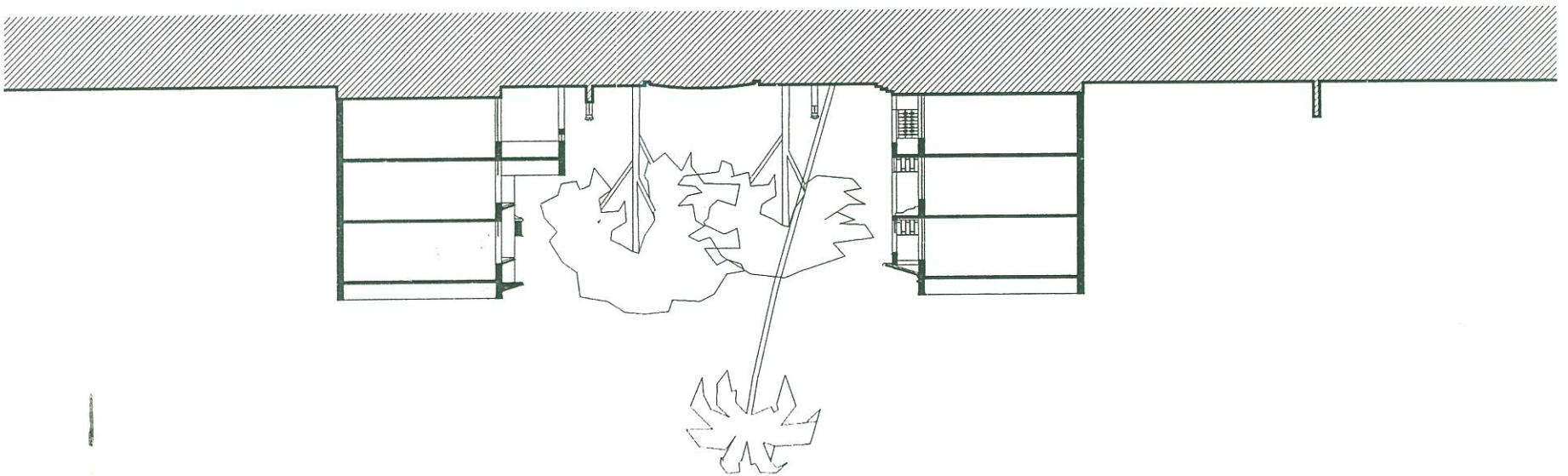


WEST ELEVATION



SECTION

FLOOR ADDED

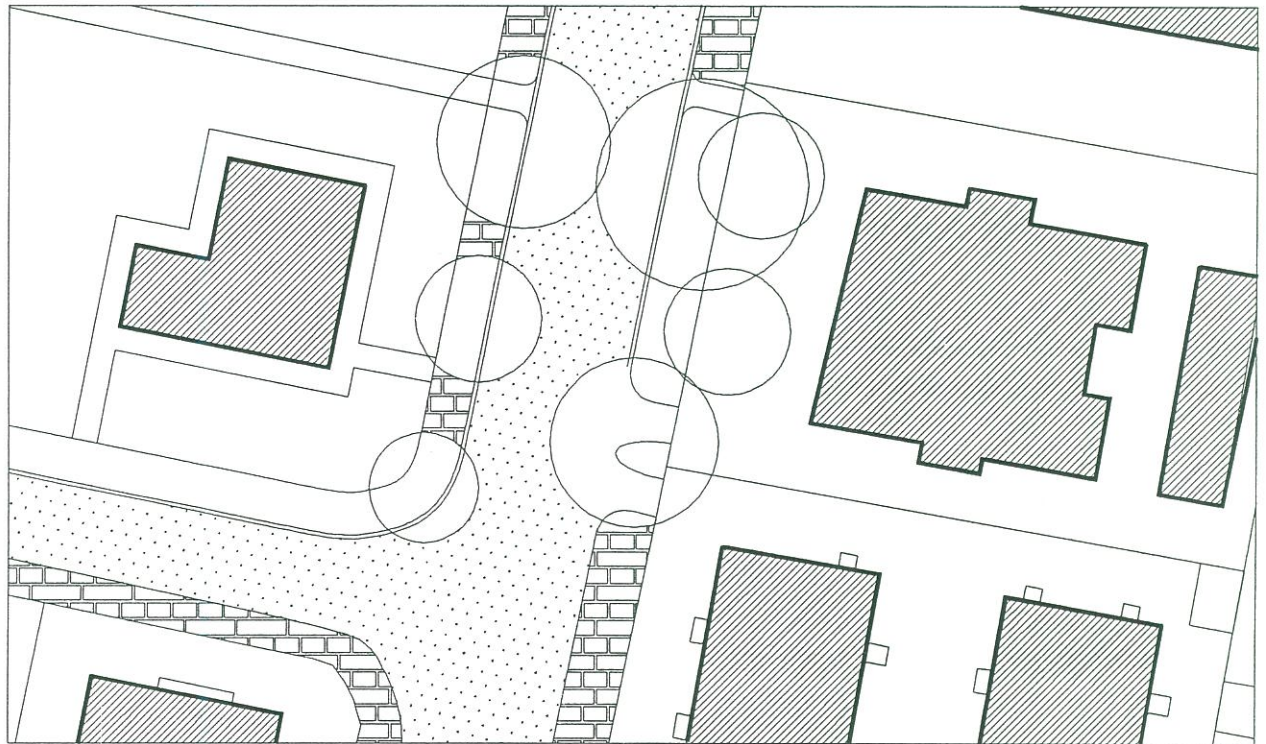


STREETS (ADENWALA ROAD)

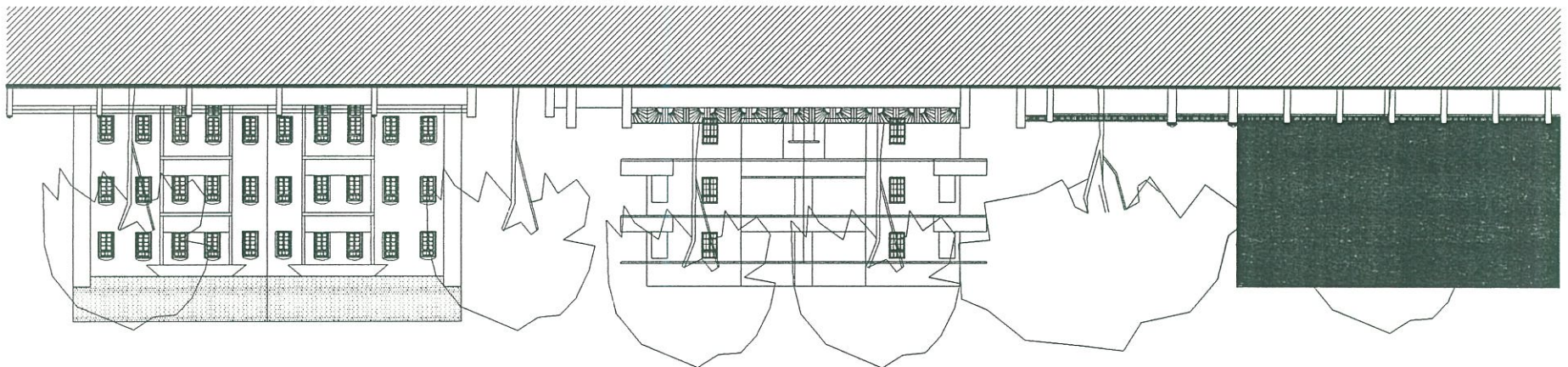
PLATE NO. 25

Notes
 Adenwala road is located within Parsi colony and is a residential street. Transformations have occurred through change in building heights and the addition of new buildings as indicated in the sections. It forms a route for public transport but its over all residential character is retained.

PLAN
 0 5 15 30m



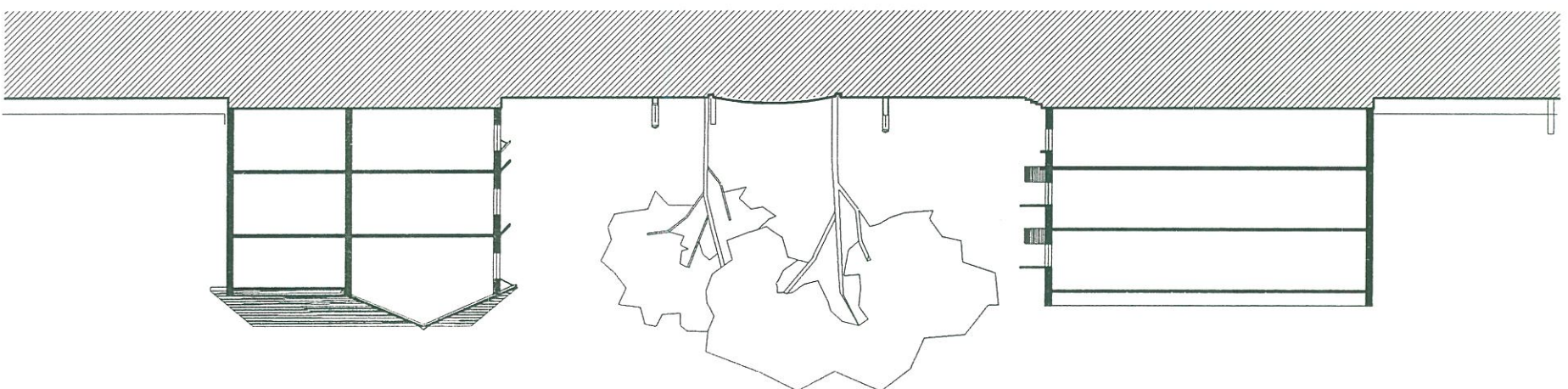
WEST ELEVATION
 0 5 15 30m



NEW STRUCTURE
 FLOOR ADDED

SECTION

0 5 15 30m



FLOOR ADDED

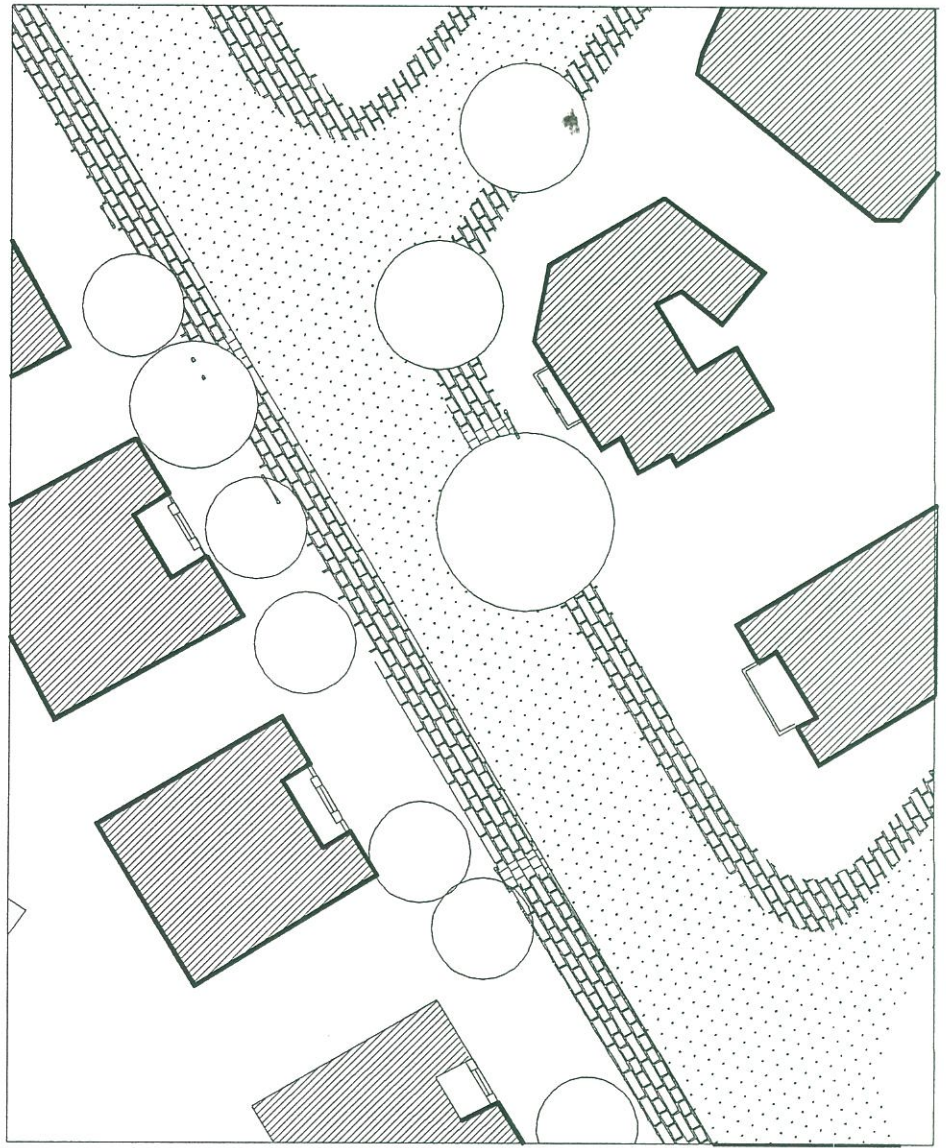
STREETS (LADY JEHANGIR ROAD)

Mancherji Joshi Road is a quiet residential street in Parsi colony. On this street there are fewer transformations owing to the presence of several buildings owned by the trust. The elevations indicated in the drawing are charity blocks belonging to the trust. Some of these are in a state of neglect and are structurally unsafe. However the overall character of this street is retained.

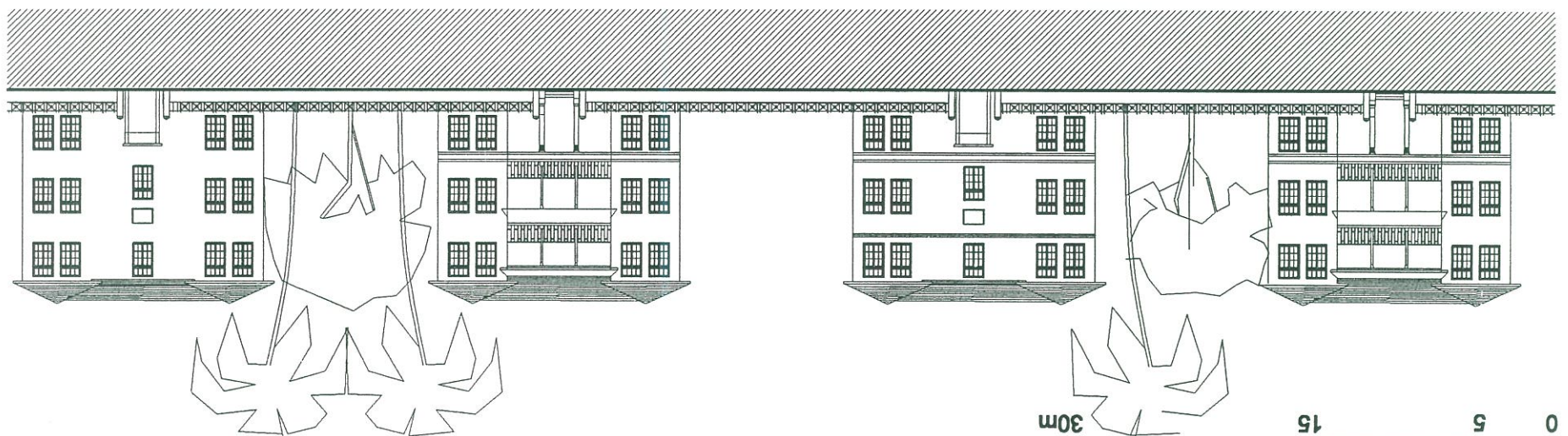
Notes



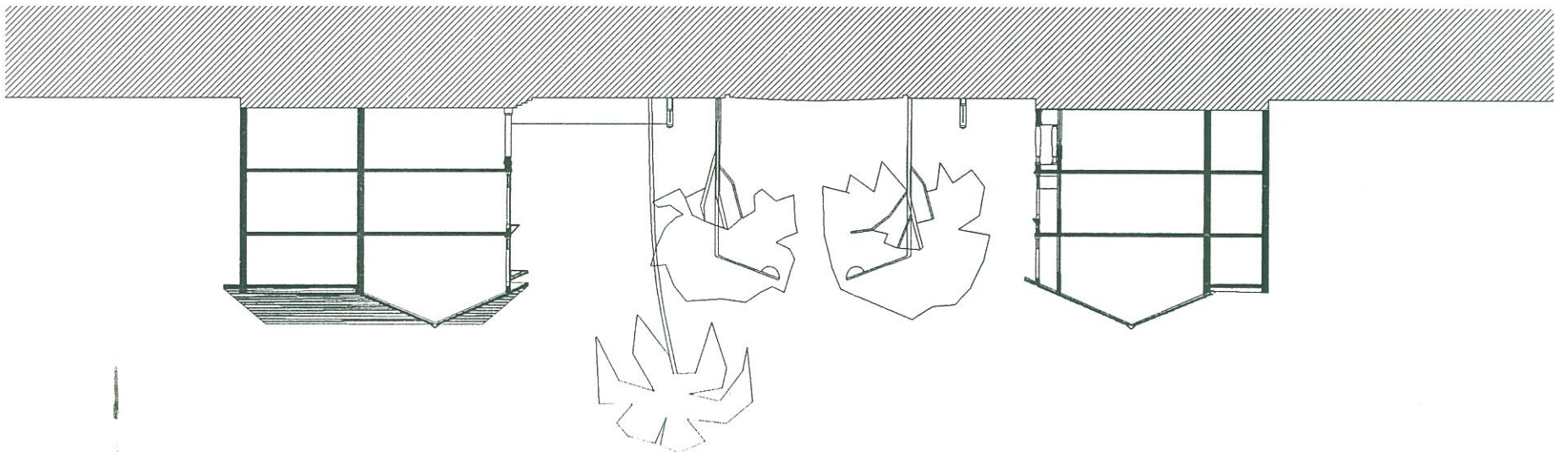
PLAN



WEST ELEVATION



SECTION



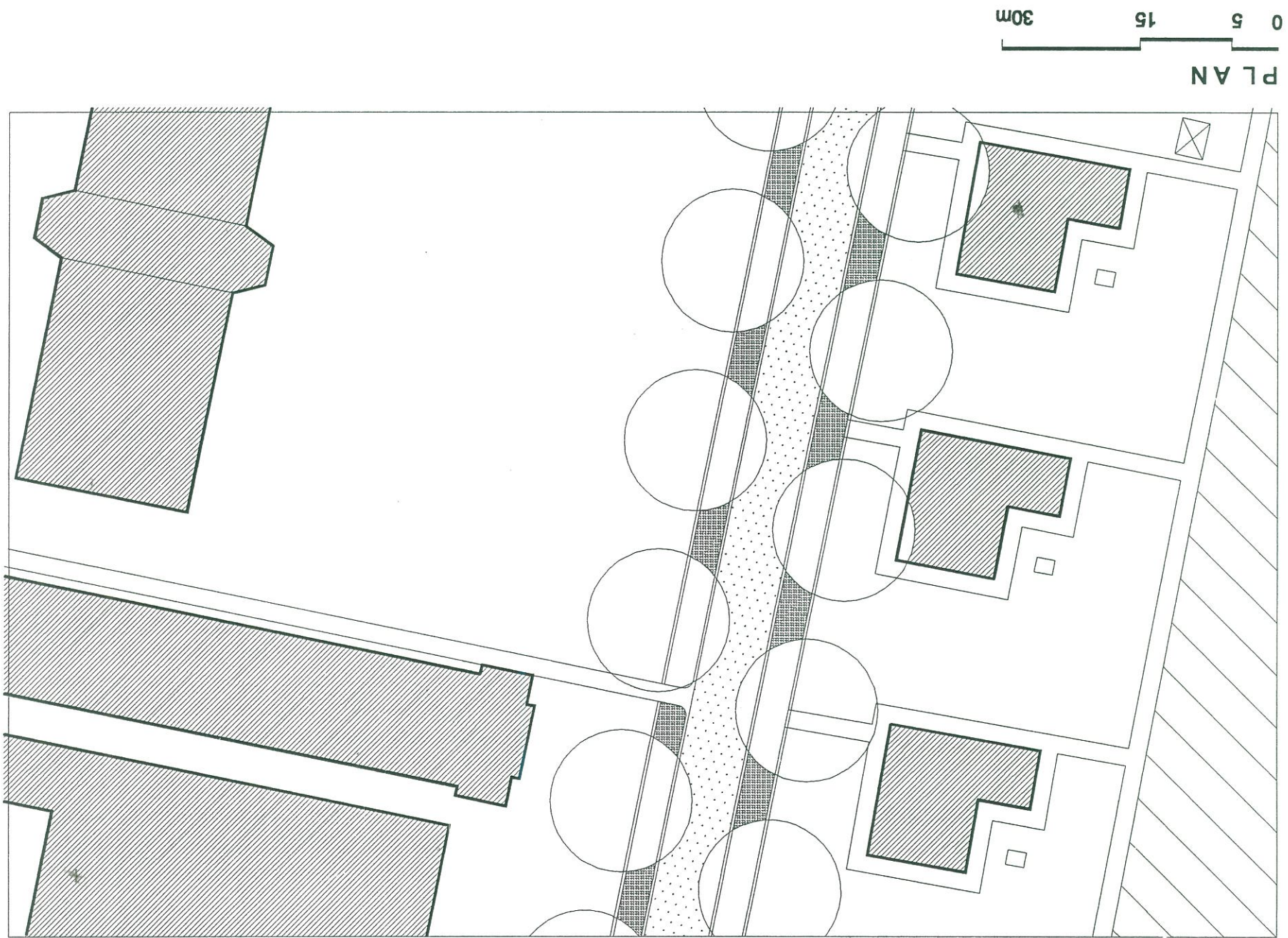
■ SIGNAGES
▨ FLOOR ADDED

▨ FLOOR ADDED

STREETS (COLLEGE ROAD)

PLATE NO. 27

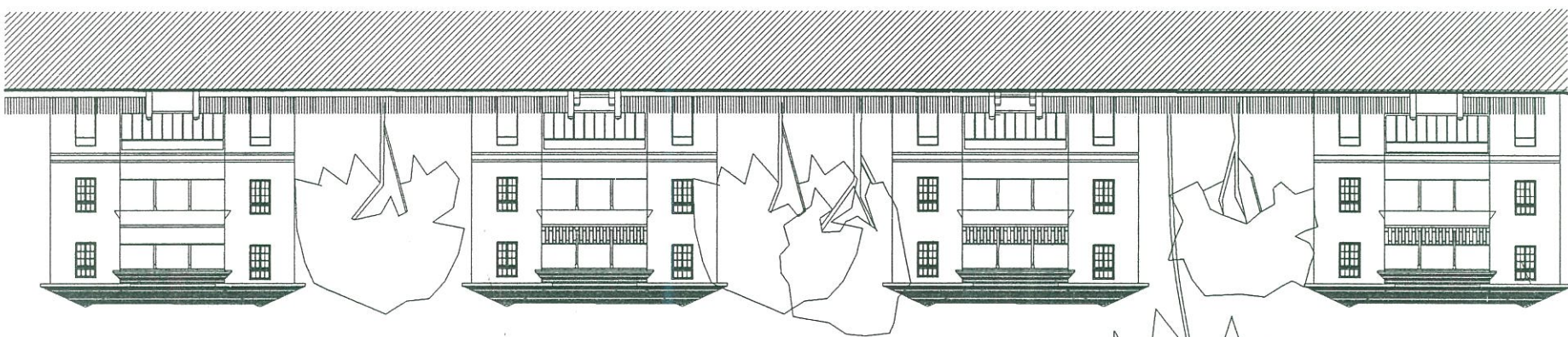
Notes
College road is an institutional road that has undergone no transformation and has therefore retained its original character.



WEST ELEVATION

0 5 15 30m

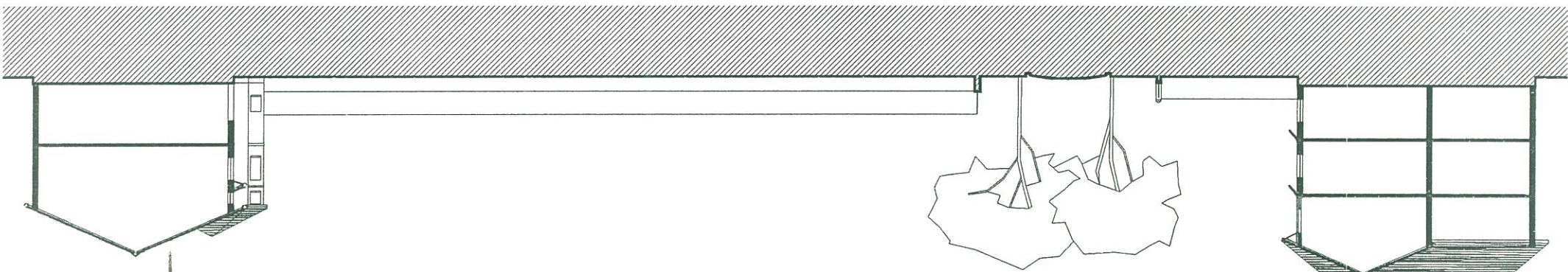
■ SIGNAGES
▨ FLOOR ADDED



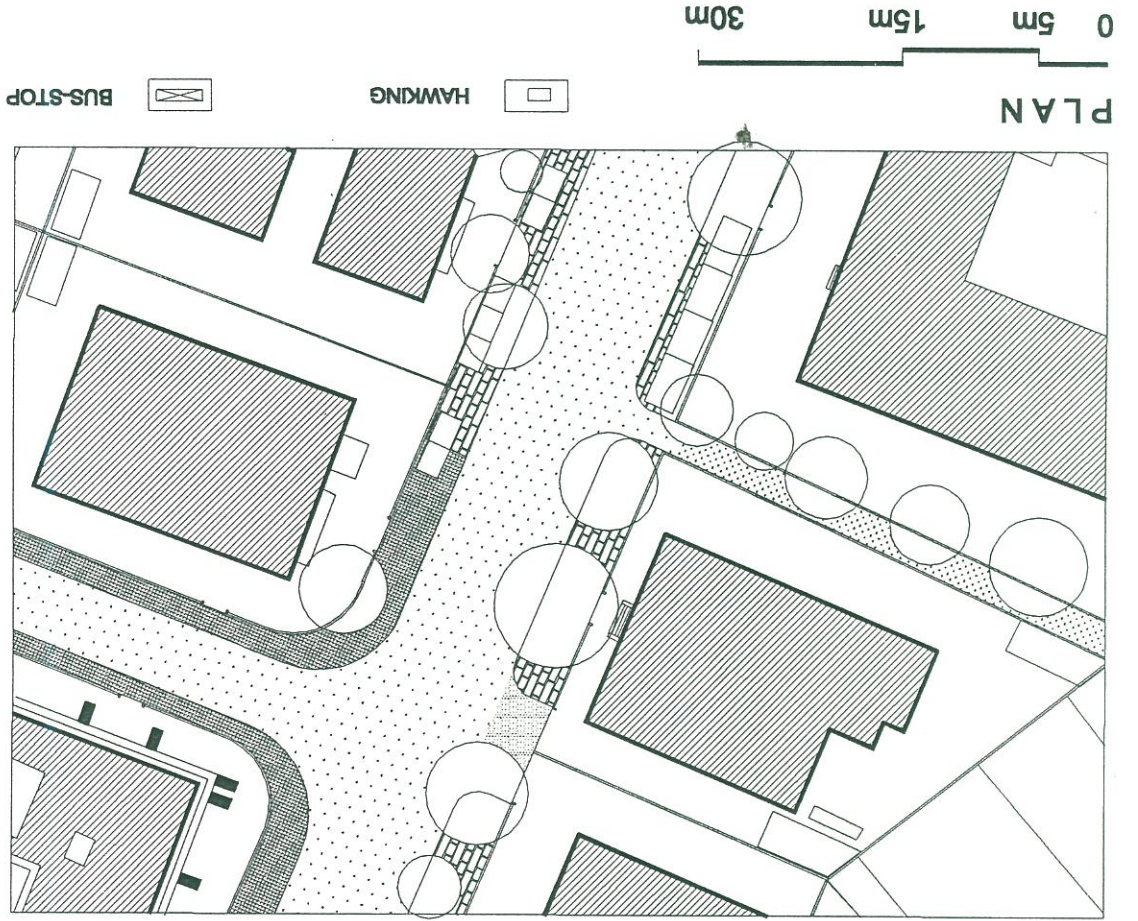
SECTION

0 5 15 30m

▨ FLOOR ADDED

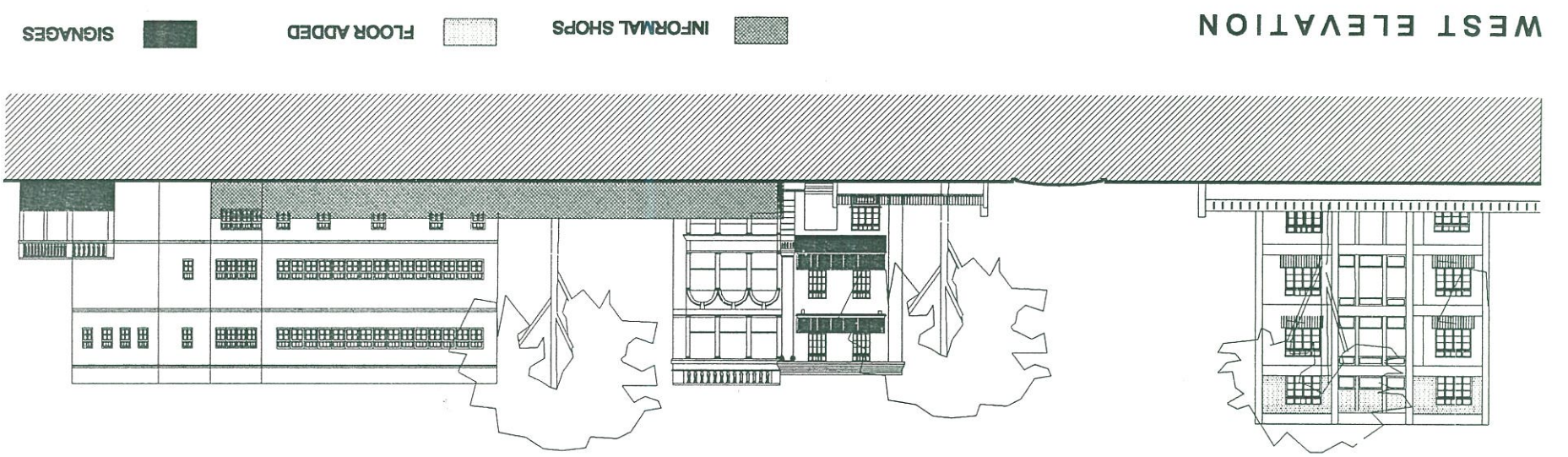


Notes
 Teland Road is a residential road. A representative section is taken on it in Matunga. Here transformations are in the form of building heights, signages and street furniture, particularly paving patterns. There is also a transformation in landuse in the form of informal shops as indicated in the drawing.



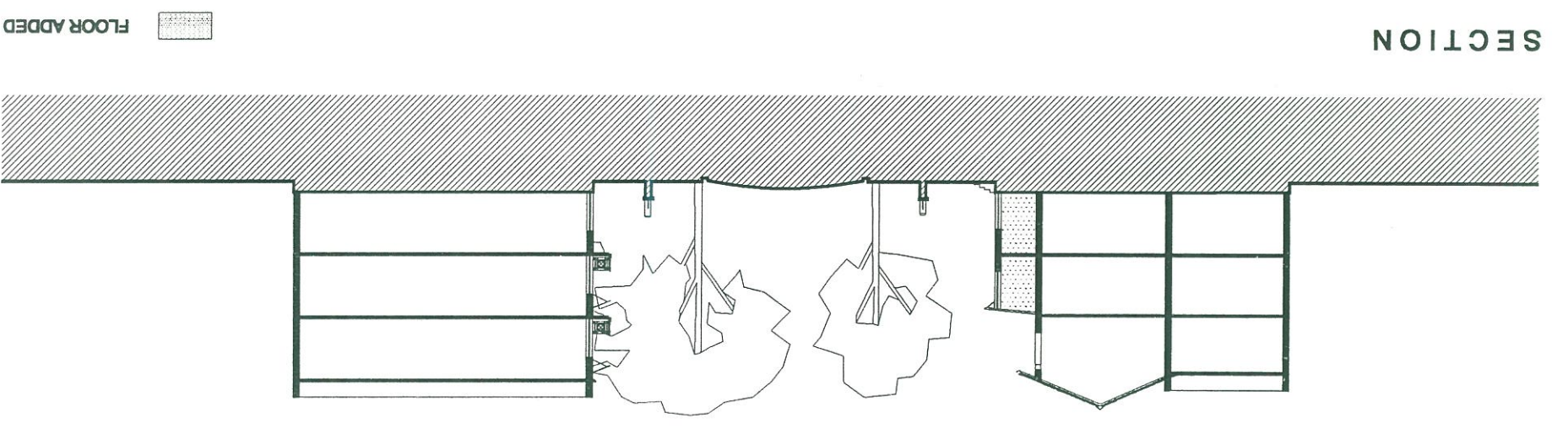
WEST ELEVATION

0 5 15 30m



SECTION

0 5 15 30m



4.2.4. BUILDING TYPOLOGIES

There are certain types of buildings, which have evolved over time in the precinct (plate 29). These types have been classified according to their residential type (bungalow or apartment), height, the nature of skin (fenestration, openings and projections); architectural language used, which have been recorded in detail (plate 30 to 38). They have however, undergone transformation. There are three types of transformations observed in these initial building typologies (plate 14). They are:

1. An additional floor added in the existing building (fig 11).
2. A new structure built above the existing by taking structural support from the sides (fig 12).
3. A completely new structure built by demolishing the old.

fig11

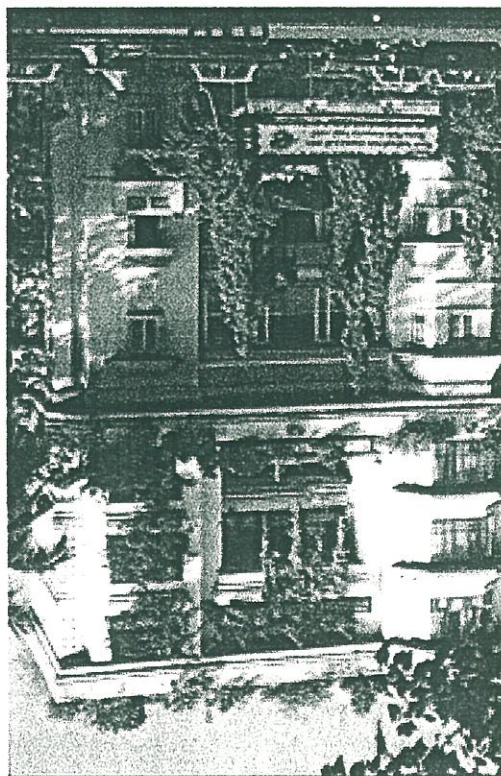
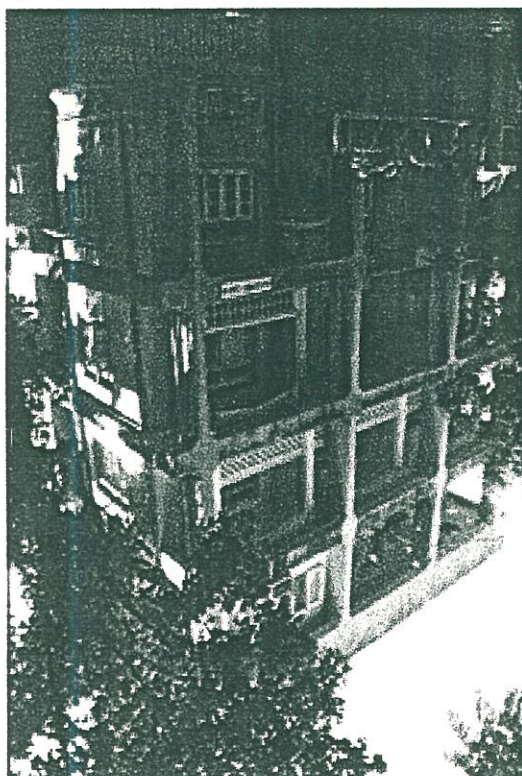


fig 12



BUILDING TYPOLOGIES

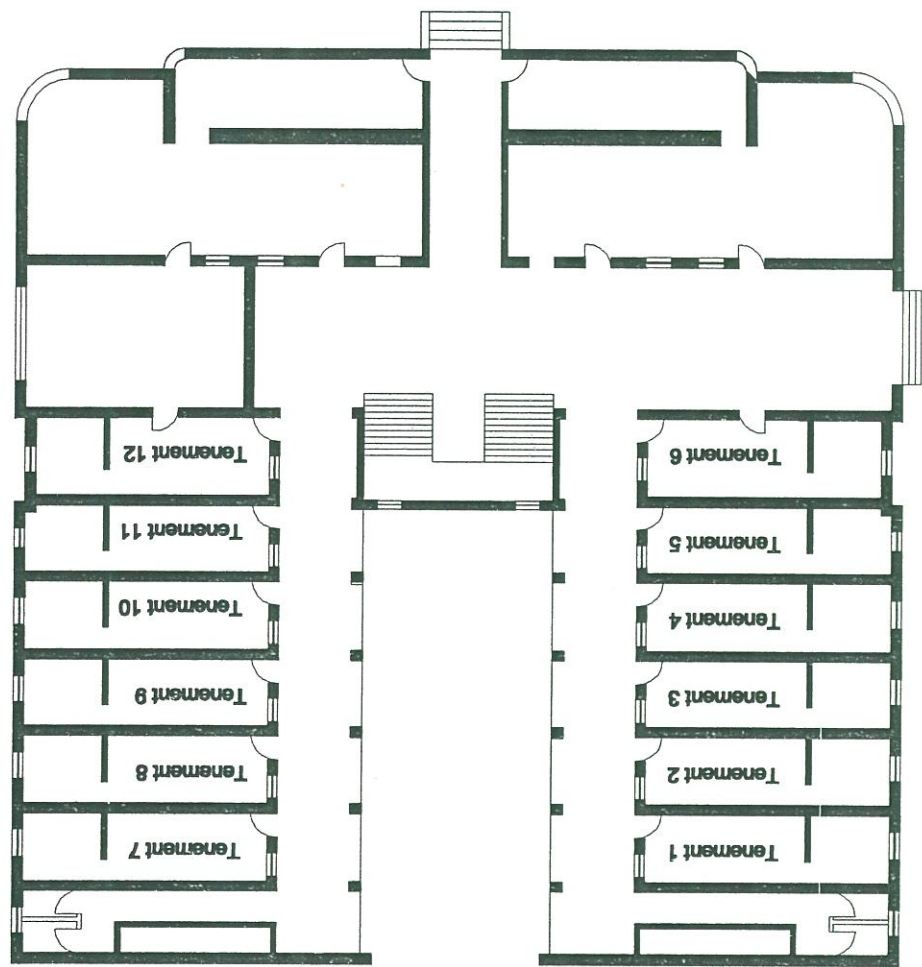
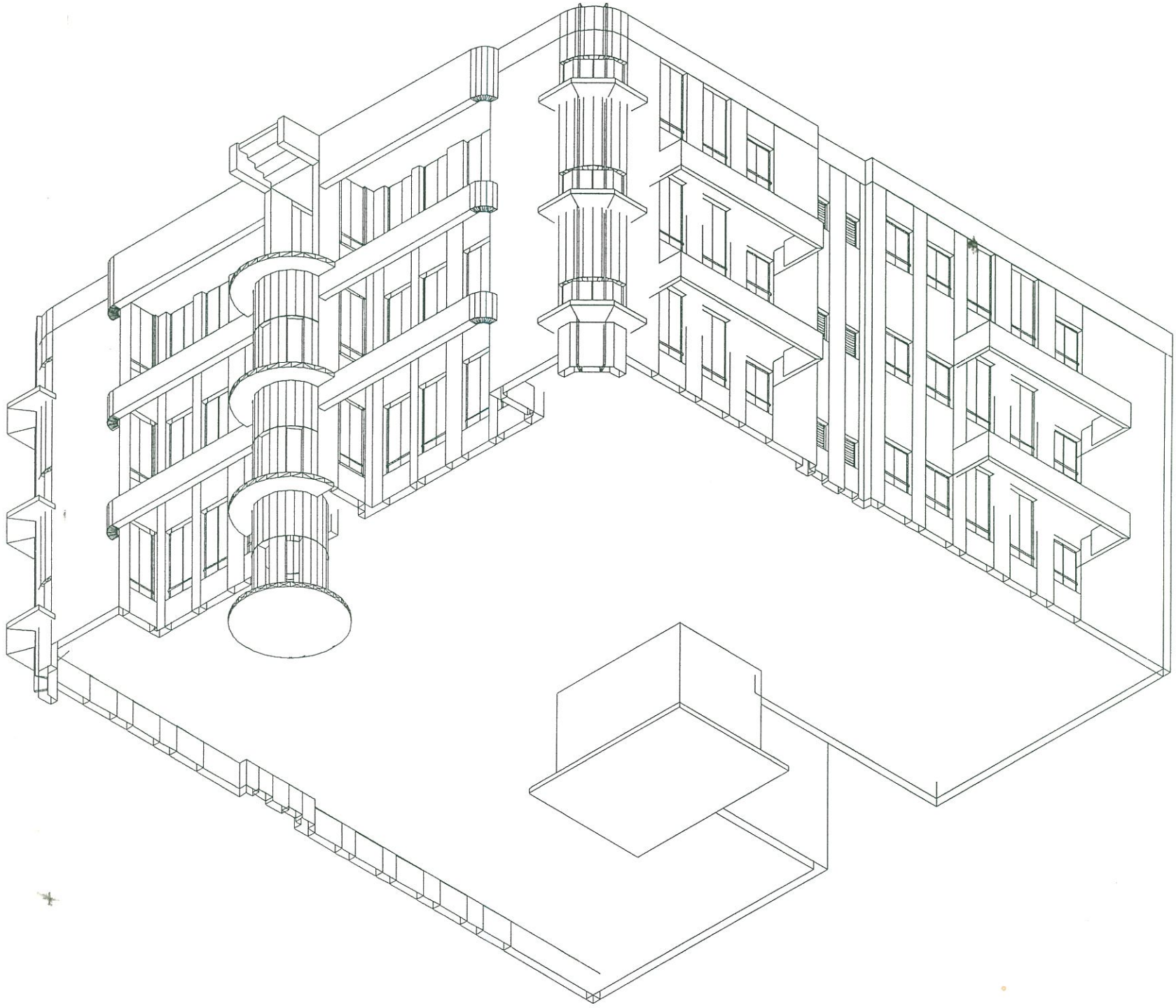
Notes
The precinct has developed from 1920 - 1940 and has variation in typologies. Eight such variations have been observed which are identified in the precinct.



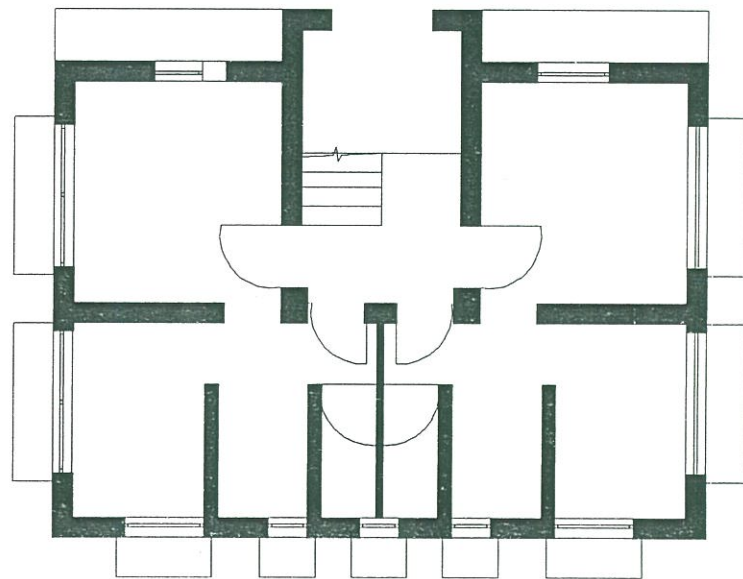
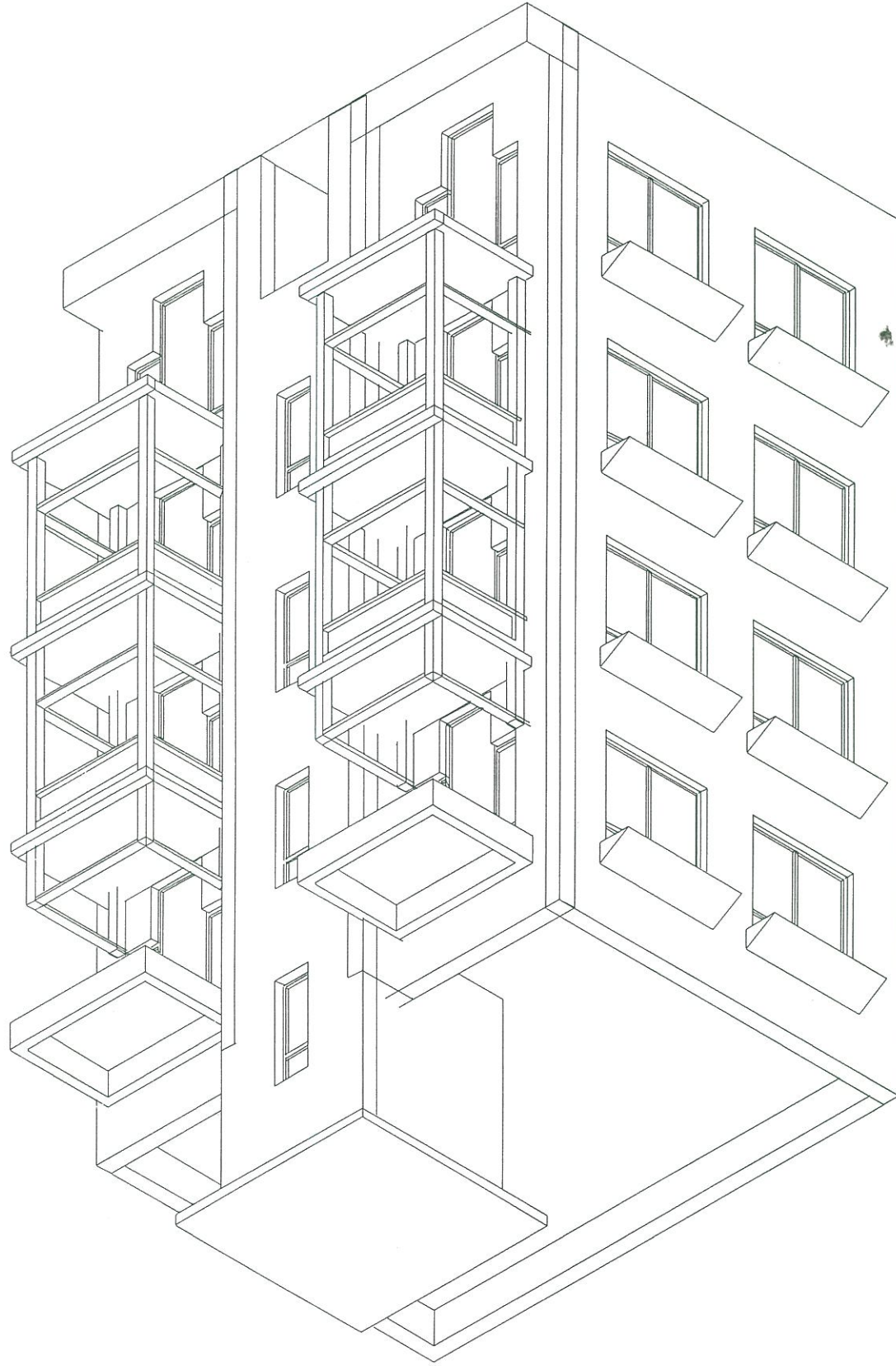
LEGEND

- TYP1
- TYP2
- TYP3
- TYP4
- TYP5
- TYP6
- TYP7
- TYP8

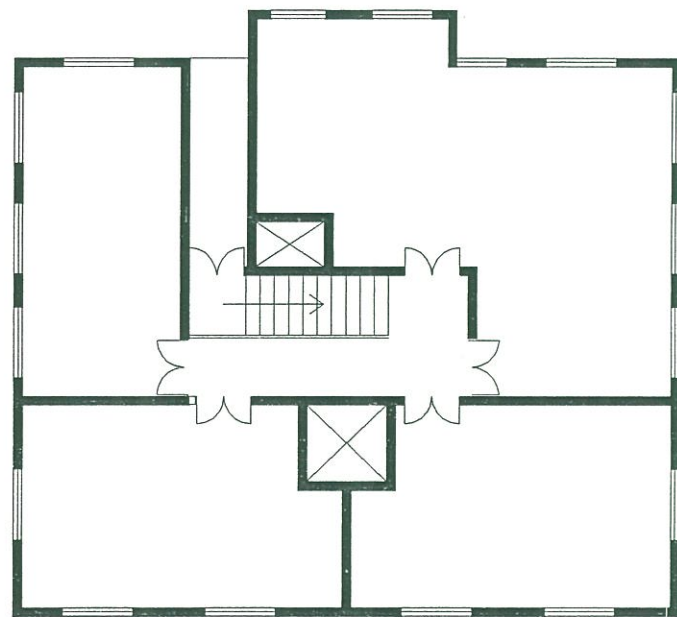
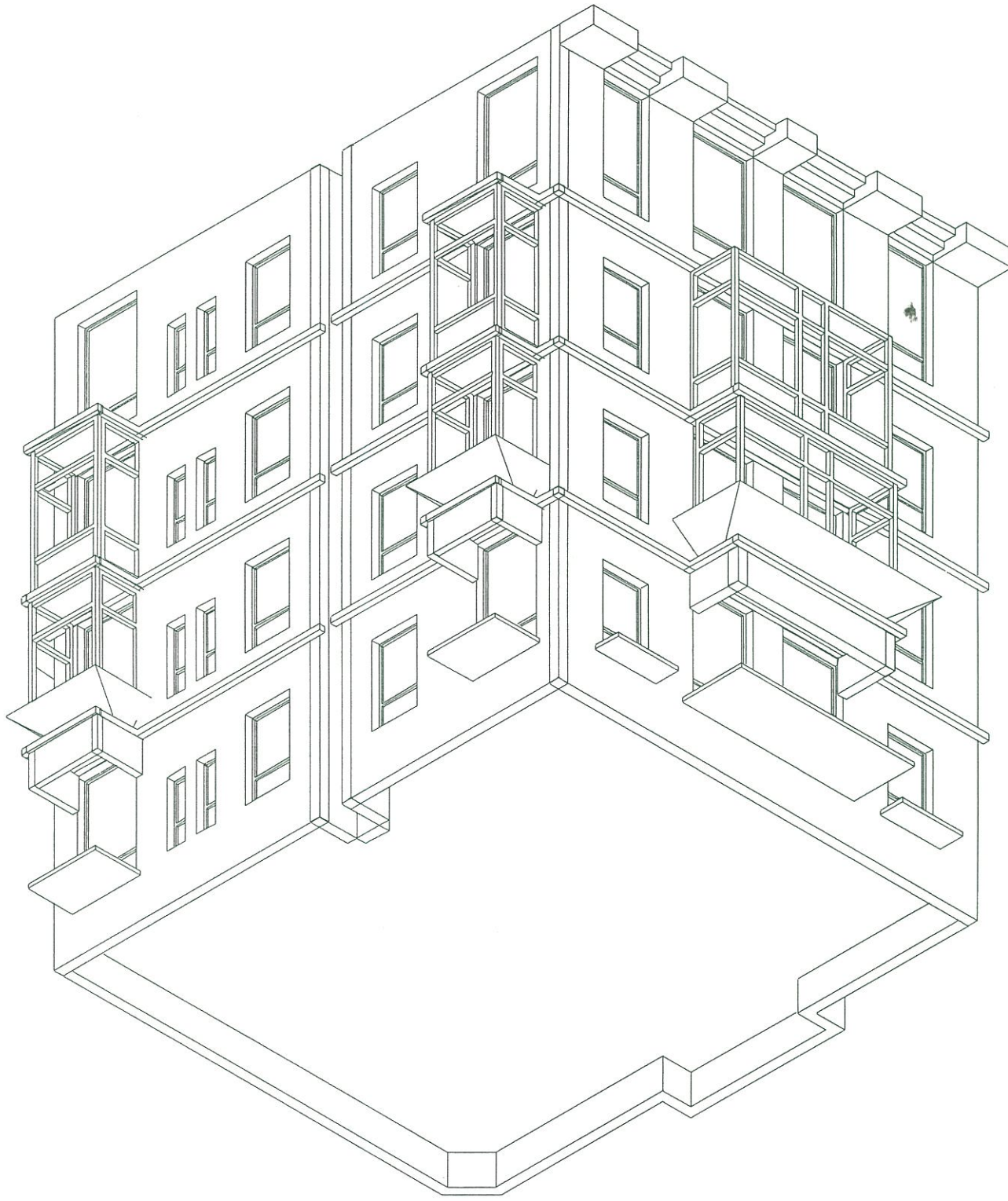




545	PLOT NO.	IDENTIFICATION	TYPOLOGY 1
HINDU COLONY	LOCATION (AREA)		
DR. BABASAHEB	(ROAD)		
AMBEDKER RD.		TIME OF CONSTRUCTION	1832 A.D.
36	NO. OF TENANTS	PHYSICAL	
4000	PLOT AREA (SQ.M)		
420 + (940)	GROUND COVERAGE (SQ. M)		
34%	% OF PLOT COVERAGE		
10.75	BUILDING HEIGHT (M)		
4180	BUILDING VOLUME (CU. M.)		
7.00	SET BACKS FRONT (M)		
17.45	BACK (M)		
8.85	SIDE 1 (M)		
9.30	SIDE 2 (M)		
1.00	FSI CONSUMED		
G + 2	NO. OF FLOORS	CONSTRUCTION TECHNOLOGY	R.C.C.
		ROOF PROFILE	FLAT ROOF

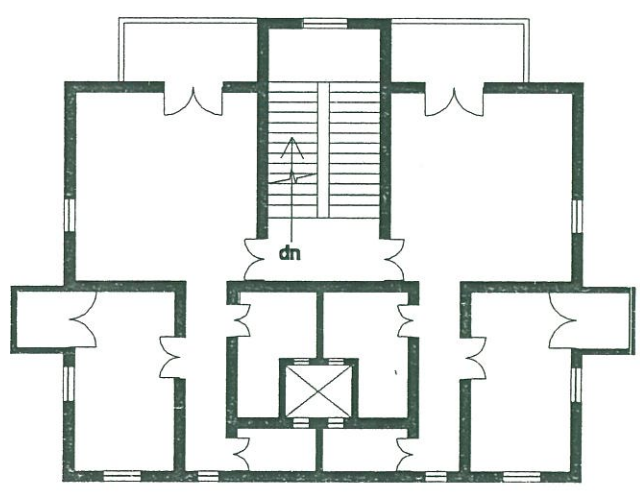
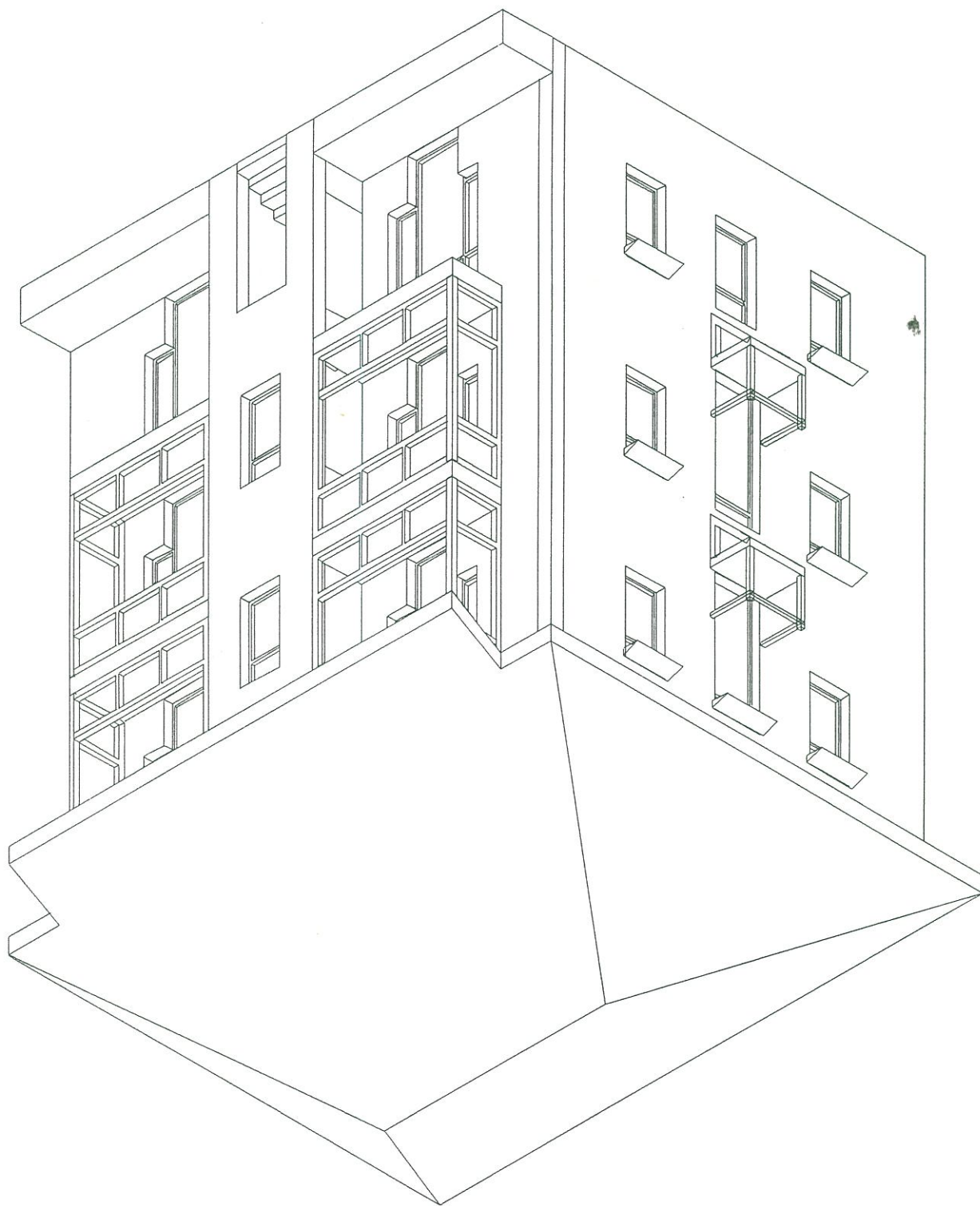


317	PLOT NO.	
HINDU COLONY	LOCATION (AREA)	
SIR BHALCHANDRA RD.	(ROAD)	
1932 A.D.	TIME OF CONSTRUCTION	8
	NO. OF TENANTS	PHYSICAL
800	PLOT AREA (SQ.M)	
305	GROUND COVERAGE (SQ. M)	34%
15.1	BUILDING HEIGHT (M)	4800
4.75	SET BACKS FRONT (M)	3.00
3.00	BACK (M)	3.75
4.00	SIDE 1 (M)	1.33
1.33	SIDE 2 (M)	NO. OF FLOORS
G + 3		CONSTRUCTION TECHNOLOGY
		L.B. & WOODEN
		ROOF PROFILE
		FLAT ROOF



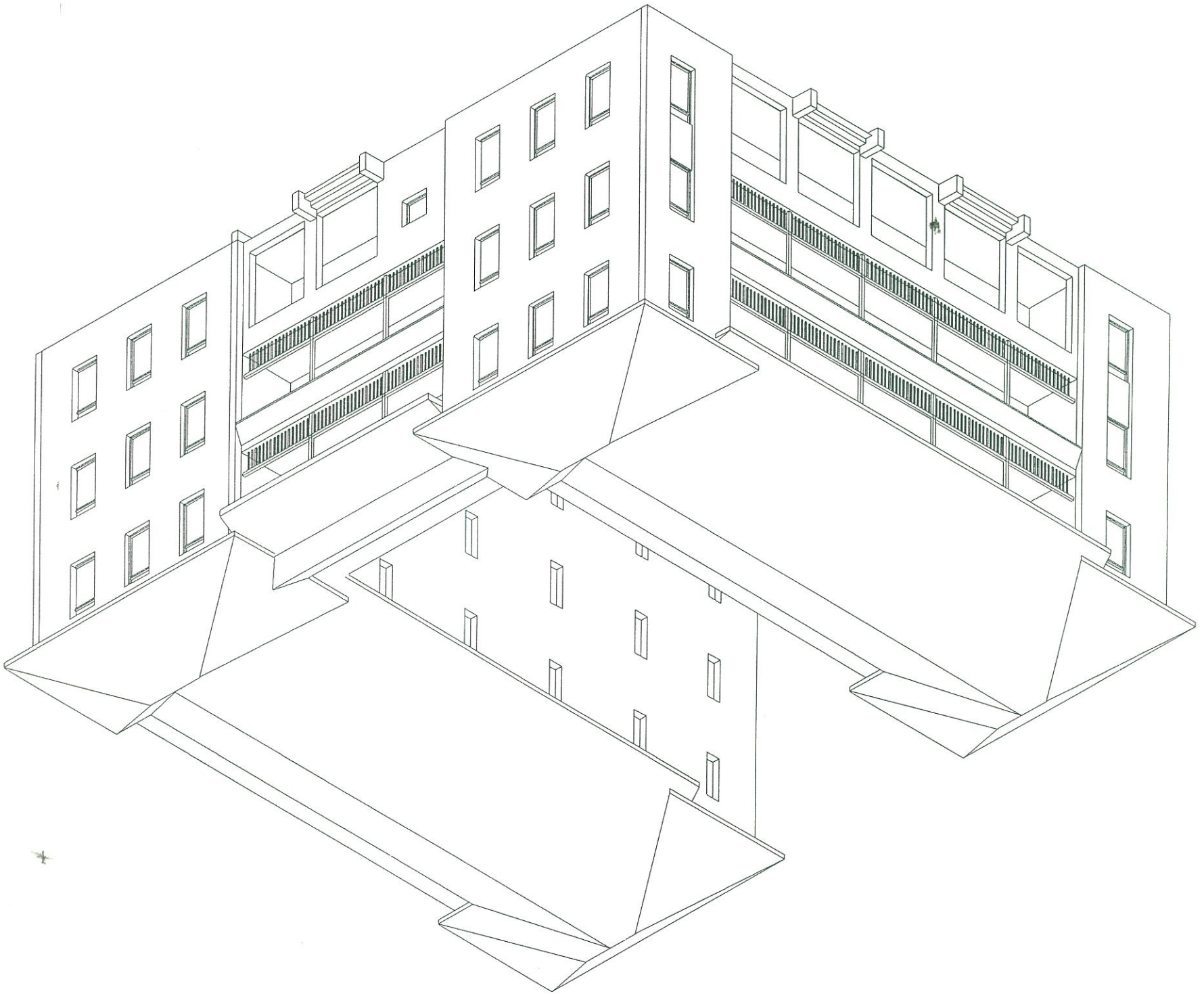
TYPOLGY 3

IDENTIFICATION	PLOT NO.	81
	LOCATION (AREA)	HINDU COLONY
	(ROAD)	D.V. PRADHAN ROAD
	TIME OF CONSTRUCTION	1933 A.D.
	NO. OF TENANTS	G. FL. COMMERCIAL + SERVANTS
		UPPER FLOORS 12 RESIDENTS
PHYSICAL	PLOT AREA (SQ.M)	350
	GROUND COVERAGE (SQ. M)	105
	% OF PLOT COVERAGE	34%
	BUILDING HEIGHT (M)	13.4
	BUILDING VOLUME (CU. M.)	4690
	SET BACKS FRONT (M)	6.95
	BACK (M)	4.45
	SIDE 1 (M)	7.00
	SIDE 2 (M)	4.60
	FSI CONSUMED	1.33
	NO. OF FLOORS	G + 3
CONSTRUCTION TECHNOLOGY		L.B. & WOODEN
ROOF PROFILE		FLAT ROOF

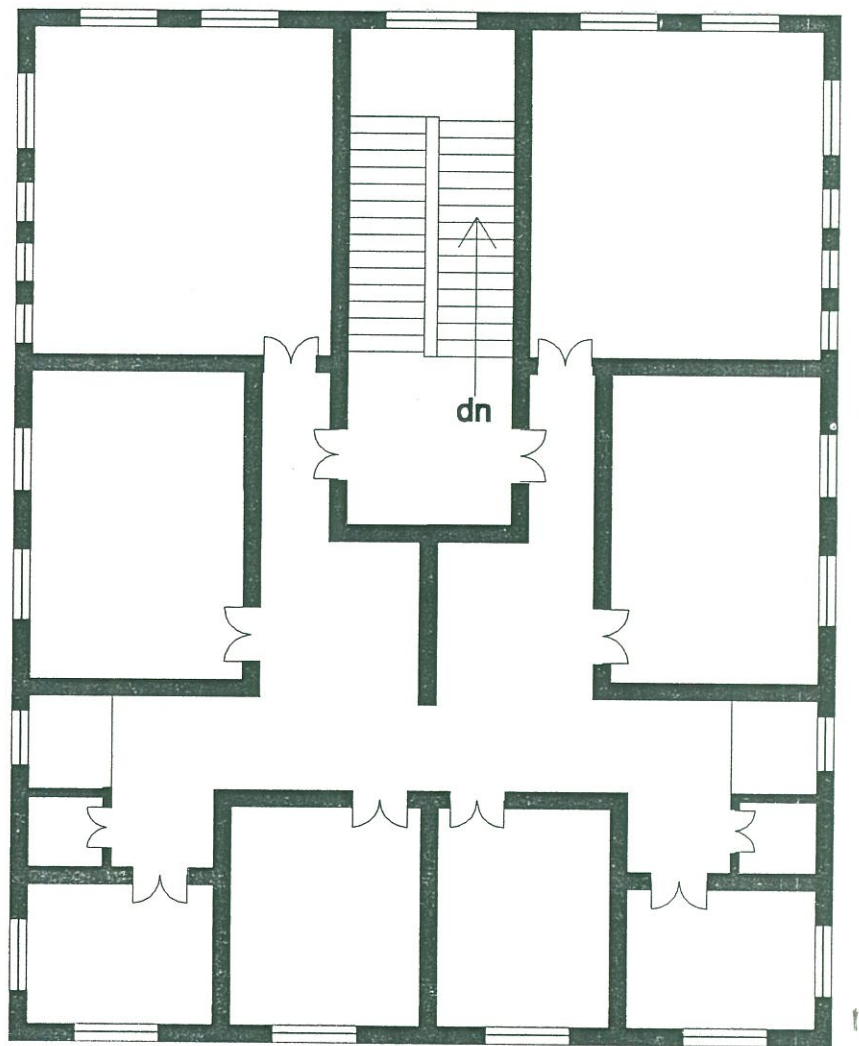


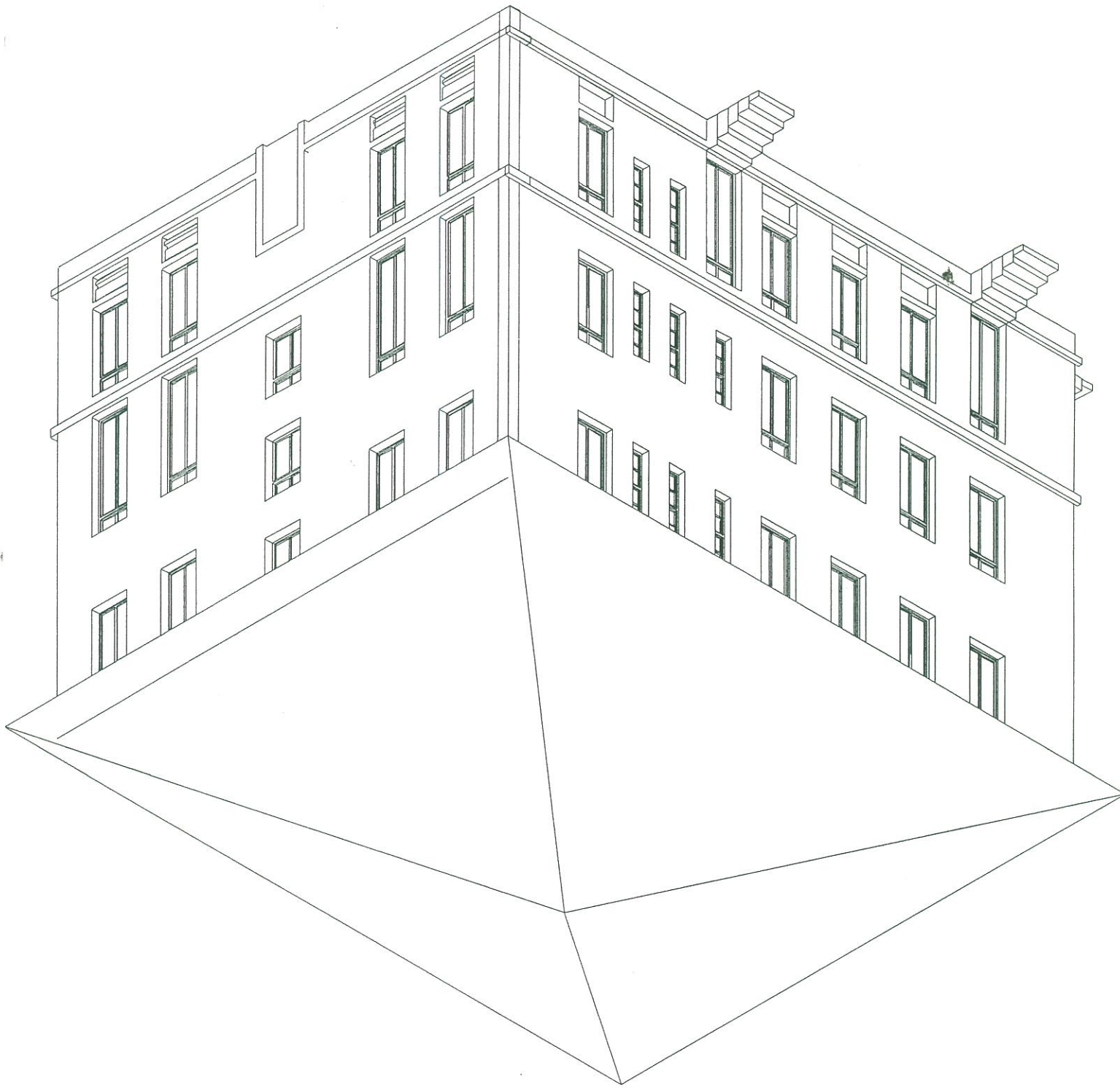
639	PLOT NO.	PARSI COLONY	LOCATION (AREA)	MANCHERJI	JOSHI ROAD	1929 A.D.	TIME OF CONSTRUCTION	6	NO. OF TENANTS	PHYSICAL	825	PLOT AREA (SQ.M)	250	GROUND COVERAGE (SQ. M)	33%	% OF PLOT COVERAGE	11.4	BUILDING HEIGHT (M)	2850	BUILDING VOLUME (CU. M.)	7.35	SET BACKS FRONT (M)	7.45	BACK (M)	5.9	SIDE 1 (M)	5.35	SIDE 2 (M)	1.00	FSI CONSUMED	G + 2	NO. OF FLOORS	CONSTRUCTION TECHNOLOGY	L.B. & T.W	PITCHED ROOF	ROOF PROFILE
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TYPOLOGY 4

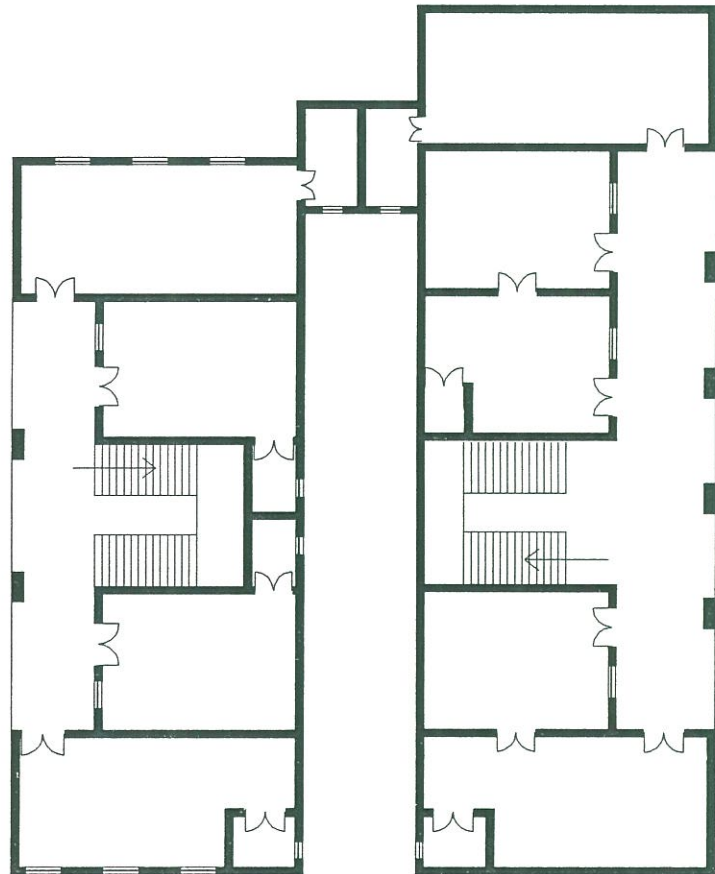


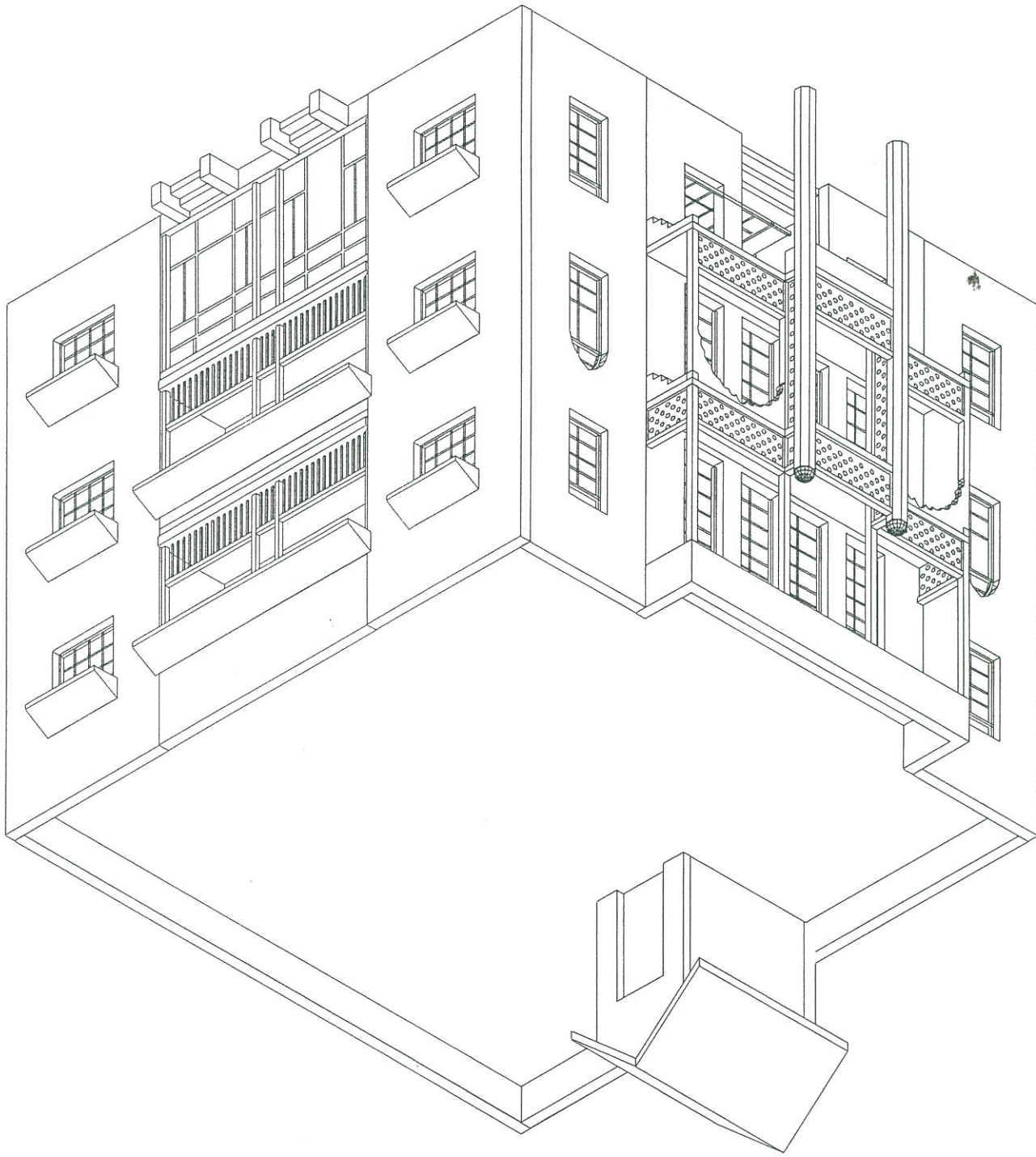
783	PLOT NO.	783
PARSI COLONY	LOCATION (AREA)	PARSI COLONY
MANCHERJI	(ROAD)	MANCHERJI
JOSHI RD.		JOSHI RD.
1824A.D.	TIME OF CONSTRUCTION	1824A.D.
32 BEDS (HOSTEL)	NO. OF TENANTS	32 BEDS (HOSTEL)
PHYSICAL		PHYSICAL
3375	PLOT AREA (SQ.M)	3375
255 + (705)	GROUND COVERAGE (SQ. M)	255 + (705)
28%	% OF PLOT COVERAGE	28%
11.75	BUILDING HEIGHT (M)	11.75
2650	BUILDING VOLUME (CU. M.)	2650
8.33	SET BACKS FRONT (M)	8.33
8.00	BACK (M)	8.00
8.55	SIDE 1 (M)	8.55
10.25	SIDE 2 (M)	10.25
1.00	FSI CONSUMED	1.00
G + 2	NO. OF FLOORS	G + 2
CONSTRUCTION TECHNOLOGY		CONSTRUCTION TECHNOLOGY
LB & TV		LB & TV
PITCHED ROOF	ROOF PROFILE	PITCHED ROOF



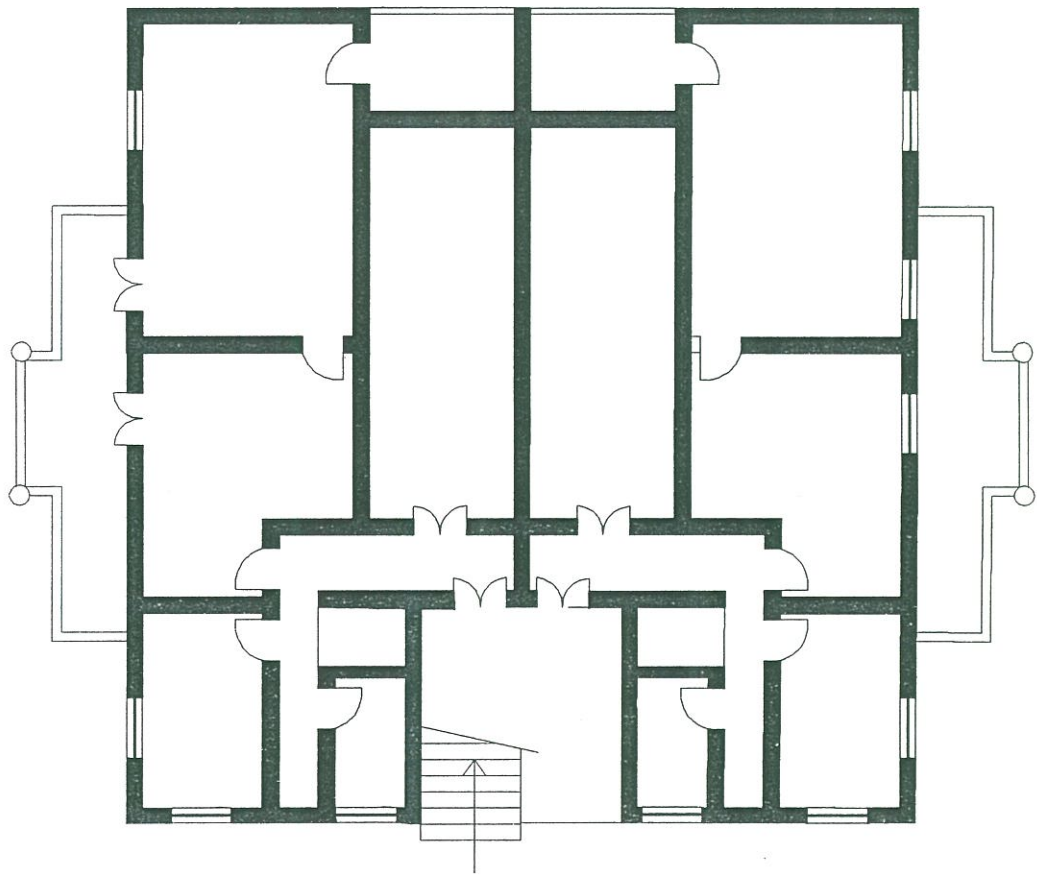


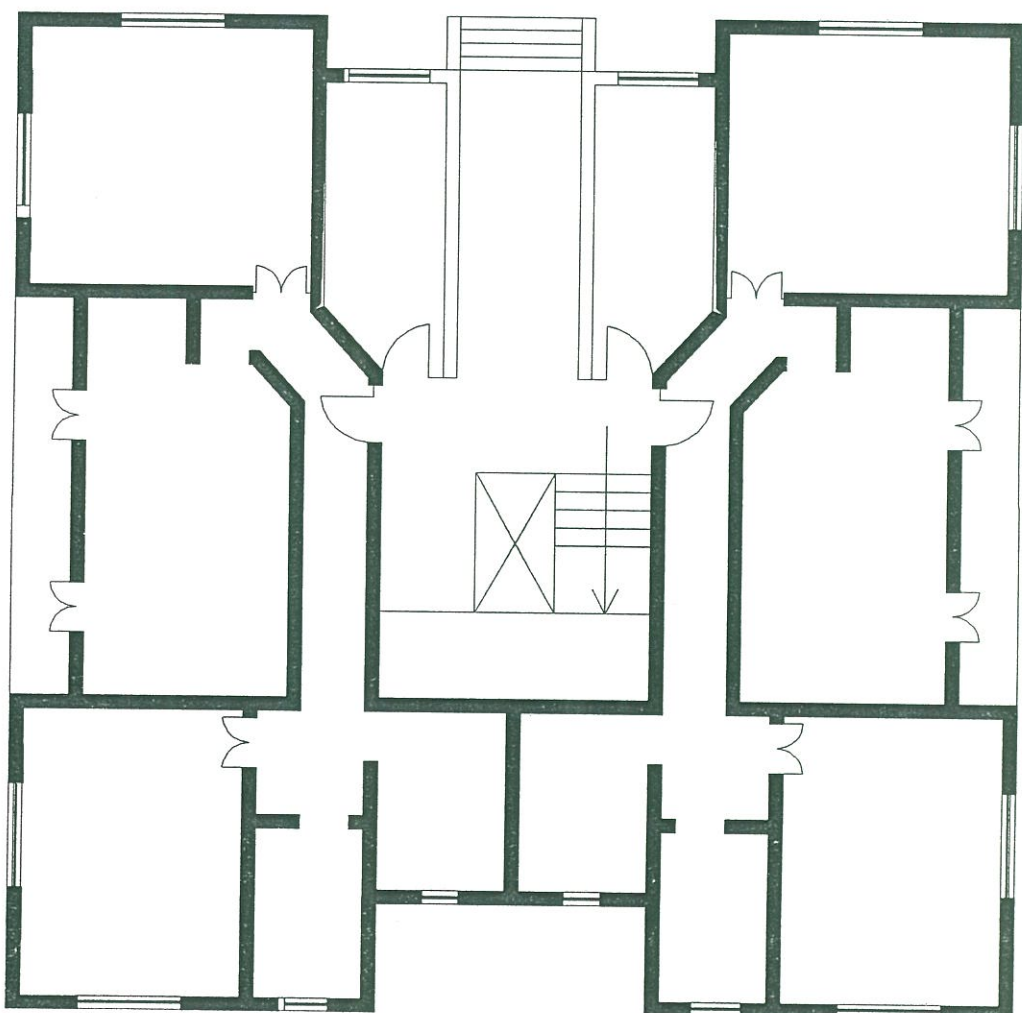
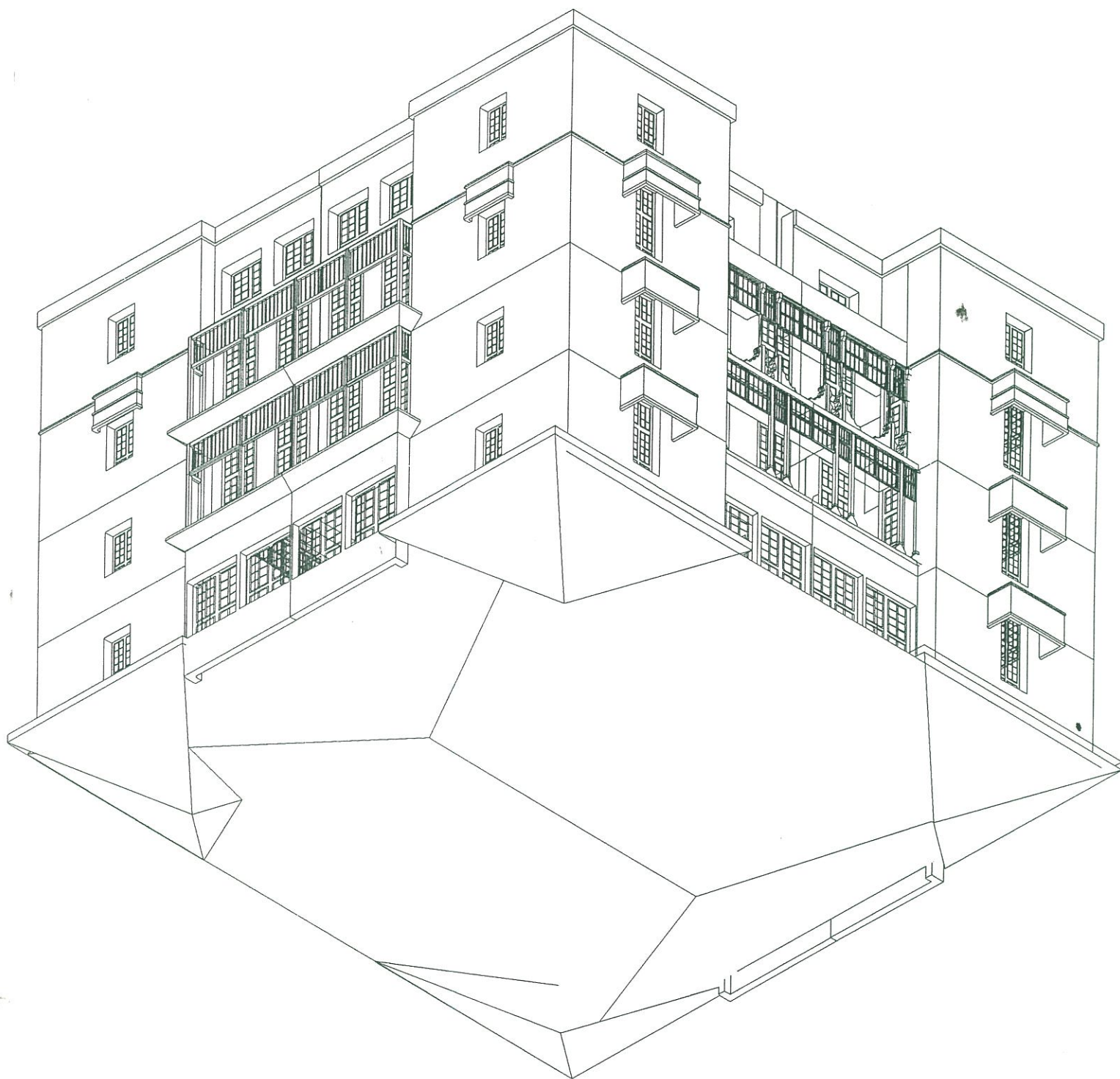
696	PLOT NO.	IDENTIFICATION
PARSI COLONY	LOCATION (AREA)	
DR. DINSHAW	(ROAD)	
MASTER RD.		TIME OF CONSTRUCTION
1925 A.D.		
12	NO. OF TENANTS	PHYSICAL
3320	PLOT AREA (SQ.M)	
275 + (980)	GROUND COVERAGE (SQ. M)	
36%	% OF PLOT COVERAGE	
13.5	BUILDING HEIGHT (M)	
3710	BUILDING VOLUME (CU. M.)	
7.85	SET BACKS FRONT (M)	
3.85	BACK (M)	
9.8	SIDE 1 (M)	
7.10	SIDE 2 (M)	
1.00	FSI CONSUMED	
G + 2	NO. OF FLOORS	
	CONSTRUCTION TECHNOLOGY	LB.& T.W.
	ROOF PROFILE	PITCHED ROOF





TYPOLOGY 7	
118	PLOT NO.
HINDU COLONY	LOCATION (AREA)
HINDU COLONY	(ROAD)
5TH LANE	TIME OF CONSTRUCTION
1932 A.D.	NO. OF TENANTS
6	PHYSICAL
880	PLOT AREA (SQ.M)
190	GROUND COVERAGE (SQ. M)
34%	% OF PLOT COVERAGE
11.75	BUILDING HEIGHT (M)
2230	BUILDING VOLUME (CU. M.)
6.00	SET BACKS FRONT (M)
4.70	BACK (M)
5.60	SIDE 1 (M)
4.00	SIDE 2 (M)
1.00	FSI CONSUMED
G + 2	NO. OF FLOORS
CONSTRUCTION TECHNOLOGY. B. & WOODEN	
ROOF PROFILE	
FLAT ROOF	

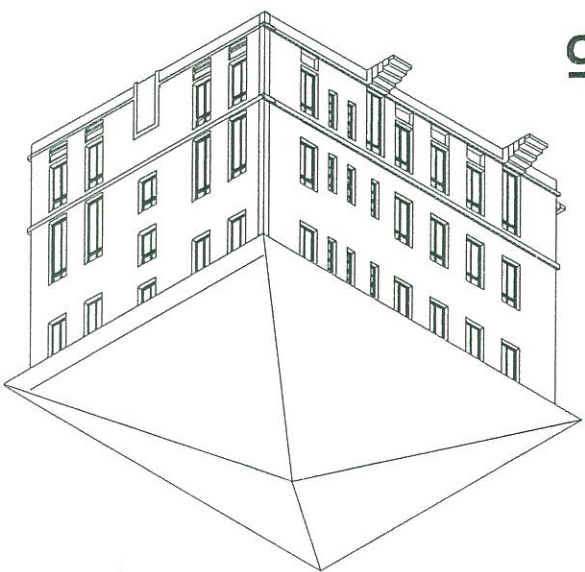
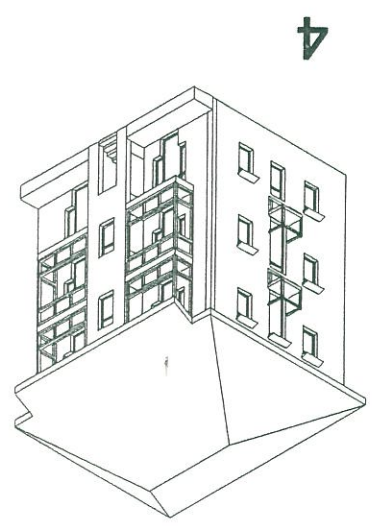
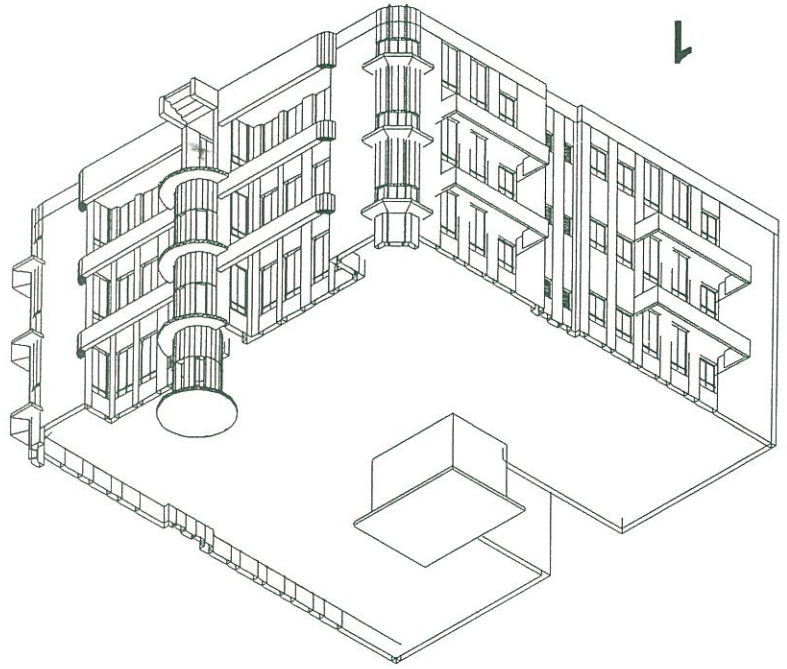
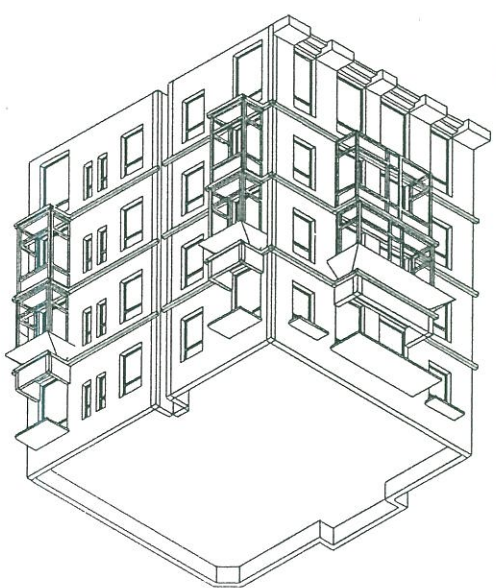
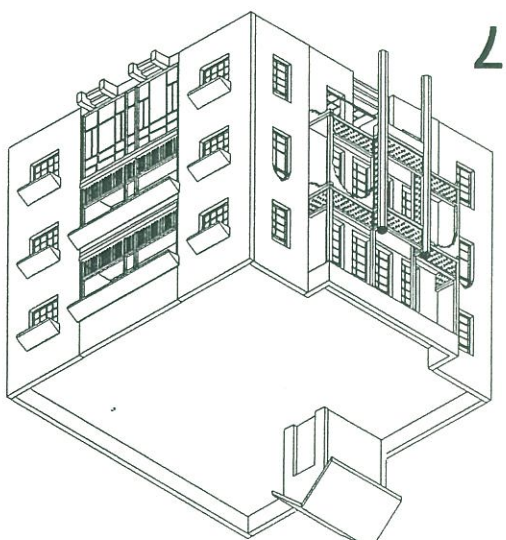
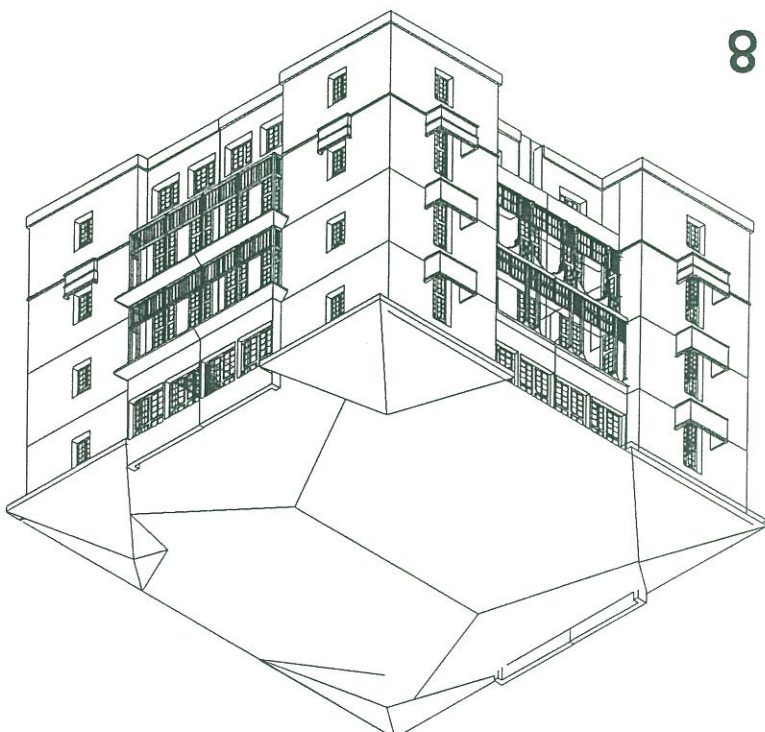
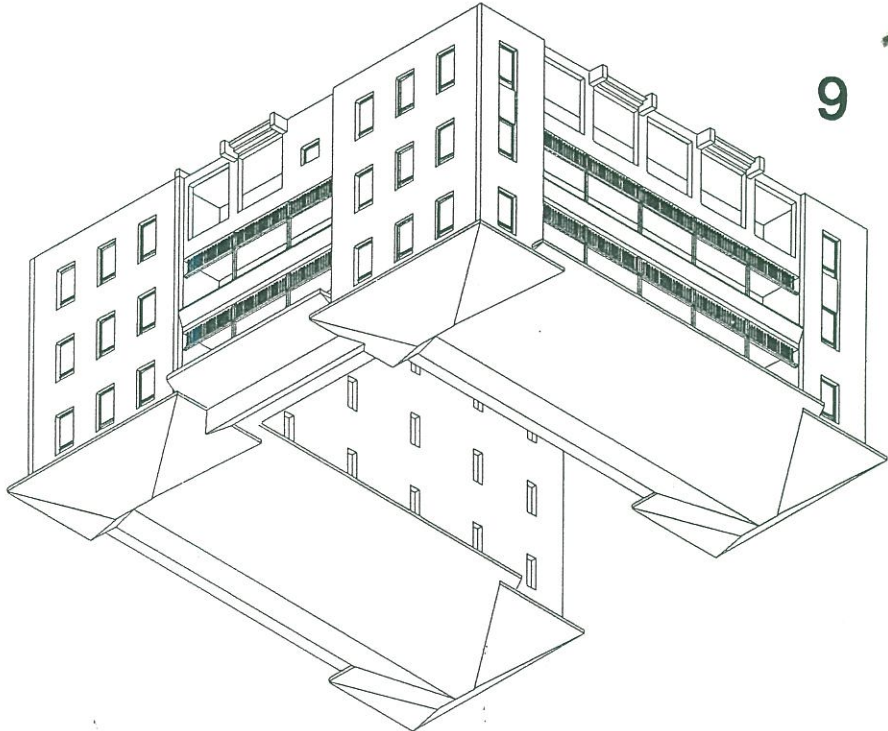
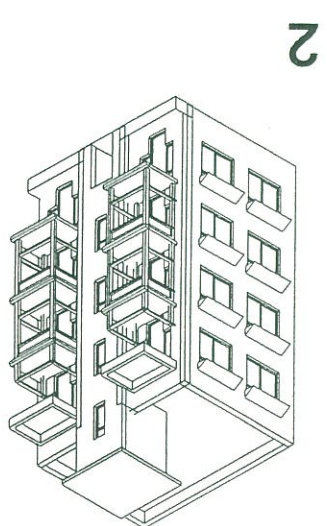




545	IDENTIFICATION	
PARSI COLONY	LOCATION (AREA)	
MANCHERJI JOSHI RD.	(ROAD)	
1829 A.D.	TIME OF CONSTRUCTION	
8	NO. OF TENANTS	
PHYSICAL		
1680	PLOT AREA (SQ.M)	
420	GROUND COVERAGE (SQ. M)	
33.33%	% OF PLOT COVERAGE	
14.50	BUILDING HEIGHT (M)	
6510	BUILDING VOLUME (CU. M.)	
7.00	SET BACKS FRONT (M)	
17.45	BACK (M)	
6.85	SIDE 1 (M)	
9.30	SIDE 2 (M)	
1.33	FSI CONSUMED	
G + 3	NO. OF FLOORS	
CONSTRUCTION TECHNOLOGY		
LB. & WOODEN		
PITCHED ROOF	ROOF PROFILE	

COMPARATIVE TYPOLOGIES

Notes
All the typologies have been compared to study the
difference in footprint, volume, fenestration and architectural character.



The precinct has a number of urban spaces, which need to be studied for their nature of urban form and activity. The nature of spaces might vary from city square, transport interchanges, maidans, gardens to smaller residential open spaces (plate 39). Khodadad Circle and Maheshwari Udyan have an identifiable built-form and open space relation and form important commercial city nodes on the Dr. Baba Saheb Ambedkar Road. Five Gardens is known for its multifunctional nature of activity for the city as well as the neighbourhood. The Ruita and Poddar area is a very important institutional node. The Matunga station forms a commercial node as well as a transport interchange for the precinct.

Each of these spaces has a separate identity, which needs to be established. However as the analysis of each would indicate, there might be many activities and transformations in built-form in these spaces, which might be incongruous to its nature.

STRUCTURE OF URBAN SPACE

PLATE NO. 39

The precinct has a distinct urban space structure, which is interconnected by the movement network (vehicular + pedestrian)

Notes



5.1. KHODADAD CIRCLE (fig 13)

It forms one of the important nodes amongst many others on the Dr. Baba Sahab Ambedkar road and lies on the crossing of the North-South and East-West connectors of the city. These series of nodes together gives an identity to this city corridor.

Historically this precinct formed a tram terminus and an urban square marking the culmination of the city limits. With the expansion of the city limits this urban square became a part of the city's movement system and became more of a traffic junction and a parking lot. The construction of the ongoing fly-over will completely destroys its built-form open-space structure. Khodadad Circle thus struggles to keep its identity. It is a contested space with various interest groups like shop-owners, informal shop-owners, the BMC, the residents, the corporates vying with each other for space. The chaotic arrangement of urban signages, informal shopping on the pavements and varied landscape features, which characterise the precinct, are symptomatic of this struggle (plate 40 to 43).

5.2. MAHESHWARI UDYAN (fig 14)

This is one of the city nodes after Khodadad Circle on the Dr. Baba Sahab Ambedkar road. It also forms an important node between different parts of the precinct. The Maheshwari Udyan forms a crescent with shops on the ground, residences on the top and a garden in the centre. Though this garden lies in the middle of a traffic junction, it is actively used as a children's play area. The other activities, like informal shopping, parking are much subdued than the Khodadad Circle with lesser signs of decay (plate 44 to 46).

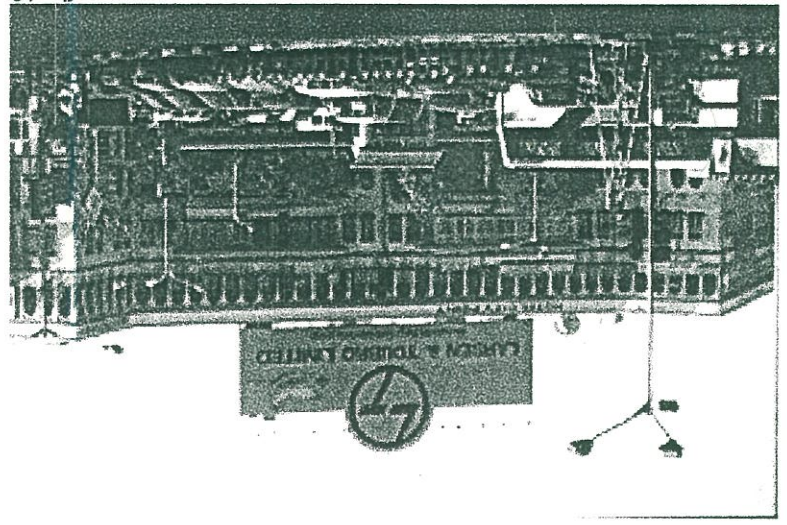


fig 13

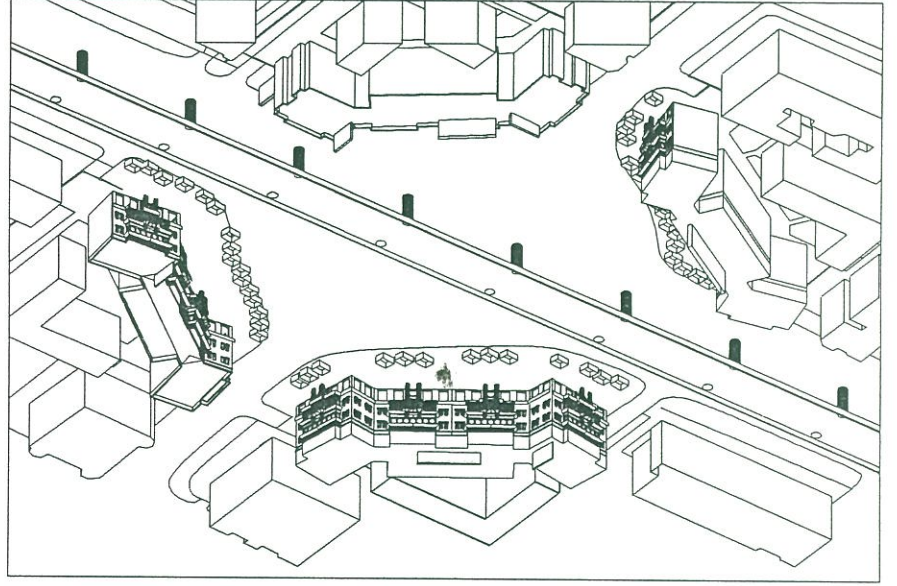


fig 14

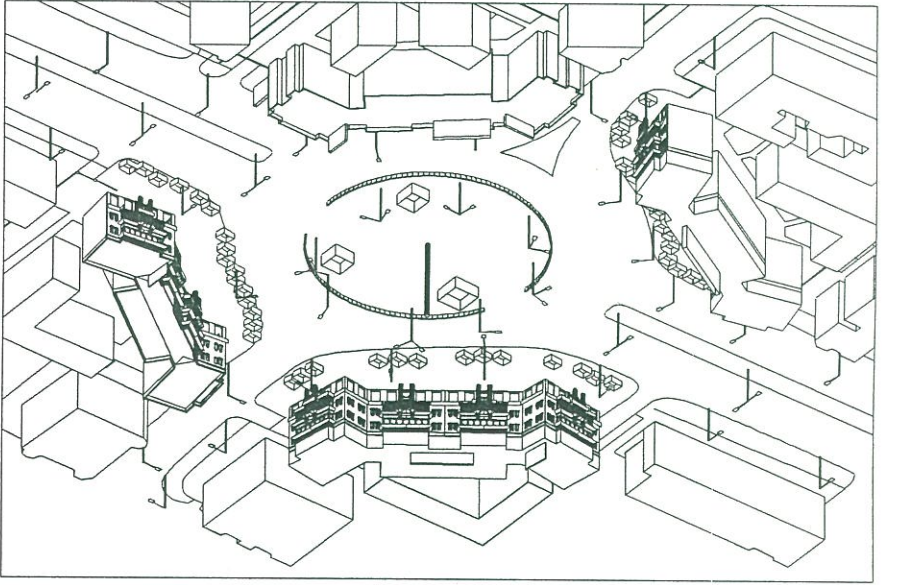
KHODADAD CIRCLE

(TRANSFORMATIONS)

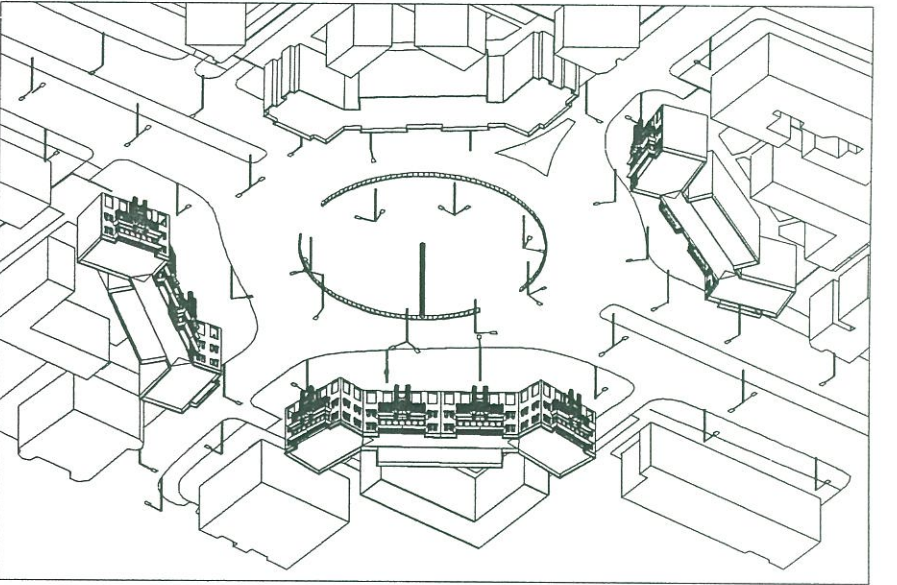
PLATE NO. 40



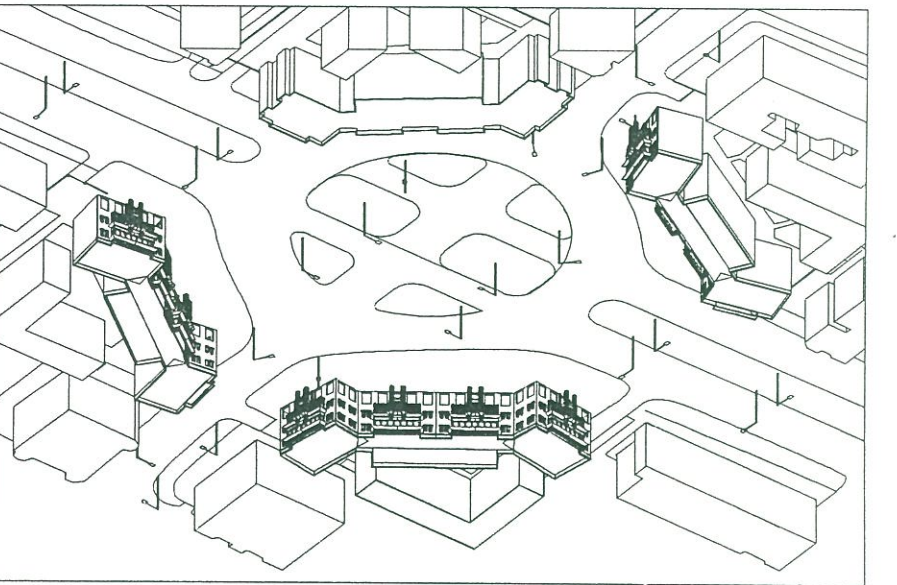
2000
With the bridge cutting through the Khodadad Circle, the nature of space will be completely disrupted.



1980
With the increased FSI, some buildings have added floors; building facades are changed and ruptured. Central garden has become a parking lot and the pavements are occupied by hawkers. Hoardings, air-conditioning units, signages are all abruptly placed and the character has undergone complete transformation.



1950
The tram route is taken off and the circle is made into a central garden. The street lights have undergone changes.



1930
The circle as planned originally with all four buildings as G+2 high. The tram route passes through the circle.

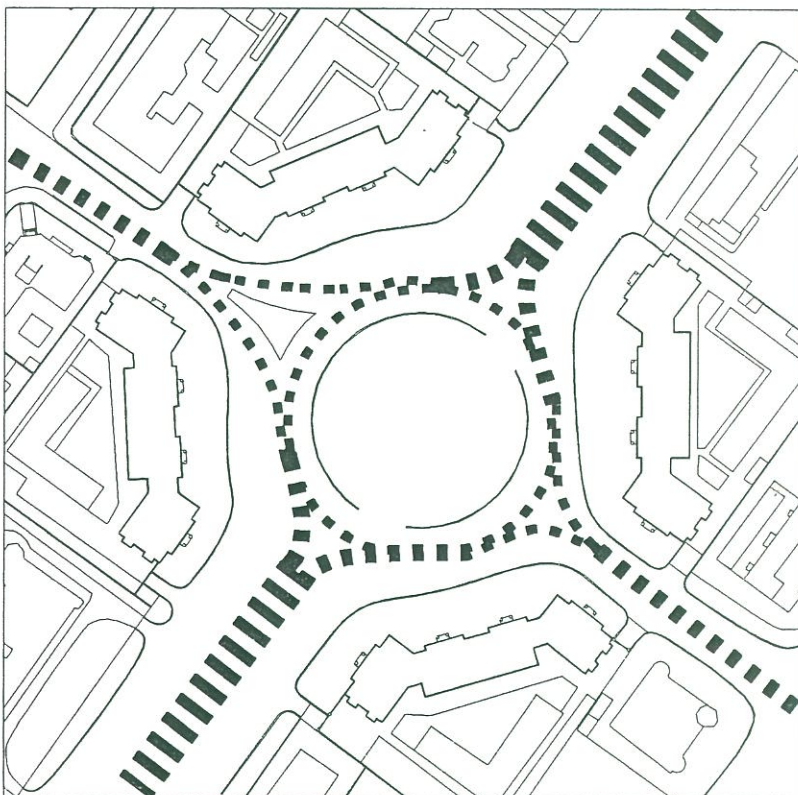
This urban space as seen clearly is heavily used as a commercial space and a transport junction. However the transport activities like the car parkings are detrimental to the image and activity.

ACTIVITY PATTERN

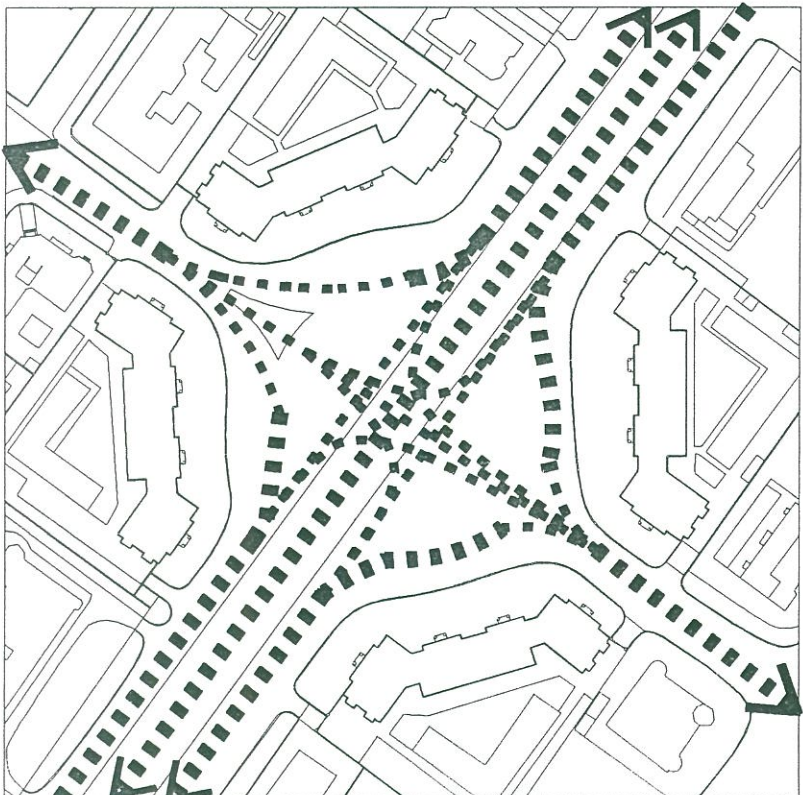
	morning	afternoon	evening	recreation	commercial space	transport junction	institution	office use

The junction causes some delay to the north-south bound traffic in the present condition.

EXISTING MOVEMENT

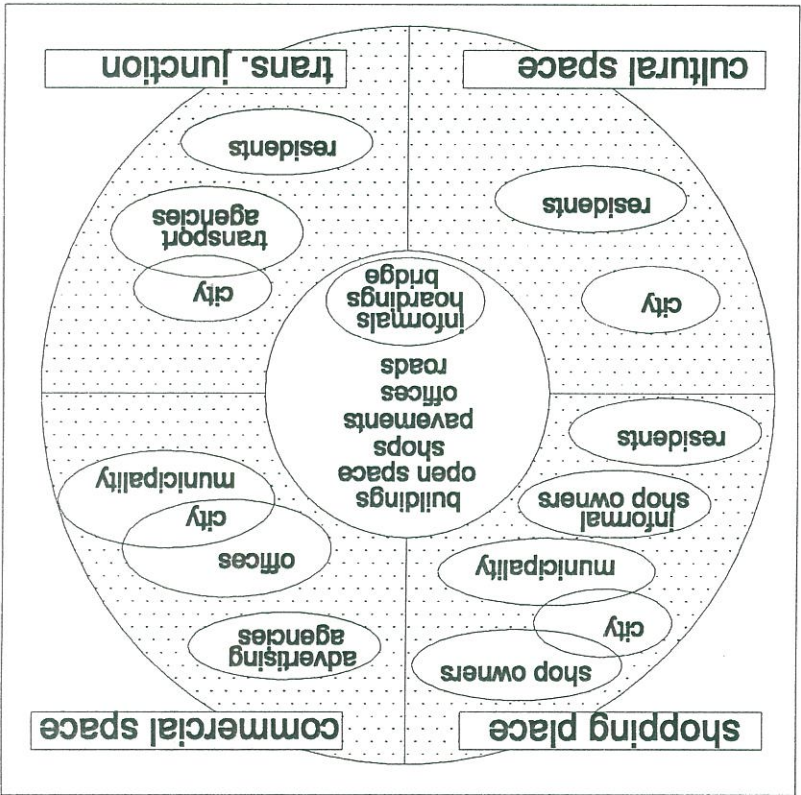


MOVEMENT WITH THE BRIDGE



The new bridge proposed resolves this problem, but only for private vehicles since the public transport requires to use the ground level. Also the east-west crossing happens at this level. The bridge also detracts the overall image of this node.

INTEREST GROUPS



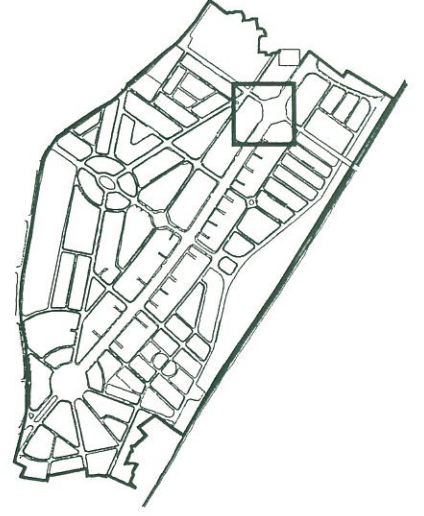
A large number of groups like shop owners, informal shop owners, residents, corporate offices etc. are using this precinct for various purposes. The BMC's use of this urban space as a parking lot seems to override others.

KHODADAD CIRCLE

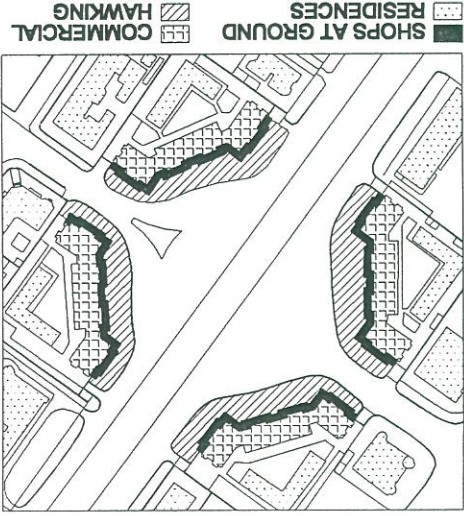
(PHYSICAL CHARACTERISTICS)

Notes
 This plan shows the use of space for informal shopping.
 The pavement pattern is varied with attempts of every shop owner to private space in front of his/her shop.
 The location and design of street furniture and urban signage is haphazard.

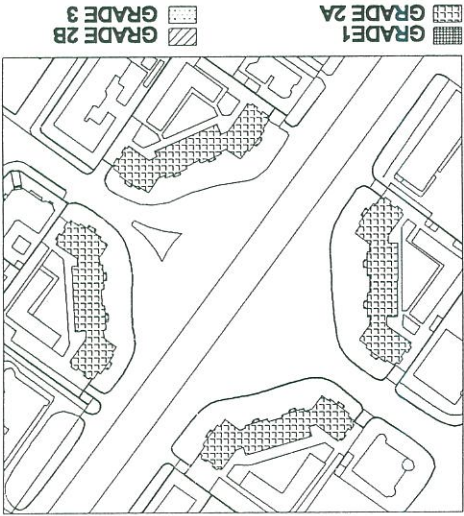
LOCATION PLAN



LANDUSE PLAN

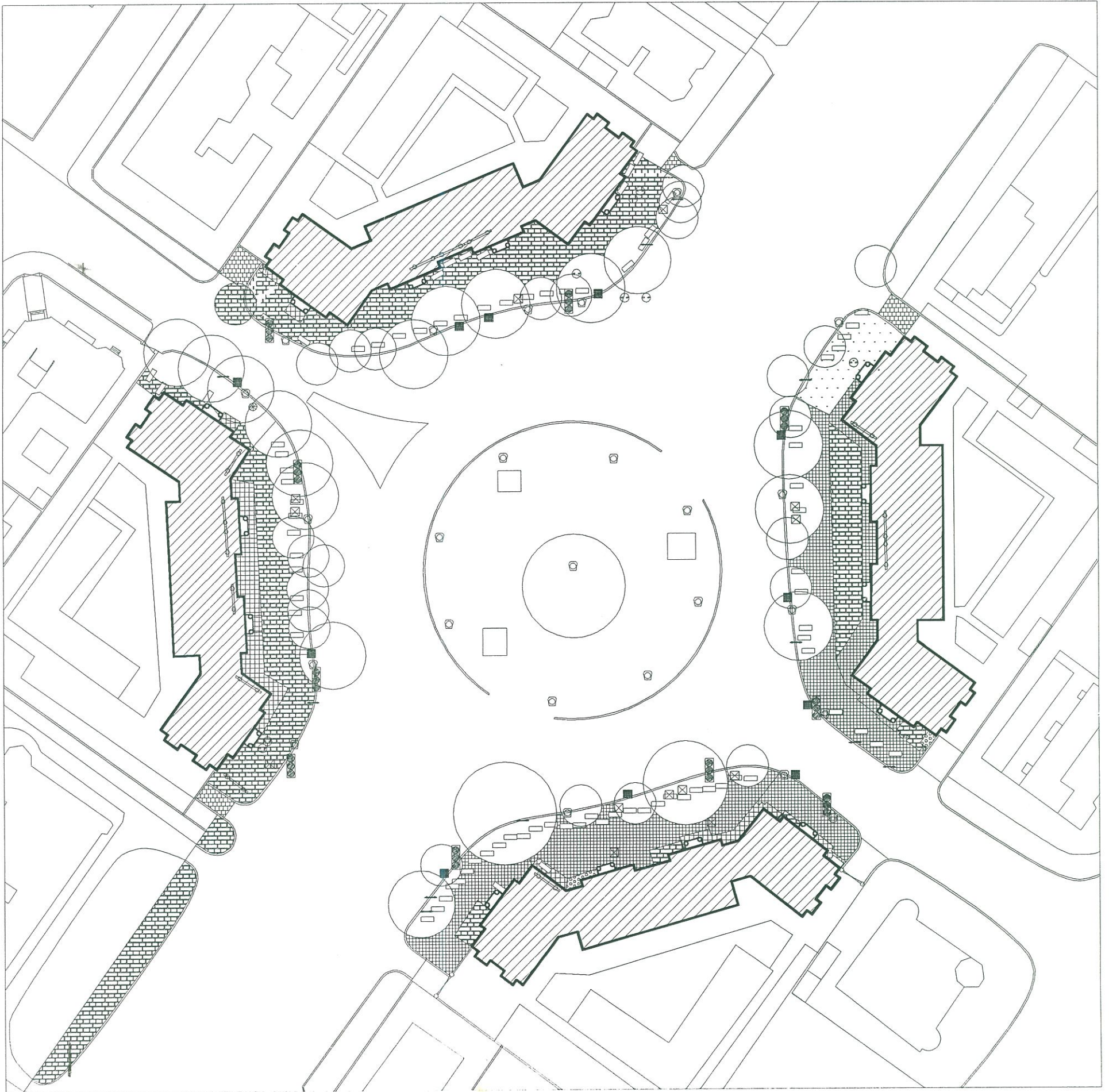


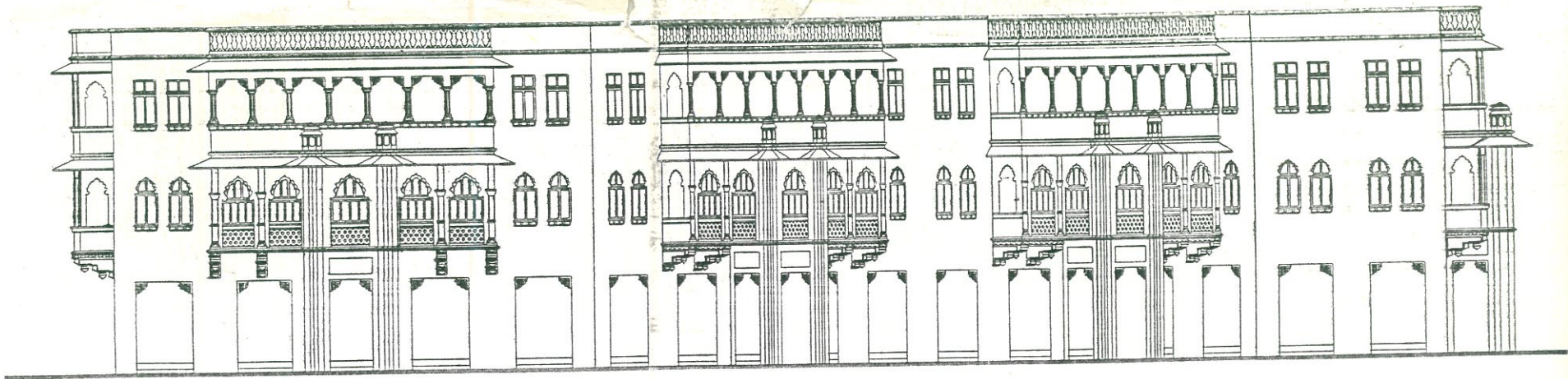
HERITAGE STRUCTURES



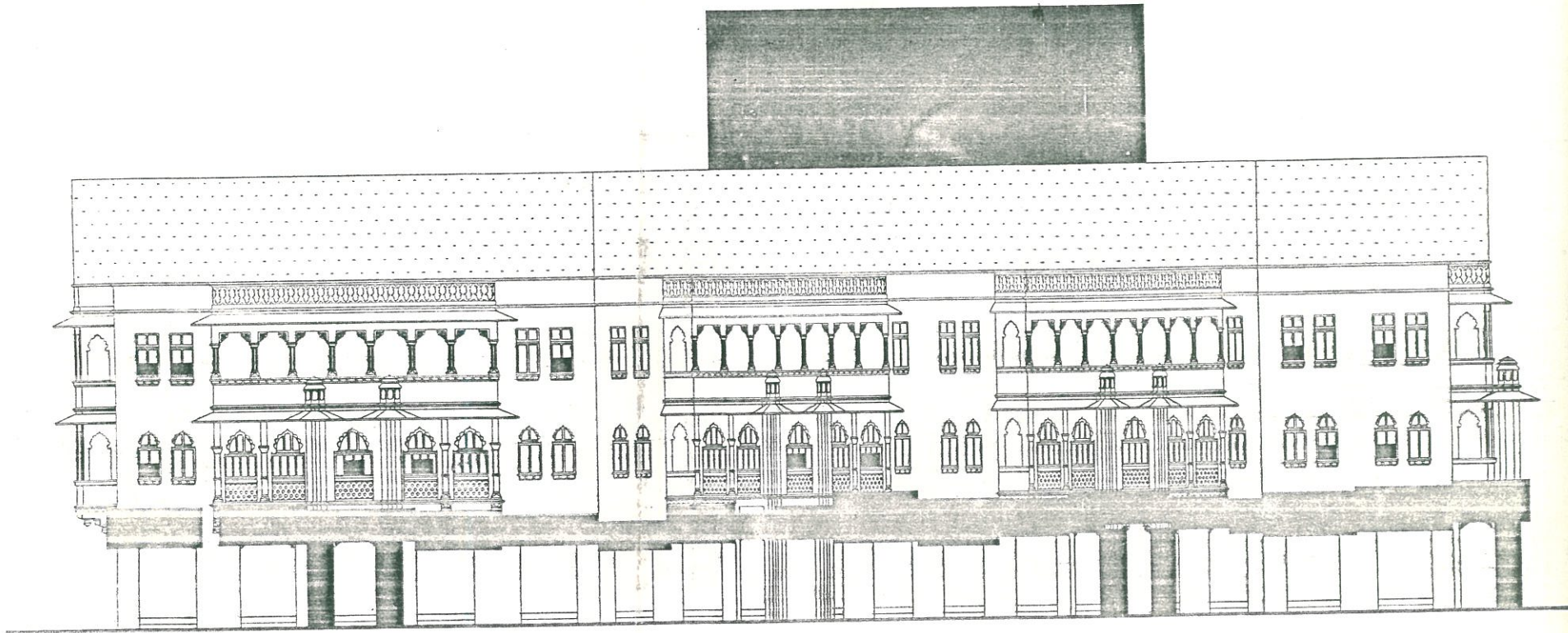
PLAN

- GUTTER HOLE
- LAMP POST
- ⊗ SIGNAL
- ⊗ ELECTRIC/TELEPHONE BOX
- MANHOLE
- ⊗ FIRE HYDRANT
- SIGN BOARD

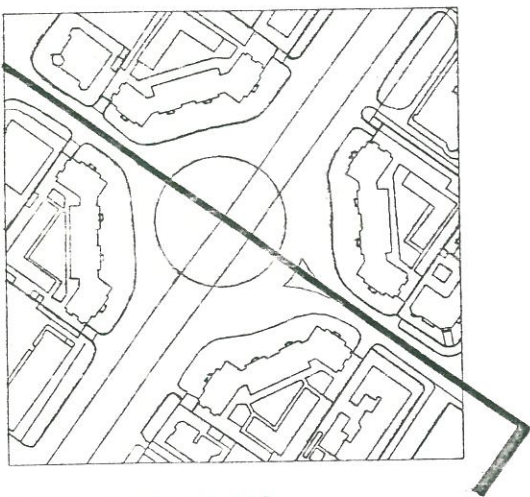




DETAIL OF ELEVATION



DETAIL OF ELEVATION



LOCATION PLAN

1



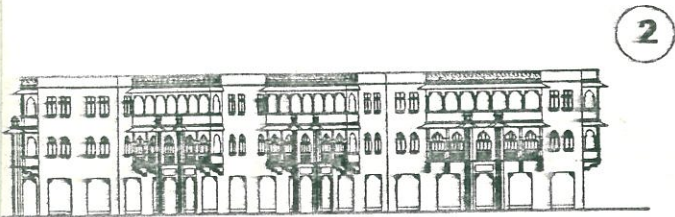
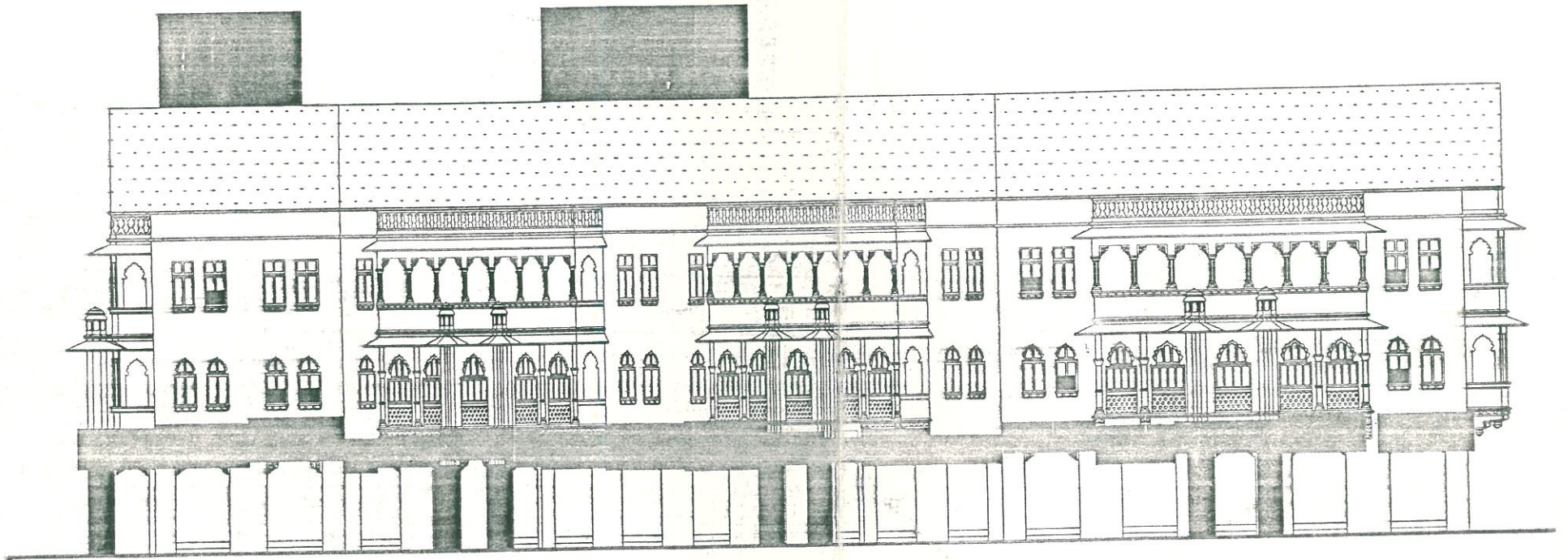
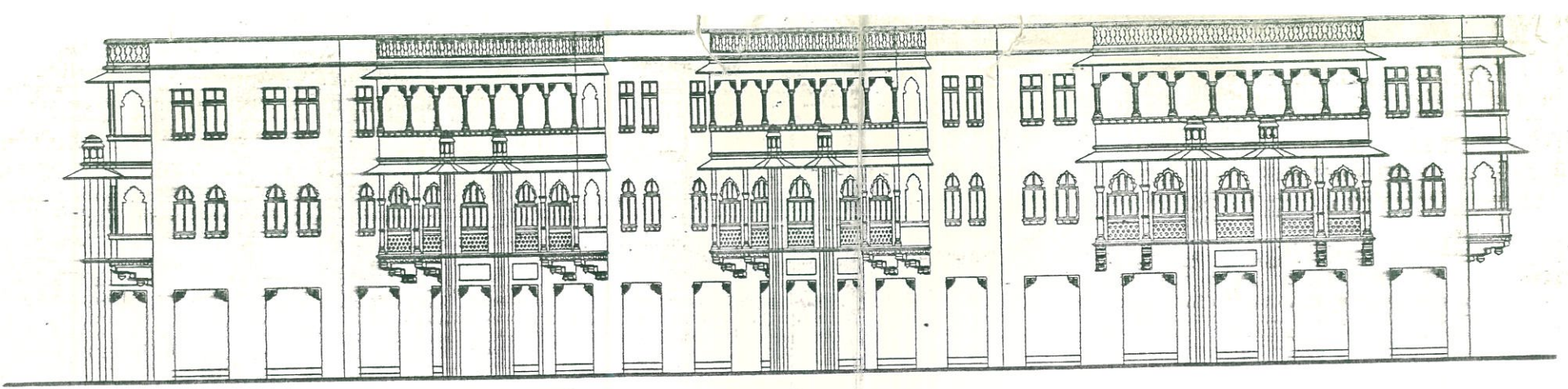
ELEVATION

Notes

The building facades of the Khodadad circle shows serious ruptures with insensitive signboards, hoardings, air-conditioning units etc.

KHODADAD CIRCLE

(BUILDING TRANSFORMATIONS)



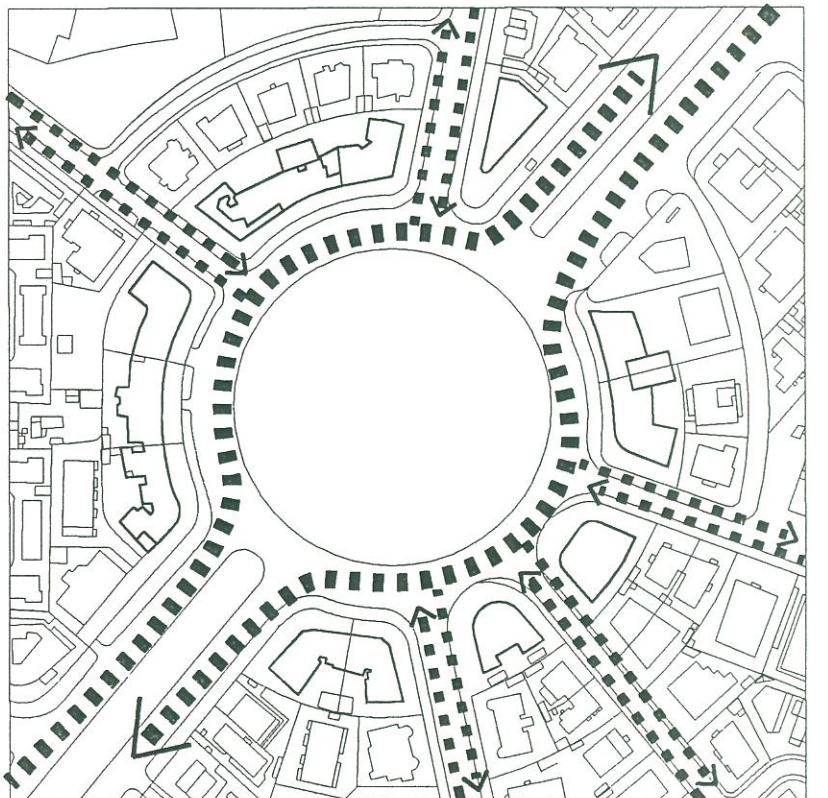
This urban space as seen clearly is heavily used as a commercial space and a transport junction. The roundabout is used as a public garden.

ACTIVITY PATTERN

office use					
institution					
through vehicular traffic					
commerce					
recreation					
	morning	afternoon	evening		

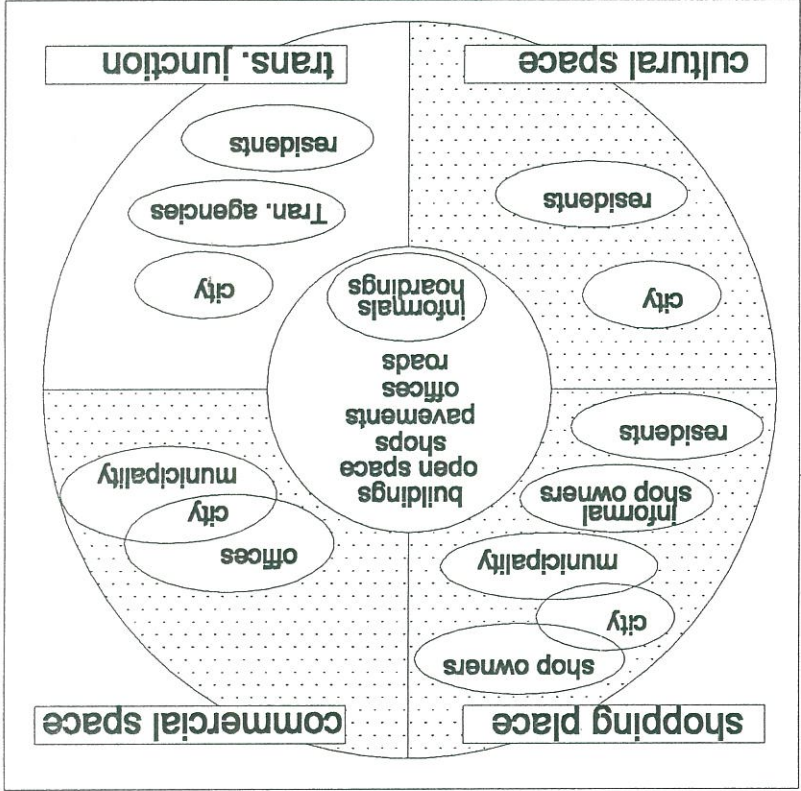
This urban space as seen clearly is heavily used as a transport junction, with a roundabout which forms a public garden. The roundabout forms an obstruction in the experience of of the entire circle but is an important lung to the area

VEHICULAR MOVEMENT



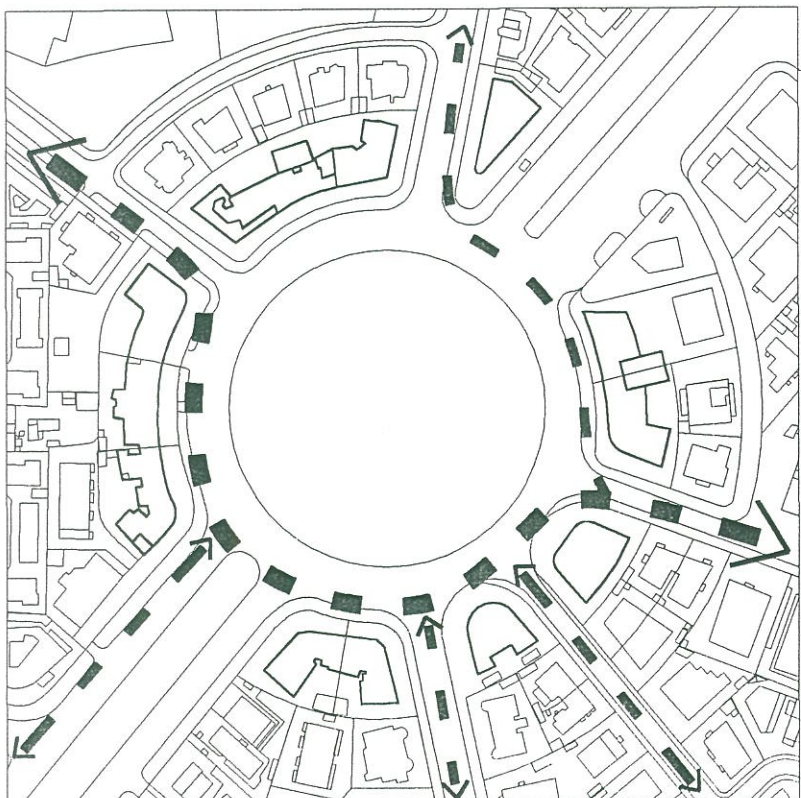
A large number of groups like shop owners, informal shop owners, residents, corporate offices etc. are using this precinct for various purposes.

INTEREST GROUPS



This node forms a connection from the railway station to the institutions like VJT, Khalsa College, Don Bosco School and UDCT. The high vehicular traffic that this node handles makes the crossings hazardous.

PEDESTRIAN MOVEMENT

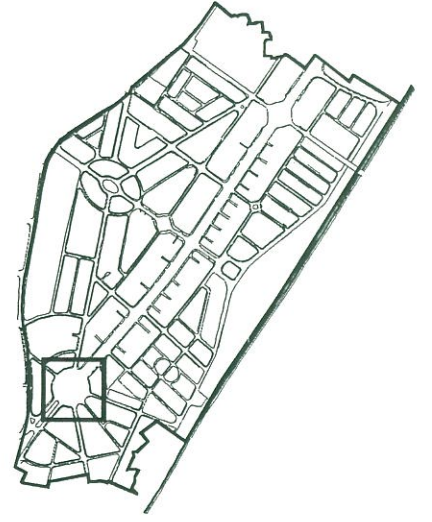


MAHESHWARI UDYAN

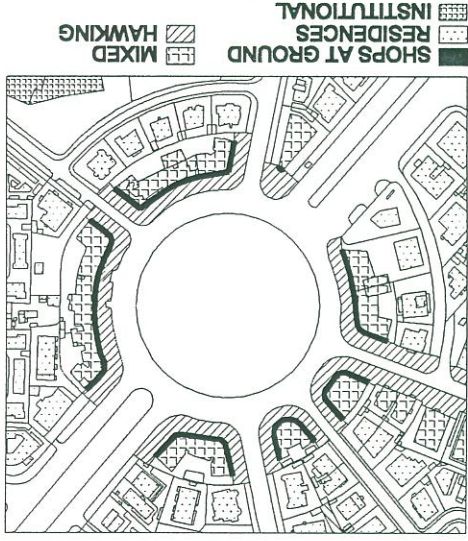
(PHYSICAL CHARACTERISTICS)

Notes
The pavement of Maheshwari Udyan shows lesser degree of informals as compared to Khodadad Circle and shows lesser signs of decay. However the garden in the middle is contradictory to vehicular traffic that surrounds it.

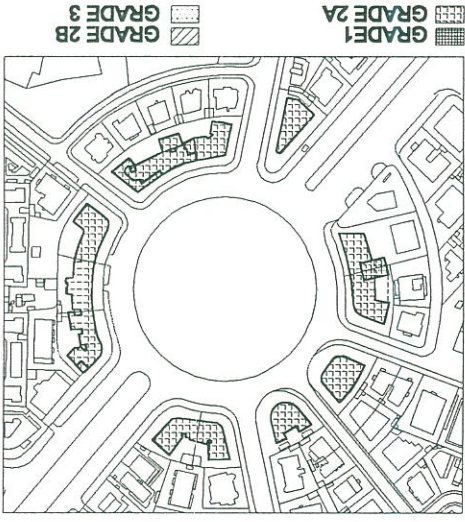
LOCATION PLAN



LANDUSE PLAN



HERITAGE STRUCTURES



PLAN

- ☐ GUTTER HOLE
- ☐ LAMP POST
- ☒ SIGNAL
- ☒ ELECTRIC/ TELEPHONE BOX
- ☒ MANHOLE
- ☒ SIGN BOARD
- ☒ FIRE HYDRANT

0 10 50 75m.

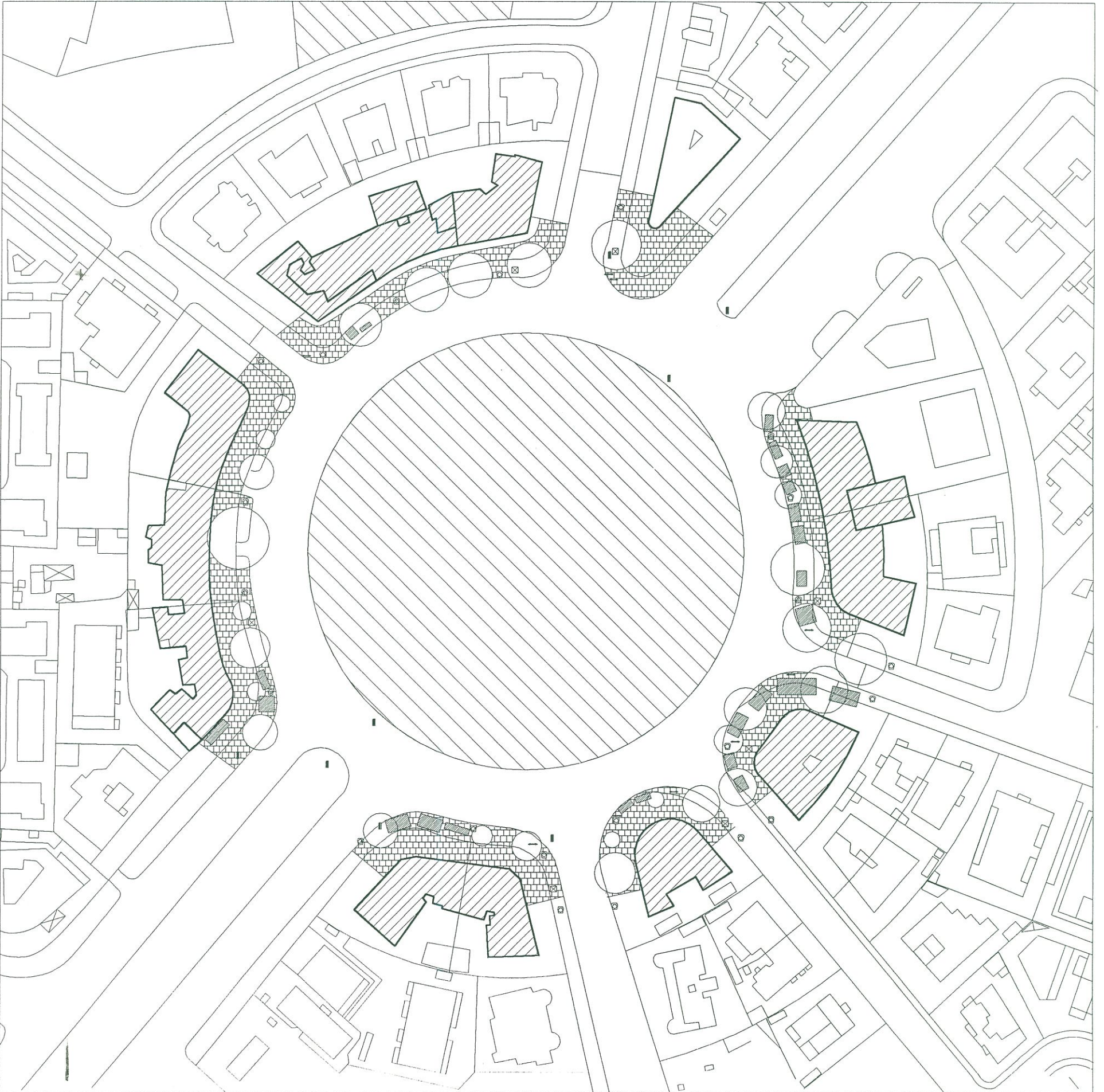




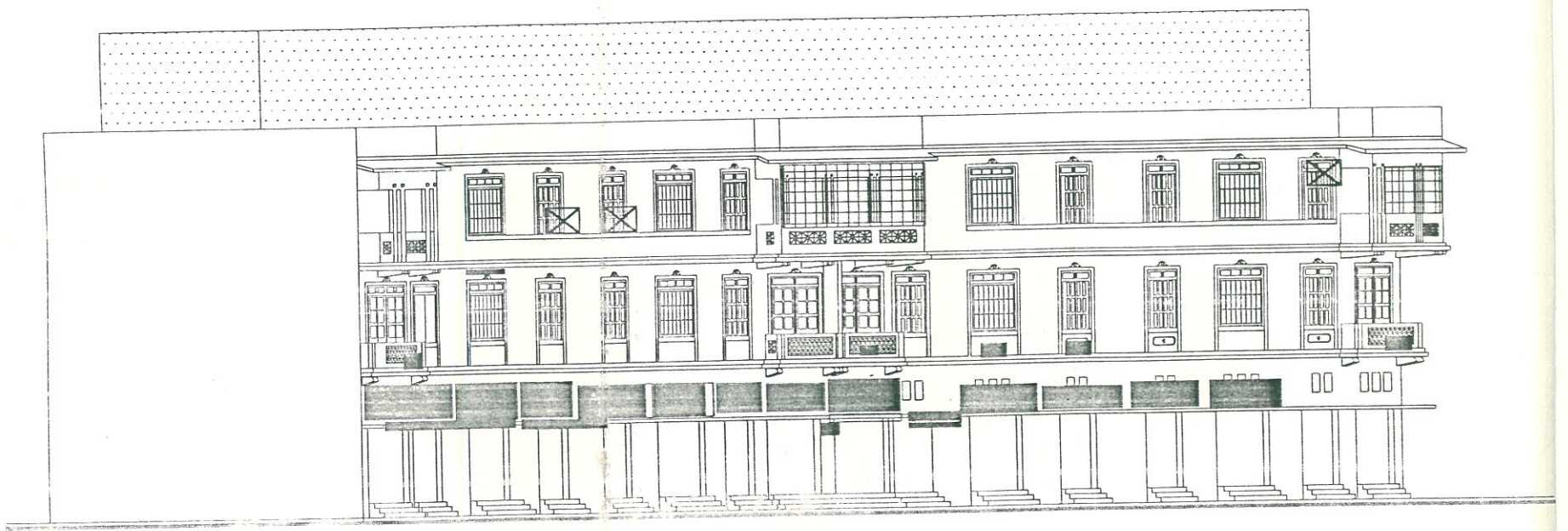
fig 15

5.3. MATUNGA STATION (fig 15)

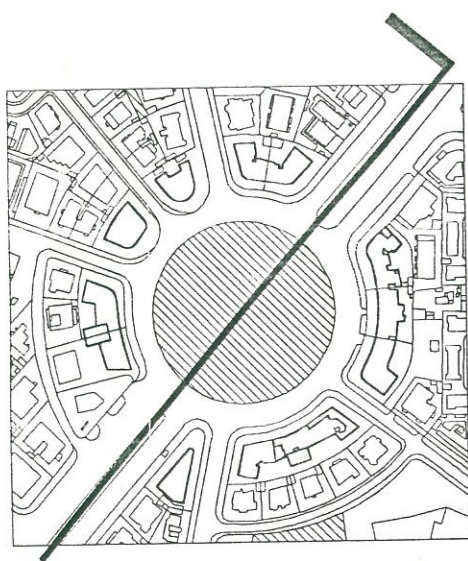
The station serves as one of the entry points as well as an interchange point for the precinct. However it lacks the quality of such a space, as lot of other functions like parking, informal commercial compete for the use of this space. The front of this station is used as a parking lot for private vehicles as well as a taxi stand. The pavements are encroached upon by the informal market which competes with pedestrian movement (plate 47 & 48)



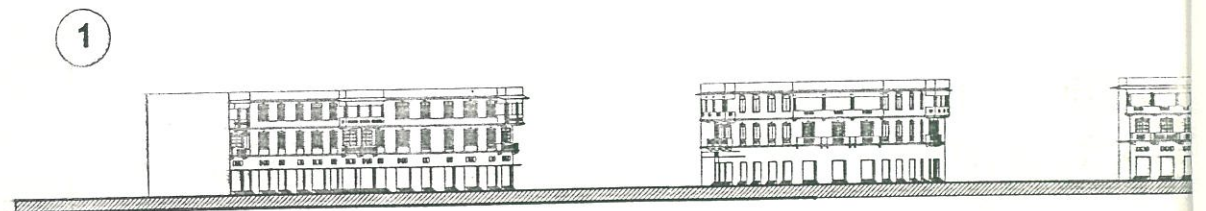
DETAIL OF ELEVATION



DETAIL OF ELEVATION



LOCATION PLAN

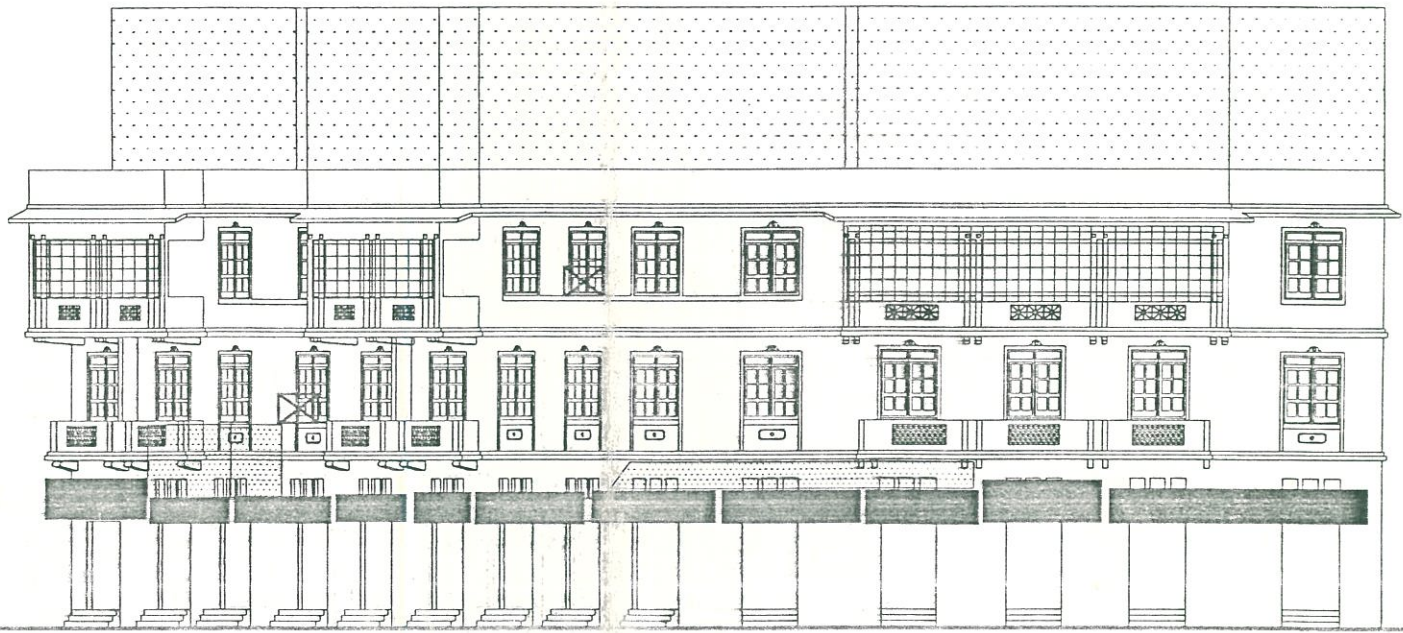


ELEVATION

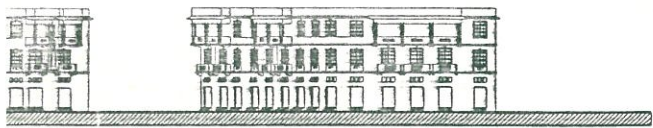
Notes
 The building facades of the Khodadad circle shows serious ruptures with insensitive signboards, hoardings, air-conditioning units etc.

MAHESHWARI UDYAN

(BUILDING TRANSFORMATIONS)



2



0 5 10m.

PLATE NO. 46



VEHICULAR MOVEMENT

Being a railway station and also a market, this urban space is one of the prime generators of vehicular traffic in the precinct. Overlapped with the high traffic intensity, is the use of the space in front of the station as a parking lot and for informal shopping, making the entire area completely chaotic.



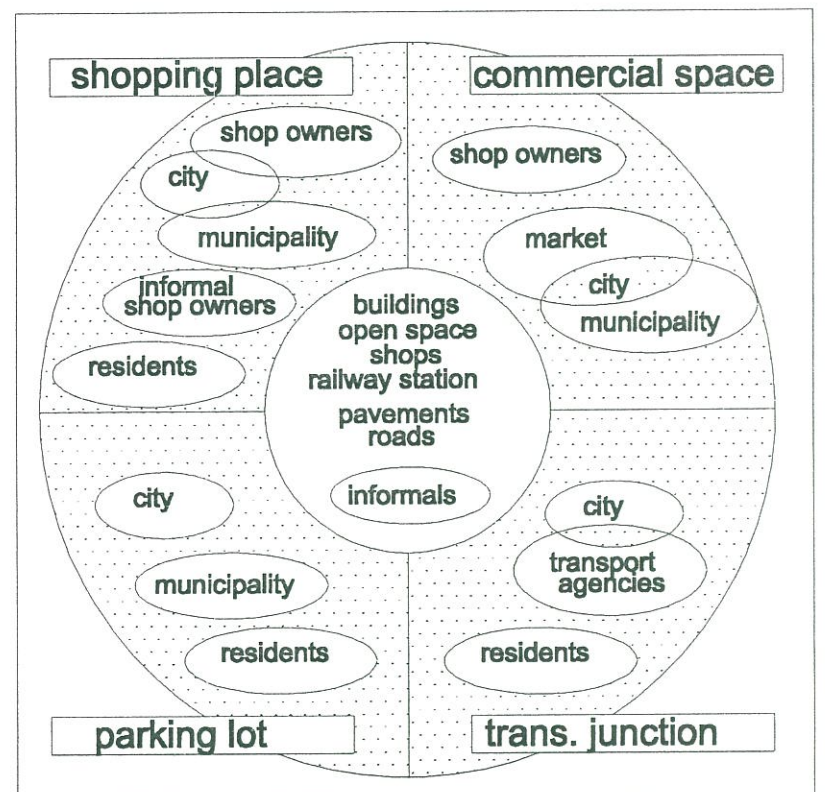
PEDESTRIAN MOVEMENT

Like vehicular traffic, this urban space also generates a huge amount of pedestrian traffic.

	morning	afternoon	evening
recreation			
commerce			
through vehicular traffic			
institution			
interchange			
office use			

ACTIVITY PATTERN

The overlap of two functions: commercial and transport interchange with unorganised planning makes this place completely chaotic in nature.



INTEREST GROUPS

A large number of groups like shop owners, informal shop owners, residents, corporate offices etc. use this precinct for various purposes. The BMC's use of this urban space as a parking lot seems to override others.

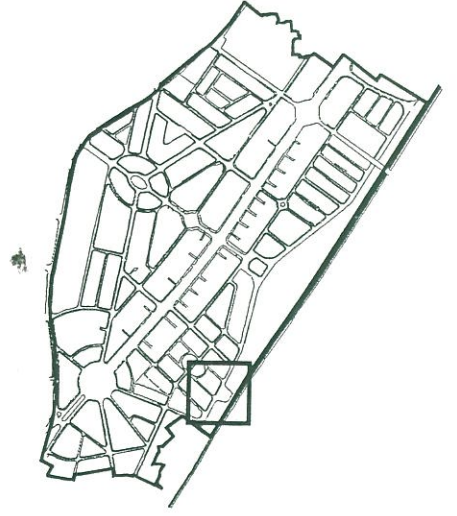
MATUNGA STATION

(PHYSICAL CHARACTERISTICS)

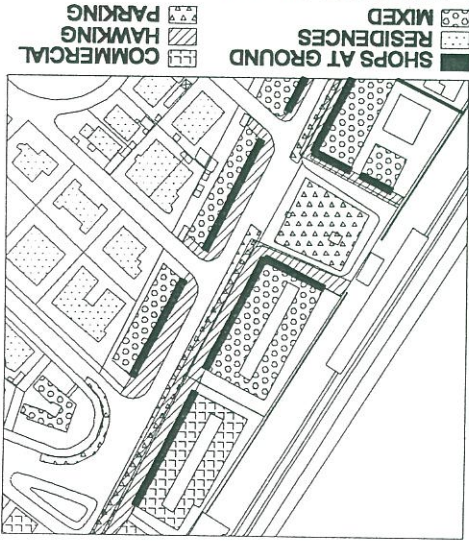
PLATE NO. 48

Notes
The overlapping unorganised functions of the station, market and the parking place with through traffic makes this area completely chaotic. The space in front of the Matunga Station which spatially can provide a good gesture as an entry/exit from the station is used as a parking lot.

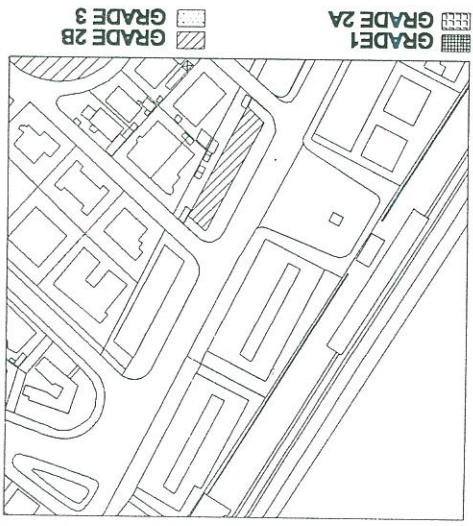
LOCATION PLAN



LANDUSE PLAN

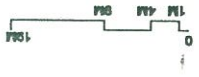
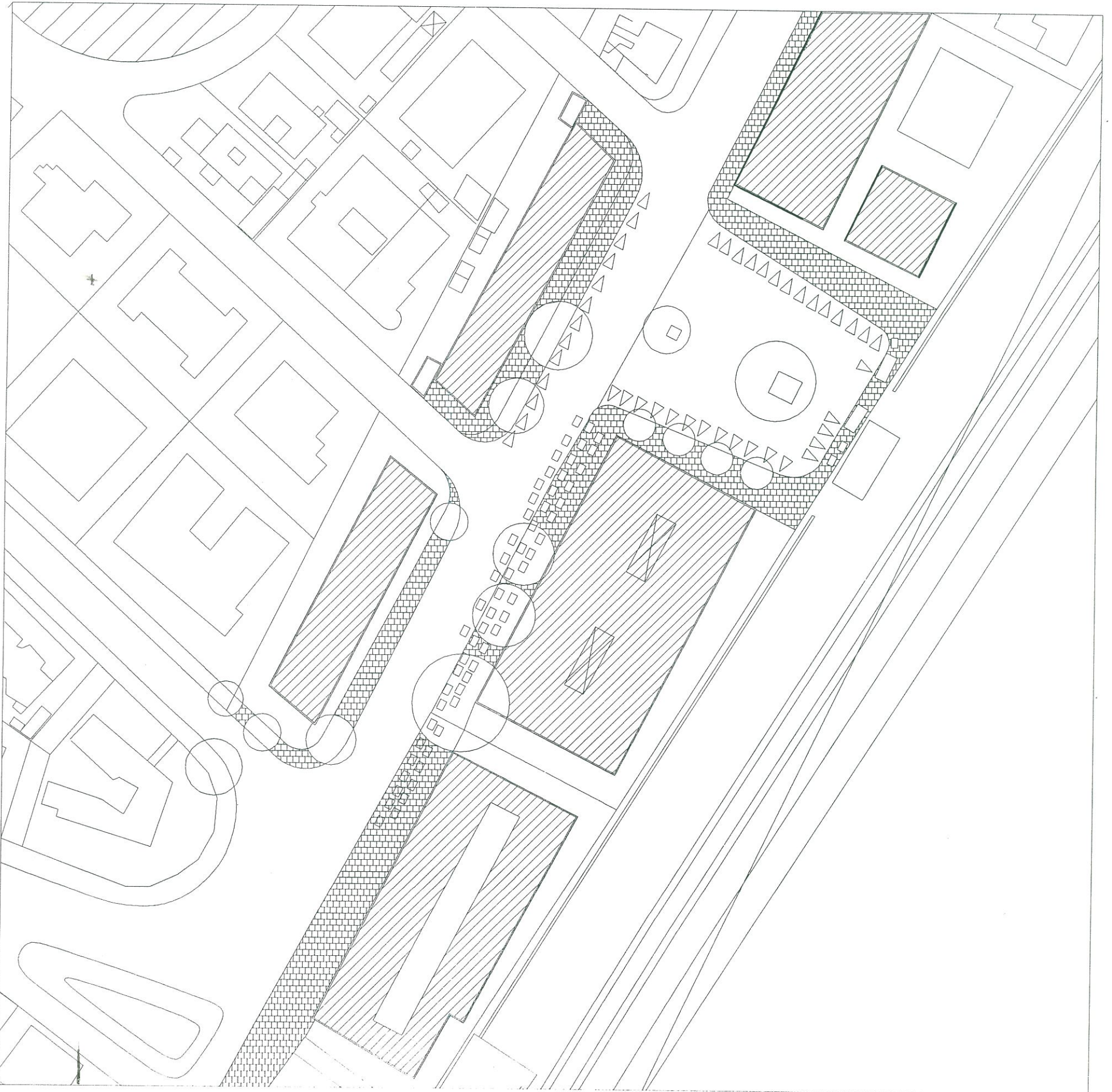


HERITAGE STRUCTURES



PLAN

- GUTTER HOLE
- LAMP POST
- SIGNAL
- ELECTRIC TELEPHONE BOX
- MANHOLE
- FIRE HYDRANT



5.4. FIVE GARDENS (fig 16)
 The Five Gardens have been a prime generator of the identity of this precinct. The generous scale and neutrality have been factors for the five gardens to assume a city level importance. Before independence these gardens formed a setting for the military band to be orchestrated in the central garden. Later the central garden started being used for political rallies and public meetings. Presently it is a multi-functional space. It assumes a different set of functions with time. While daily during the mornings and evenings it becomes a space for the residents of the neighbourhood to recreate/socialise, through the week it becomes a space for political meetings of the trade unions and other small organisations. Late in the evenings it becomes a safe haven for young couples of the city. The ability of the space to take in different functions is because of the neutrality in the physical nature of the space. However it is this neutrality, which is being threatened by city officials by defining territories for specific functions in this space, like strictly designating areas for senior citizens, modifying furniture in the garden, adhoc-landscaping etc (plate 49 & 50).

5.5. RUIA-PODDAR COLLEGE PRECINCT (fig 17)
 This is primarily an institutional node. It has a number of compatible functions around it like the maidans, sporting clubs and restaurants. However the presence of a public thoroughfare and intense off-street parking of private cars, inter-state taxis and school buses, seems to be activities, conflicting with the institutional character of the precinct (plate 51 & 52).

5.6. NEIGHBOURHOOD GARDENS (fig 18)
 These gardens are found in all the five neighbourhoods identified in the precinct. These spaces are used for various functions, like in Parsi Colony, where it is primarily used as a play area by children and recreational area by adults and as a community gathering place in Hindu Colony, which is used by the Bhagini Samaj.

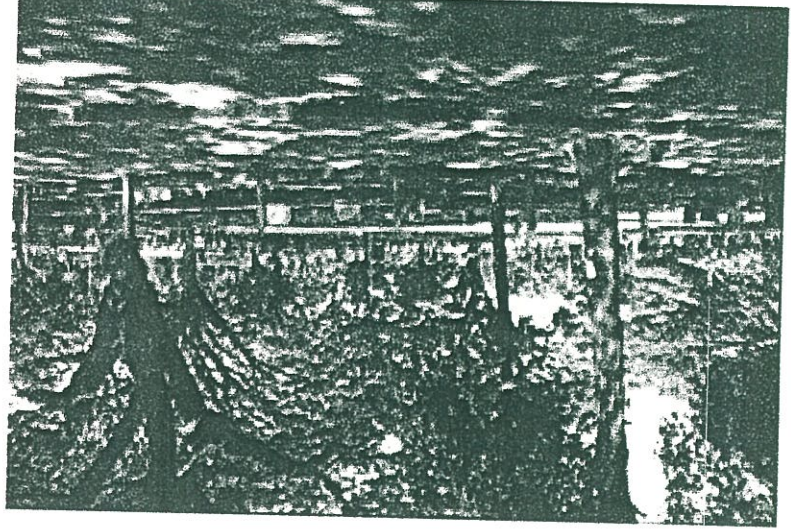


fig 16



fig 17

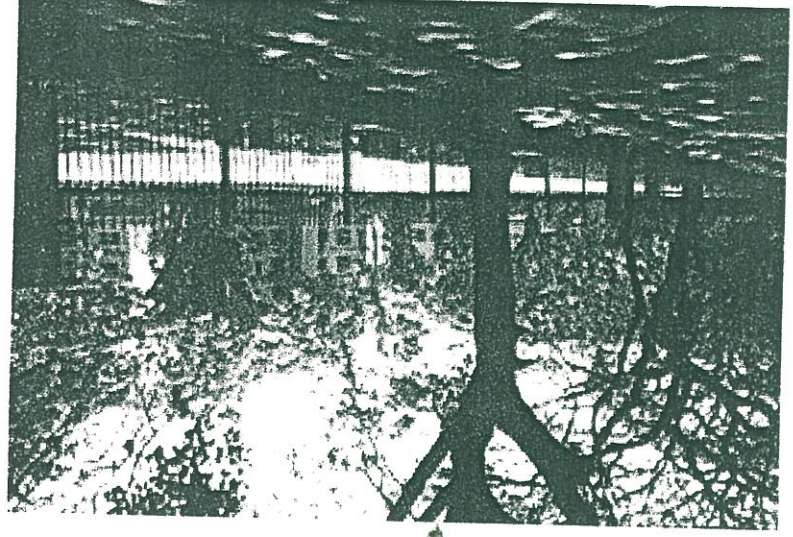


fig 18

Being an institutional node with a main in front, this space is efficiently used. Though the traffic is well handled, the intensity of through traffic is detrimental to the institutional node.

ACTIVITY PATTERN

	office use				
	institution				
	through vehicular traffic				
	commerce				
	recreation				
evening	afternoon	morning			

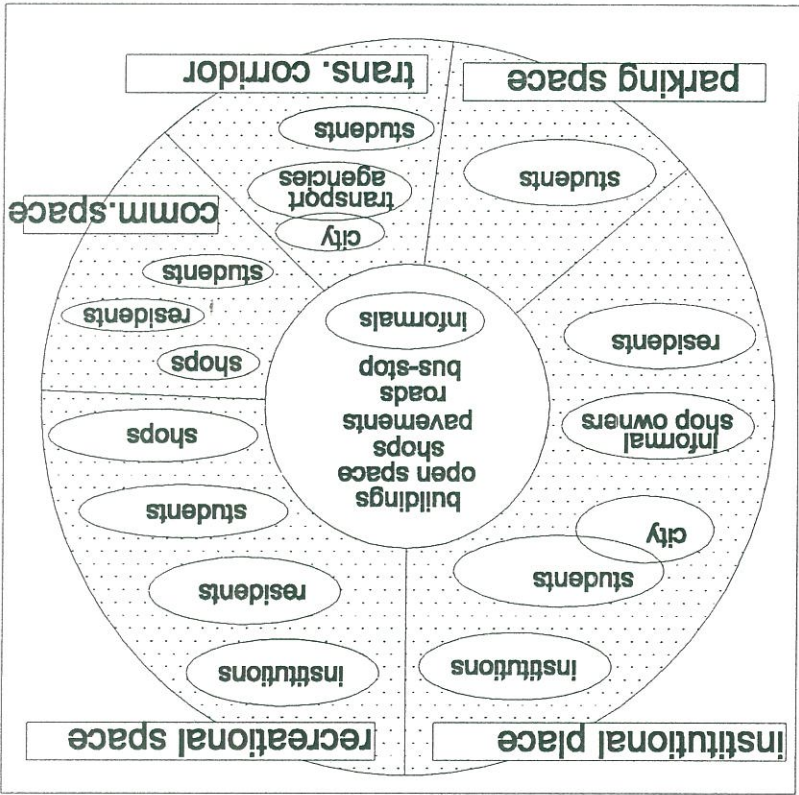
Being an institutional node, this area is a generator of a large amount of traffic. This area also forms a node for the east-west crossing. But the space is aptly designed for this movement.

VEHICULAR MOVEMENT



Essentially used by the institutions, this place is also used by the neighbourhood and the city for recreation. Shop owners and informal shop owners seem to complement the institutional/recreational use of the space. Its use as a through traffic corridor seems to be the only drawback.

INTEREST GROUPS



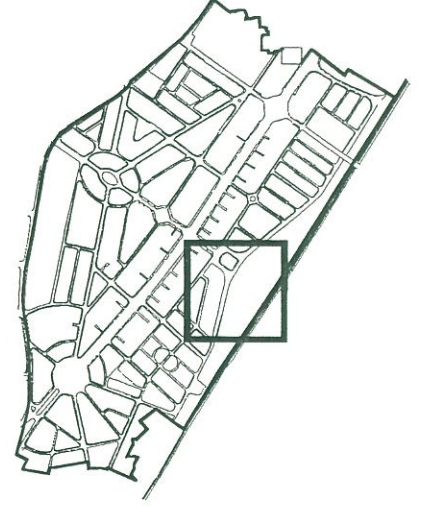
This area also forms a generator of pedestrian traffic, mainly towards the two stations.

PEDESTRIAN MOVEMENT

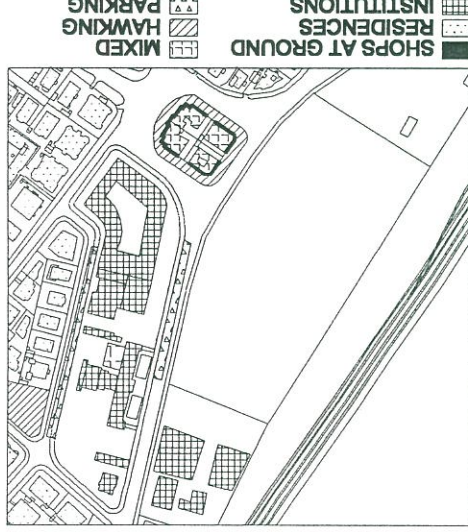


Notes
This precinct has the quality of an institutional node with colleges, sporting clubs, play areas and restaurants. However the vehicular through traffic on the adjoining street detracts from the quality of the precinct.

LOCATION PLAN



LANDUSE PLAN



HERITAGE STRUCTURES

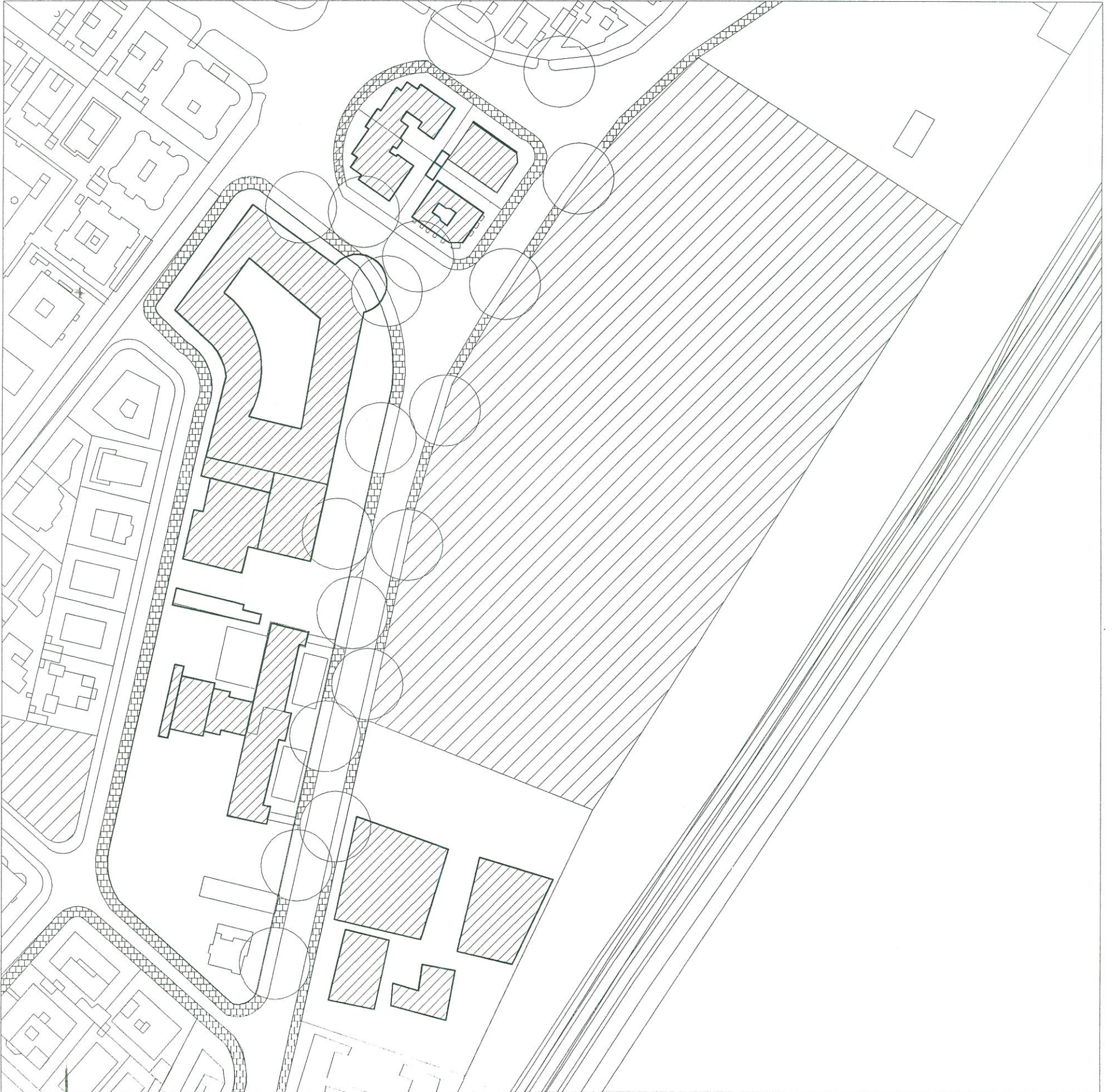


PLAN

PLAN

- GUTTER HOLE
- LAMP POST
- SIGNAL
- ELECTRIC TELEPHONE BOX
- MANHOLE
- FIRE HYDRANT
- MANHOLE
- SIGN BOARD

0 30m 100m



FIVE GARDENS

(PRESENT NATURE OF SPACE)

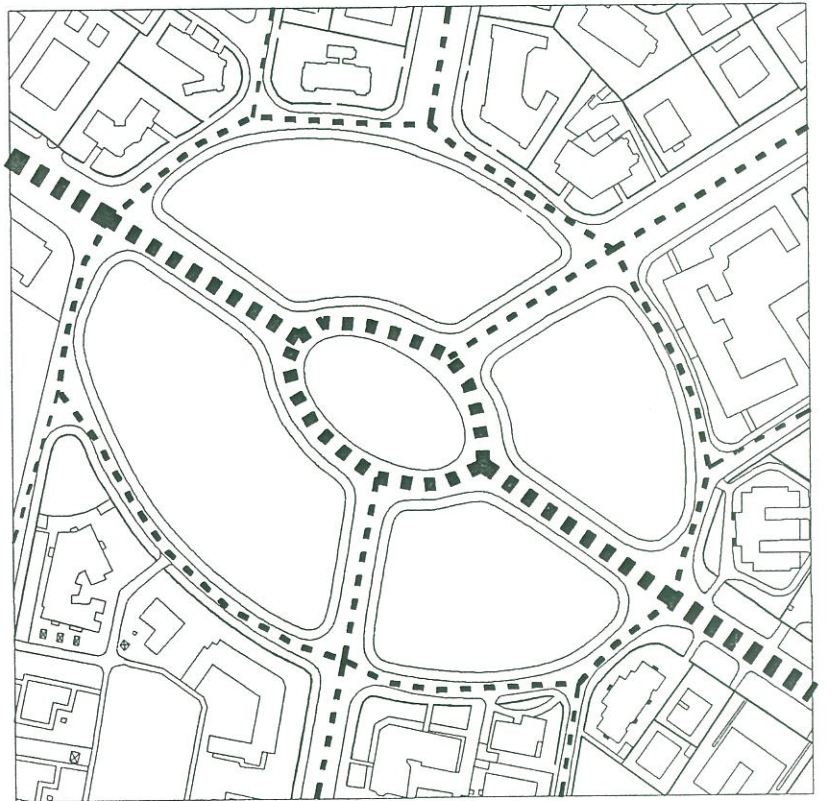
Five Gardens is used as an active recreational area. Though it handles a large amount of traffic at all hours, its planning is efficient enough to do so.

ACTIVITY PATTERN

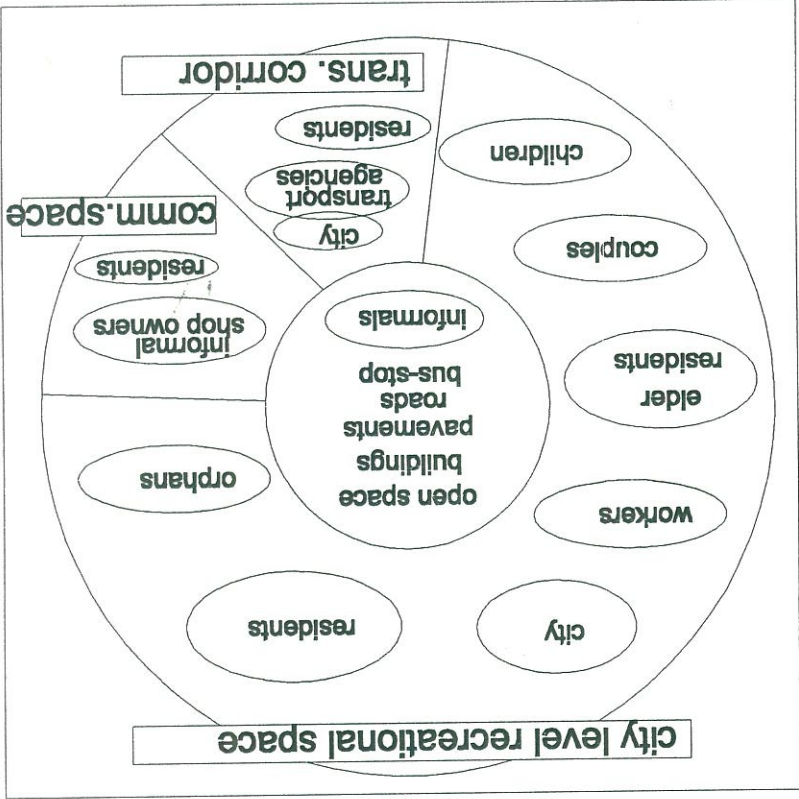
				office use
				institution
				through vehicular traffic
				commerce
				recreation
evening	afternoon	morning		

Lady Jamsheedji road carries the east-west connecting traffic and hence forms the most active road with heavy vehicles. The inner roads more or less serve only the neighbourhood with few outside vehicles.

VEHICULAR MOVEMENT

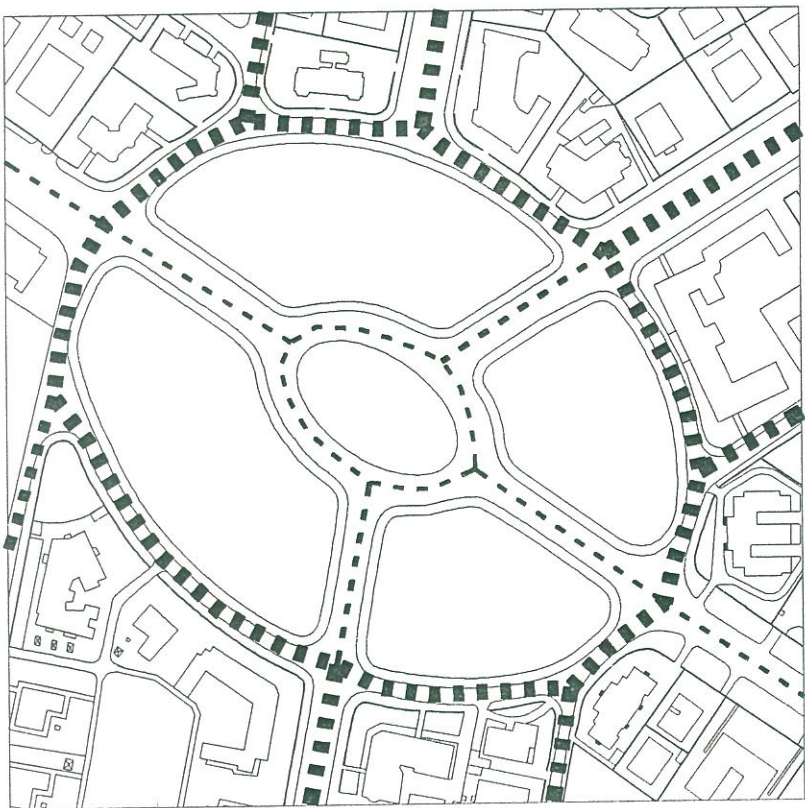


INTEREST GROUPS



As opposed to the vehicular traffic, the Lady Jamsheedji Road is the least used. The outer ring of the five gardens and the inner roads are the most used pedestrian roads. These roads are not only used by the residents for their leisure walks but are also preferred by all people moving in the precinct.

PEDESTRIAN MOVEMENT



Five gardens not only forms a recreational area for the neighbourhood, but also for the city. People of all age-group, trade-unions, couples, etc use this place for different purposes at different times.



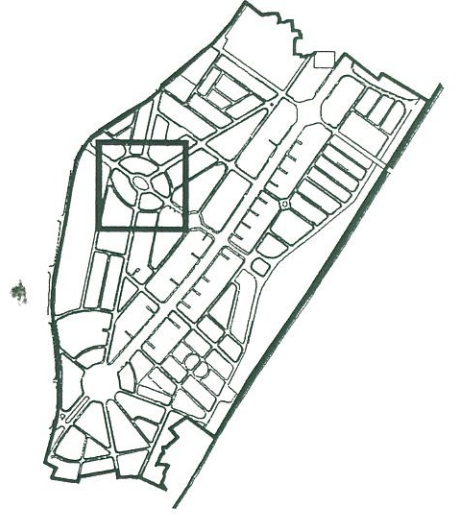
FIVE GARDENS

(PHYSICAL CHARACTERISTICS)

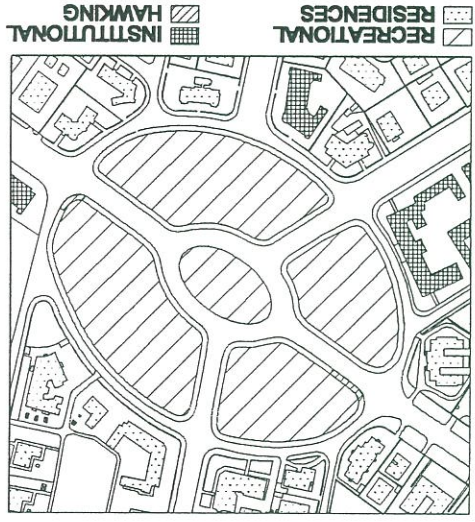
PLATE NO. 52

Notes
The five gardens are under a threat of adhoc design decisions. Its landscape and furniture is insensitive towards the overall character

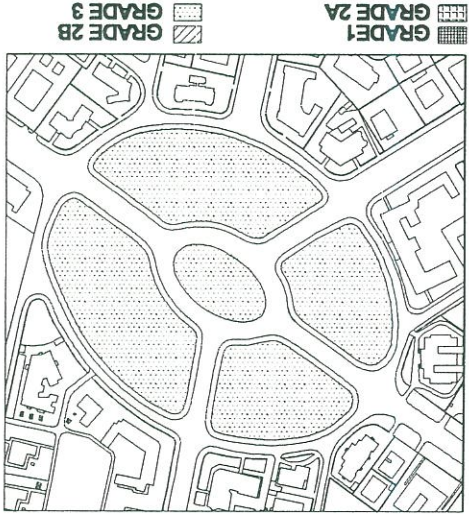
LOCATION PLAN



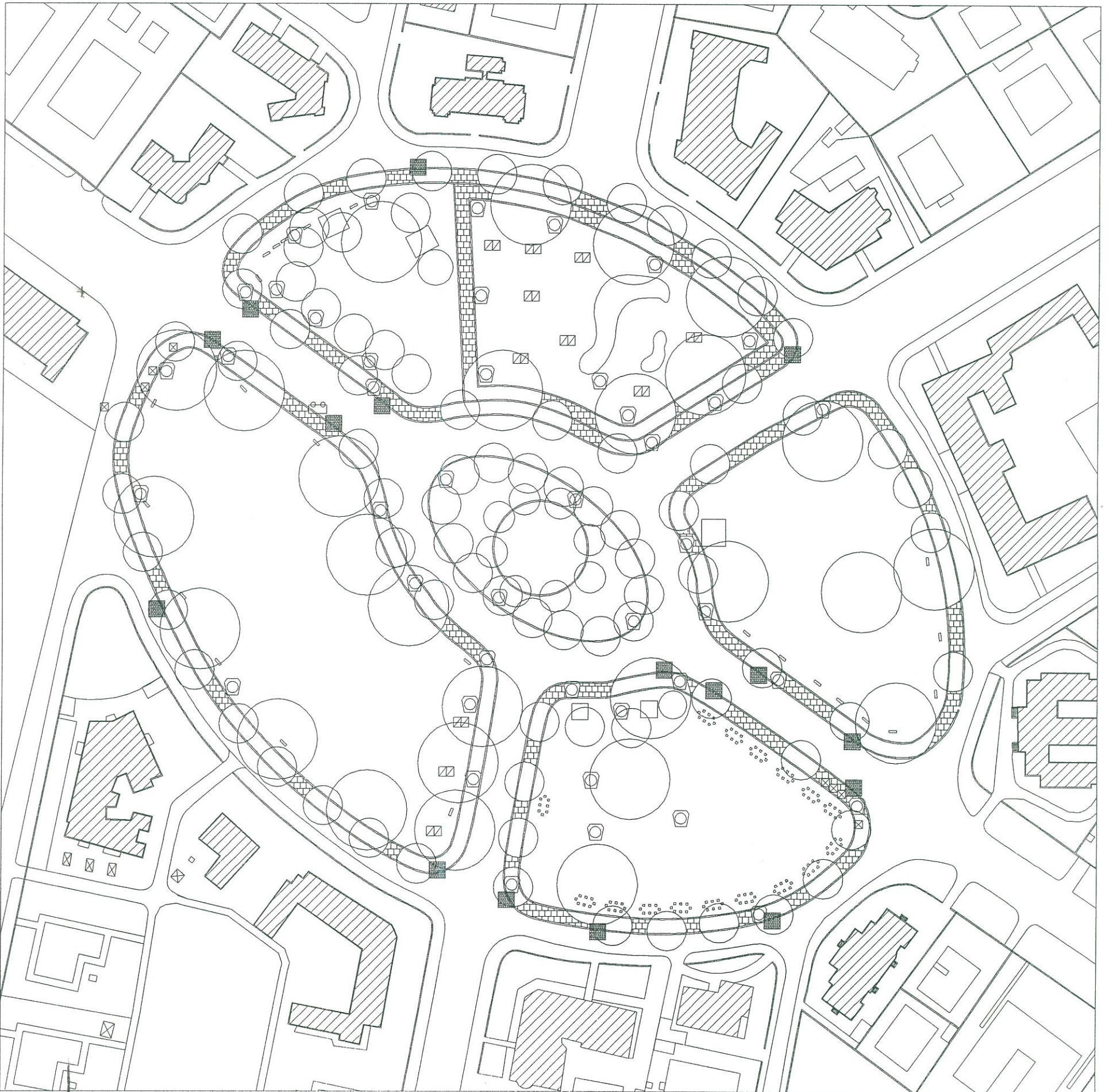
LANDUSE PLAN



HERITAGE STRUCTURES



PLAN



- GUTTER HOLE
- LAMP POST
- BUS STOP
- ⊠ HAWKER
- SIGN BOARD
- ▨ CHILDRENS PLAY EQUIPMENT
- SEATS



The objective of the first part of the study was to understand the community's perception of the precinct as well as their reactions on issues on the precinct as a whole. To ascertain this, a questionnaire was made, which was distributed randomly through the precinct (appendix 4). The questionnaire contained distinct parts to it, which were as follows:

1. Data on the perception of the community of their own surroundings and their response to the changes undertaken.
2. The present participation of the community in preserving their buildings, their surroundings and their participation in social activities in the neighbourhood.
3. Data on the readiness of the community to participate in the upkeep of their environment.
4. Another part was dedicated to the collection of data on the community, ranging from ownership patterns to car ownerships.

Based on the findings of the questionnaires it became clear that the precinct is divided into few identifiable neighbourhoods, which may be due to social affiliations. Due to this, problems faced by the residents of a certain area tend to be common within the neighbourhood and differ from those of the other neighbourhoods. These need to be examined differently (plate 53 to 57).

DO YOU LIKE LIVING IN THIS AREA?

LIKES

ASSOCIATIVE MEMORY.

MARKETS.

INSTITUTIONS.

LOCATION IN MUMBAI.

VEGETATION.

COMMUNITY.

WELL PLANNED, QUIET AND CLEAN.

DISLIKES

SECURITY.

STREET MAINTENANCE.

BAD FOOTPATHS.

POLLUTION, TRAFFIC (AMBEDKAR ROAD).

NUMBER OF RESPONDENTS: 40 PER NEIGHBOURHOOD.

The above results for the questionnaire are only relevant for the sub-precincts of Parsi colony north, Parsi colony south and Hindu colony. The response from Matunga north and Matunga South was not adequate enough to include.

PERCEPTION

REACTION TO CHANGES.

NUMBER OF RESPONDENTS: 40 PER NEIGHBOURHOOD.

The above results for the questionnaire are only relevant for the sub-precincts of Parsi colony north, Parsi colony south and Hindu colony. The response from Matunga north and Matunga South was not adequate enough to include.




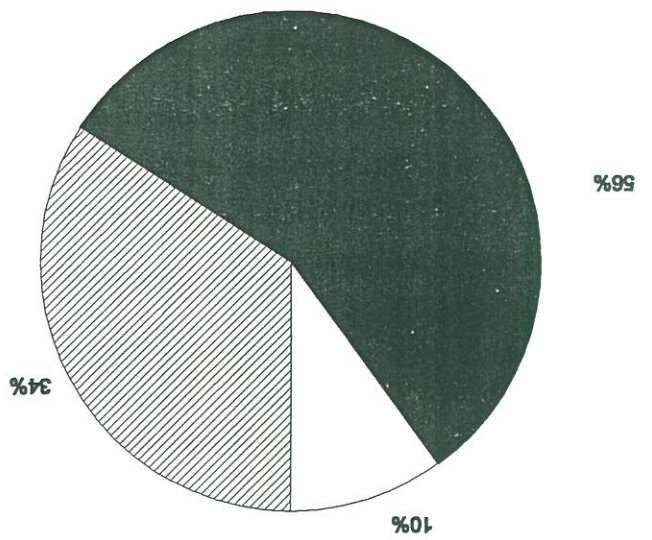
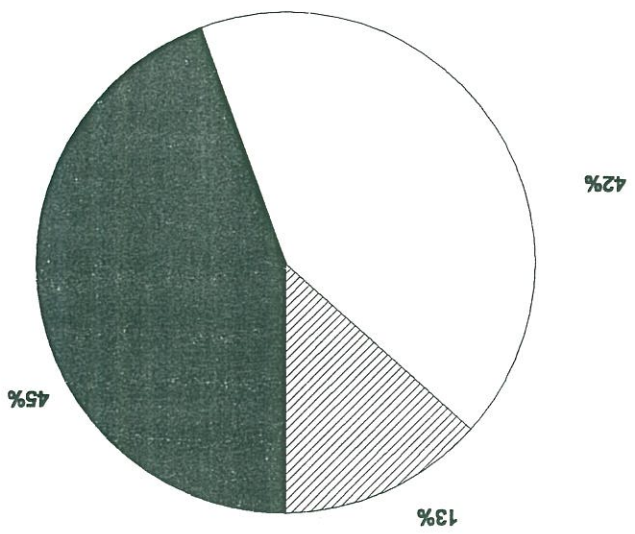
POSITIVE. 
 NEGATIVE. 
 CANT SAY. 

PLATE NO. 54

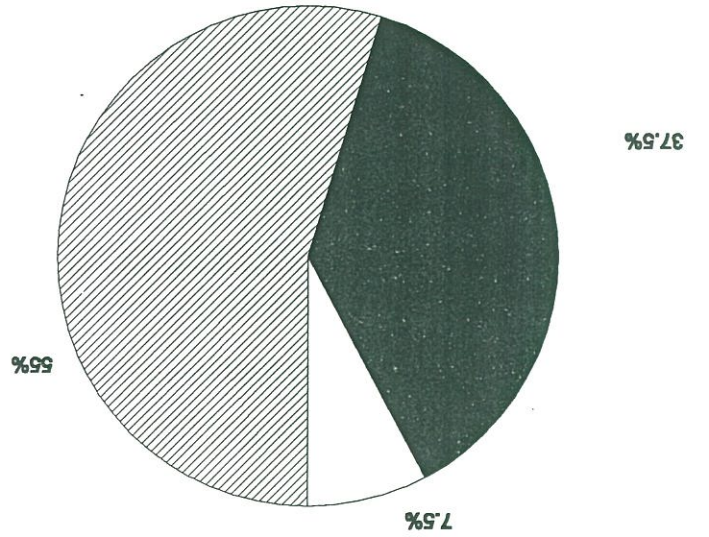
DO YOU APPROVE OF THE FLYOVER BEING BUILT OVER KHODADAD CIRCLE?



PARSI COLONY (NORTH).

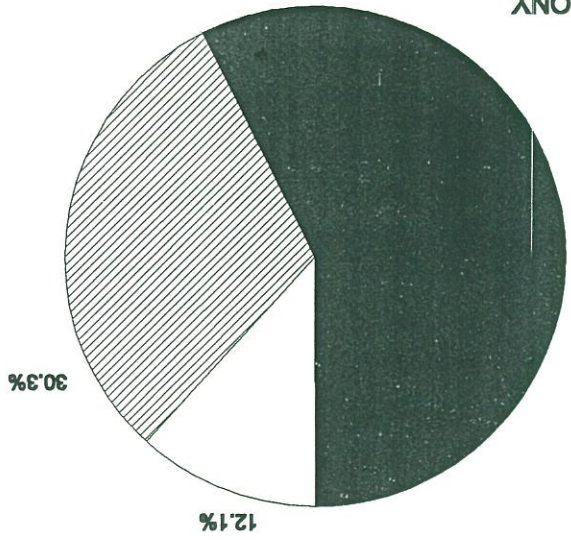


PARSI COLONY (SOUTH).

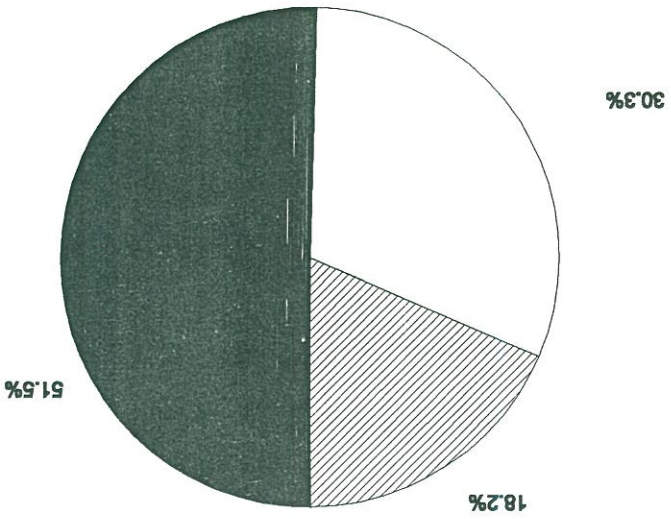


HINDU COLONY.

POSITIVE: 40%
NEGATIVE: 50%



POSITIVE: 14.6%
NEGATIVE: 47%



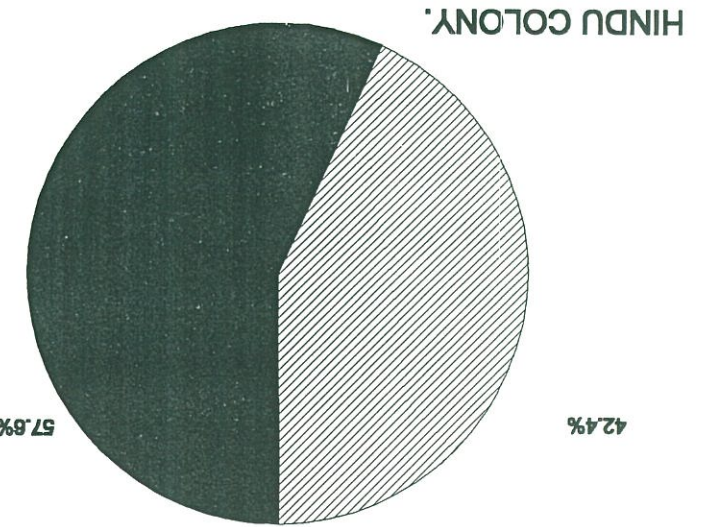
DO YOU USE FIVE GARDENS? WHAT DO YOU THINK OF THE PRESENT CHANGES?

PARKING.

NUMBER OF RESPONDENTS: 40 PER NEIGHBOURHOOD.
 The above results for the questionnaire are only relevant for the sub-precincts of Parsi colony north, Parsi colony south and Hindu colony. The response from Matunga north and Matunga South was not adequate enough to include.

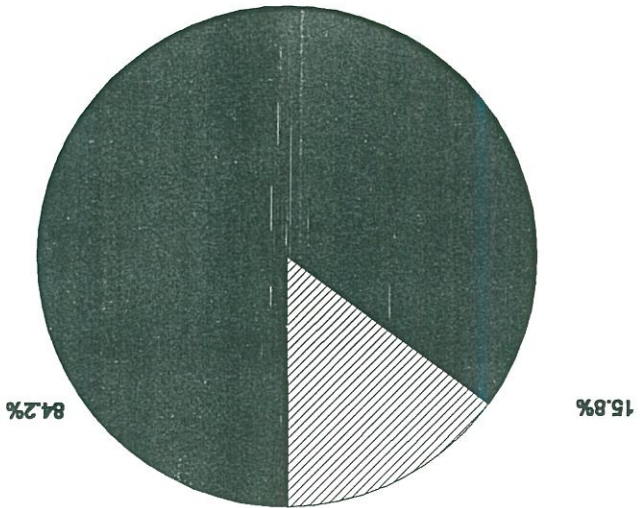
DO YOU OWN A VEHICLE?
 OWNS A VEHICLE.
 DOESN'T OWN A VEHICLE.

NUMBER OF CARS PER MOBILE RESPONDENT: 1.33
 64% OWN A VEHICLE.



WHERE IS YOUR VEHICLE PARKED?
 COMPOUND.
 OFF STREET.

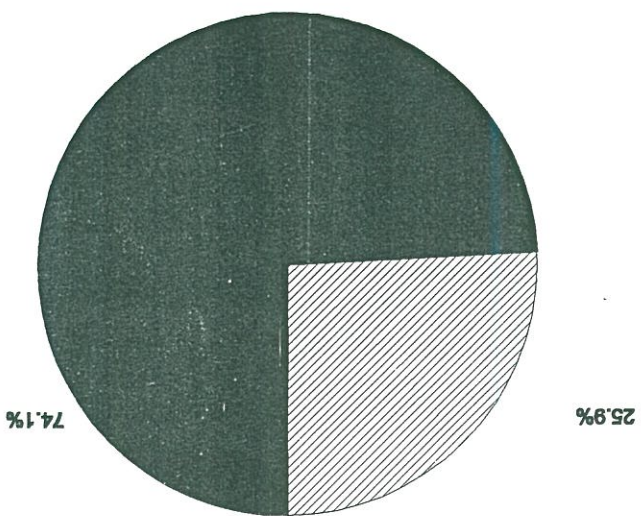
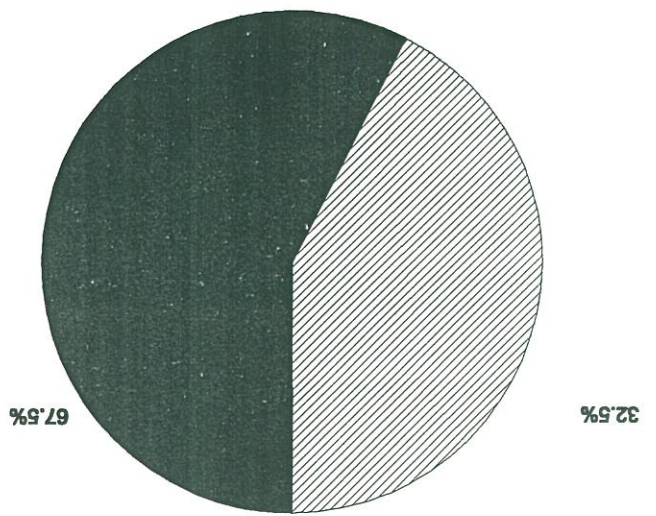
19.8% OFF STREET PARKING.
 80.2% COMPOUND PARKING.



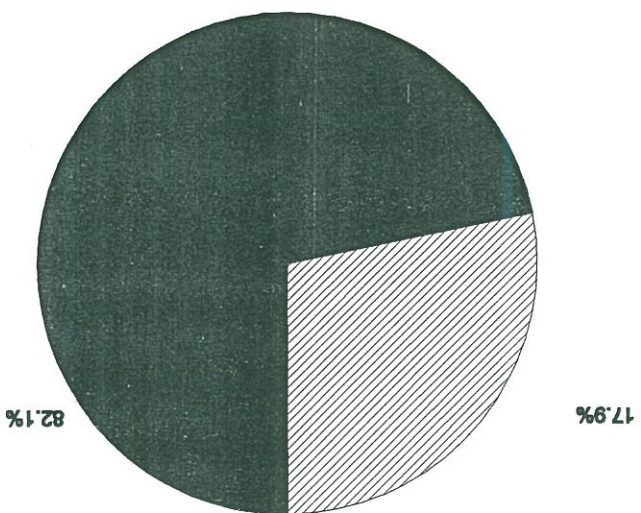
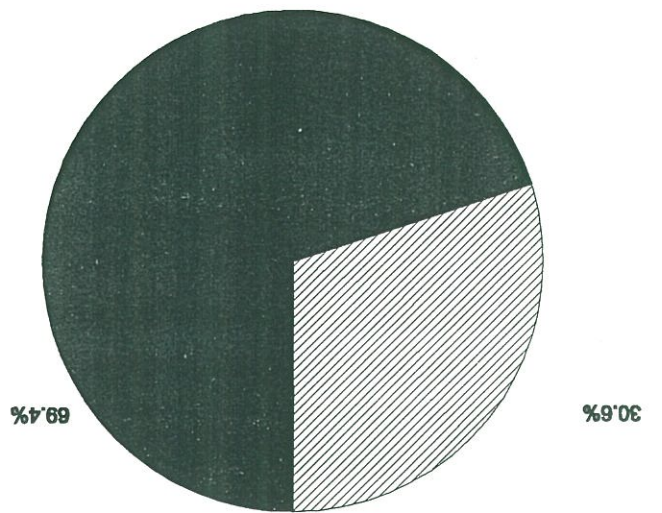
DO YOU OWN A VEHICLE?

WHERE IS YOUR VEHICLE PARKED?

PARSI COLONY (SOUTH).



PARSI COLONY (NORTH).



INVOLVEMENT

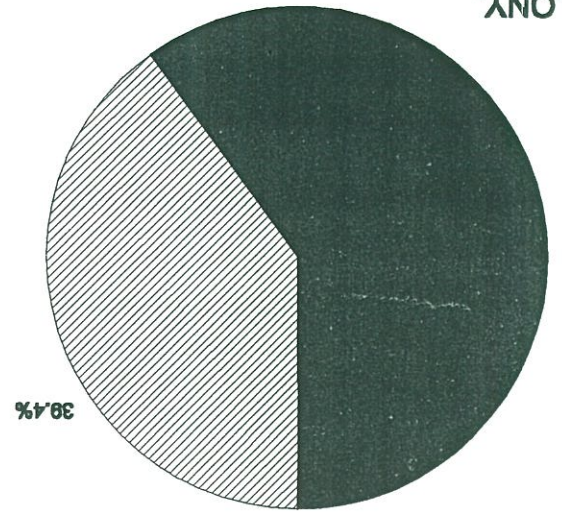
NUMBER OF RESPONDENTS: 40 PER NEIGHBOURHOOD.

The above results for the questionnaire are only relevant for the sub-precincts of Parsi colony north, Parsi colony south and Hindu colony. The response from Matunga South was not adequate enough to include.

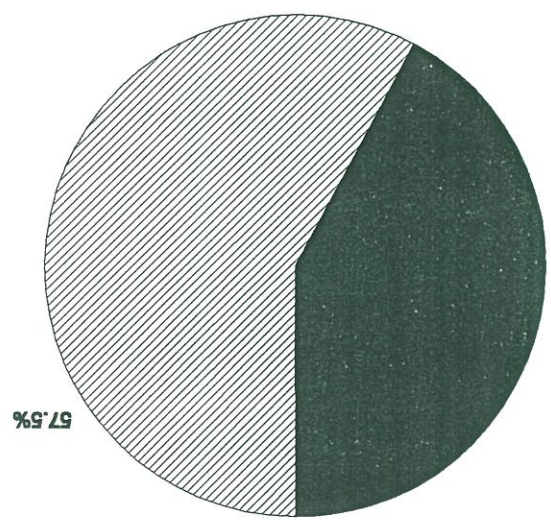
■ NOT INVOLVED.
▨ INVOLVED.

CUMULATIVE FIGURES:
49.2% RESPONDENTS ALREADY INVOLVED.
50.8% RESPONDENTS NOT INVOLVED.

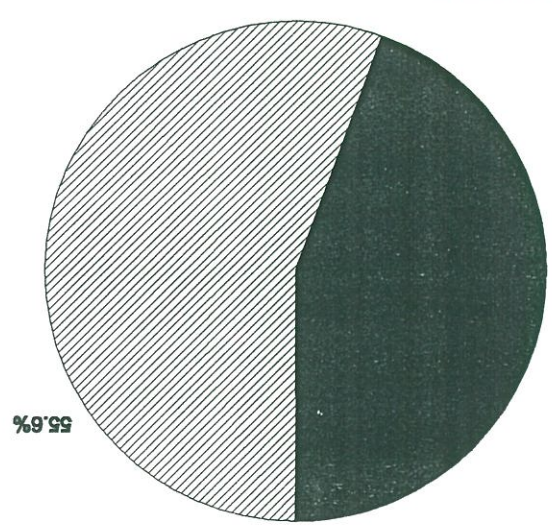
HINDU COLONY.



PARSI COLONY (SOUTH).

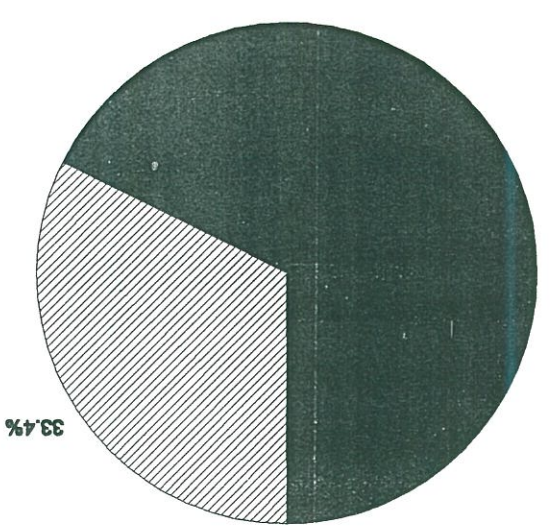
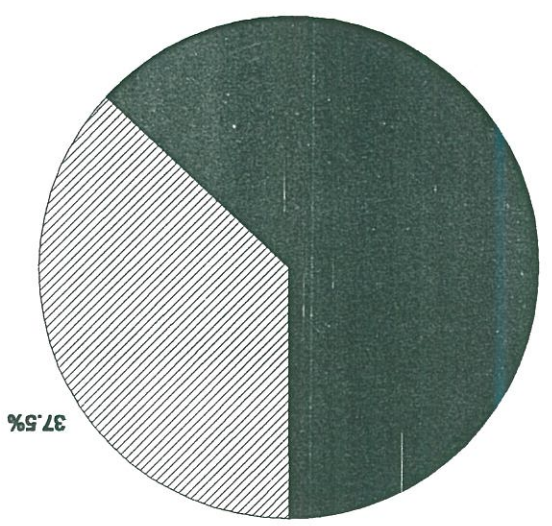
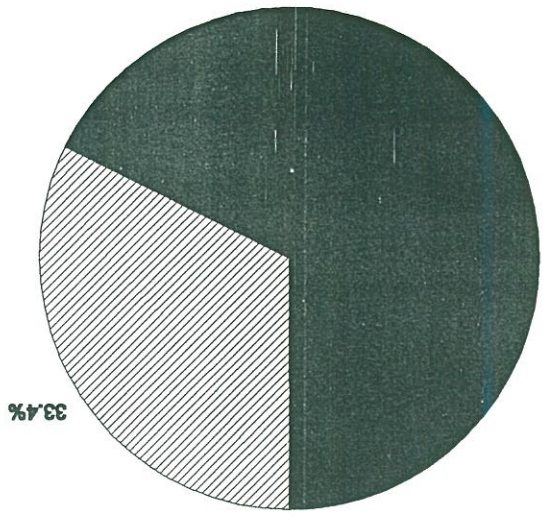


PARSI COLONY (NORTH).



■ WILLING.
▨ NOT WILLING.

CUMULATIVE FIGURES:
65.2% RESPONDENTS WILLING.
34.8% RESPONDENTS NOT WILLING.



ARE YOU INVOLVED WITH ANY ORGANISATION FOR SOCIAL /CULTURAL/RELIGIOUS ACTIVITIES.

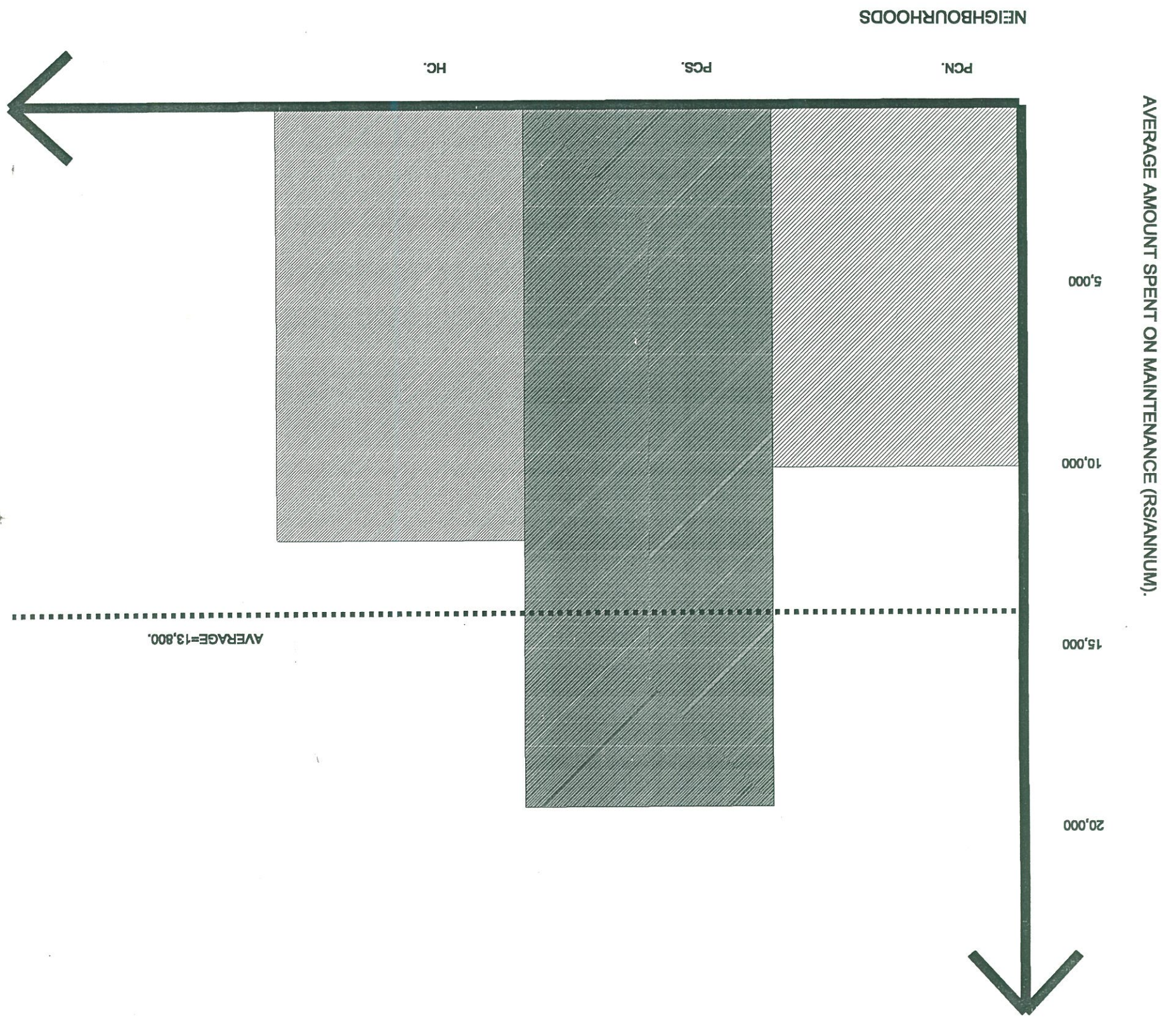
ARE YOU WILLING TO PARTICIPATE IN THE UPKEEP OF THE ENVIRONMENT.

MAINTENANCE

NUMBER OF RESPONDENTS: 40 PER NEIGHBOURHOOD.
 The above results for the questionnaire are only relevant for the sub-precincts of Parsi colony north, Parsi colony south and Hindu colony. The response from Matunga north and Matunga South was not adequate enough to include.

AVERAGE AMOUNT SPENT BY RESPONDENTS IN PARSİ COLONY (NORTH) = RS 10,000/- PER ANNUM.
 AVERAGE AMOUNT SPENT BY RESPONDENTS IN PARSİ COLONY (SOUTH) = RS 19,500/- PER ANNUM.
 AVERAGE AMOUNT SPENT BY RESPONDENTS IN HINDU COLONY = RS 12,000/- PER ANNUM.

PARSI COLONY (SOUTH) 
 PARSI COLONY (NORTH) 
 HINDU COLONY 



WHAT IS THE APPROXIMATE EXPENDITURE PER ANNUM TOWARDS MAINTENANCE OF YOUR HOUSE?

AVERAGE AMOUNT SPENT ON MAINTENANCE (RS/ANNUM).

NEIGHBOURHOODS

PCN.

PCS.

HC.

5,000

10,000

15,000

20,000

AVERAGE=13,800.

Through the study of the precinct, a number of problems as well as opportunities have been identified. The problem and opportunities can be seen at many levels:

1. The change of this precinct from a suburb to a central location due to the city's expansion has created a lot of opportunities as well as problems for the precinct. While it has increased the importance of the urban spaces, the precinct's residential character is under threat. The increase in thoroughfare movement, intense parking and city land use policies are a major cause for this.

2. One major observation has been that individual owners seem to transform their properties whereas the government and trust properties remain unchanged. It reflects the aspirations of the inhabitants to transform their own properties. Thus to preserve these individual buildings might be uncalled for and such a decision might face stiff resistance from their owners. The open space structure of the precinct, is what lends it its character. The present bylaws have not recognised this aspect of the precinct. The study therefore concludes that it is this open space structure that needs to be conserved.

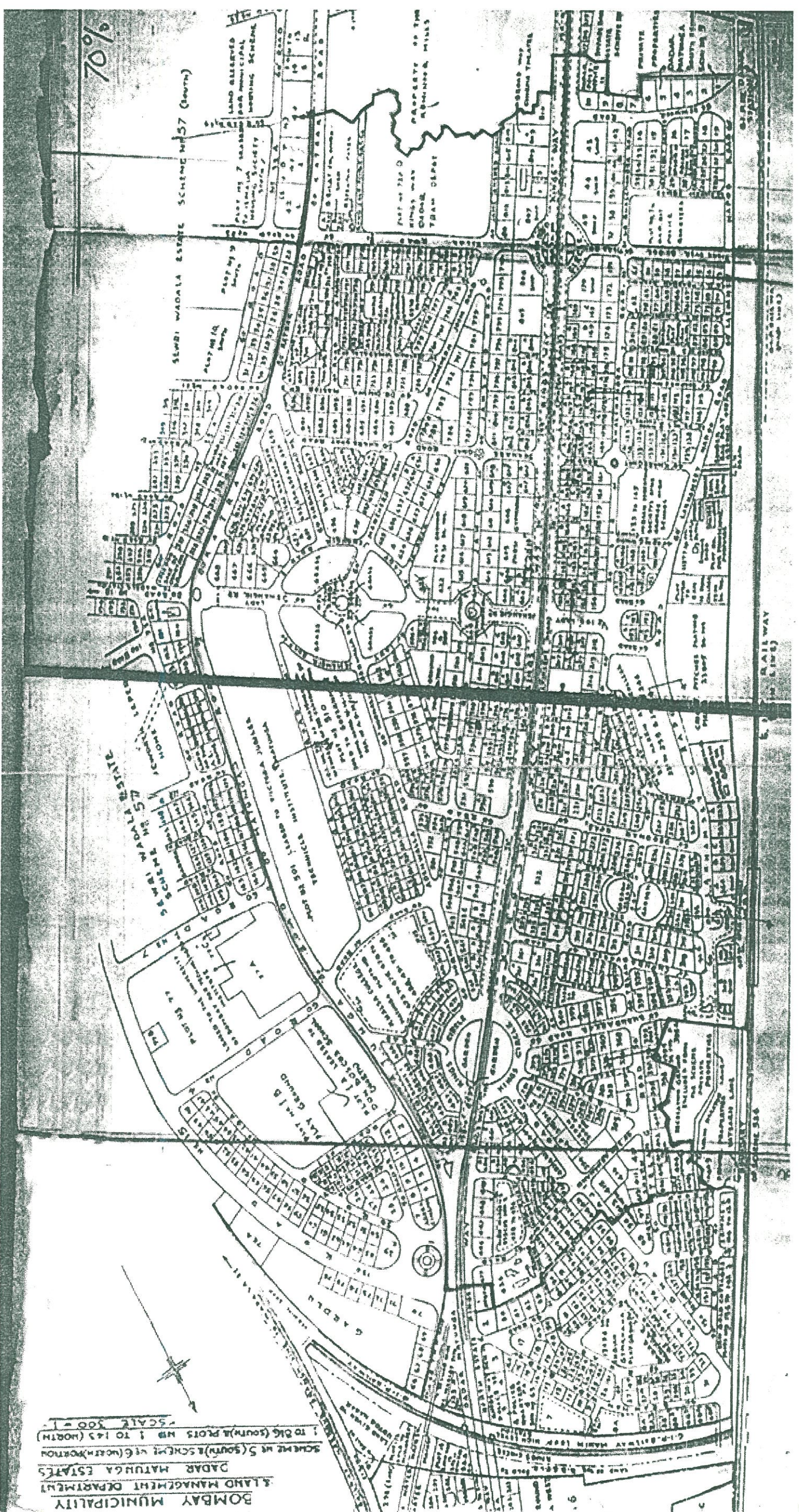
4. Some of the urban spaces identified in the precinct are under threat e.g. in the case of Khodadad circle, where the character and nature of this circle will soon be disturbed by the flyover built over it. Same is the case with the Five Gardens, where the city official threaten the multifunctional nature of the Garden by their insertion of incompatible activities in the garden.

5. This precinct has a number of sub-precincts, composed of neighbourhoods inhabited by different communities. From the study of the communities in these neighbourhoods it can be concluded that they are aware of their environment and their participation could be harnessed to better the precinct. The strategies, which need to be adopted to address the above problems, will be elaborated in the second part.

21

APPENDIX 1

A Bombay Improvement Trust plan of Dadar Matunga Scheme Five showing 816 plots



APPENDIX 2

8

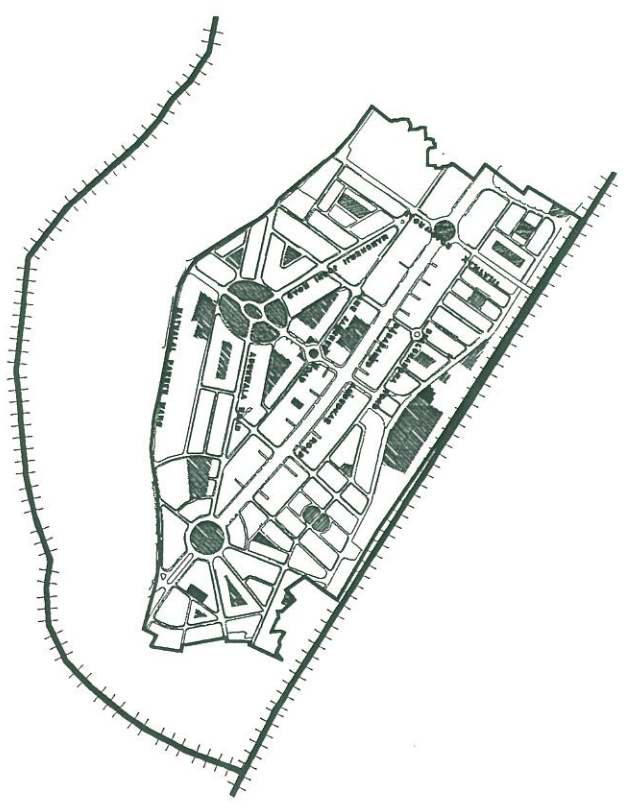
8) GLOBAL F.S.I. OF PRECINCT (6/1) - .93

7) GROSS RESIDENTIAL DENSITY (4/1) - 56.4 dwelling/hectare
8) PERCENTAGE OF OPEN SPACES (5/1) - 34%

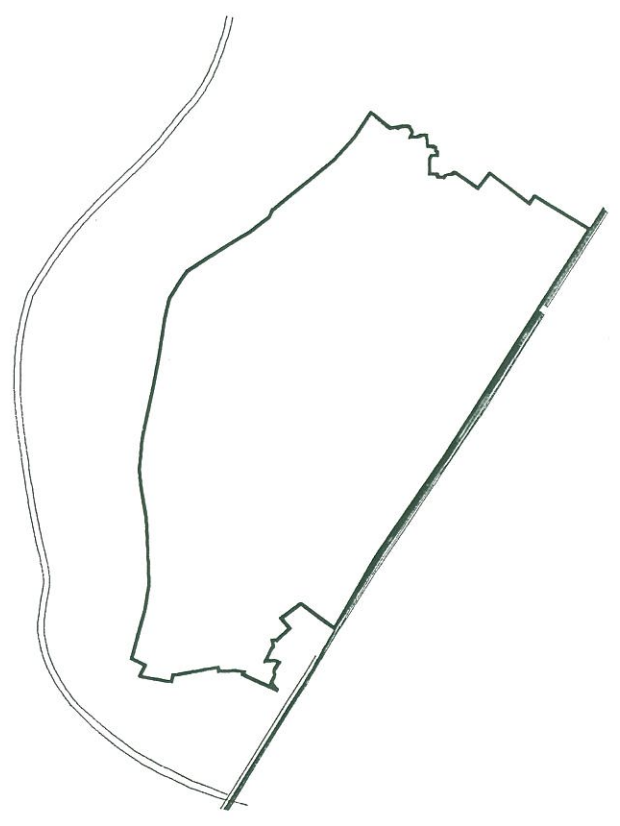
6) TOTAL BUILT UP AREA - 140 Hectares



5) OPEN SPACES
Area of urban spaces + gardens + 7 Hectares.
Area of residential gardens - 9 Hectares
Area of roads - 35 Hectares
TOTAL AREA OF OPEN SPACE - 51 Hectare



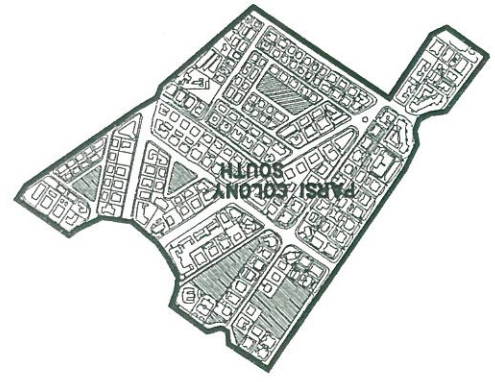
4) NO. OF DWELLING UNITS - 8460
3) POPULATION OF PRECINCT - 70000 (Residents + Floating)
2) NO. OF PLOTS - 816 NOS.
1) AREA OF PRECINCT - 150 HECTARES





APPENDIX 3 - COMPARATIVE DATA FOR THE NEIGHBOURHOOD

NOTES
STATEMENT OF AREA, GROUND COVERAGE FOR RANDOM SAMPLE OF PLOTS AND COMPARATIVE FIGURE FOR THE NEIGHBOURHOOD.



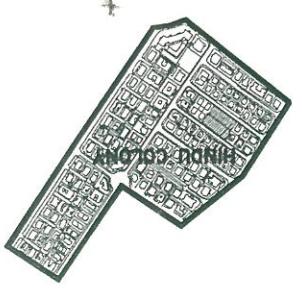
PARSI COLONY SOUTH
PERCENTAGE OF OPEN SPACE = 34%
AREA OF NEIGHBOURHOOD = 31 HECTARE
TOTAL BUILT AREA = 24.4 HECTARE
GLOBAL F.S.I. = 0.78

PLOT NO.	FRONTAGE	DEPTH	AREA	GROUND COVERAGE	FRONT	SIDE	REAR
648	25	30	750	34%	7	6	4
689	25	28	700	23%	6	5	11
745	20	20	400	30%	4	4	4
798	30	30	900	26%	5	5	12
627	30	36	1080	24%	8	6	13
				27.32%			



PARSI COLONY NORTH
PERCENTAGE OF OPEN SPACE = 30%
AREA OF NEIGHBOURHOOD = 17.09 HECTARE
TOTAL BUILT AREA = 15.86 HECTARE
GLOBAL F.S.I. = 0.92

PLOT NO.	FRONTAGE	DEPTH	AREA	GROUND COVERAGE	FRONT	SIDE	REAR
515A	20	25	500	31%	6	4	4
522	20	25	500	33%	6	4	4
557	30	45	1350	28%	10	6	14
592	30	33	990	28%	6	6	12
447	30	30	900	30%	6	5.5	10
				30%			



HINDU COLONY
PERCENTAGE OF OPEN SPACE = 17%
AREA OF NEIGHBOURHOOD = 13.06 HECTARE
TOTAL BUILT AREA = 14.38 HECTARE
GLOBAL F.S.I. = 1.01

PLOT NO.	FRONTAGE	DEPTH	AREA	GROUND COVERAGE	FRONT	SIDE	REAR
156	20	30	600	25%	5	4	10
148	18	25	450	33%	4	3	6
125	20	25	500	30%	5	5	4
173	30	32	660	30%	6	6	13
76	18	17	306	30%	3	3	3
				29.6%			



MATUNGA SOUTH
PERCENTAGE OF OPEN SPACE = 18%
AREA OF NEIGHBOURHOOD = 17.8 HECTARE
TOTAL BUILT AREA = 17.45 HECTARE
GLOBAL F.S.I. = 0.98

PLOT NO.	FRONTAGE	DEPTH	AREA	GROUND COVERAGE	FRONT	SIDE	REAR
315	24	30	720	38%	5	5	5
269	22	30	660	35%	6	4	4
217	20	30	600	31%	6	4	4
249	20	25	500	30%	5	4	4
294	16	30	480	38%	6	3.5	4
				34.4%			



MATUNGA NORTH
PERCENTAGE OF OPEN SPACE = 15%
AREA OF NEIGHBOURHOOD = 9.7 HECTARE
TOTAL BUILT AREA = 9.6 HECTARE
GLOBAL F.S.I. = 0.98

PLOT NO.	FRONTAGE	DEPTH	AREA	GROUND COVERAGE	FRONT	SIDE	REAR
372	26	36	936	37%	8	5	3
389	20	28	560	32%	6	4	4
397	23	25	575	36%	6	5	3
459	21	27	567	33%	5	4	6
375	25	32	800	33%	5	7	4
				34.2%			

QUESTIONNAIRE

THE FOLLOWING QUESTIONNAIRE IS PART OF A STUDY BEING CONDUCTED BY THE DESIGN CELL OF THE KAMLA RAHEJA VIDYANIDHI INSTITUTE FOR ARCHITECTURE AND ENVIRONMENTAL STUDIES TO FRAME GUIDELINES FOR THE CONSERVATION/ DEVELOPMENT OF THE KHODADAD CIRCLE, DADAR PARSANI AND HINDU COLONY AND THE KING CIRCLE PRECINCT. THE STUDY IS SPONSORED BY THE MUMBAI METROPOLITAN REGION DEVELOPMENT AUTHORITY (MRDA). THE INTENT OF THE QUESTIONNAIRE IS TO HELP THE STUDY GROUP UNDERSTAND THE COMMUNITY'S PERCEPTION OF THE KHODADAD CIRCLE, DADAR PARSANI AND HINDU COLONY PRECINCT. THIS WILL HELP THE STUDY GROUP TO FORMULATE GUIDELINES WHICH WOULD ALLOW ACTIVE PARTICIPATION OF THE COMMUNITY TO MANAGE THEIR OWN ENVIRONMENT.

1. NAME OF RESIDENT: _____

2. PLOT No: _____

3. MEMBERS IN YOUR FAMILY _____

4. DO YOU AND YOUR FAMILY LIKE LIVING IN THIS AREA? PLEASE ELABORATE. _____

5. WHERE DO YOUR CHILDREN PLAY? PLEASE SPECIFY THEIR AGE. _____

6. WHERE DO SENIOR CITIZENS IN YOUR FAMILY GO IN THEIR LEISURE TIME? _____

7. DO YOU THINK THE AREA PROVIDED FOR THE ABOVE IS SATISFACTORY? PLEASE ELABORATE. _____

8. ARE YOU OR ANY OF YOUR FAMILY MEMBERS, PRESENTLY, INVOLVED WITH ANY EXISTING GROUP / ORGANISATION FOR SOCIAL / CULTURAL / RELIGIOUS ACTIVITIES? PLEASE ELABORATE. _____

9. DO YOU USE 'FIVE GARDENS'? WHAT DO YOU THINK OF THE PRESENT CHANGES? _____

10. DO YOU APPROVE OF THE NEW FLYOVER BEING BUILT OVER DADAR II ? _____

11. HAVE YOU NOTICED ANY SPECIFIC CHANGES IN YOUR AREA IN THE PAST FEW YEARS? HOW HAVE THESE CHANGES AFFECTED YOU? _____

12. WHAT VEHICLES DO YOU OWN? _____

13. WHERE DO YOU PARK YOUR VEHICLE/VEHICLES ? _____

14. WHERE DO YOUR VISITORS PARK THEIR VEHICLES? _____

15. HOW DO YOU COMMUTE TO WORK? _____

16. IN WHAT CAPACITY DO YOU OCCUPY THE PREMISES: OWNER TENANT _____

17. IN CASE OF 'TENANT' PLEASE STATE THE OWNER'S NAME (INDIVIDUAL/ TRUST) _____

18. IF RENTED, IS YOUR FLAT AN EXTENSION OR A PART OF THE ORIGINAL STRUCTURE. _____

19. IS YOUR BUILDING PART OF A CO-OPERATIVE SOCIETY? IF, YES THEN SPECIFY NAME. _____

20. WHAT IS THE AVERAGE APPROX. INCOME PER MONTH FOR YOUR FAMILY ?

BELOW 5000 RS.P.M. BETWEEN 10,000 - 20,000 RS.BETWEEN 5000 - 10,000 RS. P.M. ABOVE 20,000 RS. P.M.

21. FLOOR AREA OF PREMISES. _____

22. AGE OF THE RESIDENTIAL PREMISE. _____

23. WHAT IS THE APPROX. EXPENDITURE TOWARDS MAINTENANCE OF YOUR HOUSE PER ANNUM ? _____

24. IS THERE ANY EXTENSION DONE TO YOUR BLDG? IF YES, WHEN? _____

25. DO YOU PAY ANY OF THE FOLLOWING:

PROPERTY TAX: YES NO AMOUNT: _____

REPAIR TAX: YES NO AMOUNT: _____

26. DO YOU PROPOSE TO MAKE ANY CHANGES/ ALTERATIONS TO YOUR HOUSE IN THE NEAR FUTURE? IF 'YES' PLEASE SPECIFY WHAT CHANGES. _____

27. WHAT DO YOU THINK ABOUT THE MAINTENANCE OF YOUR AREA BY THE BMC? _____

GOOD SATISFACTORY BAD

28. WOULD YOU PARTICIPATE IN ANY FORM FOR THE UPKEEP OF YOUR ENVIRONMENT? PLEASE ELABORATE. _____

29. ANY FURTHER SUGGESTIONS OR REMARKS PERTAINING TO YOUR ENVIRONMENT ARE WELCOME AND MAY BE MENTIONED HERE. _____

APPENDIX 4 - QUESTIONNAIRE DISTRIBUTED TO RESIDENTS