

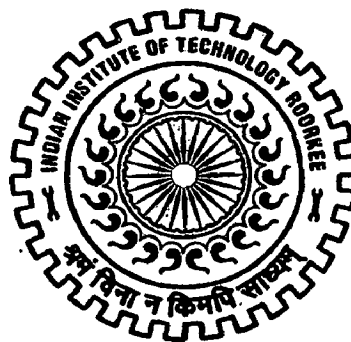
CONSERVATION OF CHARACTER OF A HILL TOWN: CASE STUDY MUSSOORIE

A DISSERTATION

*Submitted in partial fulfillment of the
requirements for the award of the degree
of*
MASTER OF ARCHITECTURE

By

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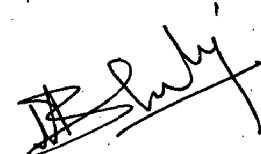
CANDIDATE'S DECLARATION

I hereby certify that the work which is being presented in the dissertation entitled 'CONSERVATION OF CHARACTER OF HILL TOWN: CASE STUDY, MUSSOORIE' in partial fulfillment of the requirement for the award of the degree of **MASTER OF ARCHITECTURE** submitted in the **Department of Architecture and Planning** of the Institute is an authentic record of my own work carried out during the period from July 2007 to June 2008 under the supervision of **Prof. (Dr) Pushplata**.

The matter embodied in this dissertation has not been submitted by me for the award of any other degree.

Place: Roorkee

Dated: June³⁰, 2008



(MONALISA)

CERTIFICATE

This is to certify that the above statement made by the candidate **MONALISA** is correct to the best of my knowledge.



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Dated: June 2008

(MONALISA)

ABSTRACT

The concerns of organizing development in the settlements are predominantly focused towards enhancing their economic and amenities infrastructure. However this pattern of priorities needs to be re-examined in the case of hill stations of India, whose morphological pattern distinctly governs the socio-cultural aspects of residing and touring community.

This multifaceted demand pattern of hill towns determines the various aspects of its economic sustainability. The economic interest of the town is in attracting tourism, by virtue of its unique character which is distinctly pleasant from that on plains. Hence in any proposal for its development, a need to maintain the distinctness of its character is supremely important.

In context of Mussoorie, as a typical ridge positioned hill town of India, the thesis aims to identify the parameters of its unique characteristics, which also represent the standard morphology of Hill stations in terms of location, setting, road form, streetscape, 'The Mall', the public buildings, the private cottages, the landscape, and so on. The thesis revolves around developing an explicit and comprehensive cause for the concern towards these aspects of a hill station's identity and justifies a need for its conservation by highlighting the comparative discussion of existing and changing character, firstly in all hill towns, and then specifically in Mussoorie.

The thesis thereafter attempts to approach the issue of character appraisal on the lines of various urban conservation charters recommendation. The delineation of character area in Mussoorie and the areas specific Mussoorie has been attempted as guidelines proposition aiming to conserve the '*character*' of the town which is till date the major attraction for tourists from all over India and in turn the spine of all economic activities of the station.

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1.1 - BACKGROUND

The hill station was established as a 'culture specific environment' characterized by the temporary patronage of its occupants. From 1815-1947 some 80 settlements were located and established in four clusters in lower mountain ranges of India. The distinct urban character evolved due to peculiar social demands in colonial context has an importance from historical aspect. This can be understood in light of the fact, that only a limited no.(approx. 80) such settlements were established of all scales and size over a period of century. *"With the end of colonial rule, these towns have become an integral part of nation's history and no sequel to this concept shall be manifested in future."* (A.D. King). In the terms 'unique character' one can define the character itself as the identity of a settlement's various physical, functional and visual elements representing its growth and evolution over a period of time in a holistic paradigm.(This will include: Road form and pattern, Urban built form, Landscape Pattern, Architectural characteristics, Open Spaces, Setting, Streetscape, & Landscape). Hill stations were established in Indian subcontinent, on the guidelines of 'Picturesque' movement in Britain. The intention to create a healthy, pollution free, closed community, in aesthetically pleasing and scenic locations for recreational/ leisure activities, led to evolution of a 'unique settlement- centre with its specific character'. However the changing scenario over a period of century and the consequence of the activities of development, on the lines of 'urban concepts', is reflected upon the severely diminishing aesthetic quality of the hill towns, which were once very popular as tourist destinations.

1.2- Need for Conservation

According to the projected percentage of population living in urban area's which would reach beyond 50% by 2010.It is possible to visualize the rapid consequences on all levels of settlements. Drawing attention to the "HILL STATION" in India which represented a unique and distinct settlement character, the forces of urbanization have induced new trends of development over a period of last 30-40 years.

The history of "Hill Stations" reveals their obvious proposition's to be encouraged amongst tourists and temporary patrons this intention was forced by a need to create a

healthy, pollution free, closed community in aesthetically pleasing and scenic locations for recreational, leisure activities for more than 100 years ago. However these hills station's although limited in number (eighty) and well connected to major cities of the region were economically parasitic. For most Hill Station and for the ones like Mussoorie, Matran, Kodaikanal, the most important source of revenue was the resident's themselves. The seasonal influx of the visitors supplied the economic life blood of the Hill Station's. The present day situation of these towns can be assessed from the statistics which quote increment of 406% of population over a span of 80 years in case of Mussoorie, Matran, and Kodaikanal. The dramatic explosion of population has affected the status and size of tourists catered to and ignited the conflicting issues concerning the interests of residential population.

Factors like- weekend tourism, facilitated infrastructure rise in affordability of the urban middle class and investment in tourist infrastructure by private enterprises has contributed specifically to the diminishing quality and quantity of tourism in these Hill Stations. The consequences of the new pattern of demands from tourists patronage is reflected upon the severely diminishing aesthetic quality of the Hill Stations. The Heritage of these settlements faces a threat in two ways:-

- 1) Demolition and replacement of this environment/ setting by modern construction practices.
- 2) Other is the threat of their being camouflaged under new built environment.

“Such a trend manifests itself against the principles of architecture which advocate that the relationship of spaces to one-another should be an achievement of a continuous flow of harmonious experiences over a period of time to give an impression of continuity.” Moreover the form of his city always has been a true indicator of the state of his civilization. Thus the increasing chaos in the settlements, the haphazard development, the piece meal short term gain oriented practice's are indicative of what..????

An urbanizing society in its inappropriate context!

CHAPTER 1

1.3-AIMS AND OBJECTIVE

- 1) To understand the urban and architectural character of a typical hill town in India and identify its essential features/elements /aspects/components.
- 2) To understand the changes in urban and architectural character of hill stations in India, in post independent scenario.
- 3) To suggest guidelines for conserving the heritage of a hill stations in India.

1.4-METHODOLOGY

In order to achieve the above stated objectives the following methodology will be adopted:

- 5) Extensive literature review to
 - i. To understand the factors (socio-cultural-political-climatic) responsible for setting up and evolution of hill stations during British time in India.
 - ii. To study the various types of hill towns established during the British colonial era.
 - iii. To understand the relationship between function and topographical location of these settlements.
 - iv. To understand the relationship between various types of urban morphological pattern on one hand and between value system and social organizations at another hand.
 - v. To study the controls/measures responsible to ensure the unique qualities and character of hill stations.
 - vi. To study various approaches to urban and architectural conservation, particularly related to areas with unique architectural character and heritage value.
 - vii. To study the approaches to conservation attempted in similar towns as case studies.
- 6) Observational Studies and Analysis of a select Hill Station to
 - viii. To understand and identify the urban character (road pattern, form, activities) and landscape character of hill station.

CHAPTER 1

- ix. To understand and identify the typical colonial architectural character and its essential elements /features/components in hill stations.
 - x. To understand the changes in urban character in hill towns
 - xi. To understand the changes in architectural character of hill stations.
 - xii. To understand the present architectural practices and its impact on colonial heritage of hill stations.
 - xiii. To understand the changes in urban character in hill towns
 - xiv. To understand the changes in architectural character of hill stations.
 - xv. To understand the present architectural practices and its impact on colonial heritage of hill stations.
- 7) To identify the issues /problems related to conservation of urban character in colonial hill stations of India.
- 8) To propose guidelines for conservation of urban characters in colonial hill station of India.

1.5- SCOPE AND LIMITATIONS

1. This work is primarily based on the study of urban and architectural character of one typical hill station of North India.
2. The extent of study is dependent on the research material available.
3. The scope of the study is limited to general architectural character and not the details of individual building.

2. HILL STATIONS IN INDIA

2.1 INTRODUCTION

The chapter provides an understanding of the general characteristics of hill stations in India. The section includes abstracts from exhaustive literature study about the history of hill stations in India. The relevant contents which help understand the context of hill stations and their character at settlement and architectural level have been discussed in various sub heads namely, history of hill stations, their location, and their typology as attempted by various scholars. Also discussed are the Socio-Cultural-Political-Climatic factors responsible for setting up & growth of Hill Stations.

2.2 HISTORY OF HILL STATIONS DURING BRITISH TIME IN INDIA

The hill stations were established as a culture-specific environment characterized by the temporary patronage of its occupants. Between 1815-1947, around 80 settlements were located and established in 4 clusters in the lower mountain ranges of India.(A.D. King). The preferred location was at an elevation between 4,000-8,000 ft, for their climatic suitability and accessibility. Hill towns were developed in the colonial environment of India to enable a European population to live at a level of civilization reasonably comparable to that they experienced at home. These hill stations have often been designated as ... "*culturally constituted behavioral environment*".

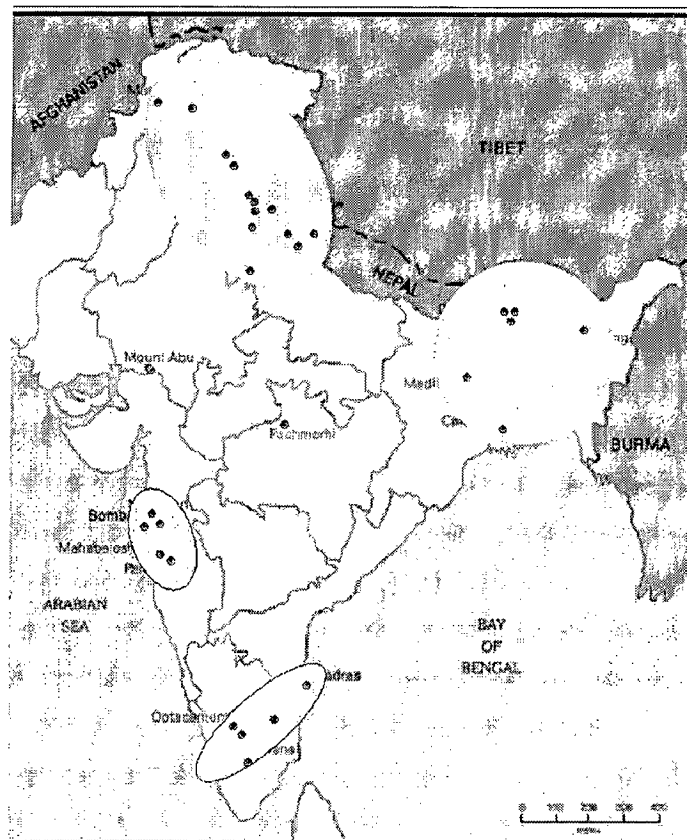
Their origins can be attributed to the intentions establishing sanatoria within the subcontinent where European invalids could recover from the heat and diseases of the tropics. The primary basis of their establishment being therapeutic attraction & seasonal relief soon evolved as a refuge from the social and psychological toll of an alien culture for the European society. The hill station was a variant neither of the traditional Asian city nor of the modern colonial/postcolonial metropolis, both of which thrived by incorporating a combination of commerce, industry, and state institutions. Rather the hill station was a unique urban entity, a seasonal site for the recreational activities of a highly transitory expatriate population. Hill stations offered enclaves where the British could seek the physical and psychic relief they needed from their imperial roles, & replicate the social and cultural environments that embodied the values they sought to cohere as a community.

Hence, the replication of certain features of the natural and social environment of Britain was central to the hill station's distinctive identity. It was the command of the colonial political power which enabled the acquisition of territory and exploitation of resources. 'The sites were mostly inhabited by relatively few native peoples or tribes, though local rajas often held claim to the land. Formal transfer into British hands by treaty or sale or subterfuge was an essential preliminary to the development of hill stations.'(Dane Kennedy).

2.3 LOCATION OF HILL STATIONS

The major hill stations were clustered in one region, each accessible to major European centers of population. They could be grouped on the basis of their vicinity to major metropolis in India as following:

1. **Simla -Mussoorie** group (lower Himalayas) accessible by rail from Delhi and Calcutta
2. **Darjeeling -Shillong** (North-East India) located near Calcutta.
3. **Poona- Mahabaleshwar** located near Bombay.
4. **Ottacamunda- Kodaikanal & Coonoor** located in Nilgiri hills closest to Madras



2.4 SOCIO-CULTURAL-POLITICAL-CLIMATIC FACTORS RESPONSIBLE FOR SETTING UP & GROWTH OF HILL STATIONS

‘The creation of hill stations was as much a matter of memories and desires as of bricks and mortar. If these communities were made from roads and railways, shops and markets, houses and hotels, they were also born of words and patterns and intentions, of the names and designs that gave meaning to the physical features of the built environment, of the habits and customs that characterized the daily workings of the social environment, of the manifold means by which the men and women who came together in them sought to infuse their habitat with significance.’ (Dane Kennedy). The types of urban development and residences prevailing in the metropolitan society (the society in Britain) at that time influenced the ‘settlement choices’ available to European inhabitants of India in the early nineteenth century. The development of a substantial ‘middle class’ & new concept of urban ‘social time’ led to the emergence of an institutionalized form of non-work or ‘leisure’ activity, an activity increasingly accommodated into the new physical-spatial and urban forms (the ‘hotel’, ‘boarding house’ and ‘resort’) and new forms of economic activity and occupation (‘the holiday’ industry and ‘entertainment’ profession) (Davidoff, 1973). As the civil station was a cultural response to the indigenous city, the hill station was a social response to the colonial settlement on plains. In hills, the natives and Europeans were temporarily separated from each other. Hill stations largely embodied the principal property; an exclusive environment where people with similar aims gathered occasionally to pursue them. This character gave them a specific and unique ‘socio-spatial’ role to play.

“The social, political and psychological factors, taken together suggest that Hill Stations in India was a form of Socio-Spatial organization peculiar to colonial urban development” (A. D. King). The major factor responsible for the setting up and growth of hill stations in India could be enlisted as follows;

2.4.1 HEALTH AS A FACTOR

1. “The particular ‘ethno medical’ belief of the colonial society which held that certain diseases, particularly *cholera*, *malaria*, and *typhoid* were less likely to occur in the elevated regions of hill stations.” (A.D. King)
2. The British preferred elevations of about 6,000-7,500 ft, which was well above the habitat of malarial mosquitoes or the influence of ‘zymotic’ diseases.
3. In most of the hill stations the difficulty of approach except by authorized public roads facilitated the exclusion of two of the greatest banes of cantonment life on the plains i.e. the poisonous spirited liquor of the ‘bazaars’ and the venereal infections.(A.D. King)

2.4.2 SOCIAL FACTORS

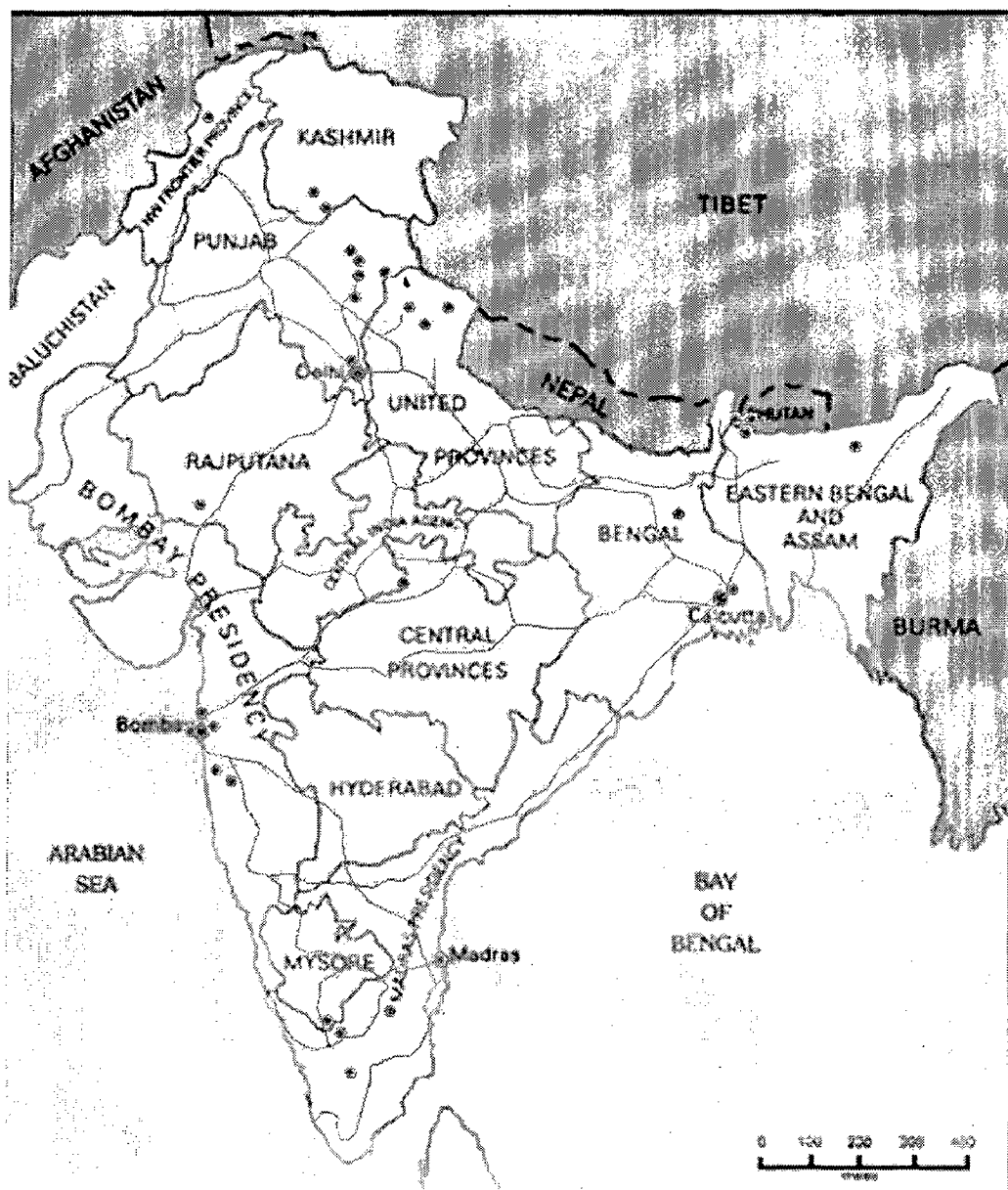
The attraction of hill stations lay in absence of the three major constraints which restricted social life on the ‘plains’: the unfavorable climate, ‘official authority’ and the large number of indigenous population. (AD KING). Hill Stations performed a social role by providing in its modified cultural environment an opportunity for new relationships and alternative patterns of behavior. .{ AD KING}.

“Here were localities with ‘a marked holiday atmosphere and absence of ‘officialdom’ (Allen, 1975). As hill stations attracted larger, more restless populations in the wake of the railway, they developed more lively and labyrinthine social traits. Visitors in the late nineteenth century were often struck by the highly ritualized character of social life in the hill stations.

An elaborate code of etiquette governed everything from forms of introduction to rules of seating at dinner parties. Thus, temporary residences in the hills provided an opportunity to strengthen the ‘cultural identity’ and participation in familiar community roles which was missing in the life on plains. Hill station was deemed a suitable environment for ‘childbirth’, matrimony, burial of kin. (Thompson, 1938)

2.4.3 TECHNOLOGY AS A FACTOR

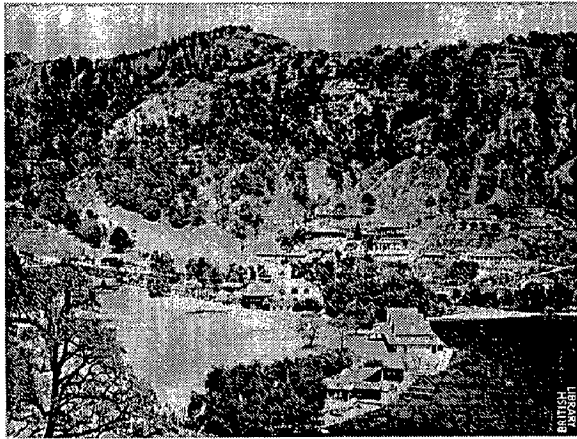
Technology for example the railways, the surveying institutions, after 1840's contributed immensely, to the establishment of the hill stations. Nearly every hill station in India was within fifty miles of a railway junction by the end of the nineteenth century. These improvements in transportation inevitably brought an increase in visitors and residents. Technical centers for geology, survey, road making, bridges, and concepts on urban developments were supporting parameters.



British India (1909), Major Hill Stations and major railway routes

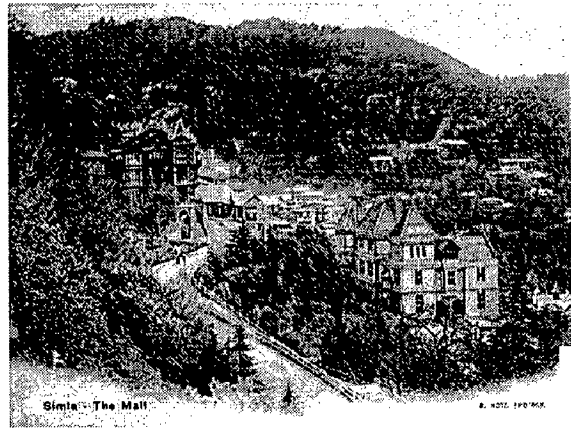
2.4.4 AESTHETICS AS A FACTOR

Along with other motives, the ideological belief, common to elites in the metropolitan society, were shared by middle-class members of the colonial community throughout the nineteenth and twentieth centuries. (A. D. King). The hill stations aesthetics emerged in lines of the new role similar to the 'picturesque' environments followed in the mountainous area of north Britain ('the lakes' & Scotland). (Nicholson, 1972)



Source: en.wikipedia.com (Nainital)

NAINITAL located around a lake-1875



Source: en.wikipedia.com

Located on a ridge, Shimla-Before 1890



Source: From Eastern Bengal State Railway, *from the Hooghly to the Himalayas* (Bombay, 1913).

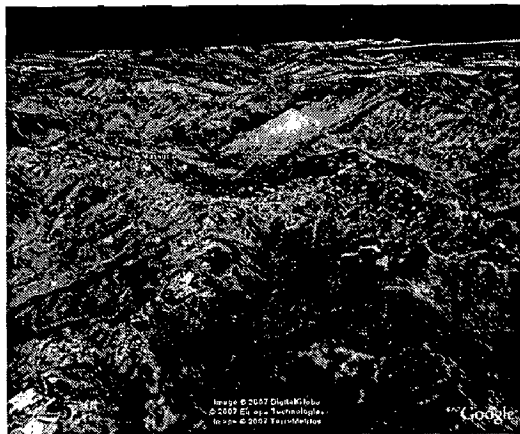
The artificial lake at Shillong

2.4.5 CLIMATE AS A FACTOR

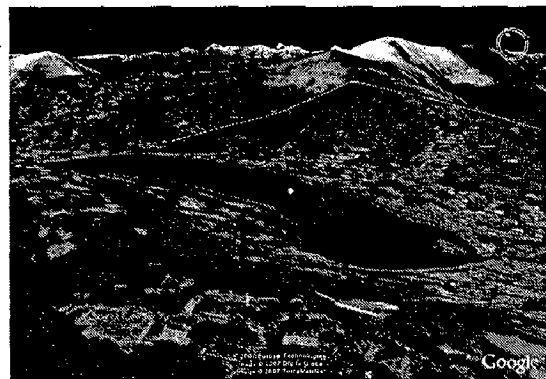
Considering the climatic suitability factor it was recommended in British norms to locate 1/3 rd of their establishment of European troops in India, to be permanently located in the hill stations. Carefully chosen sites with, settlements situated away from the wet, windward side of mountain slope, where the air was cool and dry and vegetation scanty at heights between 2,000 and 4,000 ft were thought to be healthier. Such sites were developed primarily for Sanitariums.. E.g. Mussoorie

2.5 VARIOUS TYPES OF HILL TOWNS ESTABLISHED IN INDIAN SUBCONTINENT FROM 1815-1950.

Norberg-Schulz (1971) distinguished and typified the settlements in upland areas on the basis of distinct figure-ground relationship with the landscape. He claimed that settlements on promontories, acquired their identity from cluster-like concentration. Attempting a typology of settlement forms, he identified three basic forms: cluster, row and ring. He suggested that, while the row was the 'natural solution' in valley development, the cluster was the natural solution on hilltops.



Source: google earth.com
A Ridge Town (Mussoorie)



Source: google earth.com
A Valley town (Nainital)

The cantonment or permanent military stations were the institutionalized form of settlement for the military representations in India. Their location in Hills was selected from strategic point of view. Hence the location on ridge and their connectivity was a favorable criterion. .E.g. Ranikhet. These stations on basis of topographic locations could be classified as ridge towns.

Leisure towns and resorts laid much importance to the scenic beauty visible from the site and areas of interest like Lakes, Falls, Valleys and so on. E.g Nainital. These towns on basis of their topography could be Valley towns or mid-slope towns.

A clear chronological pattern can be discerned in the development of hill stations, a pattern shaped by a variable mixture of political, social, military, medical, and technological factors.

The history of evolution of the hill stations in Indian sub continent could be stratified—Sanitarium to high refuge (1819-72), High refuge to hill station (1872-96), And hill station to town (1892-1948). on the analogy of analysis done by Monika Bührlein Mitchell has proposed the following five categories to classify the hill stations in Indian subcontinent.:

- I. The Official Multifunctional Hill Station (Simla, Darjeeling, Naini Tal, and Ootacamund): They were government headquarters as well as social, recreational, and educational centers for the British.
- II. The Private Multi-Functional Hill Station, (Kodaikanal, Matheran, and Mussoorie) : they served much the same array of social functions as the first group but did not possess any official purpose.
- III. The single-purpose hill station, the minor hill station.
- IV. The satellite hill station.

The remaining three categories are a more difficult to distinguish from one another because many stations could be categorized as minor, single-purpose, and satellites of larger stations. It is easy to classify the smaller hill stations by the clientele they encouraged. Twenty five stations existed as cantonments for British troops almost exclusively. Others accommodated *missionaries, planters, pensioners, railway workers*, and so on . 'Dharmkot', for instance, was dominated by Presbyterian missionaries, Yercaud by coffee planters, 'Lonavala' by employees of the Bombay railway system, and 'Madhupur' by retired civil servants. The occupational-cum-class attributes of their patrons was applied as a measure very often by the British themselves to distinguish one hill station from another. The most striking location criterion is the string of military stations ('Kasauli', 'Dagshai', 'Sabathu' , 'Solon', 'Jutogh') that guarded the route from the plains to Simla. Mostly located on ridges, these stations acted as guarding units for the route.

2.5 CONCLUSION

The hill station in India represents a peculiar settlement typology by the virtue of the unique circumstances responsible for its setting and establishment. The major technological factors of railways and survey techniques facilitated the criteria of health and culture to dictate their location at hill ranges, between elevations of 4000-8000 ft, and also established the layout and urban design to accommodate their cultural norms. The aesthetics and picturesque setting were essential criterion to their site selection which was often associates by the advantage of lakes, falls, or commanding location on ridges for the function of cantonments. These stations apart from being defined as culturally specific environments have been stratified on various criterion, of location, size and function and also layout. Hill towns have been stratified as a distinctive urban system at societal level and under major dimension at national level of geographic unit. Colonial urbanization, on the criterion based on Economics, organization, spatial-cultural factors, identifies Hill stations with other styles like sea-ports, district towns, cantonments, colonial capitals, and district towns.

SCALE OF GEOGRAPHIC UNIT	DIMENSIONS	SCALE OF SOCIAL UNIT	TYPE OF PHENOMENON CONSIDERED	ILLUSTRATIONS
1. Global	Macro	Inter- cultural	Cognitive	Knowledge of urban system, planning theory
2. International or sub-macro	Sub- macro	Inter – societal	'Centre-Periphery' & 'Cultural-pluralism'	' third country' urbanization and urban development'
3. <i>National</i>	<i>Major</i>	<i>Societal</i>	<i>Economic, organizational, spatial, cultural,</i>	Sea-ports, district towns, colonial capital, Cantonments, HILL STATIONS , considered as a system.
4. Urban	Intermediate	Urban	Social, spatial, cultural, economic, technological	'Colonial city' structure: 'native city'/'cantonments'/'civil stations'
5. Sector	Minor	Community	Social, spatial, cultural, economic.	'Colonial urban settlement' structure: 'indigenous city structure', 'cantonment' structure.
6. Unit	Micro	Institutional (domestic or public)	Built- form (architectural), social, cognitive, cultural, and economic.	Residential units: 'bungalow compound', courtyard house, church, mosque, temple,

**3. Urban morphological pattern, value system and social organization
of Hill station in India.**

3.1 - INTRODUCTION

Therefore the physical manifestation of the inspired ideas helped create an urban morphology which had certain features typical for all stations. This setting/layout of settlement acted as a conducive environment for the value system and social norms practiced by the patrons of the hill town. The fundamental context is however of 'cultural appraisal' wherein the individuals must possess a value system which motivates them to want to make use of a particular resource.

The hill station's 'central avenue' invariably emanated from the 'Anglican Church'. Government buildings such as the postal and telegraph office, the collector's office, and the civil court are planned and located along this thoroughfare. Other important institutions would be banks and prominent businesses serving buildings.. Particularly in the Himalayan hill stations, where the terrain restrained vehicular traffic, this main street was known as the "Mall," a distinctive term that both suggested its pedestrian nature and evoked associations with elegant precincts at England. (Dane Kennedy)



Source: hpshimla.nic.in/her_th_1.htm (The Simla Summer Festival Committee)

Simla- Town hall

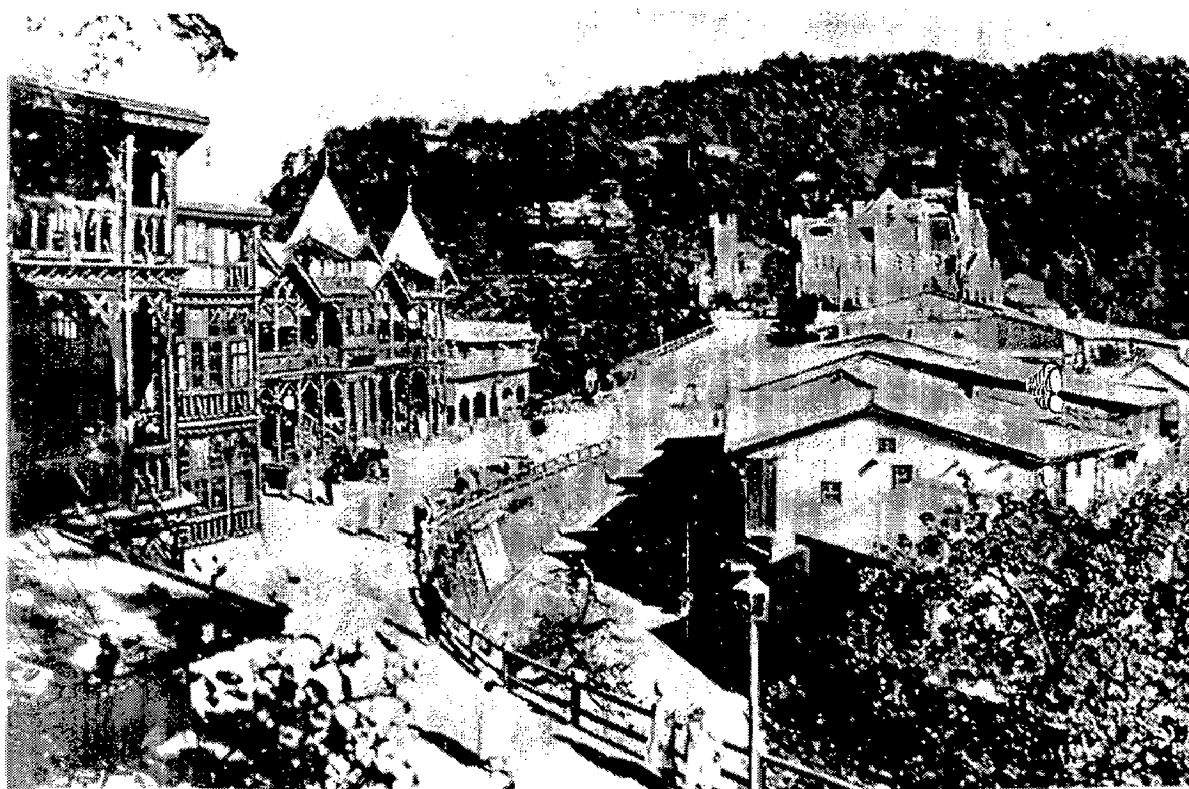
'Intersecting the Mall at various points was a bewildering array of other lanes that snaked their way across the undulating topography of the station.' Rarely were these lanes identified by name since inhabitants were presumed to possess the same cosy familiarity with their surroundings that the village folk at Britain had. This practice frequently created problems for newcomers to the larger hill stations. Ootacamund's municipal council felt obliged in 1894 to put up street signs on major intersections to orient visitors. In Simla, however, a tourist guide published in 1925 complained that "one of the chief shortcomings in the administration of the town . . . [is] the almost entire absence of street and road names" (Dane Kennedy). Other than the Mall or its equivalent, the only route familiar to everyone was the 'Cart Road', a utilitarian name for a utilitarian road that served as the main artery for people and goods going to and from the station. The Cart Road usually was located at the lower reaches of the hill station, where its constant din would not disturb the serenity of British householders. The hill stations provided their clients with a wide array of social institutions to keep them entertained. These included assembly halls, residential clubs, gymkhanas, subscription libraries, Masonic lodges, sports and recreational clubs, and, in several of the larger stations, theatres. They landscaped the station's meandering avenues and footpaths with trees and flowers indigenous to Britain and cultivated English fruit orchards and vegetable gardens in their backyards.



Source: www.worldofstereoviews.com/indiapage1.htm

An image showing the settlement in Simla-before 1880

The British were predominantly inspired by European models when they designed their highland buildings to re-create a similar physical appearance & moral meaning as in their homeland. *“Rather than transposing the grid patterns of civil and military stations of the plains to these mountain settings, the British preferred the sinuous contours of the rugged landscape and constructed their cottages along the crests of ridges and around the shores of lakes without apparent premeditation or planning”* . (Dane Kennedy).



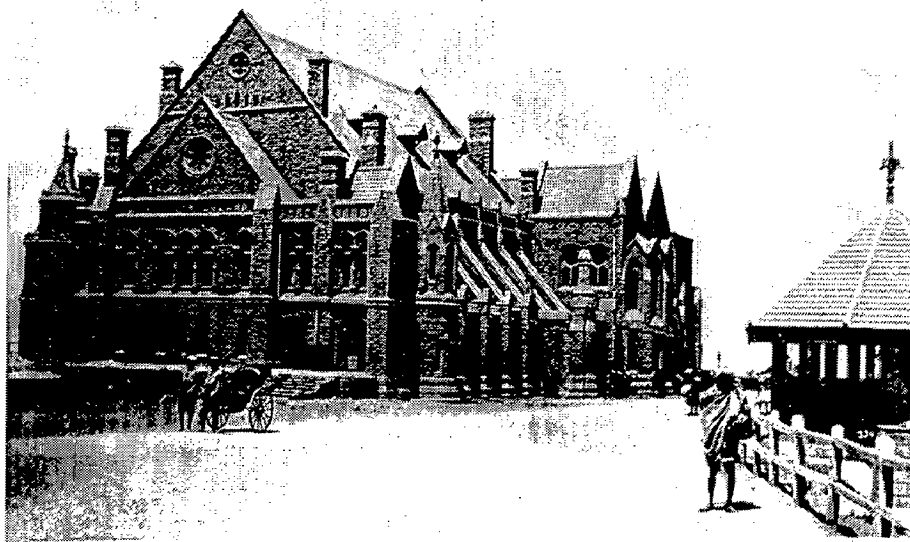
Source: hpshimla.nic.in/her_th_1.htm (The Simla Summer Festival Committee)

Simla- Town hall and Mall Road, 1895

The urban character can be elaborated and discussed in the physical manifestation of the various institutions established to serve the social activities/life of the patrons. The major elements of the urban morphology have been studied as follows:

3.2- ARCHITECTURAL STYLE

Swiss Gothic remained the dominant motif for hill-station architecture. Inspired from the picturesque concepts of town design, these stations were designed on the themes of architectural eclecticism. The houses were more often gabled Gothic villas, half-timbered Tudor cottages, gingerbread-ornamented Swiss chalets, and other European architectural impressions. (Danë Kennedy) These communities tried to recreate their impressions of homeland by words and patterns and intentions giving meaning to the physical features of the built environment. Social Identity in terms of prestigious associations; 'The Manor', 'The Grange', 'The Manse', 'The Priory', or visual criteria of settlement; 'Vale View', 'Prospect Point', 'Snow View' or the natural setting; 'Oak Cottage', 'The Firs', 'The Saplings', 'Hill Tops'.

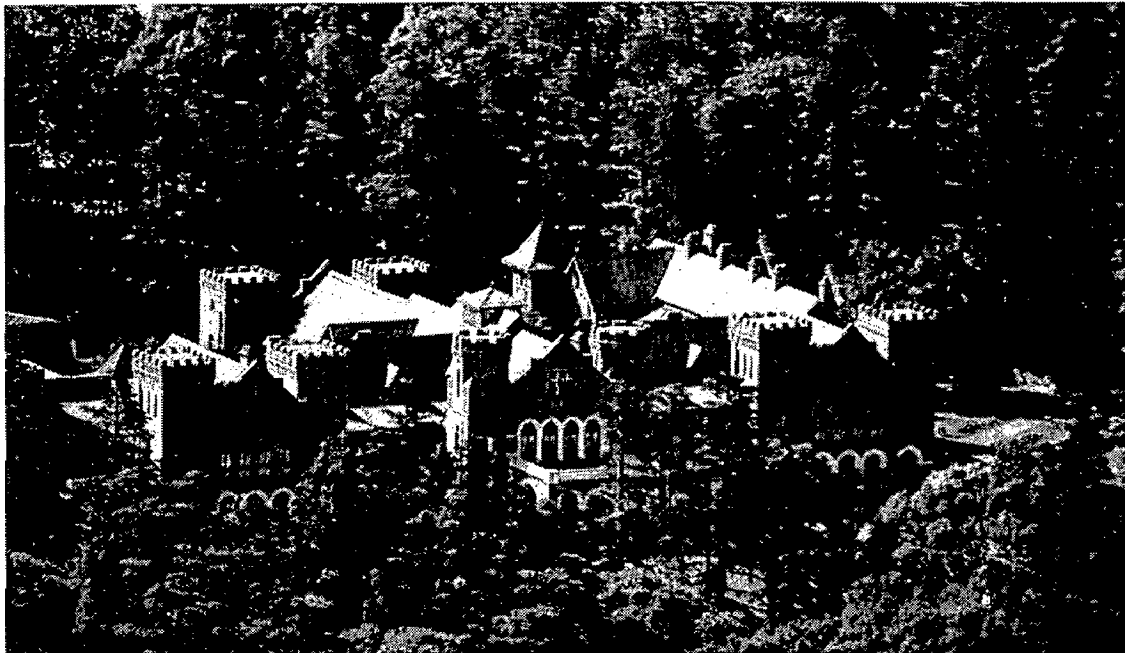


Source: hpsimla.nic.in/her_th_1.htm (The Simla Summer Festival Committee)

Simla- town hall 1895

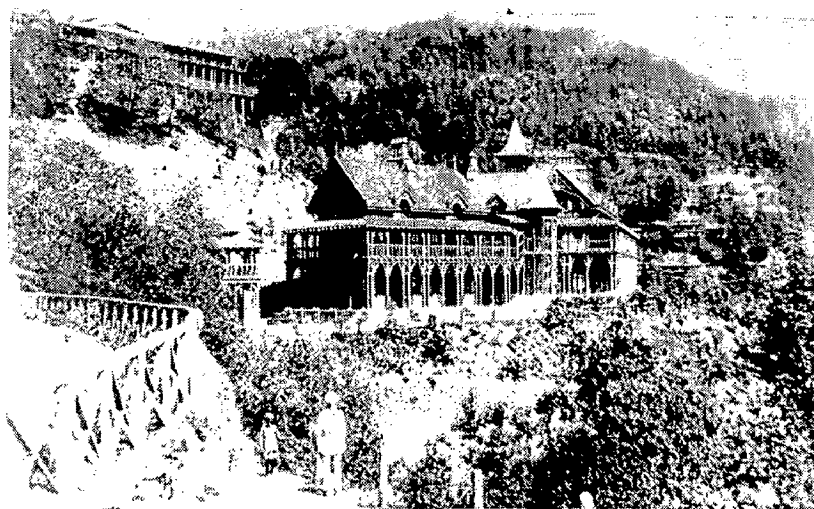
"It was in the hill-stations," Jan Morris believes, "that the British in India achieved the most distinctive of their vernacular styles" And what fancies they were! "*Himalayan Swiss-Gothic*" is Morris's term for the style that came to predominate in the Himalayan stations by the mid-nineteenth century.

“It was distinguished by multistoried structures with chimneys thrusting up from steep roof lines, numerous gables and terraces cutting against the vertical grain, and ornately carved fretwork framing the eaves, windows, and doors; the result looked like a cross between a Victorian garden villa and a Swiss chalet.” (Dane Kennedy)



Source: internet

Nainital: Governor house



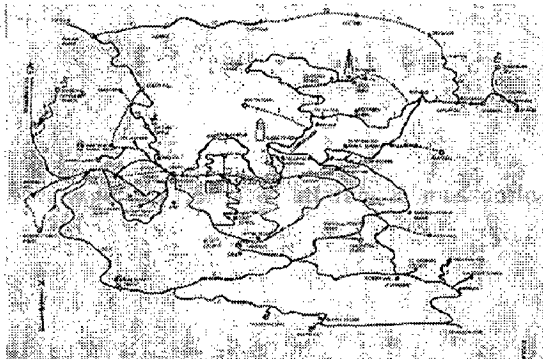
Source: hpshimla.nic.in/her_th_1.htm (The Simla Summer Festival Committee)

Simla: Rippon Hospital

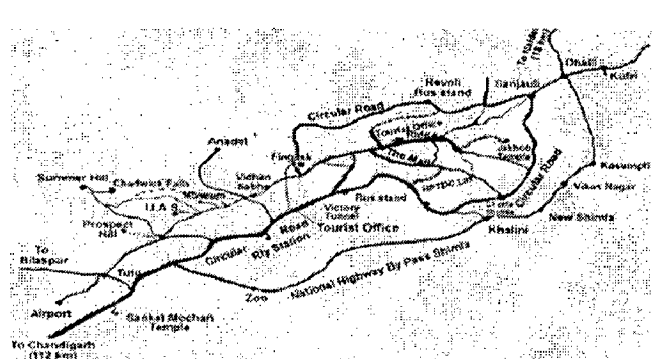
3.3 - ROAD FORM & PATTERN

The main road was the pedestrian lane called Mall which gave access to various circulations routes leading to major institutes and cottages. The road followed the landform; the 'Garland' profile and linear route was most common amongst all hill stations. 'Intersecting the Mall at various points was a bewildering array of other lanes that snaked their way across the undulating topography of the station.' Rarely were these lanes identified by name since inhabitants were presumed to possess the same cosy familiarity with their surroundings that the village folk at Britain had. These local roads ended up as cul-de-sac or completed a loop around the settlement.

The 'Cart Road' was the major utilitarian road serving the day to day supply for the station from the plains. This road was located in lower elevation securing a pleasant view for the pedestrian paths.



Source: Internet
Road map of Mussoorie.



Source: Internet
Road map of Shimla.

'The Mall'

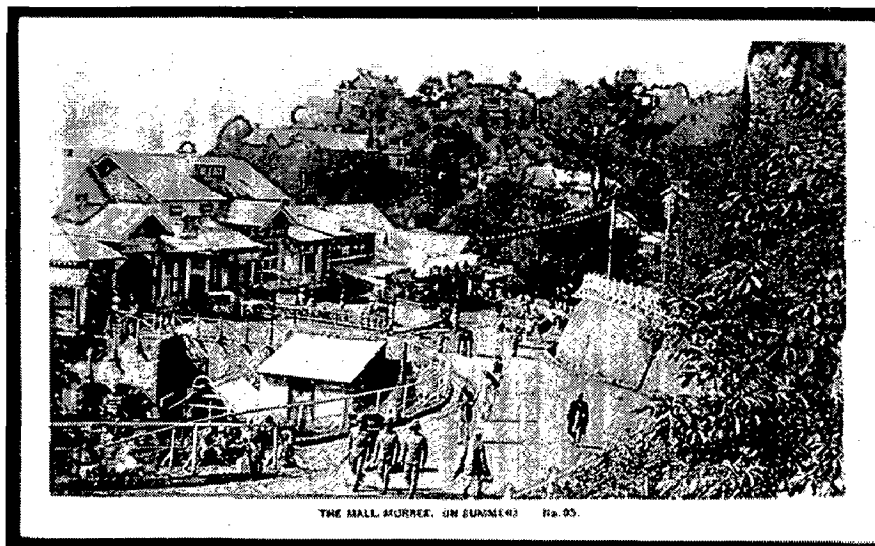
The Mall was the typical central thoroughfare. Major activities catered to were 'recreation', 'walking', 'admiring the view', 'riding', 'and collection of flora'. Typically the central thoroughfare of the Himalayan hill stations was the Mall. From here, other cart roads or tracks either branched off to make circulations routes around the peak on which the settlement was sited and then returned to the mall or to peter out on uninhabited slopes) was a The mall was instrumental in generating social interaction."

The hill station mall road ('pedestrian-equestrian precinct') gives access to major institutions of Church, Principal Hotels, Library, Club, and the few European stores. The effect of the modified environment was to produce a location where it was difficult, without staying indoors, to avoid regular social interaction. The inhabitants were constantly in contact.



Source: Internet

THE MALL ROAD AT SHIMLA



Source: Internet

THE MALL ROAD AT SHIMLA -1932

3.4-COTTAGE (Typical Residential Unit)

The cottage was considered appropriate for the hill station because it replicated the general features of the English country home. Those features were easily recognized by visitors to the hills. "With their small windows, sloping roofs, and many chimneys," applauded one writer, "[hill-station houses] put one in mind of English cottages." Another sketched the scene at Yercaud: "On the summits . . . amid pretty clumps of trees which the woodman's axe has spared, are scattered cottages very English in appearance, with tile or zinc-covered roofs, and walls overgrown with beautiful many-coloured creepers and blushing fuchsias." On a grander level, the Simla residence of Lord Auckland, the governor-general, was described by his sister, Emily Eden, as "a cheerful middle-size English country-house."

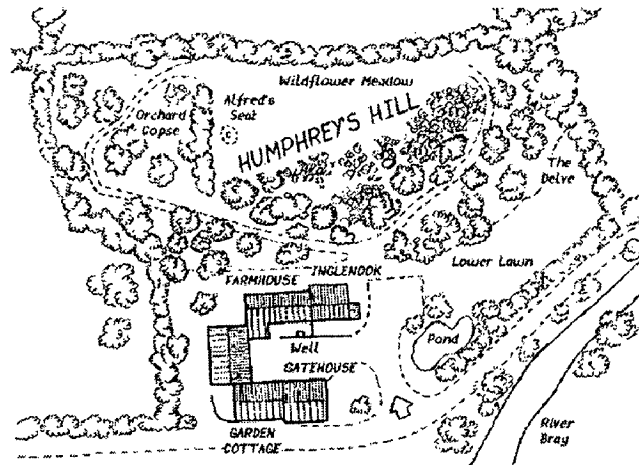


Source: Self

Cottage at Mussoorie(2007)

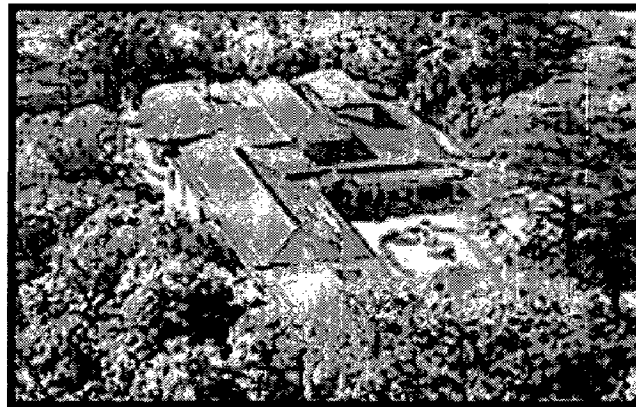
The emotional impact of these evocative highland dwellings is apparent in Lady Wilson's remarks about her arrival at the small hill station of Sakesar in Sind: Blessings on the man who dreamt of Sakesar and made it an English home. . . . You can't imagine the kind of material pleasure one has in material things that simply look English. The roof of this house enchants me, merely because it slants instead of being flat: the ceilings because they are much lower than those at Shahpur and are plastered. . . . The woodwork is actually varnished: the bow windows are really windows, not doors: the fireplaces are all in the right place; . . . we are as cosy as cosy could be.

The cottage was replicated in the general features of the English country home. Those features were easily recognized by visitors to the hills. "With their small windows, sloping roofs, and many chimneys," applauded one writer, "[hill-station houses] put one in mind of English cottages.



Source: Internet

A site plan showing setting of a cottage



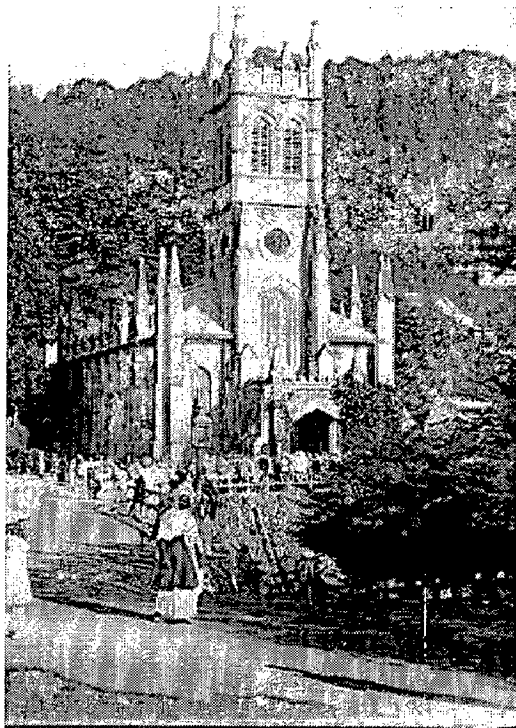
Source: Internet

An image highlighting the setting of a cottage

"Typically each bungalow was dug closely to the hill-side, occupying a separate compound and isolated from neighboring sites. The criteria of location were those of seclusion, access to 'views' and conformity to a 'picturesque' landscaping ideal. The private environment of hill was consciously varied and utilized for individual expressions. (A.D.King, Colonial urban development)

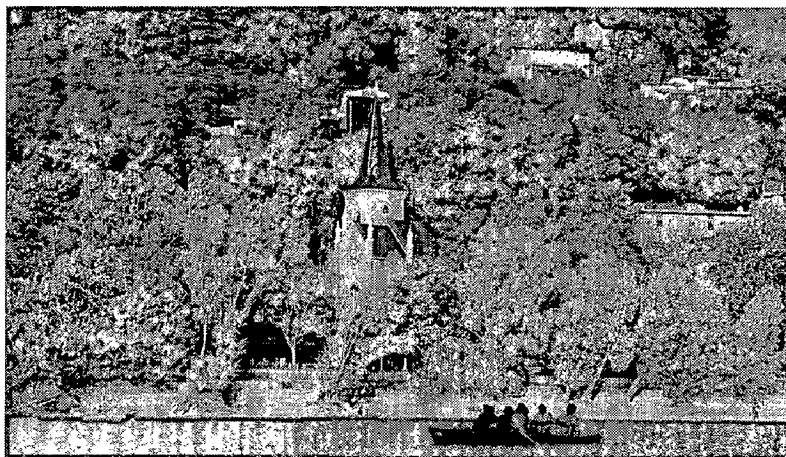
3.5 - CHURCH

Most visible symbol of Cultural landscape was the 'Anglican Church'. The pedestrian precinct and the central thoroughfare road started from the church. Thus, prominent location was a crucial criterion for its site selection. Most commonly followed was the 'revived gothic' form. The spire of altar was a prominent landmark feature visible from most part of the station. Very often, a bright (red) color would make the spire strikingly visible amidst the dense landscape.



Source: geocities.com

Christ church-Shimla before 1900



Source: shaunya.com

Church Spire as seen from the lake-Nainital

3.6 - CROSSING POINTS

The peculiar behavioral quality of these squares is noticeable from social interaction point of view. These crossing points encouraged socialization & discourage privatized behavior amongst the residents at the same time. Names like: 'Charing cross', 'Scandal Point'.....the location of these points was at the junctions of major roads within the settlement. Important official and cultural institutions were established in the vicinity.

A relatively flat terrain acted as the junction point where units like boat houses, band stands, post office, church & theatre could serve the residents in a smaller and peculiar form of 'plaza'.



Crossing point - Nainital

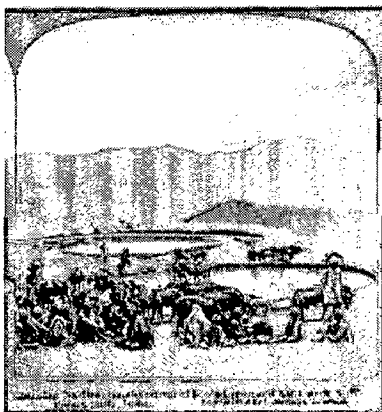


Source: internet

Scandal point- Simla

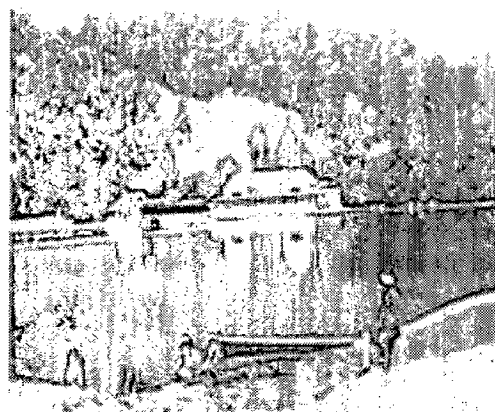
3.7 - RECREATIONAL INSTITUTES

Suitable even plains for sports like Horse Racing, Polo, cricket were chosen for recreational spots. Sailing and boating activities, required boat houses and water diversion from water resources which were located near the lakes. Libraries, theatres, assembly rooms, band stands, restaurant, etc were typical to each hill station on the mall road.



Source: www.worldofstereoviews.com/indiapage1.htm

A Picnic spot in hills



Source: www.worldofstereoviews.com/indiapage1.htm

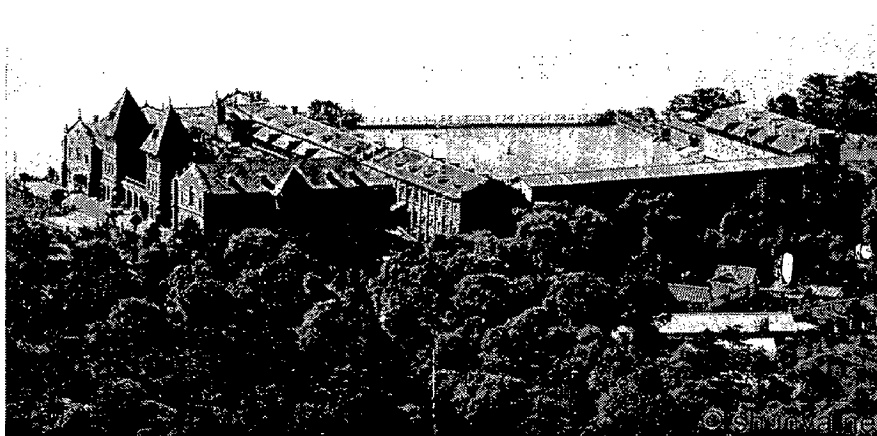
Nainital, a leisure resort.

3.8-EDUCATIONAL INSTITUTES

"[I]f left to the society of native servants, not only will [children] most assuredly contact native habits in the way of eating, gesticulating with the hands when talking, etc., . . . but, rapidly picking up the language, their little minds will soon become contaminated with ideas and expressions that would utterly horrify a mother did she herself understand the language of the country." (Dane Kennedy, the Magic Mountains)

Many parents either could not afford to send their children back to Britain or were unwilling to do so. The financial costs—the fare for the passage, the expense of maintenance with strangers or even relatives, the fees for schooling—were simply prohibitive for many families in India, especially those employed in services like telegraph, mail, police, forestry, customs, the railways, the army, and various commercial enterprises. Those mothers who spent their summers in hill stations invariably brought their offspring with them. Many other parents sent their children to boarding schools in the hills while they remained on the plains. Even orphans and the children of poor whites were frequently placed in institutions located in the vicinity of major hill stations. Schools were founded at Mussoorie in 1835 for "parents who are too poor to send children home. The colonial state and its ruling elite were growing concerned about the increasing numbers of poor whites in India. They were the inevitable residuum of the nonofficial population, the underclass of unemployed workers, discharged sailors, abandoned and widowed women, orphaned children, alcoholics, lunatics, and others who lived on the margins of European society, often resorting to beggary, burglary, and prostitution to survive. Children they considered redeemable when placed in suitable environments, such as orphanages and similarly regimented educational institutions, particularly when those institutions were removed from the subversive influences of the plains. The colonial literature was replete with laments about how children were being corrupted morally by their intimate association with servants. Established after the metropolitan models prominent location was a crucial criterion for its site selection. Many of the newly founded hill schools were all-male institutions. St. Paul's, an Anglican school originally located in Calcutta, was moved to Darjeeling in 1864. The

Church of England also established a school in Simla named in memory of Bishop Cotton (1866), and diocesan schools in Mussoorie (1867), Naini Tal (1869), and Panchgani (1876). The Catholics opened St. Thomas College of Murree (1882) and St. Joseph's of Darjeeling (1888) (Figure 9), of Naini Tal (1889), and of Coonoor (1889), in addition to expanding the pre-Canning-era schools, St. George's of Mussoorie (1853) and St. Joseph's of Ootacamund (1854). The American Protestant missions sponsored Oak Openings at Naini Tal (1880) and the Philander Smith Institute in Mussoorie (1885). Several nondenominational institutions also arose, notably Stanes' School in Coonoor (1861), Breeks' Memorial School in Ootacamund (1873), and the Modern School of Mussoorie (1896).



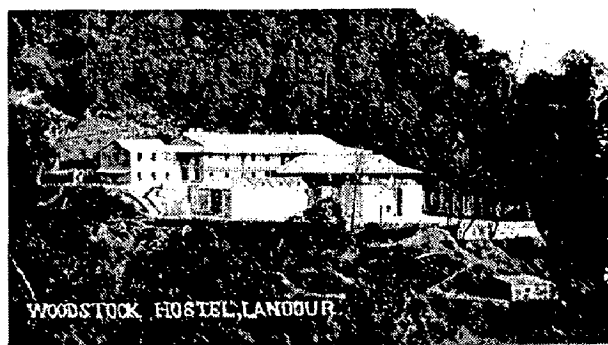
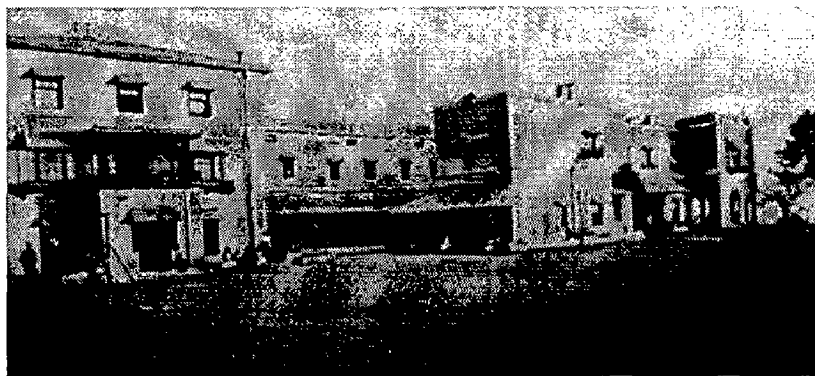
Source: internet

St. Joseph's college, Nainital

Educational opportunities in the hills were no less abundant for girls. Roman Catholics dominated the field, with the Loreto Convents particularly active. In addition to the branches it founded in Darjeeling and Ootacamund in the premutiny era, this Irish order opened schools in Murree (1876), Naini Tal (1878), Kurseong (1890), Simla (1895), and Shillong (date unknown). Other Catholic institutions for girls were the Convent of Jesus and Mary in Simla (1866), the Nazareth Convent School in Ootacamund (1875), and St. Joseph's Convent in Coonoor (1900). The Anglicans countered with Cainville House, Mussoorie (1864), Auckland House, Simla (1866), diocesan schools at Naini Tal (1869) and Darjeeling (1875), and St. Denys' School, Murree (1882). The American Presbyterian Mission took over the preexisting Woodstock House of Mussoorie (1872); the American Methodist

Episcopal Church opened Wellesley School in Naini Tal (1880); and the Calcutta Christian Schools Society founded Queen's Hill School of Darjeeling (1895). Nondenominational schools included Wynberg, Mussoorie (1894), Hampton Court, Mussoorie (1895), Petersfield, Naini Tal (1899), and Arycliff, Simla (1888), which subsequently affiliating with the Church of Scotland.

The hill schools modeled their appearance and approach after English public schools, pitching themselves both to those parents who wanted their child to obtain the schooling needed to prepare them for "finishing" at an English institution and to those who wanted their child to receive the benefits of an English-style education without incurring the financial cost or facing the emotional loss entailed in sending them to England. The hill schools modelled their appearance and approach after English public schools, pitching themselves both to those parents who wanted their child to obtain the schooling needed to prepare them for "finishing" at an English institution and to those who wanted their child to receive the benefits of an English-style education without incurring the financial cost or facing the emotional loss entailed in sending them to England. Simply put, the hill schools held the promise of the social and ideological reproduction of Britain's imperial emissaries



Woodstock school at Mussoorie

3.9 CHARACTER OF HILL TOWNS

Worskett (1958) examined and coined the term '*Town-Landscape Relationship*', asserting that the visual relationship between town and country must create a distinct visual identity for the town. Lynch examined elements of distant views, such as '*Figure-Ground Relationships*', and referred to the qualities that make places remarkable, vivid and recognizable also arguing for the clarity of structure and vividness of identity as desirable objectives. Norberg-Schulz (1971) follows that settlements in upland areas formed distinct figure-ground relationship with the landscape. He proposed that the settlements on promontory, acquired their identity from cluster-like concentration.

Owen (1995) identified elements of the appearance of settlements that fostered distinctiveness and attractiveness to a hill settlement. They included the following-

1. settlement structures that were recognizable and legible;
2. scale that was both human within the settlement and appropriate to the settlement's appearance in the local and wider landscape;
3. buildings that were integrated with their natural surroundings, including sensitivity to the shape and structure of land, avoidance of exposure to cold winds and securing the benefits of light and warmth from sunshine;
4. distinctive landmarks;
5. Unity, although rarely uniformity, of building materials of recognizable local origin.

Apart from fulfilling these aspects of a distinct setting, the hill station's character is representative of a patronage which inhabits the settlement for the exclusive purpose of leisure, sanitarium, cantonments, and very rarely as summer capital. The functional aspect is deeply integrated to suit the socio-cultural requirement of a community which was economically superior to the common population.

The urban morphology therefore gives extreme importance to the setting of town and buildings. The roads, their layout, their location, their width their surfaces all respect the scale of a pedestrian user. The landscape accordingly is to provide a favorable ambiance, shelter the promenades, develop a compound for buildings, and form an aesthetically enriching experience.

The buildings which are rarely above two story and most commonly single store are rarely perceived in their bulk from a distance. Their typical setting is concealed by their immediate compound. Also, the roofscape which was staggeringly colored in red for common buildings, and green for important and selected buildings, was an important aspect typical in all hill towns. The street furniture was an important aspect of this fabric which was exclusively for the advantage of pedestrian user.

The density of the town was sparse though the relative rush during summers was accommodated in the number of hotels and lodges which were then occupied for months together.

Also, because the winter time hardly had any commendable population, the use of hipped roof in tin or timber was acceptable over an introvert building design. The requirement to sit out in sun during winters, in a space like verandah or balcony was negligible. Hence the cottages were contrasting to the design of standard bungalows of the plains.

The commonly painted facades and ornate signages provided a harmonious character within the built fabric of the settlements.

3.9 CHANGING CHARACTER OF HILL TOWNS

The changing socio-economic-political and cultural scenario over a period of last 100 years in Indian subcontinent has affected the functional character of these hill stations most dramatically. The months long patronage of economically rich tourists during summers had been replaced by the clientele of tourist of all class, on a weekend or extended weekend pattern. The bulk of tourism hence is enormous, and so is the demand on the tourism infrastructure which is being modified to accommodate both, the increased number of tourists, and their wide range of affordability.

Thus the transformation of various properties in to hospitality buildings, and division of properties as a consequence of growing resident population is drastically affecting the building morphology and harmony which are crucial to the character of the town. Another aspect of development is the growing traffic of motorized vehicles, whose presence questions the compactness of these towns, which were established as the promenade dominated settlements. The consequence of traffic is the problem of parking space. Both of these factors sabotage the pedestrians interests on the roads and the views beyond the. Also the extensive

shopping opportunities divert the tourist's attention from the picturesque environment toward trivial forms of engagements.

Apart from these major changing aspects of a hill town typically, the most important change is the terracing of hills to build new buildings, irrespective of their impact on the view from and of other neighboring buildings. This inconsiderate approach on planning level is extremely detrimental in deteriorating the quality and character of hill towns in India.

The growing unpleasantness of these towns is not only restricted to visual perception. The constant noise from crowded streets and traffic, and fumes from vehicles exterminate any intention of tourists which were initially attracted to the serene ambiance of the hill towns.

All these factors of character which are important to sustain the interests of tourists are significant to be conserved because the tourism provides the economic spine to the town's sustainability. Any alteration reflecting considerate change in appearance and ambiance of the hill station would be bluntly reflected in the changing functional characters of the town, with incorrigible consequences.

4. Approaches to urban conservation

(Particularly related to areas with unique architectural character and heritage value)

4.1- Introduction

This chapter discusses general pattern of growth, development and consequent changing character at a typical urban level. Thus understanding is developed for the cause of conservation and the need of urban conservation justified under the heading of character areas. Salient provisions of various conservation charters, international as well as national form the following text of the discussion. Approaches, principles and methodology of conservation are also discussed in the concluding part of this chapter.

4.2- CONSERVATION AS A PROCESS

In the much acclaimed book "The design of cities" the author states his interpretation of the growth and cities. Explicitly visible is his concern for preserving the past as he says, "*Life is a continuous flow of experiences; each act or moment of time is preceded by a previous experience and becomes the threshold of experience to come. If we acknowledge that an objective of life is to achieve a continuous flow of harmonious experiences, then, the relationship of space to one another as experienced over time becomes a major design problem.*" The fabric of an existing town, its qualities of architecture and townscape have a ready made capacity for carrying traffic and for absorbing new development.

Once this capacity is exceeded the town's character alters. Size and growth determine the pressure for change; the size of a place, (the no of people who live there) is also an imp parameter to decide the character of a place. 'Changes' there fore can be absorbed up to a certain extent and beyond that point it must be diverted. The indefinite survival of individual and separate towns should be accepted with their 'internal organizations' as 'units' accommodate the changing local needs.

Their townscape must respond accordingly. Forces of change over a period of time affects towns/settlements in two ways discussed in following lines. Socially, it is manifested in the need for new buildings and structures and the demand for service and amenities. Structurally it is manifested in the process of

decay, when the fabric of town begins to deteriorate affecting the town's efficiency. (Roy Worskett) "Pressures for physical change are a consequence of the population growth, its structure and spending power and its desire for mobility." This growth attracts investment, at local, national, and private levels and makes more demands on public resources. In cases where the population is not increasing the situation is usually exactly opposite. There is little growth in spending power and consequently limited attraction for investment. Hence the pressures for physical changes are less effective. These conditions are basis of 'economic viability'. The visible effect of physical change in these two situations of expansion will be different. Where the growth of town centers would face increased pressure for re development-(for building new roads, or widening others, for providing car parks, new shops and offices.), the owners of buildings and land will want to profit the increased value of their sites from anticipated redevelopment. Pressure will mount for the demolition of old buildings and their structural condition will begin to deteriorate. The appearance of whole town changes as new development begins to spread out.

One alternative that might prove to be realistic one, is to change the identity completely cutting of the town from its past. However, if changes are to be absorbed, areas or site for change must not challenge the past of town. This may mean selected piecemeal development within a comprehensive program for environmental improvement. An assessment of conservation needs will define the effect of conservation on the future function of towns, villages or regional centers and in reverse establish the likely effect of growth on conservation scheme. The modernization of existing services and the conversion of buildings will still be for the needs of static population. "An appraisal of conservation aims, covering desirable preservation standards and design aims in one town must be compatible with the economic and social function of the region." (Roy Worskett). Action areas and environmental areas are two subsets of this detailed procedure. However, in Urban settlements with heritage zones and unique character are important to the town's identity, effort should be made specifically in this direction to conserve or preserve this discrete character.

4.3- CONSERVATION AREAS

“A conservation area is often defined because of the presence of an overall architectural quality of historic associations.” (Roy Worskett). Those associations often give the area a significant historical and social character. Thus, conservation areas must be seen as a part of the whole town for historic and visual reasons which would provide a relevant context for planning. ‘Size and function are the basic ingredients of a character. The character areas have been defined as *‘areas of special architectural or historic interest, the character or appearance of which it is desirable to preserve or enhance’*. In all character zones, the character appraisal can attempt to identify the area’s special interest based on its activities, heritage value, serenity, and tourism potential. Identification and delineation of boundaries should help assess the need for enhancement and assist the preparation of the local development document guiding any future proposals for the area.

4.4 URBAN CONSERVATION CHARTERS

The various initiatives world wide for conservation on urban level have been organized as ‘Charters’¹ and conferences which provide an exhaustive literature on the various aspects and contexts in which the objective of conservation is as important as the way it is to be achieved. Amongst the preliminary efforts on international level the first is *The Athens Conference of 1931*, organized by the International Museums Office. It established basic principles for an international code of practice for conservation. The Second International Congress of Architects and Technicians of Historic Monuments, which met in Venice in May 1964, approved the text of an International Charter for the Conservation of Monuments and Sites (the Venice Charter) superseding the Athens Charter.

The Venice Charter was an important modern milestone for the conservation movement, which was adopted by the newly formed International Council on

¹ The term has been used for documents such as charters, recommendations, guidelines or declarations drafted in direct consideration to some aspect of conservation.

CHAPTER 4- URBAN CONSERVATION

Monuments and Sites (*ICOMOS*)² in 1965 and published by it in 1966. The Venice Charter stresses the importance of setting, respect for original fabric, precise documentation of intervention, the importance of contributions from all periods to the building and the maintenance of historic buildings for a socially useful purpose. The Charter outlines the basic tenets of what is now accepted to be an appropriate approach to dealing in philosophical terms with historic buildings. The Venice Charter was followed by a plethora of other standards, charters, formal recommendations and conventions relating to building conservation.

The most significant of these, with the approval of ICOMOS, is 'The *Charter on Cultural Tourism*' (1976). It considers the positive and negative effects of cultural tourist activities, whose object is the discovery of historic monuments and sites, on the architectural heritage. It emphasizes the integration of cultural assets into the social and economic objectives which are part of the planning process.

The Florence Charter on Historic Gardens (1982) provides a definition of the term historic garden and the architectural compositions which constitute the historic landscape. It emphasizes the need to identify and list historic gardens, and provides philosophical guidance on maintenance, conservation, restoration and reconstruction.

LI Charter on the Conservation of Historic Towns and Urban Areas - The Washington Charter (1987) is a chiefly useful document which considers road principles for the planning and protection of historic urban areas.

LI Charter for the Protection and Management of the Archaeological Heritage (1990) considers the subject of archaeology under the following headings of definitions, integrated protection policies, legislation, survey, maintenance and conservation, presentation, reconstruction, and international cooperation.

Then the resolutions of *the Symposium on the Introduction of Contemporary Architecture into Ancient Groups of Buildings* (1972) stresses the need for

² ICOMOS is an international, non-governmental organization which promotes the study of the theory, methodology and technology of conservation as applied to monuments, historic areas and sites.

appropriate use of mass, scale, rhythm and appearance, and the avoidance of imitation. It also notes that the revitalization of historic groups of buildings by new uses is legitimate, provided that such uses do not affect the structure or character of the buildings.

LI Resolution on the Conservation of smaller Historic Towns (1975) considers potential threats to such sites, which are detailed as- lack of economic activity, outward movement of population, disruption of structure due to insertion of new elements, and measures to adapt to modern activities. Methods to counteract these threats are then suggested in the conclusion of the document. *LI Tiaxcala Declaration on the revitalization of Small Settlements (1982)* evaluates the initiatives for securing communities living in small settlements and the traditional environment of such places. *LI The Australia ICOMOS Charter for the Conservation of Places of Cultural Significance- The Burra Charter (1981)* develops the principles detailed in the Venice Charter to suit local Australian requirements. It includes a broad list of definitions of items such as 'place', 'fabric', 'conservation', 'maintenance', 'preservation', 'restoration', 'reconstruction', 'adaptation and compatible use'. It also introduces the proposal of 'cultural significance', the 'aesthetic, historic', scientific or 'social value' for past, present or future generations", and requires this to be defined for each place, and conservation plans to be established and vindicated prior to any intervention. It continues with a description of conservation principles, processes and practice which are intended as a definition of good practice. *LI Recommendations Concerning the Safeguarding of the Beauty and Character of Landscapes and Sites (1962)* reflect on preventive measure aimed at protecting natural, rural and urban landscape and sites, whether natural or manmade, which have a cultural or aesthetic interest from dangers which may threaten them. *LI Recommendations Concerning the Protection, at National Level, of the Cultural and Natural Heritage (1972)* delineate the terms 'cultural and natural heritage', and provides a lengthy consideration of general principles, the

organization of services, and protective measures under the headings financial, administrative, scientific and technical. *LI Recommendations Concerning the Safeguarding and Contemporary Role of Historic Areas (1976)* is another lengthy and detailed document which provides an all-inclusive set of standards and principles for the conservation of the historic environment.

INTACH³ Charter

Charter for the Conservation of Unprotected Architectural

Drawing upon the experience of the in conserving the unprotected architectural heritage and sites of Indian charter on urban conservation has been detailed in more than 8 articles.

Article 1 deals with identifying the living heritage and the importance of conserving it. It states that the majority of India's architectural heritage and sites constitute a unique civilization legacy, as valuable as the monuments legally protected by ASI/ SDA and other governmental and non-governmental agencies. Many unprotected heritage sites are still in use, and the manner in which they continue to be kept in use represents the '*living*' heritage of India.' Beyond its role as a historic document, this unprotected heritage embodies values of enduring relevance to contemporary Indian society, thus making it worthy of conservation. This '*living*' heritage' is not legally protected. The buildings and sites, which constitute it, are subject to demolition or unsympathetic interventions. The knowledge of traditional building skills with which it is associated is also in danger of being lost in the absence of patronage and official recognition. Conserving the '*living*' heritage, therefore, offers the potential to conserve both traditional buildings and traditional ways of building. Conserving the unprotected architectural heritage and sites ensures the survival of the country's sense of place and its very character in a globalising environment. It provides alternate venues for employment and a parallel market for local building materials and technologies. This '*living*' heritage also has symbiotic relationships with the natural environments within which it originally evolved.

³ Indian National Trust for Art and Cultural Heritage (INTACH)

CHAPTER 4- URBAN CONSERVATION

Article 2 deals with what should be conserve. It asserts that the objective of conservation is to maintain the significance of the architectural heritage or site. Significance is constituted in both the tangible and intangible forms. The process of Listing (Article 5) must determine the characteristics of significance and prioritise them. The tangible heritage includes historic buildings of all periods, their setting in the historic precincts of cities and their relationship to the natural environment & culturally significant modern buildings and towns. The intangible heritage includes the extant culture of traditional building skills and knowledge, rites and rituals, social life and lifestyles of the inhabitants. Conservation of architectural heritage and sites must retain meaning for the society in which it exists. This meaning may change over time, but taking it into consideration ensures that conservation will, at all times, have a contemporary logic underpinning its practice. Where the evidence of the tangible or intangible architectural heritage exists in fragments, it is necessary to conserve it, even in part, as representative of a historic past. Such conservation must ideally be undertaken *in-situ*. Conservation in India attends to Western conservation theories and principles introduced through colonialism and, later, by the adoption of guidelines formulated by UNESCO, ICOMOS and international funding agencies and also to pre-existing, indigenous knowledge systems and skills of building. These indigenous practices vary regionally and cannot be considered as a single system operating all over India. This necessitates viewing conservation practices as a multi-cultural activity. While the Western ideology of conservation advocates minimal intervention, India's indigenous traditions idealise the opposite. Conserving unprotected architectural heritage offers the opportunity to use indigenous practices. Before undertaking conservation, it is necessary to identify where one system should be applied and where the other. For this purpose, it is necessary at the outset to make a comprehensive inventory of extant heritage, both tangible and intangible, and separate it into two categories. The overarching objective for undertaking conservation of unprotected architectural heritage and sites is to establish the efficacy of conservation as a development goal. What to conserve will, therefore, be

CHAPTER 4- URBAN CONSERVATION

determined by those strategies of conservation, which accommodate the imperatives of development and the welfare of the community while seeking economically to achieve maximum protection of the significant values of the architectural heritage and site.

The Article 3 Conservation Ethics elaborates upon the basic fabric of conservation being constituted of authenticities, Conjecture, Patina, Rights of the indigenous community, Respect for the contributions of all periods, Minimal intervention, Minimal loss of fabric, Reversibility, Legibility, Demolish/Rebuild, Relationship between the conservation architect and the community.

Article 4 deals with conservation objectives listed by INTACH. To retain visual identity it is necessary to retain the specific visual identity of a place created by the presence of unprotected architectural heritage and sites. This image should accommodate the imperatives of change in making the heritage relevant in contemporary society. The objective must be to integrate unprotected heritage and sites into daily social life. The visual cacophony created by advertisement boards, signage, hanging electric cables, and air conditioning units, dish antennas, etc. must be carefully controlled to enhance the visual character of the architectural heritage and site. Additions of street furniture, pavement material, lighting, signage, etc. can add to the experience and appreciation of the heritage.

Adaptive re-use aspect touches the topic of re-use of historic buildings and neighbourhoods are economically sensible. The goal to prolong the useful life of architectural heritage by retaining as much (and not necessarily, all) of the surviving is primary objective. Priority must be accorded to retaining the continuity of original functions. Any new use must be introduced only after studying its effect on the local context, and must conform to the carrying capacity and vulnerability of the architectural heritage. Functional characteristics of the building or site, its external image must be retained.

CHAPTER 4- URBAN CONSERVATION

The other features of the articles define the standard approach to restoration/ replication/ rebuilding, employment generation, use of local material and traditional technology, and sustainability.

The article 5 elaborates the criterion of listing, selection criteria. The selection is concluded after the analysis of following three key attributes

- i. Historic significance
- ii. Historic integrity
- iii. Historic context

Methodology is detailed and stratified in the categories of

- i. Background research
- ii. Field work
- iii. Mapping of vernacular architecture and historic settlements
- iv. Detailed format for all the structures
- v. Grading

Article 6 establishes the guidelines for conservation in step wise approach of defining heritage zones, Role of conservation architects and Education and Public Awareness.

The charters provide the guiding principles towards an appropriate response to particular conservation issues, not as instant and all inclusive perfect prescriptions. Moreover, these suggest that the context of conservation has to be the basis of all decisions. The aspect of what is to be conserved is a flexible subject which completely depends on the virtues of local factors of the site. These guidelines can help formulate a relevant methodology once the aim of conservation has been aptly identified and justified.

4.5- URBAN CONSERVATION

The visual environment of a settlement is subject to change continuously because a changing society, growing in numbers creates the need for a changing environment.

CHAPTER 4- URBAN CONSERVATION

The following factors combine together to influence the impression of urban character.

- 1) Historic buildings which are valuable for their architectural qualities.
- 2) Buildings which illustrate a town's history through their association with people and events, local activities or styles and periods of architecture.
- 3) A building, if it was designed by a distinguished architect or was occupied by a famous man.
- 4) Local flavors might be worth preserving.
- 5) The local character is not confined to buildings but may include walls and railings, ramps, steps.
- 6) The social functions of a town.
- 7) The influence of its geographical and political background.
- 8) Topography.
- 9) 'Setting'; which emphasizes the fact that 'by itself a building has no meaning other than that which comes from the intrinsic quality of its architecture and it has no context in which to function. Surrounded tightly by other buildings conceals the hidden qualities until you are upon it'.
- 10) The scale of development.

An appraisal covering desirable preservation standards and design aims attend to economic and social functions of the region. The fabric of a place represents a different set of activities and functions. Conservation must aim at maintaining these features. The conservation should judge its effects on the future functions of towns. The number of people will determine the areas ability to sustain a conservation policy. In reverse, the town will, if its character is to be preserved, set a limit to population growth, and a limit to the satisfaction of certain kinds of economic demands. It will consequently determine the pattern of social structure or regional function.

4.6- CONSIDERATIONS FOR CONSERVATION OF URBAN CHARACTER

These principles of conservation concern selection, economic viability and definition of public and private sectors of action.

SELECTION- ‘Preservation needs change in order to be effective. So preservation must therefore to some degree be selective to make way for change.’ (*Roy Worskett*) An order of priorities must be decided and weight age is attributed to economic and aesthetics as parameters.

RESTRICTION AND EXPANSION-Regional assessment for conservation in context of ‘population growth projections’ of the region helps determine the specific solutions i.e. to say if one part of town is to be preserved some other must accommodate the share of change. Assessing opportunities for preservation & finding possibilities for development goes hand in hand. That might be possible within one site. It might need separate sites.

EFFICIENT USE AND ECONOMIC VIABILITY- “ ‘Efficient use’ and ‘economic viability’ are the two important features interdependent on each other.” The economic viability of a building dictates the usability of a site. For any conservation three features are essential; good environment, efficient use and economic viability.

PRIORITIES AND INVESTMENT-Priorities of investment and use of local manpower to concentrate on environmental improvement (providing alternative traffic routes, service roads, for e.g.), conversions, maintenance and repair of properties must be sorted out.

PUBLIC RELATIONS-An informed public is essential for an effective Conservation policy. A statement of intent can express its desire to preserve building saying what is architecturally valuable and what supporting action is proposed.

However such areas proposed to be conserved must not be isolated from the organic core of the town. The physical development has to follow an integrated approach and not physically barring or segregated entity. The methodology for design disciplines should aim at being both protective and creative.

The identification of the visual qualities that would define townscape and architectural is subjective. The design disciplines can influence the quality of change in sympathetic extent. There are four main aspects of design to be attended.

1. THE RELATIONSHIP BETWEEN PHYSICAL AND LANDSCAPE ENVIRONMENT-IT AFFECTS THE PLANNING SCHEME.

The number of people (static and dynamic) is the fundamental element of its character. Particular features with defined boundaries, landscape (stream, valley, and woods) define a few elements of character. "Inherent quality of landscape or unique pattern of vegetation is important characters to advocate the cause of preservation." (*Roy Worskett*). Green pockets are a significant element of any settlement's fabric.

The visual relationship between town and country create a distinct visual identity for the town. Therefore, a careful assessment of topography and landscape should suggest where development might take place to advantage especially in a Hill town.

To identify historical and geographical reasons for sitting of the town and its boundaries and the visual effects of those factors should be the base for future proposals.

2. THE SKYLINE AND FOCAL POINTS.- PLANNING TEAM AND PUBLIC RELATIONS

Town as seen when approached, by roads, bypass, country, and a number of vantage points e.g. outline of the 'soft boundary' of a hill town. Principle aim has to be the retention of the form of the land as a recognizable unit eg a ridge, to keep both sides of valley open.

3. THE TOWNSCAPE DISCIPLINE-

The qualities of space and layout which create a local character must be identified and preserved. "Views of a town are important both from inside the town as well as outside the town. What are seen and the way in which it is seen is important. Combination of different types of views or the contrasts of viewpoints gives the street a particular character." Proposal for higher buildings challenges the existing skylines which by itself safeguards the local views

within the town by virtue of their bulk and scale. Setting of a group of historic buildings must not be challenged. Landform imparts a certain character to the setting of such a building which should be protected.

”View of town when seen from outside should not be altered dramatically by the proposed new development.” (Roy Worskett) Existing spires or towers should be retained or focus for the new scheme. Certain views establish a visual relationship between different areas of a town.

This relationship should be preserved. For example in a step sided valley, development has to be controlled to preserve its unique character. *‘Focus and a series of focal point’s* may have a unique character which could be suppressed by dominating structures –in bulk, scale, and style.

‘Street façade’ is another element of character. *‘Open space’* acquires a character by virtue of the speed of the passing traffic. *‘Functional character’* is propagated by the architectural character of the building from a distant view.

“Typical feature of accommodating change over the last few years is piecemeal development. This is a haphazard expansion pattern. Such a development has a recognizable & compact quality vital to townscape principles.” (Roy Worskett)

4. THE ARCHITECTURAL CHARACTER- THE EFFECT OF BUILDINGS EXISTING AND PROPOSED.

The objective of controlling development is to protect this character from camouflaging, destruction and replacement. The increased use of vehicles questions the compactness of development. Domestic scale and the layout of shops, offices, roads and car parks may highlight the extent to which the changes which have been absorbed. If the existing significant features are to be preserved efficiently they must be given both physical and visual meaning as part of the contemporary urban fabric; combining old and new, creating a sense of unity.

4.7- APPROACH TO CONSERVE IMPORTANT AREAS OF A TOWN

Areas of a town/settlement have different roles to play and therefore must be dealt with differently in context of site specific problems. The identification of what to preserve and the policy/schemes that are needed are first part of this solution.

CENTRAL AREAS

Two major problems of the area are traffic and parking. Traffic poses inconveniences and unpleasantness in context of any urban environment. However removal of traffic cannot be a feasible solution, for example passing trade from shopping corridors may result in loss of trade. To develop a pedestrian area, it must be compact for proposed function of passing by, & surrounded by many different uses with ample ground-floor shop frontage. Such a ubiquitous issue must not be dealt with piecemeal proposal to accommodate traffic (widening and straightening streets) must be avoided. .

Traffic management techniques as an alternative to short term measures to be employed until long term plans can be implemented. In a conservation area it is essential to restrict on-site parking thus demanding a permanent off street car parking. The capacity of streets sets a limit on the absorption of both moving and parked vehicles. Hence role of public transport must be explored. A new proposal must consider two points; sitting of this development and its economic relationship to what is to be conserved. If there is a strong aesthetic advantage in a proposal, where diverting the pressure for new roads and cars parks will also divert the trade upon which smaller establishments rely. The trade relationship between old and new development must be of the type that each benefits from others presence.

RESIDENTIAL AREA

It is important to stop the drift of shops into the residential areas adjoining the central areas. Old houses can play a considerable part in maintaining and increasing the variety of town's total housing stock.

The analysis includes the following parameters:

- 1) Architectural importance
- 2) Economic feasibility of preservation program
- 3) Financial and structural suitability
- 4) Owners willingness
- 5) Traffic capacity of residential areas.

The decisions should be taken up on the theme of economic viability of existing structures to resist pressure for redevelopment. Conservation must therefore be supported by a suitable land-use policy as a whole.

The effect of visual intrusion, noise, fumes, and traffic on residential area is profound. The adjoining environment must therefore be planned with the new development considering the environment of historic building the value of surrounding development must also consider the social class of the occupants.

INDIVIDUAL HISTORIC BUILDING/GROUP OF HISTORIC BUILDINGS

Historic building or group of building which will be conveniently included in a conservation area may range from a cottage to larger individual properties like church, or a functionally obsolete building like clock tower.

Conservation Area is a public statement of intent by the local authority, rather similar to the listing of buildings by the Ministry of Housing. Where preservation is concerned, public participation and understanding are essential. This scale of change should include the occasional piecemeal redevelopment of buildings or the replacement of eyesores and the provision of garages and service roads. Nevertheless new development would need to be seen in physical and visual relationship to the Conservation Area.

As a general rule no outline planning permissions should be given in a Conservation Area and elevation details should be seen before planning permission is granted. The local authority may work with the Historic Buildings Council to implement grants for internal modernization- construction of bathrooms, provision of hot water supply, etc. The boundary of the Area should be drawn to define which buildings and sites are involved in conservation.

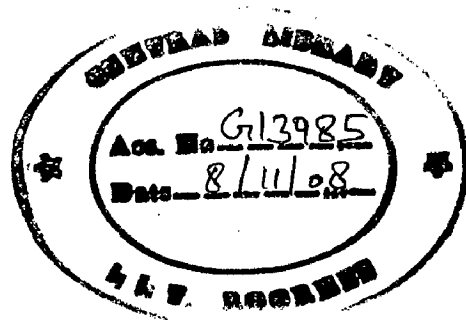
CHAPTER 4- URBAN CONSERVATION

Decisions on the future of the individual buildings will be weighted in favor of preservation. Two principal planning devices will affect the detailed implementation of conservation- action plan & environmental area. The environmental area is an area from which all extraneous traffic is removed.

4.8-METHODOLOGY FOR CONSERVATION OF CHARACTER

'Urban Structure Map' is proposed to develop a 'Conservation Scheme' for the Town _which comprise of the following set of analysis.

- I. Survey of Town/Landscape relationship.
- II. Survey of townscape
- III. Survey of buildings.
- IV. To identify the conservation area.
- V. Identification of future urban development.
- VI. Preparation of conservation plan –a long term perspective plan with phased program spelled out.
- VII. Development controls regarding use and change of use, demolition, alteration, and new construction.



5 - CASE STUDY OF ENGLISH HILL TOWNS

5.1 ENGLISH HILL TOWNS- CASE STUDY TOWNS

The English hill towns have evolved over the past 1000 years; their origins lie in the strength of their defensible positions on high ground and above a river. The reason to study these towns is because they signify a rare style of settlement peculiar by virtue of their setting, history, size, and architecture and also popularity amongst tourist destinations. They also denote a typical trait of deterioration in their aesthetic quality due to forces of urbanization. After following the literature on the characteristics and history of "English hill towns" it is possible to derive similarities in the issues being referred in the thesis.

How these forces of development being targeted in planning schemes of these towns at architectural and urban level would offer a systematic reference.

It is therefore necessary to establish a case where parallels can be drawn between "Hill Stations" and 'Classic Hill Towns'. Then a systematic appraisal of typical issues being faced by the settlement followed by case study of classic examples would give an exhaustive literature for further reference.

5.2 EVOLUTION OF ENGLISH HILL TOWNS

Hill towns have been established on elevated sites in most of the upland areas of England. "Perhaps the greatest number and the most distinctive are found in the Pennines, places such as Appleby, Alnwick, Alston, Barnard Castle and Richmond.

Further south, there are hill towns in Shropshire, Gloucestershire, Wiltshire and Dorset. Modest in scale, English hill towns are attractive settlements." (Owen, 1995)

Their setting, form and appearance provide people with pleasure, whether the residents experience the rich internal composition of the town, & see the whole settlement set in pleasing landscape. These hill towns are valued as individual settlements, but not necessarily valued, or even recognized, as a type of settlement.

"English hill towns are defined as 'free-standing small towns set in English upland landscapes where, because of their siting on predominantly convex land shapes, the whole settlement, or a significant part of it, is visible from viewpoints and routes in the surrounding landscape" (Owen). Thus, English hill towns are typically characterized by their visibility, distinctiveness and attractiveness in the landscape.

English hill towns are typically 'hill-slope towns', usually located near rivers. Number of towns grew up around castles. "Castles occupied defensive positions to which their occupants could retreat in the event of attack" (Owen). The others occupied a position from which attacks could be launched or from which trade routes could be protected. Many hill towns that developed around castles were important settlements in mediaeval times: Ludlow and Middleham, for instance, were the childhood homes of two future kings of England.

"Some hill towns had industrial origins and almost all developed industry during their evolution." (Owen) *English hill towns are market towns*; most became centers of trade for their neighborhood. Currently, most hill towns look to the tourism industry to secure their economic future, trading on their attractiveness, history and their setting in an attractive landscape.

5.3 SETTING OF ENGLISH HILL TOWN

The siting of a town was influenced by a number of factors such as defense, proximity to rivers and route ways and the source of raw materials for industry, any of which might supersede climatic slopes facing northeast, east, southeast and south and southwest. This seeming tendency to avoid north- and west-facing slopes might be related to climatic factors. Located in upland areas, hill towns are likely to be more exposed to wind and rain than lowland towns and experience lower temperatures. North-facing slopes are generally coldest and west-facing slopes wettest.

5.4 FORMS OF ENGLISH HILL TOWNS

The most distinctive visible characteristic of English hill towns is their 'skyline'. 'Taller buildings', 'the spires' and 'towers of churches' & the 'keeps of castles', which give identity and drama to the skyline, as at Barnard Castle, Ludlow and Richmond. They highlighted the importance of *silhouette, skyline and roofscape*. Roofscape also is a crucial component, which reinforces the horizontal character of the composition, & creates variety amongst buildings of uniform height with their differentiated and interrupted planes. "This horizontal structure is often an expression of the town's street pattern, particularly where streets run along the contours." (Owen)

Because hill towns can be seen as whole entities, an important aspect of views is the figure-ground relationship, the town against the landscape. The distinction between figure and ground is created by a number of elements, including:

1. *colour* —the predominant greys of buildings against the green of the landscape;
2. *shape* —the geometry of the built town against the organic shapes of nature in the surrounding landscape;
3. *texture* —the hardness of building materials, usually stone, against the softness of vegetation;
4. *reflectivity* —the tendency of hard materials to reflect light and of vegetation to absorb it. The contrast is most noticeable when the walls and roofs of buildings are in full sunlight.

Hill towns have two basic structural forms, '*linear*' and '*nuclear*', corresponding with Norberg-Schulz's typology of row and cluster forms (Norberg-Schulz, 1971). Hill towns were usually built either along thoroughfares and developed linear form, e.g. '*Painswick*', or around market places and developed a mainly nuclear form, as at '*Middleham*'. Towns that remained relatively small retained one of these two distinctive characters. "*Linear forms tend to run horizontally across the landscape, producing a long, shallow profile to the town. The roads along which they evolved usually followed the contours; sometimes they were widened to form linear market places.*" (Owen) Mumford (1991) explained that medieval streets were not adapted to wheeled traffic or formal drainage arrangements, & it was more economical and sensible to follow the contours. He suggested that such streets probably traced earlier cow paths along contours. Long, narrow burgage¹ plots are a noticeable feature of the linear town in the landscape as they typically run down the slope at right angles to the main street. "*Nuclear structures that clustered around market places encouraged a concentration of differentiated building forms at varied angles to each other, thereby developing a deeper and irregular profile.*" (Owen) . More complex towns have streets running mainly at right angles to each other so that some streets run along the contours to give the town a horizontal profile.

¹ A burgage was a town ("borough") rental property (to use modern terms), owned by a king or lord. The property ("burgage tenement") usually, and distinctly, consisted of a house on a long and narrow plot of land, with the narrow end facing the street.

5.5 CHARACTERISTICS OF ENGLISH HILL TOWNS

Finally, perhaps it is not too fanciful to conceive of the 'classic' English hill town displaying a consistent set of characteristics:

1. located beside a river
2. built on a slope that is steep in places
3. built around, or next to, a castle
4. having a complex form comprising
 - (a) Streets lined continuously by buildings running along a shelf at the same contour height, and
 - (b) At least one street running directly down the slope to the river.
5. having a market place in the form of either a focal nuclear space, or a linear widened street;
6. a wide extent of the surrounding countryside from which a hill town can be seen as an entity.
7. having a church tower prominent in the skyline. Churches built in the town centers from mediaeval times onwards were located on higher land so that their steeples or towers are visually dominant
8. have more than one distinctive vertical element in their skylines.
9. within the town but also visible in the surrounding countryside.
10. displaying compactness of form visible as an intense figure against the wider ground of the landscape
11. built predominantly of local stone.
- 12.

5.6 FEATURES OF RECENT DEVELOPMENT IN ENGLISH HILL TOWNS

There has been a tendency over the past 50 years for the sharply defined profiles of some hill towns to spread outwards in relatively large blocks of low-density development. These are principally inspired from the form of suburban-style market housing built from non-local materials.

Similar effects result from the practice of locating local authority housing. "Earlier building in hill towns was adjusted to fit the character of sites and local microclimates; this gave development a degree of visual integrity and ensured that it was assimilated into the overall profile of each town." (Owen)

The recent, 'standard' housing layouts replicate those in the suburbs of towns and cities have paid little or no attention to the individual character of sites, ignored the shape of land and therefore commonly spoiled the appearance of hill towns.

As there is little flat land in hill towns, the available sloping land has been flattened for development. In some places this has deteriorated the 'visual integrity' of the hill-town profiles.

An essential element of the figure-ground relationships that characterize hill towns is the physical intensity of development. Most buildings that comprise this intensity are in terrace forms. newer houses are predominantly 'detached' or 'semi-detached' interrupting the *continuity of rooflines*, which played an important role in the composition of skylines. This is particularly non-harmonious where the "*serrated roofscape*" is silhouetted against the sky. The growth of industrial, commercial and retail uses on the periphery of towns has contributed to the loosening of sharply defined hill-town profiles.

5.7 CHANGING POLICY CONTEXT

The increasing development has implications on the appearance of hill towns and requires an explicit planning policy response. the Commission (Countryside Commission, 1993) proposed a more considered approach to the design and setting of new building acknowledging that there would be further development in small towns and villages. It argued specifically for *the retention of regional diversity, local distinctiveness and harmony between buildings, their setting and the landscape*. The Commission piloted, evaluated and formulated the village design statements in collaboration with local planning authorities. Many of these have been adopted as supplementary planning guidance (Countryside & Community Research Unit, 2001) to promote consideration and treatment of hill towns through the planning system. There would be advantages to be gained from treating the appearance of hill towns as one element of a three-tiered approach to planning: (Owen)

1. District-wide policies in development plans that encompassed the overall appearance of hill towns.
2. Proposals or guidance specific to individual hill towns, either as insets to local plans, separate settlement-specific plans, appraisals or design frameworks.
3. Design briefs for individual development sites.

Planners need to include an appreciation of the character and composition of views of whole hill towns, and an understanding of the implications for a view that result from different forms, locations and dispositions of development.

For instance, new development in hill towns tends to appear attractive where it is built

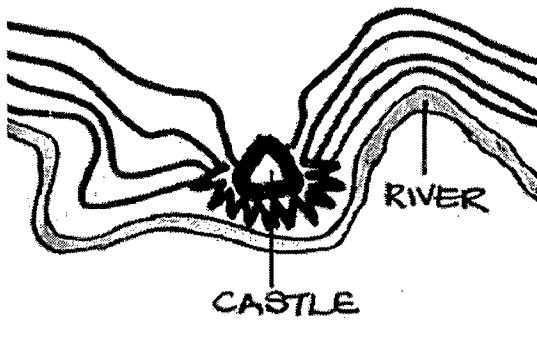
1. along the contours
2. adjoins existing buildings
3. in continuous terrace or articulated forms with pitched roofs
4. within the view of the town so that the observer does not see individual whole buildings as a separate entities surrounded by space
5. using local materials.

Also, in planning for the appearance of hill towns, planners should adopt a broader and more inclusive approach that takes into account the repercussions of development decisions on many other aspects of people's lives.

5.8 Introduction- RICHMOND

Although there is evidence of previous settlements, Richmond 'hill town' grew around the Norman castle built in 1071, the town charter was first drawn up between 1136 and 1145, with the creation of burgage plots within Frenchgate and Newbiggin. The original Market Place was located within the outer bailey of the Castle. The layout of these burgage plots remain today and provide the essential character for the layout of the town centre and its historic core. Many of the frontages within the historic core date from 18th century, but have been built onto the original medieval buildings, thus maintaining the medieval layout.

Richmond is sited on an outcrop of Millstone Grit capping Carboniferous Limestone. The town stands on an anvil-shaped promontory above the Swale, which runs west to east round the promontory, with slopes of 1:2 facing south, and 1:5 facing west and east. Above these slopes is an extensive area of land sloping more gently at around 1:20 for some 200 meters to the southeast. Development dribbles outwards at low-density in just one direction where the land is flatter.



Source: Classic English Hill Towns- Stephen Owen
Schematic location of Hill town-Richmond

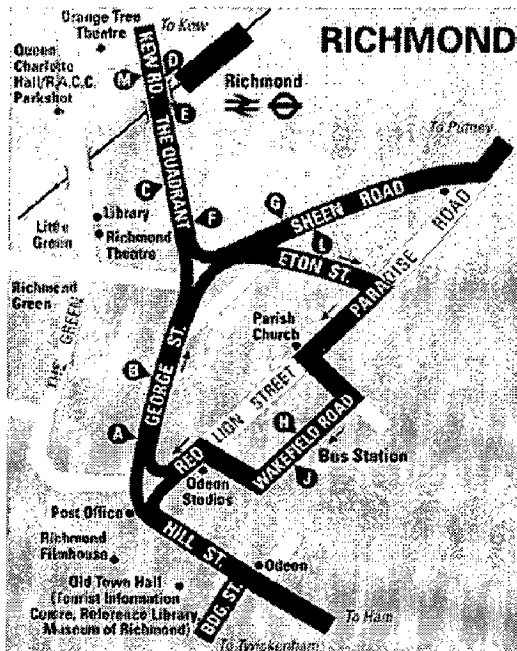


Source: Classic English Hill Towns- Stephen Owen
Hill town: Richmond.

From 1840 onwards shop windows were introduced at ground floor level to the buildings contained within the 'Market Place' and 'Finkle Street'. Although the town has grown since the 1960's, except for the introduction of some modern shop fronts there has been little change to the historic core since the 1920's. Within Richmond Town centre there are four Grade I, six Grade II* and over 150 Grade II buildings listed on the Government list of buildings of special historical or architectural importance. Richmond is also designated as a conservation area.

CHAPTER 5 - CASE STUDY

The town is significant in terms of its medieval layout with the burgage plots set out around the line of the original bailey and its subsequent development as a 'Georgian market' town. 'Victoria Road', 'Queens Road', and 'Dundas Street' are of lesser significance, with much of their character changed through modern interventions.



Source- richmond.gov.uk

Road Map –Richmond



Source-northeastengland.talktalk.net

Market place- Richmond

Although this area is contained within the Conservation Area the majority of buildings are not listed, with the notable exception of the Grade I Georgian theatre. These roads however are significant as major traffic routes through the town.

'Frenchgate' opens out into the 'Market Place' is important as this provides the initial impression of the 'Market Place' to persons visiting by car. 'King Street' is the vehicle access route out of the Market Place and is therefore of lesser significance. 'King Street' is however important as a pedestrian thoroughfare into the 'Market Place's, and opens out into the principal vista of the 'Obelisk', 'Trinity Church' and the crescent leading round to 'New Road'. 'Finkle Street' is similar in character to the 'Market Place', with Georgian frontages on the original medieval buildings, set out on the line of the original burgage plots. 'New Road' was formed as part of the alterations carried out in the 18th Century and is more of historical importance than having any significant architectural merit. 'Barrgate' is significant by having a range

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of buildings from various ages; with examples from the medieval through to the 18th Century. Colors determining the relative sharpness of the figure-ground distinction are most marked in Richmond where the building mass is predominantly light grey, with some dark grey roofs, a number of whitewashed buildings and occasional splashes of orange-red pan tiles. In summer, this contrasts with the dark green of mature trees in the foreground on the lower slopes and with the pale green of Swaledale in the background. The rectilinear building forms, with horizontal rows of buildings articulated by strong vertical divisions, diagonal streets cutting across the contours, and the diagonal shapes of roofs, contrast with the organic shapes of mature trees. This contrast is enhanced by the rectangular castle and church towers. The old part of Richmond is built largely from light grey to pale brown limestone and some pale brown sandstone, with dark grey sandstone roofs, some of which have been replaced over time by lighter red pan tiles and slates.



Source: Classic English Hill Towns- Stephen Owen

Heavy vegetation at the foot of the profile in Richmond

Richmond's silhouette can be seen against either the sky or the backdrop of Swaledale from different viewpoints. The lower part of the skyline comprises two- and three-storey development built on flattish land along the top of the promontory, from which the vertical elements—churches, castles and other tall buildings—protrude. The hardness of building materials seen against the softness of vegetation enhances the

sharpness of the figure-ground in all three towns. This is perhaps strongest in Richmond, where the apparent dry hardness of the light grey stone forms a distinct contrast with the soft texture of the surrounding vegetation. The tendency of hard materials to reflect light and of vegetation to absorb it is, again, perhaps stronger in Richmond. There is a powerful contrast between the brightness of the stone and the dullness of the surrounding vegetation.

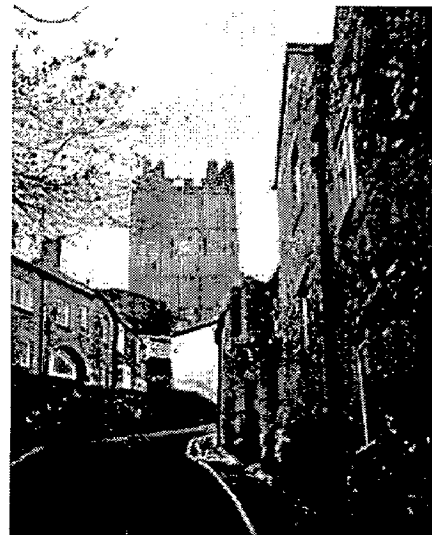
5.8.1 ARCHITECTURAL FEATURES OF RICHMOND

ROOF COVERINGS-The principal roof covering throughout Richmond is natural stone slate, generally to a steeply pitched structure, indicating the medieval origins of the buildings.

ELEVATIONS-Principal elevations range from fair faced brickwork with stone detailing, to rendered facades, to natural stone in coursed ashlar, regular coursed rubble, or random rubble.



Source-isomatic.co.uk
Streetscape-Richmond

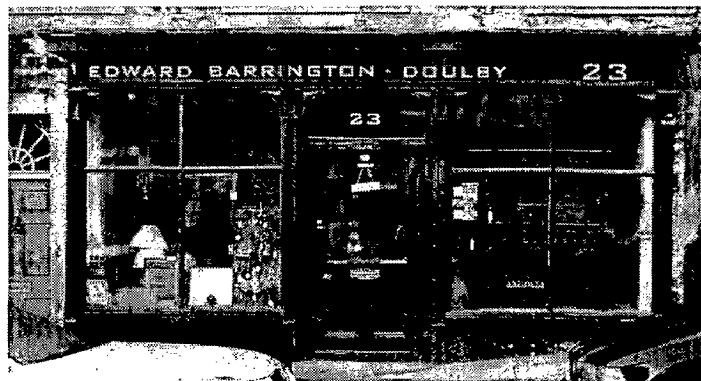


Source- yorkshire-dales.com
Streetscape-Richmond

SHOPFRONTS- The majority of shop fronts do not detract significantly from the character of the Georgian buildings but only a few can be considered as examples of good shop front design. Many of the shop fronts however have been decorated in a corporate style and are often bright and garish, having little regard to the colors used to the upper elevations and to the neighboring buildings.

WINDOWS AND DOORS-Windows are generally double action sliding sash, although to a small number of properties more modern timber casement windows have been installed.

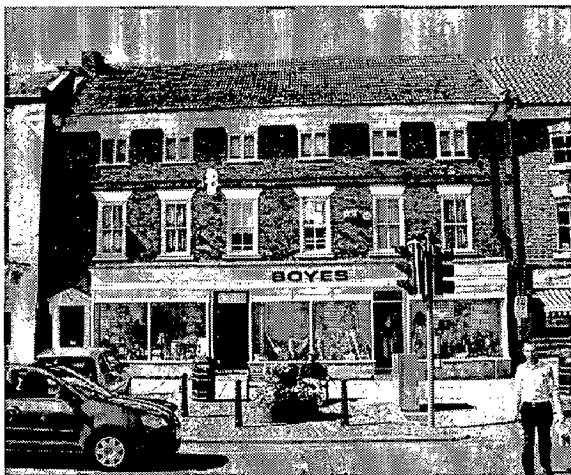
COLORS-Throughout Richmond the vast majority of windows have been painted brilliant white. The use of white paint work was widespread towards the end of the Victorian era, but is not in keeping with the character of the majority of buildings.



Source - Design guide- Richmond

Example of a mid 19th century shop front style, Barnard Castle

SIGNAGE-A number of buildings within the town centre have inappropriate, over-large, and badly positioned signage and the removal of inappropriate signage would significantly improve the quality of the streetscape.



Source - Design guide- Richmond

1960's shop front

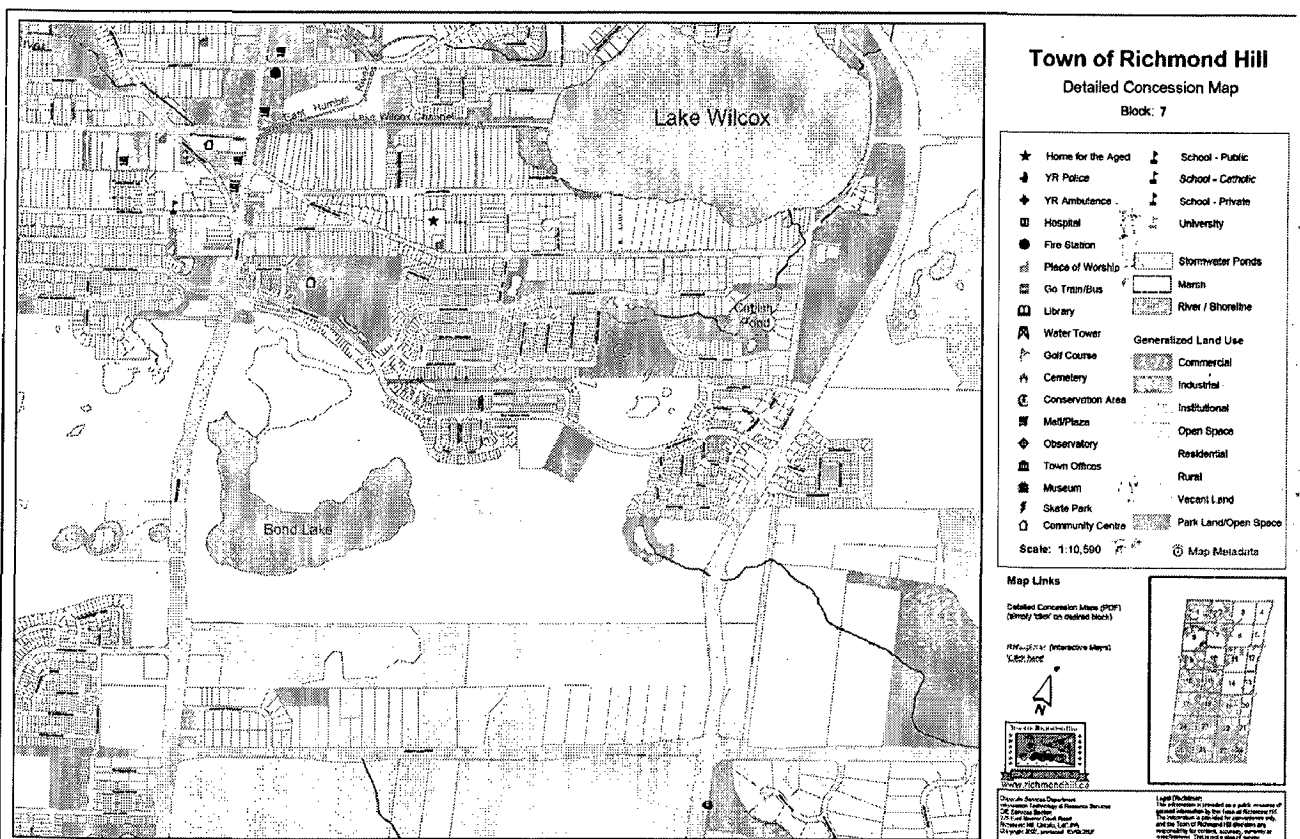


Source - Design guide- Richmond

Over provision and poor siting of traffic signs.

5.8.2 DESIGN GUIDELINES: RICHMOND

The District Council have adopted the guide as supplementary planning guidance and when considering applications for planning permission, listed building consent and advertisement consent will have regards to the guide as a material consideration. It is proposed that the guide will form part of the emerging Local Development framework and will be subject of further consultation and assessment as part of that process. (The text has been liberally adopted from ‘The design guide’ written by R.J. Maddison, Chartered Building Surveyor Accredited in Building Conservation with the RICS for the purpose of case study.)



Source- internet
Town of Richmond

CONSERVATION AREAS

Richmond is designated as a Conservation Area and therefore any development proposals must preserve the character or appearance of the area. Consent may be required for the demolition of any buildings or structures contained within the conservation area and for the lopping, pruning or felling of any trees. The design guidelines for various aspects of architectural and urban development are as follows:

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THE PUBLIC REALM –

- I. Nothing should be placed in the street unless there is a clear public benefit. Much street furniture is unnecessary and redundant items should be removed.
- II. Where street furniture is essential its location should be co-ordinates in relation to the buildings and the overall streetscape.
- III. Wherever practical, signs and street furniture should be located on buildings or at the back of the footpath to minimize their visual impact on the street scene.
- IV. If signs are required they must be placed so they can be seen
- V. The removal of vehicular traffic can have a significant benefit on the streetscape creating a less cluttered and safer environment, provided an alternative strategy can be determined to accommodate the parking and loading requirements



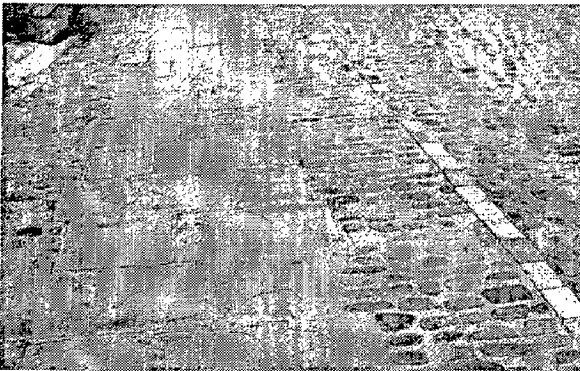
Source - Design guide- Richmond

Market Place, Richmond

HISTORIC STREET SURFACES

- I. It is important that a material's properties are understood before incorporating it into a street design.
- II. Natural local materials are preferred to man-made alternatives, and they should be used to reinforce the identity of the environment.
- III. Relate ground surfaces to their surrounding streetscape context. Invest in quality and simplicity and respect the subtle proportional relationship between the footways, the buildings and the carriageway.

- IV. Retain the historic form of streets by maintaining kerb lines, using dropped kerbs where necessary and retain historic kerbing and drainage to reinforce local identity.
- V. Use kerbs to provide definition and reduce the need for bollards and physical barriers and avoid small paving modules laid in arbitrary colors and patterns.
- VI. Respect the local designs and details and reinstate lost surfaces of high quality that make up important townscape.



Source - Design guide- Richmond

Use of local materials to design the footway



Source - Design guide- Richmond

Channel set into the historic cobble surface.

STREET FURNITURE AND SIGNS

- I. In order to reduce street clutter, consider mounting signs, traffic signals and street lighting onto existing columns, furniture and buildings, or grouping them together, to reduce the number of poles etc. needed
- II. Furniture should be sited to increase visibility in the street and create a safe environment for all and should not dominate the street scene.
- III. All street furniture, signposts, railings, lampposts, bus stops etc., shall be painted black. Some of the detail may be picked out in gold.
- IV. The local authority should record items of interest and establish programmes for their maintenance or restoration. When undertaking work to the public realm, care should be taken to ensure that historic objects are not harmed.

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STREET SIGNS-

Street signs and nameplates are fundamental to the understanding and character of a place.

- I. Where older signs remain they should be retained and restored. Their siting and style should be used to inform the design of new signs.
- II. Where new designs are warranted they should be consistent throughout an area.
- III. In most cases street nameplates should be fixed to boundary walls or railings, or should be placed at the back edge of the footway.
- IV. Other signs should generally be sited on existing furniture. Avoid placing signs on new posts which adds to the clutter.



Source - Design guide- Richmond.

A typical street signage

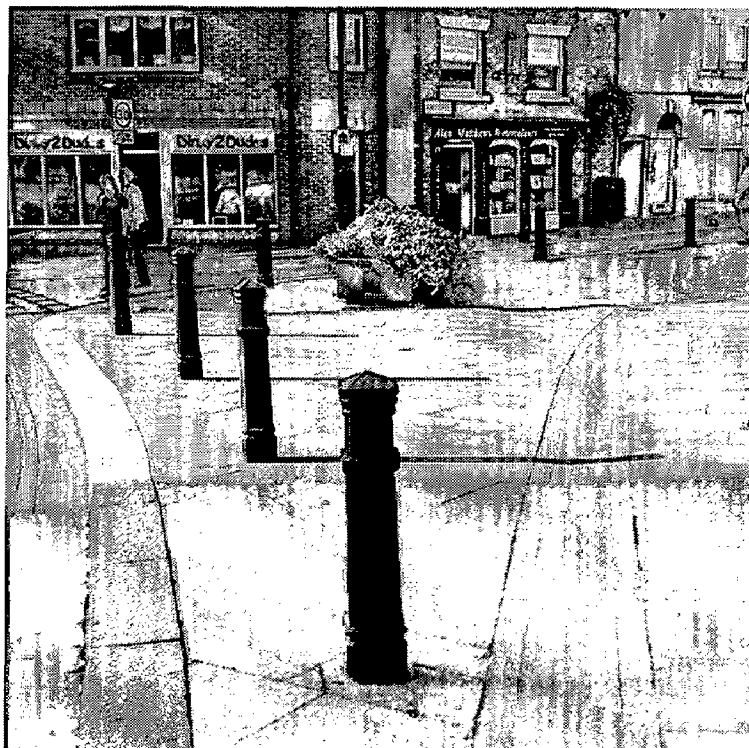
TRAFFIC SIGNALS

- I. Redundant signs should be removed and where signs are necessary they should be concise, no bigger than necessary and carefully sited.
- II. Wherever possible use internally illuminated signs to reduce the need for additional lighting.
- III. Avoid the need for supplementary poles and where they are needed position them to the back of walkways and clear of circulation routes.

- IV. Appropriate management of pedestrian, cycle and vehicle interaction can reduce the quantity of traffic signals, signs and physical barriers needed in the street.
- V. Where traffic signs are necessary, they should, wherever possible be combined with street lights or other elements. Position control boxes unobtrusively.
- VI. Raised crossovers can assist the shift in priority between pedestrians and vehicles without the need for guardrails.
- VII. Only use guardrails where other safety measures are inappropriate and use designs that relate to the townscape, such as post and rail or post and metal bar fencing.

BOLLARDS

- I. Eliminate the need for bollards through higher quality kerb definition and good design.
- II. Surviving historic bollards should be retained and restored as they contribute to local character and identity.
- III. Color at the top of bollards can be helpful for the visually impaired and a minimum height of 1m is preferred.



Source - Design guide- Richmond

SEATS AND BENCHES

- I. Seats and benches should be designed and sited in conjunction with all other street furniture.
- II. Seating should be elegant, functional and robust.
- III. Timber benches are susceptible to vandalism and deteriorate quickly.
- IV. Seats should be placed to address a space or street, view, landscape feature or activity, but not where they might cause an obstruction.

TREES AND PLANTING

- I. Trees and planting should reflect the history, architecture and tradition of places, and should not be added or preserved without question.
- II. As Richmond is a conservation area all trees with a girth of more than 10cm are protected and notification must be given to the District Council for proposed work.

ARCHITECTURAL DESIGN GUIDELINES

- I. Respect the character of the existing building and its neighbours and reinforce the local identity of the area and/or create a sense of place.
- II. Conserve historic buildings and features as these give the town its character.
- III. Keep designs simple, even if elements within the shopfronts are elaborate.
- IV. Add visual interest to the street without detracting from other buildings.
- V. Follow the proportions of the rest of the building and provide a visual support for the upper floors.
- VI. Integrate signs, lighting and security measures specifically for the design of the shopfront. Adapt company “house styles” to suit the character of the local area and building, avoiding arbitrary repetition or stretching of logos.
- VII. Employ a competent designer and use high quality materials and craftsmen.
- VIII. The building front design must respect the scale and proportions of the streetscape by maintaining the rhythm along the street and respecting the appropriate plot widths.
- IX. Large expanses of undivided glass should be avoided, and long runs of horizontal facades should be broken up with vertical divisions or features.
- X. It is important to relate to the fascia height of the adjacent properties.

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- XI. If buildings differ in size or architectural style, varied designs are more likely to be appropriate, and variation in the height of fascias will maintain the rhythm of the buildings.
- XII. The choice of materials should complement the character of the building and integrate with the streetscape as a whole.
- XIII. The materials should be selected in keeping with the character of the building and streetscape, and in accordance with the shopfront style used.
- XIV. The scale and design of the fascia should be relevant to the character height and period of the building and in proportion with the design of the building.
- XV. Ornate or overly elaborate consoles are not a feature found in Richmond, and they should therefore be kept simple in their decoration and proportion.
- XVI. Compatibility with individual buildings and the street scene should be considered more important than modern styles.
- XVII. Most of the facades in Richmond date from the Georgian period (1720 – 1830), and therefore sash windows separated with glazing bars are considered the most appropriate style for the majority of buildings contained within the town centre.
- XVIII. Much of the Georgian character has been lost in Richmond due to the changes that have been made to the fenestration, the multi-pane windows to upper floors having been replaced with large panel double hung timber sash windows dating from 1850 and later.
- XIX. Where the original multi pane windows remain every effort should be made to repair and retain this important historical reference.
- XX. Where later replacements have been installed they should be replaced over time with windows that are in keeping with the building's character and the general streetscape, as and when their condition merits their replacement.

SIGNAGES ON SHOPFRONTS—

- I. Only one projecting sign should be provide per shop, unless the building occupies a corner site.
- II. The sign should generally be located at fascia height.
- III. Other forms of projecting sign and any form of illumination are not acceptable.

- IV. As a guideline the sign should be maximum 600 x 900mm on two storey buildings, increasing to 900 x 1200mm maximum size on a building of three storey or more.
- V. Advertising for ground floor units above fascia level is generally not acceptable.
- VI. Advertising for upper floor offices etc. should be limited to a single plate at the entrance and, where appropriate, lettering applied direct to the window glass
- VII. Additional signs will rarely be allowed where fascia or other smaller signs are already in existence on the same elevation, although an exception may be made to this general rule in the case of taller buildings in Richmond where there is something of a tradition of high level board signs, particularly on public houses.
- VIII. High gloss or reflective plastic signs should always be avoided and bright and garish colors are likely to be at odds with the character of the historic environment.

ILLUMINATION

- I. Box fascias internally illuminated are unsightly and should be avoided.
- II. Discreet spotlights and house lights may create a more even and pleasing effect whereas neon lights, strip lighting (unless concealed) or oversized swan-necked lamps are to be avoided.
- III. Great care is needed to avoid lighting units which appear unsightly in the daylight, and light fittings should ideally be concealed.
- IV. The sign to be illuminated should be sufficiently well designed to make a positive contribution to the appearance of the area and the scale of the sign should not detract from the appearance of the building or its setting at night.
- V. The level of illumination should not be excessive, having regard to normal levels of background light. In the majority of cases where background lighting is low, illumination should adopt complementary soft and muted forms.

5.9 CASE STUDY- LUDLOW

Ludlow's recorded history begins in 1086 when the impressive castle was first developed, 'Ludlow Castle', on a hill overlooking the rivers Teme and Corve. A planned town was laid out at the castle gate very soon afterwards. There are nearly 500 listed buildings in Ludlow and the original medieval street layout survives to this day almost unchanged. The town has many half-timbered buildings, notably the Jacobean Feathers Hotel and buildings in Dinham which borders the castle wall. In the 18th and 19th centuries Ludlow was a fashionable social centre and county families built elegant brick houses. Today, the population of Ludlow is just under 10,000 and industries include precision engineering, cabinet making, and the manufacture of agricultural machinery. Tourism is important, particularly retailing to the town's visitors.



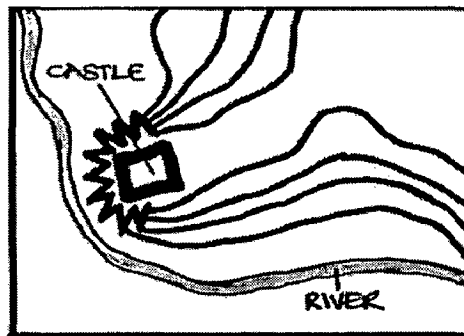
Source- www.freefoto.com



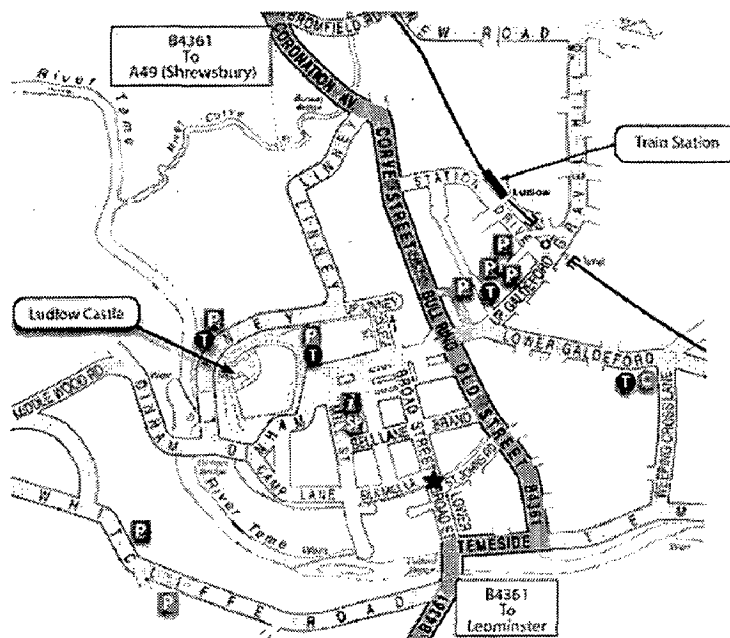
Source- ewgreen.org.uk/ludlow

5.9.1 ARCHITECTURAL FEATURES OF LUDLOW

Ludlow is sited on a whale-backed promontory aligned more or less west to east, with a steep west-facing slope of 1:2 cut into Silurian Sandstone by the river Teme, which runs north to south and then turns west to east. The top of the promontory is a level ridge, with a crest just above the west-facing slope. Gentler slopes, with a gradient of 1:15 run down to the south for some 500 mts on abroad front some 800 mts wide.



Source: Classic English Hill Towns- Stephen Owen
Schematic location of Hill town- Ludlow



Source - shropshiretourism.co.uk
Road map- Ludlow

Ludlow the extension of the town outwards took the form of a series of planned gridiron units more readily developed on flatter land where the costs of construction were lower. These units, comprising long, narrow burgage plots, were added one after the other during the 12th and 13th centuries One such street in Ludlow, Broad Street,

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is an absolutely straight street with a strong vertical rhythm of three-storey Georgian buildings, visible in views from outside as it cuts downhill through the grain of development. It is described by Pevsner (1958) as one of the most memorable streets in England.



Source: Classic English Hill Towns- Stephen Owen
Ludlow, street straight down the slope to the river



Source: Classic English Hill Towns- Stephen Owen
Streetscape-Ludlow

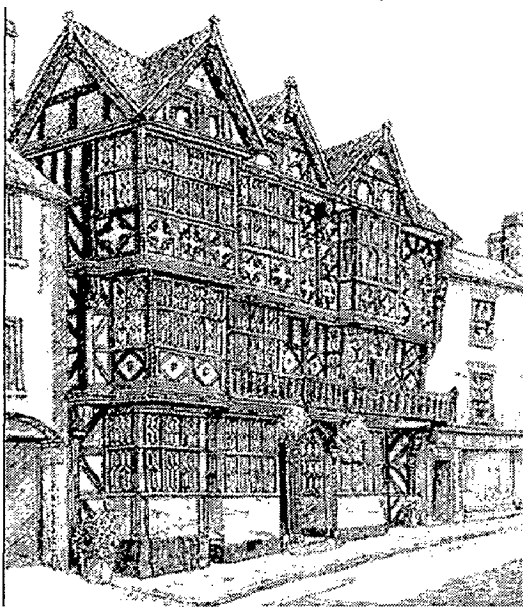
Georgian Ludlow was remodeled on the basis of its mediaeval framework, with brick facades grafted onto the existing timber frames (Girouard, 1990). Those buildings in the core of Ludlow are reddish pink brick, taking on the color of local marls, with many black and white half timbered buildings and a few built from sandstone. The geometry of the early plan-form on a gentle slope in Ludlow is particularly noticeable in the town's profile



Town Wall & the only remaining of the gates, as it was converted into a house in the 18th Century

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The palette in Ludlow is red-brown, reddish-pink, dark brown, cream-white and pale grey; the contrast with the greens and browns of vegetation in both foreground and background is slightly muted. The rectilinear building forms, with horizontal rows of buildings articulated by strong vertical divisions, diagonal streets cutting across the contours, and the diagonal shapes of roofs, contrast with the organic shapes of mature trees. . This contrast is enhanced by the rectangular castle keep and church towers. Ludlow, was planned as a gridiron with a spine running east to west along the top of a slope and streets running directly down the slope at right angles .



Source: ewgreen.org.uk
The Feathers Hotel, Ludlow



Source: ewgreen.org.uk
Court House in the Bull Ring.- Ludlow

The hardness of building materials seen against the softness of vegetation enhances the sharpness of the figure-ground in all three towns. There is a similar, but less emphatic distinction where red brick and sandstone appear to have a slightly softer texture so that the contrast with the vegetation is subtler.

The red bricks and red sandstone of Ludlow seem to absorb more light than the light grey stone of Richmond, so that the overall contrast with both the foreground and background is somewhat less marked. Skylines thrust upwards from promontories projecting a silhouette against either the sky or the backdrop of the distant landscape. Ludlow the skyline is seen mainly against the landscape. The lower part of the skyline comprises two- and three-storey development built on flattish land along the top of the promontory, from which the vertical elements—churches, castles and other tall buildings—protrude.

Study area-South Shropshire District Council, Planning (Listed Buildings and Conservation Areas) Act, and 1990-Ludlow (*Gravel Hill*) Conservation Area²

Ludlow (Gravel Hill) Conservation Area was designated as a conservation area by South Shropshire District Council on the 14th February 2008 in accordance with the provisions of the Planning (Listed Buildings and Conservation Areas) Act, 1990.



Source: Classic English Hill Towns- Stephen Owen

Gravel Hill – Ludlow

5.9.2 THE CHARACTERISTICS OF THE LUDLOW -SHROPSHIRE 'GRAVEL HILL' CONSERVATION AREA

INTRODUCTION

The Gravel Hill conservation area contains Ludlow's most imposing housing of the period 1850-1901. Gravel Hill, Julian Road and, in the last decade of the century, St Julian's Avenue were fashionable places to live. A character appraisal of the conservation area has been carried out and the main findings are set out under the following headings

SETTING

The Gravel Hill conservation area is located to the northeast of Ludlow's town centre and extends from 'The Hollies' to No. 61 'The Mount' on Gravel Hill with the rear of the back gardens setting the area boundary.

² The literature has been liberally adopted from the guidelines published by J. R. Berriman Head of Planning and Building Control. Ludlow, Shropshire.

ARCHAEOLOGICAL SIGNIFICANCE

There are no listed buildings in the area; however the following are classed as monuments in the Ludlow (Gravel Hill) Conservation Area -

1. St John's Church (A church of post-medieval date - 1500 AD to 1913 AD)
2. Iron Foundry, later Phoenix Works (The site of a possible gas work of post-medieval date)

ARCHITECTURAL AND HISTORIC QUALITY

Much of the housing in the conservation area is of the Victorian period with its characteristic bay windows and dormers and the use of decorative brickwork and bargeboards. Also of note are the many decorative iron railings and gates that are another feature of this period. Although there is some Edwardian and later housing, it is the Victorian architecture that stands out and gives the area its character.

The earliest buildings in the Gravel Hill conservation area are Gravel Hill Terrace, 'Prospect Place', 'Glenview', 'Victoria Terrace' Glebe Terrace, down the hill and two semidetached villas called 'The Laurels' and 'The Yews'. The mixture of housing styles & variety of houses ranges from detached and semi-detached villas and small terraced houses to a modern bungalow, a successful new-build and a not so successful extension, with some of the houses well set back from the road, while others built to the pavement edges.

STREET SCENE

The street scene in the conservation area is diverse. Large villas and terraces border Gravel Hill, it being the widest of the three roads the area encompasses, however it is not a spacious road and has narrow pavements, with parked cars obscuring the view along its length. The much narrower Julian Road has a mixed range of housing with the first part of the northern side having detached and semi-detached villas that are set back from the road. In many cases garages front them, which is fairly unobtrusive at the first but tends to increasingly overpower the street scene. Parts of its central portion have a tightly spaced series of small terraced houses with the rest of the road being filled with detached villas. St Julian's Avenue, which was built in 1884 as a stub road, has housing of Victorian and later development on both sides. It is a very attractive street with the houses set well to the front on their plots and with limited greenery in place.

MATERIALS

The local red brick is the predominant building material with some rendered and painted facades as well as black and white clad housing. The main roofing material is slate.

NATURAL FEATURES

The whole conservation area has a large amount of trees, which add to the overall street scene.

NEGATIVE FACTORS

A combination of the setback, large variety in housing styles plus the many cars parked in narrow Julian Road is not in the main very attractive. In addition, the street ends with an uncomfortable extension on either side of the road backing on to Sandpits Road, which presents a very poor line of miscellaneous attached buildings.

THE LEGAL FRAMEWORK

Conservation Areas Act 1990 as "...areas of special architectural or historic interest the character or appearance of which it is desirable to preserve or enhance". This is a strictly applied definition and should not be confused with Areas of Outstanding Natural Beauty or other designated areas. Conservation areas are designated by Local Planning Authorities, usually after public consultation, although this is not a legal requirement.

5.9.3 THE EFFECT OF CONSERVATION AREA STATUS

The consequences of designation as a conservation area are as follows:

1. The Local Planning Authority is under a duty "from time to time" to publish and consult on proposals to preserve and enhance conservation areas.
2. In dealing with planning applications in conservation areas, the Local Planning Authority is required to "pay special attention" to the desirability of preserving or enhancing the character or appearance of the area. This means that there is a higher standard of design required in conservation areas than elsewhere.
3. Outline planning applications will not normally be entertained.
4. Planning applications in conservation areas must be advertised as prescribed by Regulations.

5. It is an offence to demolish a building or structure in conservation area without the consent of the Local Planning Authority. There are some exceptions – please ask before taking action.
6. English Heritage has the power to make grants or loans for preservation or enhancement, although none are currently available.
7. It is an offence to cut down, top, lop, uproot, willfully damage or destroy a tree in a conservation area without having given six weeks notice to the Local Planning Authority. There are some exceptions – please ask before taking action.
8. Permitted development and the right to display advertisements are more limited than elsewhere.
9. Telecommunications operators have more onerous obligations placed on them.

1) PLANNING POLICY GUIDANCE

PPG15 is the current policy guidance on protection and enhancement of the historic environment. Development proposals in conservation areas will need to take into account the requirements of PPG15 and in particular the extracts below.

1.1-Planning Policy Guidance 15 Planning and the Historic Environment

- I. Special regard should be given to such matters as scale, height, form, massing, respect for the traditional pattern of frontages, vertical or horizontal emphasis, and detailed design (e.g. the scale and spacing of window openings, and the nature and quality of materials)
- II. Whilst the character and appearance of conservation areas should always be given full weight in planning decisions, the objective of preservation can be achieved either by development, which makes a positive contribution to an areas character or appearance, or by development which leaves character and appearance unharmed.
- III. always Account should clearly be taken of the part played in the architectural or historic interest of the area by the building for which demolition is proposed, and in particular the wider effects of demolition on the buildings surroundings and on the conservation area as a whole.

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- IV. The general presumption should be in favor of retaining buildings which make positive contribution to the character or appearance of a conservation area.
- V. Where a building makes little or no such contribution consent for demolition will not be given unless there are acceptable and detailed plans for any redevelopment or site remedial works.
- VI. When considering whether to extend protection to trees in conservation areas, local planning authorities should always take into account the visual, historic and amenity contribution of trees. In some instances new plantings or re-plantings may be desirable where this would be consistent with the character and appearance of the area.

1.2-In determining applications for proposals to which this policy guidance applies, the Council will have regard to:

- Any conservation area statement or village design statement;
- The quality of the design and the appropriateness of the proposed use;
- The appropriateness of materials and building techniques

REASONS

- a. To ensure new development in a conservation area preserves or enhances its character and appearance and conserves its distinctive qualities;
- b. To ensure that the character or appearance of a conservation area is not adversely affected by the demolition of buildings;
- c. To conform to Policy QE5 of the West Midlands Regional Spatial Strategy)
- d. To conform to PPG15

2) GUIDANCE ON THE POLICY CRITERIA

The following relates to the criteria set out in Planning Policy Guidance15 and Paragraph1.1

2.1 Special regard given to the scale, design and materials means that new developments must blend in with the character of the area, not that individuals building styles must be copied.

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22 The requirement for demolition of buildings in conservation areas to be part of the scheme of redevelopment is to avoid unsightly gaps occurring in street frontages.

2.3 There is specific Supplementary Planning Guidance:

2.4 PPG15 requires quality and appropriateness of design, materials and use in all proposals in conservation areas. In considering applications for new development in Conservation Areas, the Council will generally have regard to the following criteria:

- i. The siting of the development must conform to the general pattern of development in the area and not dominate existing buildings or occupy part of their curtilages.
- ii. The scale of the proposal must be in conformity with the scale of existing Buildings within that part of the Conservation Area.
- iii. The use should be one, which is appropriate to the area and will give rise to development of an appropriate scale.
- iv. The proportions of the building and its fenestration must be in keeping with the characteristics of existing buildings in the area.
- v. The alignment of the proposal along its highway frontage must conform to the pattern of development in the area.
- vi. The proposal must maintain the characteristics of the roofline of the street as regards height, shape and pitch of roof and is not be of a height, which
- vii. Would intrude onto the skyline from any viewpoint.
- viii. The proposal should conform to the existing pattern of door and window
- ix. Openings and their detailing prevailing within the area.
- x. The proposal should be constructed in materials traditionally used in the Conservation Area matching exactly the color and texture of that material.
- xi. The proposal should retain, restore or add traditional boundary walls intone or brick in accordance with the tradition in the Conservation Area.
- xii. The proposal should retain existing trees and provide for the planting of new specimen trees where possible.
- xiii. The proposal should retain, and take account of traditional burgage plot layouts or other historic plot and layout forms and ancillary buildings and boundary treatments.

3) OTHER CRITERIA

3.1 As far as possible the Council aims to conserve traditional shop fronts by preventing their removal and discouraging unsuitable alterations. Proposals for new shop fronts and fascias within conservation areas will be permitted provided: -

- I. They complement both the architectural character and detail of the building onto which they are to be fitted.
- II. They do not result in the removal of any existing separate access to upper stories or preclude the restoration of such an access if already removed.

3.2 Where appropriate the Council, in consultation with the Highway Authority, will seek to introduce schemes to rationalize traffic and pedestrian signs and other street furniture in conservation areas in the interests of the amenity. It is recognized that obstructive traffic signs and other street furniture can create 'clutter' and form a visual intrusion that detracts from the appearance and character of the District's conservation areas. The intention of this guidance is to minimize such impacts.

3.3 Through the control of new development and Enhancement Schemes carried out in conjunction with the Highway Authority, the Council will ensure that traditional paved areas are conserved and maintained. Considerable investment has been made on many listed and non listed buildings in the conservation areas throughout the District. The purpose of this advice is to ensure that similar attention is paid to the space between the buildings in particular the traditional paved areas.

5.10 CONCLUSION

The case study of the typical English hill towns is a relevant literature to refer while attempting to conserve the character of Indian hill stations. The parallels between the setting and picturesque townscape qualities of both types of hillscape face a similar pattern of issues of population growth and the town's economic dependence upon tourism. Therefore the successful measures undertaken for the conservation provide a direction to guide the attempts being made in the thesis.

6. HILL STATION OF MUSSOORIE- THE STUDY CONTEXT

6.1 INTRODUCTON

The chapter studies the aspects of the settlement in Mussoorie which form the context of the character analysis and conservation proposal. The chapter discusses the geo-climatic location of Mussoorie, its history and evolution, demographics, land use pattern. The chapter details out the trends of development in the hill station and its influence on changing the character of hill station. The major emphasis in this chapter has however been given to elaborate the characteristics of the settlement fabric in term of setting, road form, streetscape, street furniture, open spaces, landmarks, and architectural characters. The changing trends and issues affecting them are also discussed under similar hierarchy of elements of urban fabric.

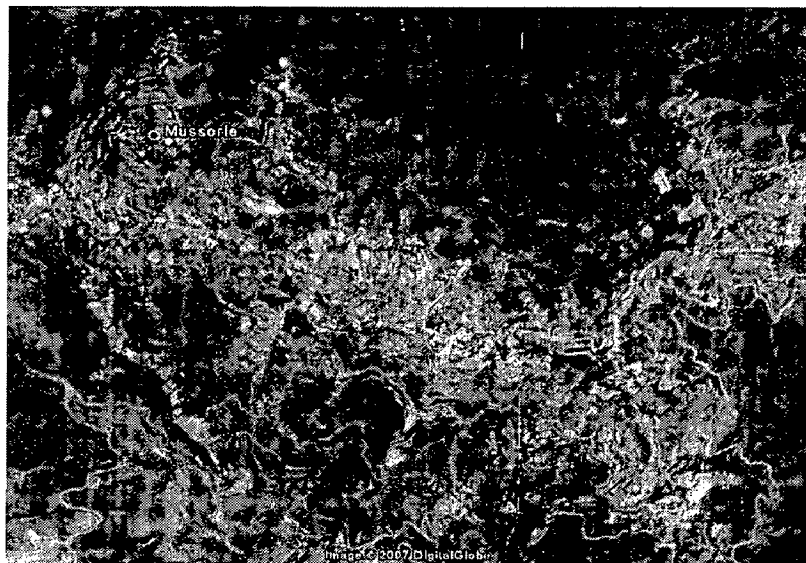
6.2 NEED FOR STUDY

This Hill station was established in 1813. For various reasons elaborated upon later, the '*hill settlement*' of Mussoorie was acknowledged amongst the esteemed tourist destinations of independent India. A complex situation is posed by the hill town, which is surviving the agonies of transition from one role to another. Although tourism remains the backbone of its economic structure, the settlement through its unorganized and unplanned techniques of development is at the verge of sabotaging its virtue.

The study of this town was made acknowledging the concerns for the town where only marginal efforts have been initiated so far in terms of a planned future of the hillscape/hill town. Important stations like Shimla and Nainital have been attended to after their character were profusely altered, and therefore any measure applied in terms of planning and designing was superficially surgical in approach. Mussoorie in light of the failed attempts of organizing/controlling the development in Hill stations needs more attention, where the charm of its character still survives to attract an annual population of 40 lakh. Therefore, to appraise the forces of change and their impact on the 'hillscape' was seen as the first aspect of conserving the character. The character which needs to accommodate the new changed must however not be in jeopardized as it still remains the major attraction for the tourist form all over India. This character was appraised in terms of the sub headings of an urban fabric frame work and step wise and issue specific solution were proposed after identification of character areas in the town.

6.3 GEO-CLIMATIC LOCATION

Mussoorie is a fascinating hill resort located at an altitude of 2005.5 Meters (6,950 ft.). Commanding snow ranges to the north-east, and glittering views of the ‘*Doon Valley*’ and ‘*Shiwaliks*’ in the south, the settlement is sprawled over the ridge on an area of 64.25 Sq. Kms. Geographically, Mussoorie is closest to Dehradun at a distance of about 30 km. The population of town according to 2001 census data is 26,069.the climate of Mussoorie is moderately warm in summer to cold in winters. For climatic preferences the best time to visit is from mid-March to mid-November though the downpours could be an inhibiting factor in the monsoon months of July to September.



Plan- Mussoorie
Source-Google earth image

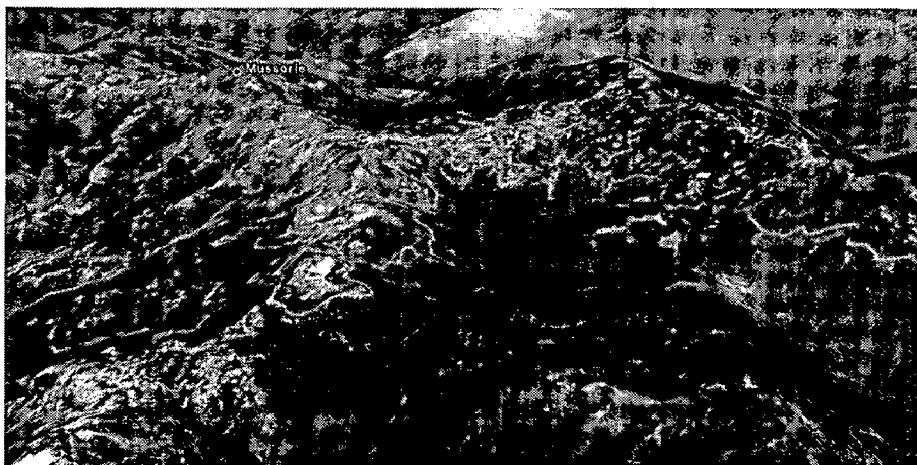


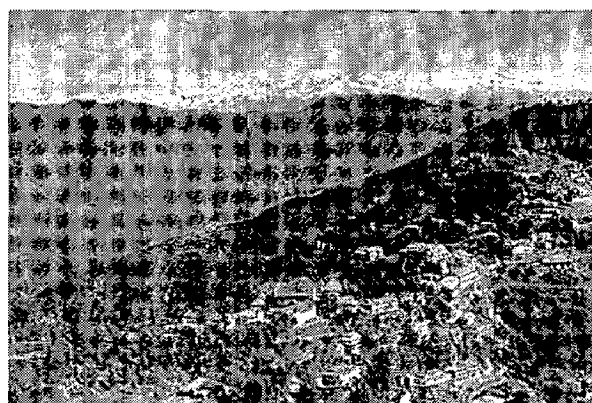
Image of Mussoorie showing the ridge & Landour
Source-Google earth image

6.4 HISTORY & EVOLUTION OF MUSSOORIE

The settlement was acquired by the British from the Gharwal state in 1803, and declared a part of the British Raj by 1815. ." Mussoorie's name derives from the '*Mansur*' shrub (*Cororiana nepalensis*), common in the Himalayan foothills. The history of Mussoorie dates back to 1825 when Captain Young, an adventurous British military officer, together with a Mr. Shore, the resident Superintendent of Revenues at Dehradun explored the present site and jointly constructed a shooting lodge. This laid the foundation of this holiday resort which now has few rivals. Initially popular as a hunter's spot and leisure resort the settlement got its first place of interest at Gun Hill in 1823 with the erection of a shooting point. The settlement recognized as a township in 1847, was the favoured destination for prestigious convent educational institutes. the first phase of development in Mussoorie includes the construction of buildings like cottages, schools, churches. By 1826, a '*sanatorium*' for the British army men had been constructed in Landour Valley, and summer resorts for British officials like "*The Malinger*" had come up sparingly in scenic setting. This was the beginning of settlement in Mussoorie region. The buildings in the initial settlements of Mussoorie include '*The Park*' (1829), '*Phoenix Lodge*' (1829), '*Everest House*' (1832), and '*Bravery*' (1832), '*Himalaya Club*' (1841).The first school came up in 1834 and '*The Church*' was erected in 1836. The year 1842 Mussoorie was recognized as a town.



Landour- Castle Hill Early 19TH Century
Source- Wikipedia.com

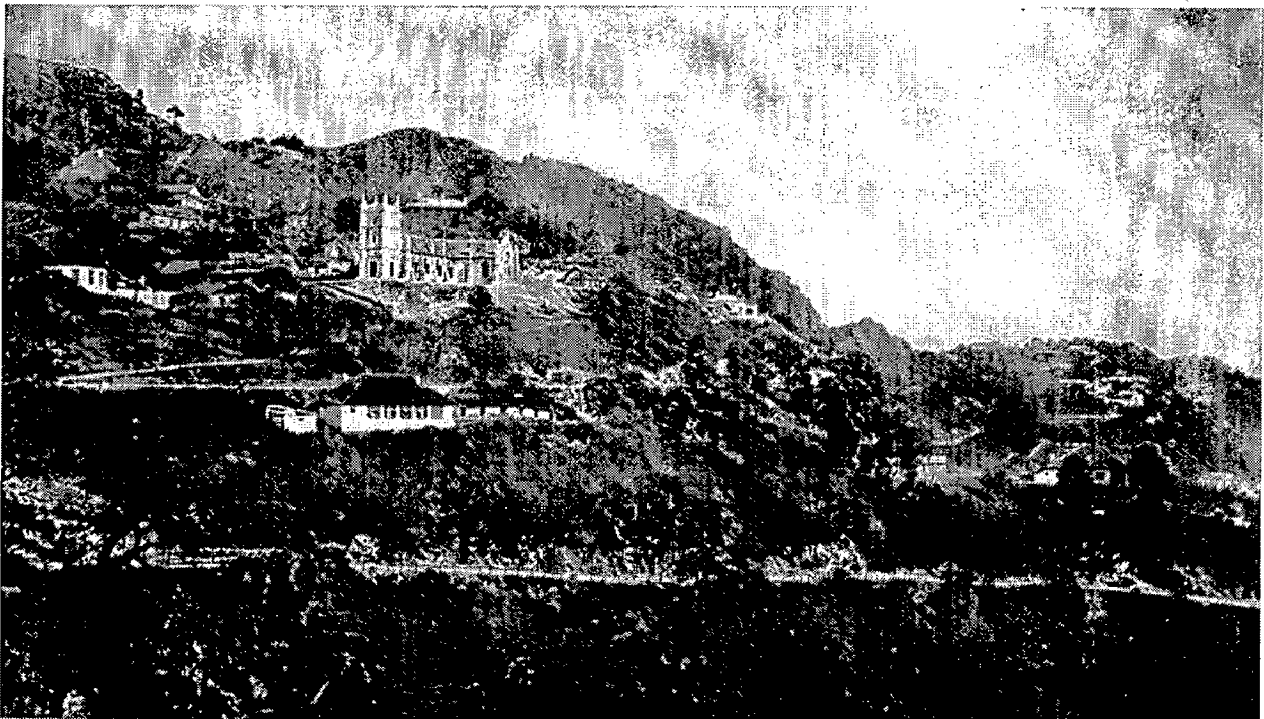


Distant View-Mussoorie, 1880
Source- Wikipedia.com

Amongst the few important institutions which came up are *'The Library'* (1843), *'Waverly'* (1845), *'Mussoorie School'* (1849), *'St. George College'* (1853), *'Woodstock School'* (1856), *'Municipal Hall'* (1880).

Thus, from 1850- 1900 the town witnessed a phase of establishment of education centers. The beginning of electrification started from 1920, the first building being *'Hotel Savoy'*. Extremely popular amongst tourist since its early days, the town developed *'hospitality infrastructure'* from 1890-1910 on a large scale. The prominent names are *'The Himalaya'*, *'The Charlie Villa'*, *'The Wood Villa'*, and *'The Savoy'*. A series of shops to attend to the daily necessities came up in major centers, while they continued to be supported by the supplies from plains.

The *'transportation infrastructure'* was initially established between *'Sun View'* (1928) and *'King Craig'*. The *'King Craig'* in present days is being used as the *'Bus Stand'*. By 1947 the motorway had been extended till the *'Masonic Lodge'* and the *'Gandhi Lodge'*. As a consequence of this development, the pockets of *'Bawloranj'*, *'Jhadi Pani'*, *'Vicent Hill'* lagged behind in terms of development whiles the areas of Mussoorie with *'Library'*, *'Kuldi'* and *'Landour'* raced ahead.



Mussoorie – Distant View
Source- wikipedia.com (British library)

The next phase of development came from 1948 when huge estates were divided out for various Royals, Industrialists, and Upper social strata. Another phase counted in the development of Mussoorie is 1959 when '*Happy Valley*' was inflexed with construction programs to accommodate the Tibetan refugees. In April 1959, after fleeing Chinese occupation of Tibet, the Dalai Lama established the Tibetan Government of Exile in Mussoorie. The Government of Tibet in exile eventually moved to '*Dharamsala*' in Himachal Pradesh. The first Tibetan school was established in Mussoorie in 1960. Tibetans settled mainly in Happy Valley in Mussoorie. Today, some 5,000 Tibetans live in Mussoorie.

Hence over a period of two centuries the settlement grew from a mere '*hunter's spot*' to a '*sanitarium*' and then a '*leisure resort*' for the upper social class. After independence the place has however become popular with general population as a tourist destination.

6.5 DEMOGRAPHICS-MUSSOORIE

The town sustained a 'static population' of 4700 at the beginning of the 20th century. The total area of Mussoorie is 17571.20 hectare according to the census data of 1991. The population of the settlement as per 2001 records was 25000 (static) and 12 lakh (Dynamic). In 80 years time since 1901 to 1980s, the growth population was declared as 406%. Since its evolutions from a '*Hunter's spot*', the population of the town was a patron of tourist/leisure destinations. Since 1941 to 1961 however the economy was based on providing service and hospitality. By 1971-1981, the economic base had diversified facets in trade and commerce. 80% of population of the town is involved in tertiary sector. The approximated annual tourist population 40 lakh has a few options to look out for in the town. Every year the load of tourism is expected to increase by 8.37%, while the town is only able to attend to 60% of them for lodging. The commercial institutions in Mussoorie are major (45 %) comprised of food supply and serving. 96 % of the shops are of 'footkar' type. The surveys dated few years back highlight the scenario that housing sector faces a shortage up to 12.22%.

These statistics show a variety of conflicting interests which have outgrown the range of cordial flexibility by virtue of their respective population sizes. The hillscape

beyond its carrying capacity of tourist influx also needs to accommodate the ever growing static population. These statistics highlight the issues discussed in the later section regarding the demands from the development program in context of Mussoorie.

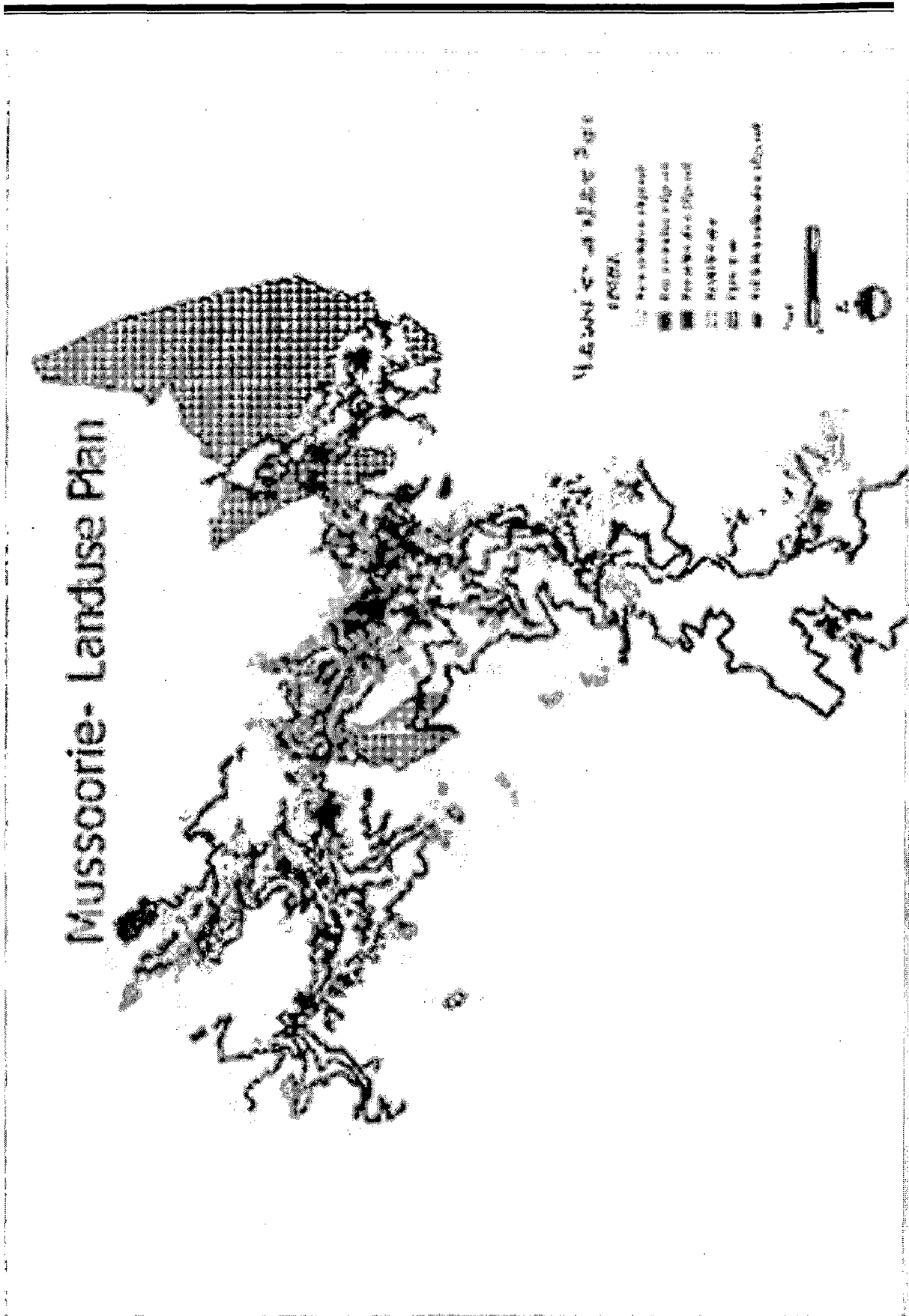
6.6 LANDUSE

The land use pattern of the hill town is mostly governed by the road layout and their connectivity strength. The relation between environmental and picturesque setting and the road form and pattern is of prime importance which has been discussed in next section. Out of 17891.20 hectare of area, about 320 hectare is limited to restricted zone under the authority of Landour, and I.T.B.P.

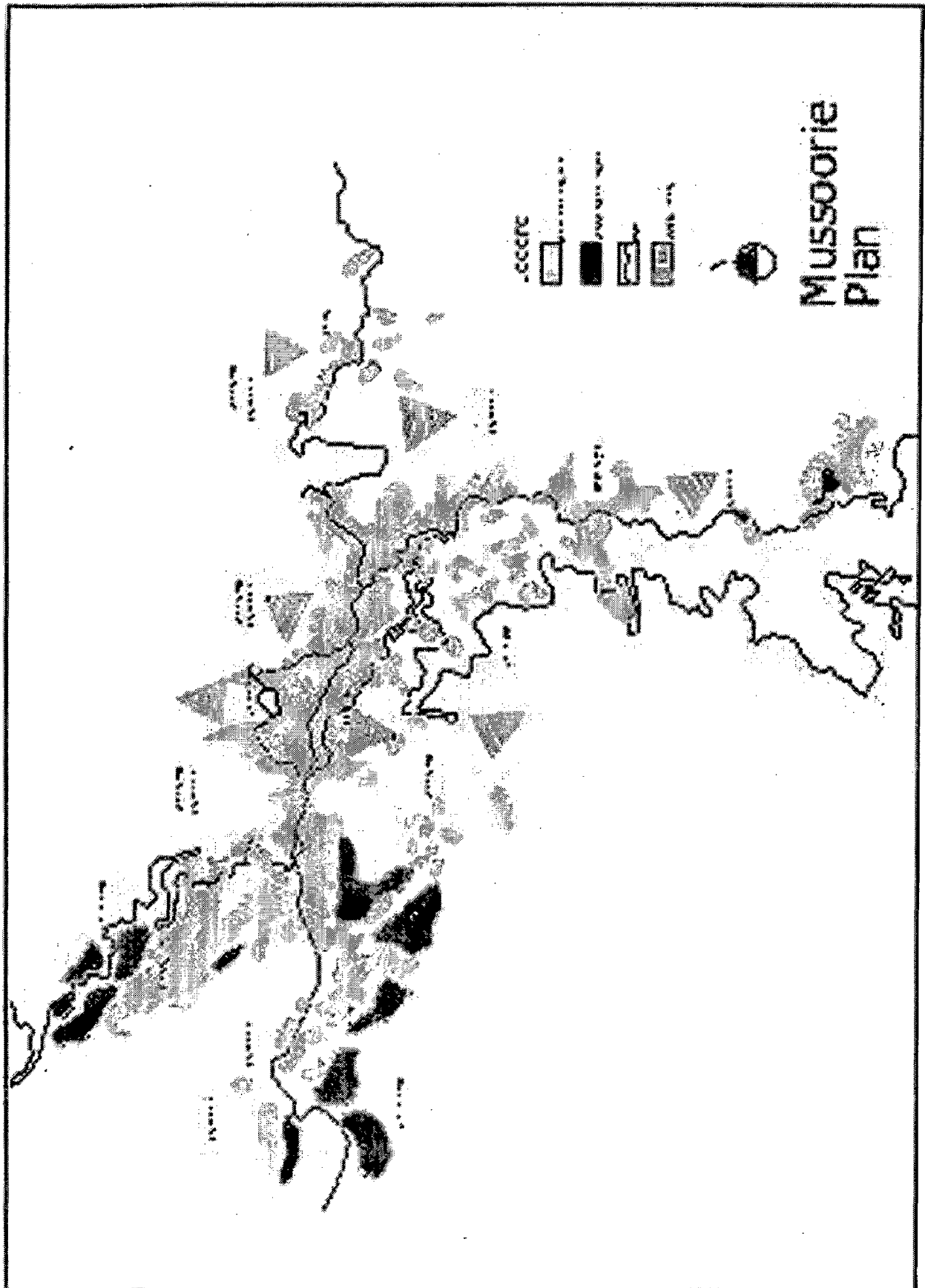
The 6445 hectare of area is under the authority of M.D.D.A. and 11126.20 is rural land. Of the general settlement development, the south face of the ridge is most densely developed. Apart from the privately owned estates, the extreme edges of the ridges follow a mixed Landuse development.

DATA AS PER 1986 SURVEY

S.No	LANDUSE- Under Municipal Area	AREA (hectare)
1	Residential	191.85
2	Commercial	22.50
3	Office	2.50
4	Public infrastructure	61.25
5	Transportation	188.59
6	Parks	4.85
7	Agricultural land	97.50
8	Mining land	18.85
9	Water bodies	98.35
10	Forest area	5758.76
	TOTAL	6445.00



Extent of development in Mussoorie and the direction of growth



6.7 TRENDS OF DEVELOPMENT AND CHANGING SCENARIO

As has been aptly said, “*matter is really the product of movement in space*”, the concept could be very well applies in a settlement fabric where the movement system is a dominant organizing force in design. The settlement evolution in Mussoorie follows a trajectory which is evidently organized by the Road layout.

‘Vicent Hill’ even though was the beginning of settlement activity could not attract commercial institutions because ‘*the Mall*’ road was the magnet for all commercial activity. However, the Cantt and Landour established in British times was the seat of all commercial activity. Eventually important institutions like the ‘Library’ came up in this area.

The major reasons for this pattern would be land shortage in ‘Landour’, restriction of construction due to Military regulations. The area around ‘Kuldi’ and ‘Library’ emerged as the core of transportation and residential zones for cottages.

The present practices and its impact on heritage could be understood as the summation of the changing pattern of activities since last 70 years. The predominant activities of housing educational institutes and months long tourism for economically affluent society have been diluted by the diversion of trends. The qualities or character which attracted tourists could be attributed to the distinct aspects of aesthetics, or picturesque views of hillscape, the lack of clutter of densely populated urban area, the climatic comfort, the minimal pollution (air, noise,..), and the popular leisure activities in town.

- I. Environmental Scenario- Amongst the practices affecting the hillscape scenario one is the ‘*mining*’ related activities which have come upon the south west slopes and also the route connecting the ‘*Rajpur*’ region near Dehradun. The landslides and queries have permanently damaged 46 of existing 76 water streams in the region. Another consequence is the additional load of transportation on this route. These query sites have severely affected the environmental quality and aesthetic character around the town which is the major tourist attraction.
- II. Tourism Infrastructure - The approximated annual tourist population 40 lakh has a few options to look out for in the town. The most popular attraction being ‘*Mall Road*’, & ‘*Lal Tibba*’ which are located 5km away in east, and ‘*Municipal Garden*’ in west again 5 km constitutes the core of tourist interest. ‘*Kempty fall*’

and '*Mossy Fall*' located 6 km and 5 km respectively define the southern limit of the core while in north the places of interest are '*The library*' and '*Camel Back*'. The distant locations include- '*Yamuna Bridge*' (27 km), '*Nag Tibba*' (42), '*Dhanolti*' (24 km) and '*Surkanda Devi*' (28 km). These destinations however have sparing tourism infrastructure. Thus Mussoorie becomes the center and added is an equivalent demand of vehicular tourism. Every year the load of tourism is expected to increase by 8.37%., while the town is only able to attend to 60% of them for lodging.

- III. Economic Conditions - The commercial institutions in Mussoorie majorly (45 %) comprise of food supply and serving. 96 % of the shops are of '*footkar*' type. The other predominant development practice is focused towards Hotels and Lodges, which have compactly come up on the '*Mall Road*' and '*Landour- Kuldi*' market. In these centers is located 70% of the entire commercial activity of the town.

The consequences of these changes on the urban and architectural level have been elaborated upon further in the next chapter.

7. Character of Mussoorie

7.1 INTRODUCTION

The chapter attempts to decipher the constituents of the built character of hill station of Mussoorie. The various aspects of character have been dissociated in a hierarchy to cover as many aspects of the settlement's built fabric. The major features are setting, road pattern, streetscape, street furniture, open spaces, landmarks, which deal with the first level of character appraisal. The next level discusses the architectural character in the sub-headings of setting, residential, hotels and lodges, church, public buildings, and educational buildings.

The chapter then follows the changing character under the same hierarchy. The chapter is concluded with enlisting of various issues related to conservation of urban character in Mussoorie.

7.2 CHARACTER OF MUSSOORIE

As a Murray has quoted in 1904, "Mussoorie is purely a summer resort...Most of the buildings, 'the Church' included lie along 'the Mall' under the 'Camel's Back', of which a circular road runs passing the cemetery. The 'Library' is beyond the church at the end of the Mall. When the band plays, society gathers here & has tea etc on the verandah of the 'Criterion Restaurant'. 'The Rink' is the greatest place for amusement, concerts, theatricals, etc. Excursions to 'Mossy falls' & 'Kempty falls' may be taken..." the character has been predominantly oriented towards upholding the interests of tourists.

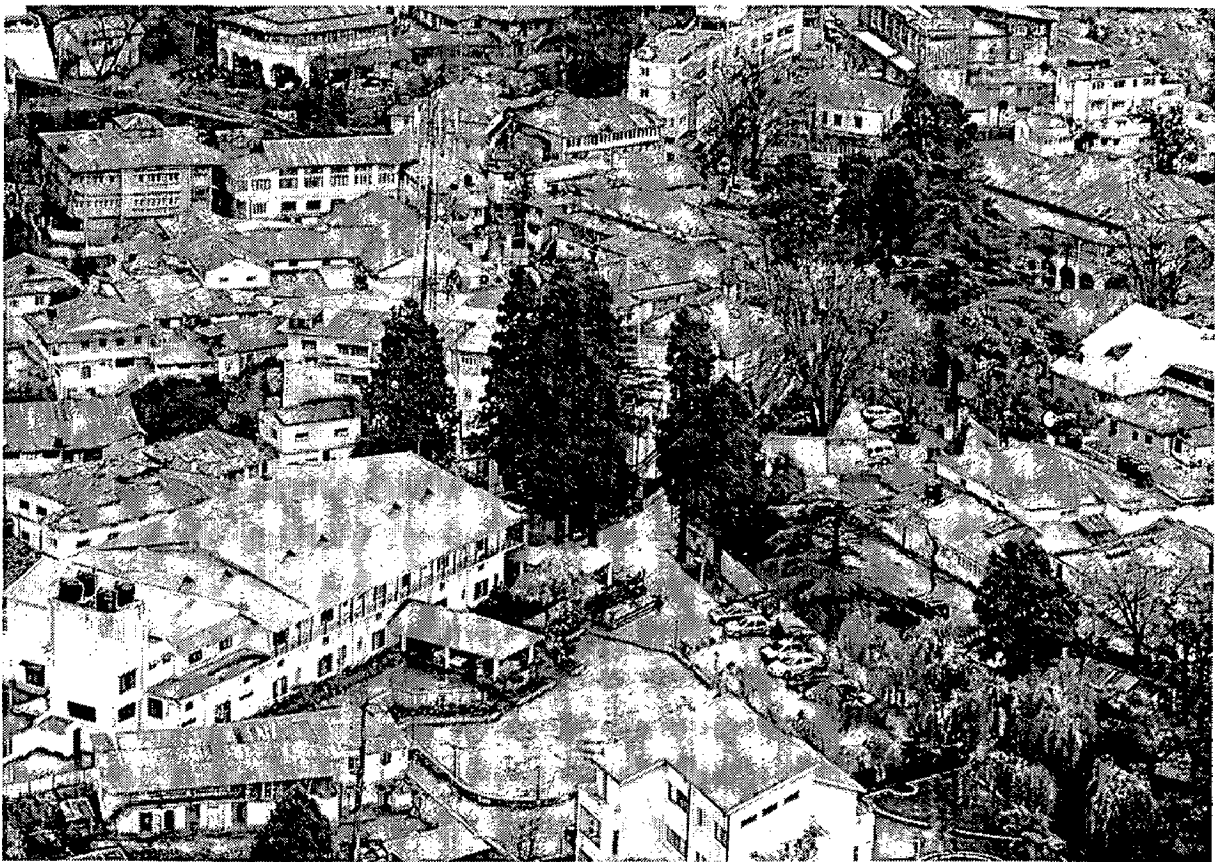
The hill town/ station developed from the viewpoint of the pedestrian, who was to walk about the town itself. Therefore, the design is intuitive in nature closely integrated with its environment, enabling simultaneous appreciation of several objects from various viewpoints, by virtue of the topography, contributing to heightened awareness of total surrounding. As elaborated in previous chapters the character of settlement fabric on a hill station could be seen as the outcome of various elements namely, the setting of the town, the land use pattern, the road form and road pattern, the streetscape, the open spaces, the public spaces and public furniture, landscape and various types of institutional building and their architecture style.

While the road form is the major organizing force which establishes the land-use pattern of the settlement, the various functional demands of the varied typology of institutions govern their setting and their architectural form and style. The setting is

CHAPTER 7–Character of Mussoorie

therefore the most ingenious aspect of buildings on a hill terrain which is predominantly dictated by the availability of site and aesthetic preferences. The function of the building is the second most important aspect of setting which spells out the location preferences and the architectural qualities of form, size, roofscape, materials, height, landscape and therefore the visual character.

The density of population and the pattern of activities are the third aspect of character of a place. The other elements of character would include the climatic features, the noise (soundscape) and any ‘peculiar aroma’ associable with the typical flora of the surrounding. It is by help of these elements that an attempt has been made in this chapter to derive upon an explicit description of the hillscape character of Mussoorie.



Built character of Mussoorie

Source- internet

7.2.1 SETTING

The town has been located on a ridge top sprawling about its contoured terrain overlooking the valley on both faces. Places of interests like hunters spot at gun hill, Kempty falls, and mossy falls, were important magnets for the settlements siting. The setting of town on a ridge had the advantages of safety, commanding location, and aesthetic benefits. While selecting a site, an undulating site had been considered as more interesting because of its contours than a flat terrain. A series of terraces follows the contours of the hill side establishing a specific character. The built form thus appears more as a cluster unlike the terse composition of an urban area. In the hill station, preferred locations for the settlement, apart from functioning as isolated domains, did not include the places of pilgrimage or habitat of a particular hill tribe, displaying a standard criterion of serenity and calmness.

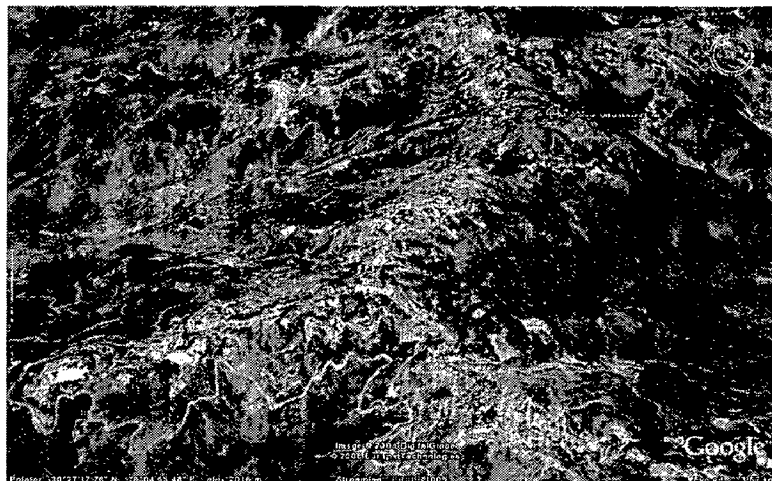


Image of Mussoorie showing the ridge facing 'east-west'
Source-Google earth image

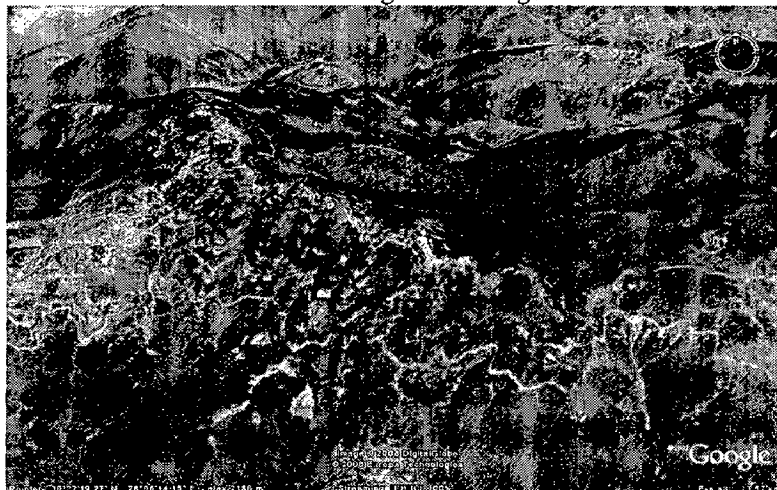


Image of Mussoorie showing the ridge settlement of Landour
Source-Google earth image

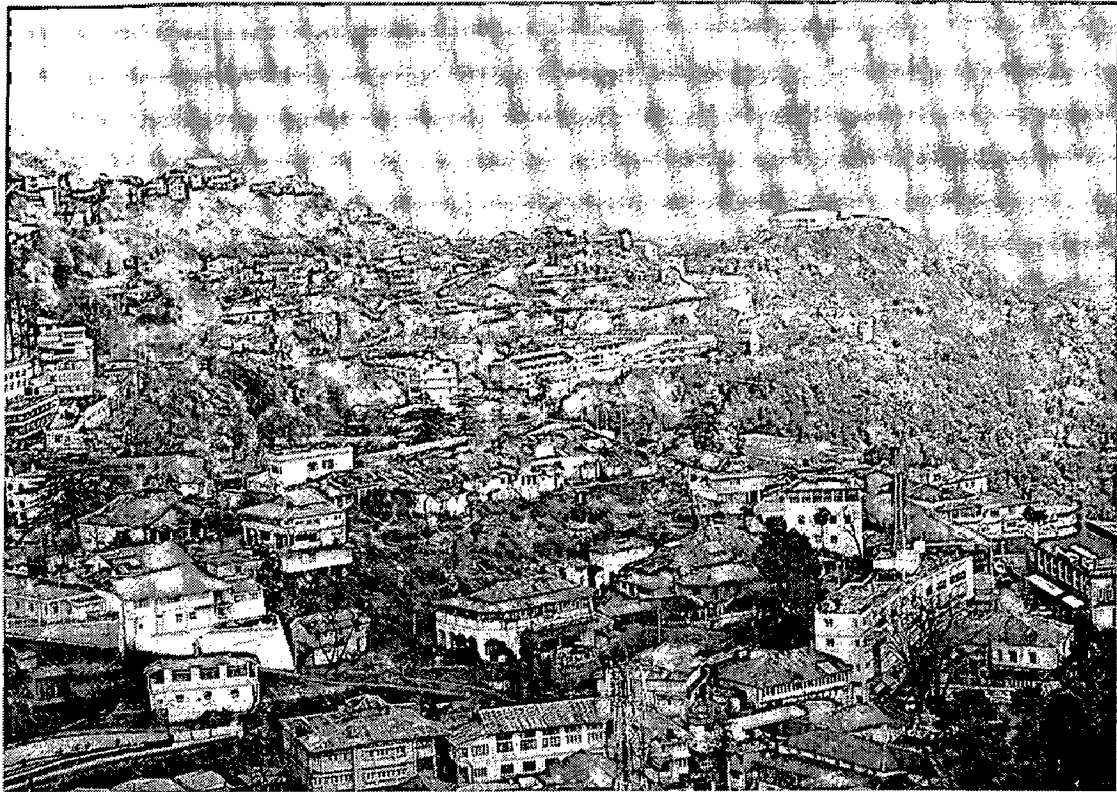


Image showing the setting of hillscape along slopes- Mussoorie



Image showing the setting of hillscape sprawled on Ridge- Mussoorie

7. 2.2 ROAD PATTERN

'McKenzie Road' in the western zone initiated development in Mussoorie along its length. However with the construction of Dehradun-Mussoorie Road the development was diverted along it. As a result, the area between 'Gandhi Square' and 'Picture Palace' came up. This pace curbed the development in western pocket of 'Jhadi-Pani' and 'Bawlorganj'. Therefore it can be concluded that, the development of Mussoorie is predominantly dictated by the road layout. The major road forms are 'Vehicular roads', 'Local roads', and the pedestrian routes. The Mall road it is the most important road known for its promenade character. The layout is typically '*Garland Style*'.

VEHICULAR ROADS-

The main road in this category is '*Mussoorie -Ambala road*' which leads to the southern part of the town up to '*Gandhi Chowk*' and connects the town to the plains.

The second major road is the one connecting '*Gandhi Chowk*', '*Picture Palace*' and '*Landour*', up to '*Chamba*' and '*Tehri*'. This road played prime role in connecting 'Mall Road' to 'Landour', which was important from tourism and administrative point of view. The average width of this road is 5.70 mts. The third main road is from the '*Gandhi Chowk*' to '*Kempty Fall*'. The average width of this route is 9 mts from '*Savoy*' hotel onwards.

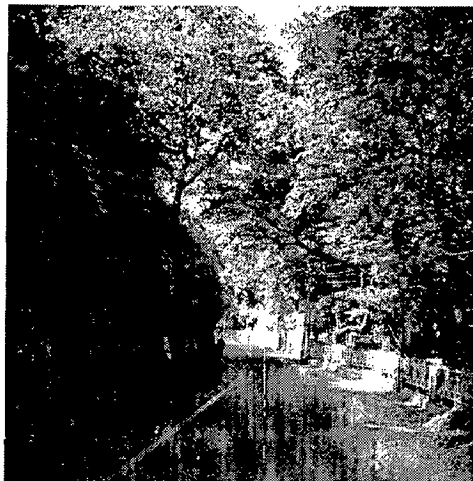
LOCAL WAYS-

This category counts the routes which connects the densely developed areas with the main roads and to tourist points. The average width of these roads is 4.5 mts. The ways includes are from '*Camel Road*' and '*St. Mary Hospital*', from '*Savoy Hotel*' to '*Radhabhawan*', from '*Baroda house*' to '*Lower Spring*', '*Harnamsingh Marg*', from '*Park-Sri Guru Nanak- Fifth Century School*', '*Charlie Villa School*', from '*Sunny View- Allen School- Fifth century*' and from '*Picture Palace-King Craig*', from '*Clock Tower to New Tehri Bus Stand*', from '*Badaa mod*' to '*Bawlorganj*', from '*Jhadi Pani*' to '*Sunny View*', from '*Hussein Ganj*' to '*Kuldi*', from '*Tehsil*' to '*Gun hill*'. These routes connect the major hospitals, hotels, tourist destinations, schools, offices to the residential areas.



Image of Vehicular road to Landour (2007) Image of Vehicular road to Landour (early 20th century)

Source-wikipedia.com



Local Road in Mussoorie

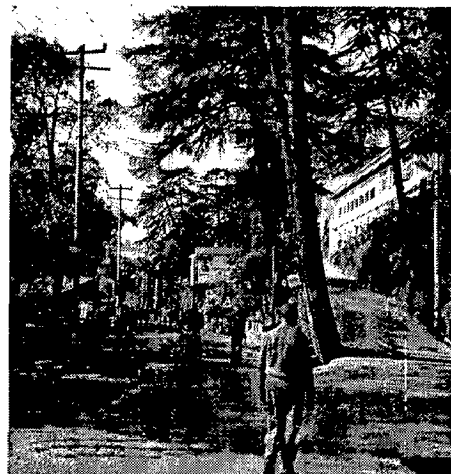
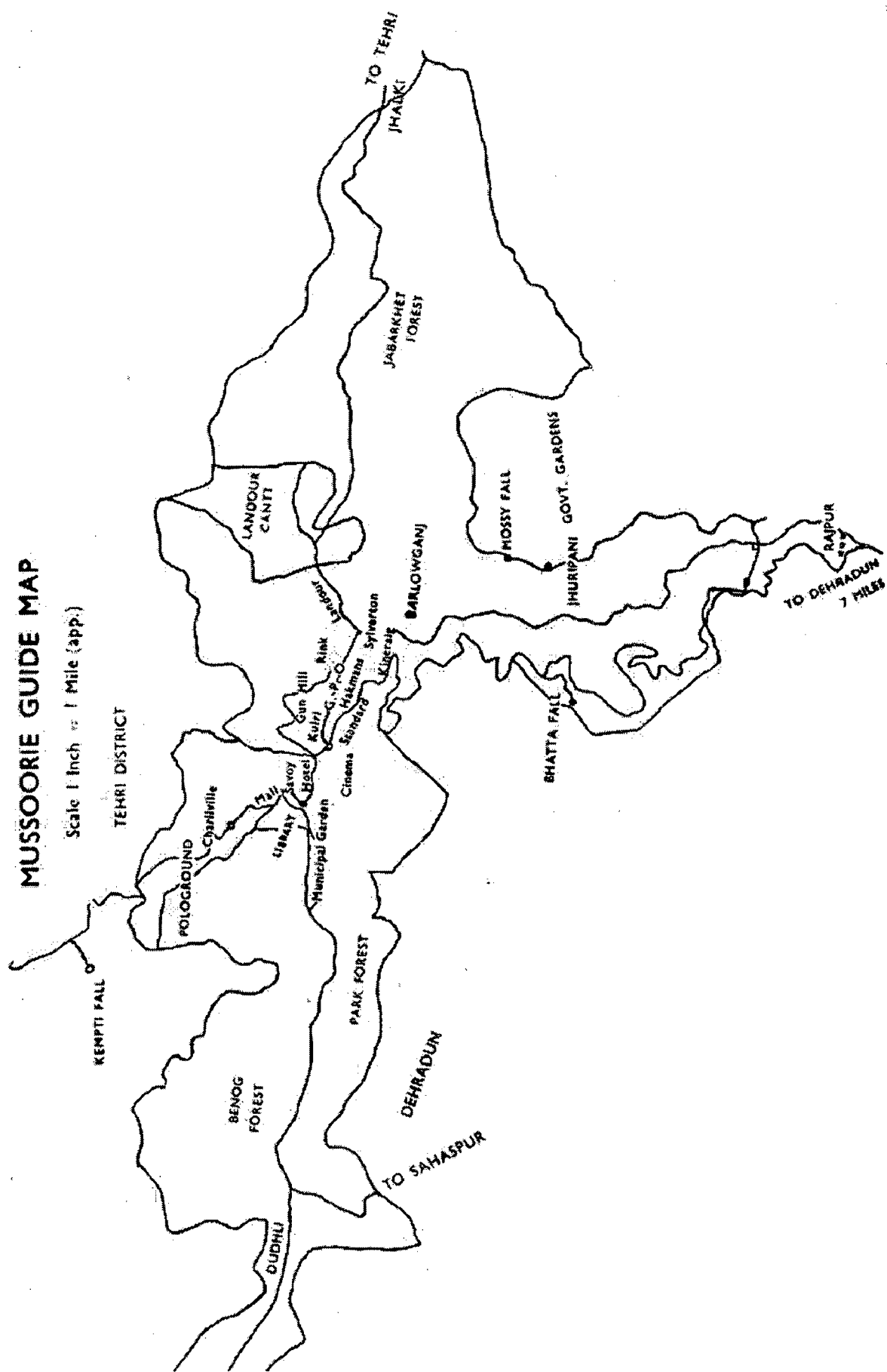


Fig. Routes from Mall road.

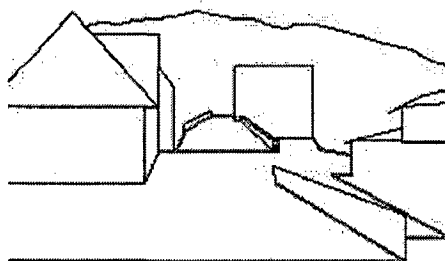
As seen in the road map of Mussoorie, the major roads are along the gentle slope of the ridge, connecting the opposite faces of the ridge in a loop/ garland. These major roads then give way to slightly restrictive local ways, which are most often ‘cul-de-sacs’ culminating in a cluster of cottages, or a major institution building. These smaller roads often start as a side ramp along the main road, with a higher gradient than the vehicular roads. These ways are also characterized by their stone tiled surface and green ambience. The vehicular roads, other than the mall which specifically was a pedestrian domain, are sufficient to sustain one way or limited vehicular traffic. These roads are marked by the location of important institutions as their origin or culmination. The entire route is lined by commercial units generally up to two stories high on the side opposing the valley. the view to valley is integrated to maintain the interest of passer by.



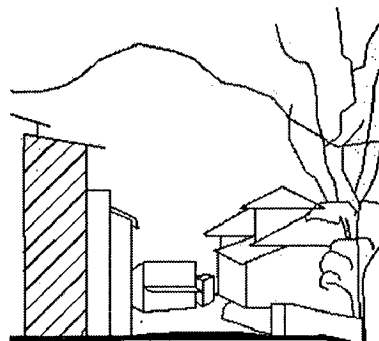
The most famous promenade of the hillscape is 'The Mall' which sits to overlook the 'Doon valley' on the south face of the ridge. The road essentially encouraged sightseeing for pedestrians hence the scale of development is related to a leisurely walking person. Two-three story structures line the hill side of the road. The opposite face is lined by railing, street benches, street lights and landscape for the comfort of ambling tourist. The route is lined by major market and recreational institutes to concentrate the touring crowd for socializing.

7.2.3 STREETSCAPE

The character of street is outlined by the kind of activities it encourages, the kind of traffic it allows to pass through, the landscape and the street facade. Thus in Mussoorie it is prominently characterized by the occupancy of pedestrian tourist along a single side developed street and landscaped along the opposite side. The streetscape relates to the tempo of a pedestrian user. Its character is defined by meandering pathways which sustains a sequence of interests, variety and impressions achieved by multiple 'focal points' from varied viewpoints. The streetscape of Mussoorie like any other hill town is marked by the presence of '*multiple silhouettes*'. These form a varying and interesting composition by the juxtaposition of the outlines of buildings, landscapes and hills. The drama of the multiple silhouettes is accentuated by the contoured topography of terrain. This adds to the inherent aspect of the design where the user appreciates the natural setting and landscape going up and down the gently sloping routes.



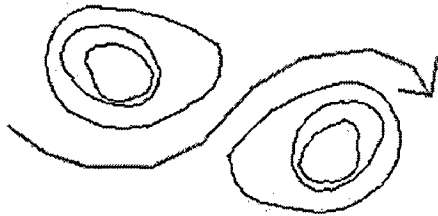
'Multiple silhouettes' on Hillscape



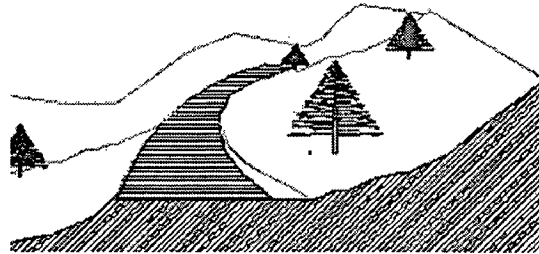
'Multiple silhouettes' on Hillscape

CHAPTER 7—Character of Mussoorie

The road layout essentially follows the natural landform and aligned along the contours avoiding terracing of natural terrain. It's the advantage of view to valley which is most prominent character of the major pedestrian routes of the hillscape.

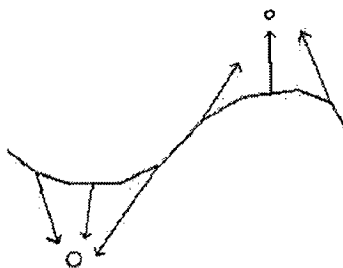


'Road alignment' on Hillscape
(Plan)

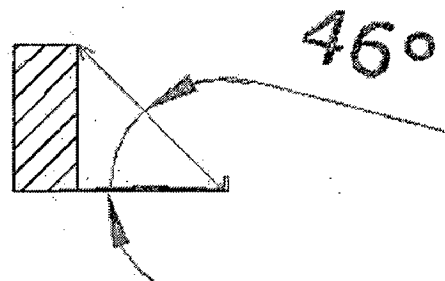


Preferred location of road for pedestrian
(Section)

The curved routes are predominantly characterized by multiple vantage points. For any serpentine or curved form, the vantage points are naturally focused beyond the bulge of the route. These curvatures therefore house the major street furniture and public structures like band stand or balconies.



Multiple vantage points
(Plan)



Schematic Section along the Mall Road
(Section)

The height of the building in relation to the width of the space enclosed determines the character in specific ways. As in promenades the commonly preferred angle is smaller than 45, so at this angle (30 degree) the row of buildings, along the cone of vision encompassing the elevation, is perceived as an edge to the space providing a sense of space rather than vertical containment.. At a slightly higher elevation height when the angle is almost 45 degree as in cases of '*public buildings*', the cone of vision can appreciate the entire elevation and its details from a height, however it becomes difficult to see the building over its full height. Beyond this any raise in elevation height, as in constricted '*local ways*', it is the dominant feeling of vertical containment.

7.2.4 STREET FURNITURE

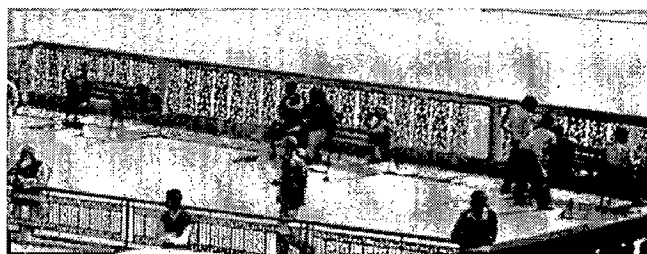
The street furniture confers to the standards of pedestrians. The height of street lamp varies from 12 ft to 15 ft. their ornate design in wrought iron is the most characteristic feature of Mussoorie streetscape. The furniture models are inspired from the century old European designs imported during the establishment of the station. The railing in wrought iron which is profusely detailed lines the valley facing side of the road. The signage on private properties and along the road was initially detailed in wooden boards. With the changing trends these have been replaced by the steel boards and hoardings. In some cases however, the initial form of the signage have been retained.



Street lamp along the routes in Mussoorie



Signage before a Hotel



Railing along the public seating space

7.2.5 OPEN SPACE

In the absence of flat terrain the roads are the main open spaces, where many activities take place simultaneously. The major activities of leisure in Mussoorie don't include sports activities of any kind. The scarcity of flat terrain must have discouraged the trend. However pockets have been retained along 'the Mall' where views of the valley could be leisurely enjoyed without obstructing the flow of traffic. Such pockets like 'Band Stand' and Trolley base have been sufficiently provided with street furniture. Another type of open space is the richly landscaped public park like 'Company bagh' and Municipality Garden. These pockets have been located along the flatter terrain along the valley. Either the open spaces are created at certain areas along the road, or rooftops of buildings along the road on lower side, or along curves, where the road widens. Certain credible pockets with flat terrain have been occupied as a part of privately owned properties and estates. These are however concentrated towards the ends of the ridge or the crests where relatively flat grounds are frequently encountered.

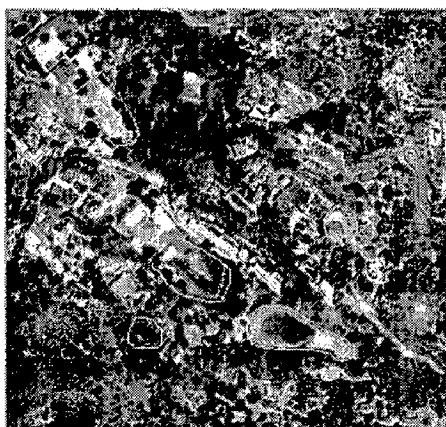


Fig. Pattern of Open Spaces in Private Properties Mussoorie



Fig. Band Stand, Public Open Spaces --Mussoorie



Fig. Open space in Private property Mussoorie



Fig. Company Bagh- Mussoorie

7.2.6 LANDMARKS

Clock tower is the tallest structure visible from major parts of the town. It marks the beginning of the '*Landour Cantt*' and way to '*Tehri bus stand*'. The '*Library*' and '*Gandhi Chowk*' mark a major crossroad on Mall road. The '*police station*' building in red color marks another focal point on '*Mall Road*'. The '*SBI building*' marks the mid point of Mall Road which stands nearest to two important junctions on Mall route. The church building and the spires mark the edges of Mall road on western side of town.

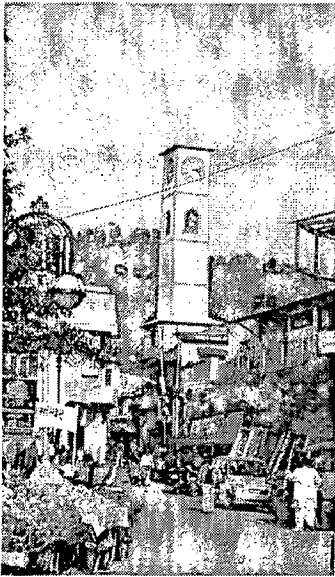


Fig. Clock Tower – Mussoorie



Fig. Band stand at Gandhi Chowk - Mussoorie



Fig. Police Station – Mussoorie

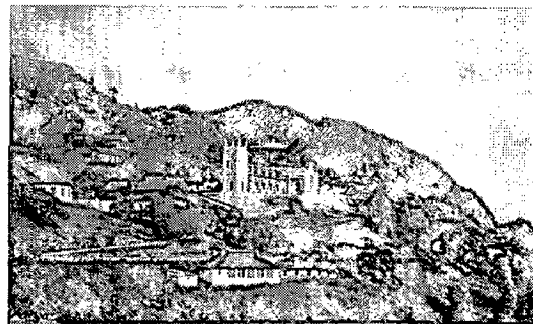


Fig. Church as Landmark - Mussoorie

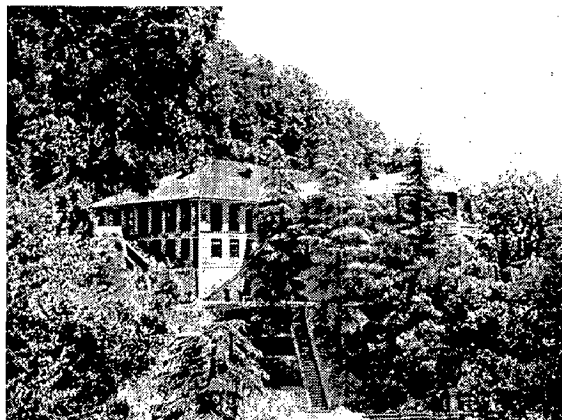
Source- wikepidea.com

7.2.7 ARCHITECTURAL CHARACTER

The architectural character of the hillscape fabric is sharply distinguished on the typology of the building. The functional aspect of the building is the primary factor in deciding the location and setting preference of the building. The function of the building also dictated the size of the building. The topography and surrounding landscape thereafter play a crucial role in the design of the building influencing the form of the building. The other aspect of architectural character would be setting of the building, roofscape, material, color and height of the building. The various types of buildings on the basis of their function are- residential, institutional, public, and commercial. The institutional buildings would include educational, organizational etc. the commercial buildings would be shops, lodges, hotels, and so on. The public buildings would include the ones like ‘Library’, ‘Church’, etc. Hence the typical architectural aspects of these buildings have been discussed.

SETTING

The satisfaction of visual criterion was important first in providing specific kinds of visual experience from the building – *a view or outlook*'. Secondly it was important to ensure that the building and its compound formed a part of a similarly pleasing view when perceived from a distance. The sitting of a building were governed by two major criterion- sanitation and preferred kind of visual experience. Whenever possible, elevated sites have been chosen for facilitating drainage. Also, the site had the potential to command the best view possible... the outlook from doors and windows of sitting room were the best available. “... *the external appearance should be pleasing to the eye. In harmony with the surrounding and expressive of the use to which the building is put*” (Meadows, 1931)



Setting of a School Building- Mussoorie

RESIDENTIAL

In the locations of 'Vicent Hill', 'Savoy-Waverly Convent', 'Camel's Back', 'Malinge-Woodstock School', 'Masonic Lodge- Wine Worge', 'Landour Market' and 'St. George- Jhadi Pani' the residences had come up on the sun facing slopes. The cottages came up in the then popular style as 'the bungalows' have been considered highly inappropriate a style for hillscape. The prime consideration was the setting of the building and its approach along with a view of the valley towards the sunny side of the slopes. The style was peculiarly identified with sloping tin roof form and expansive layout of building. An integrated landscaped pocket gave the feeling of a snuggled up compound to each cottage. The satisfaction of visual criterion was important to provide 'a view or outlook' to the adjoining compound. The cottage and its compound form a part of a pleasing view when perceived from a distance. Whenever possible, elevated sites have been chosen for facilitating drainage.

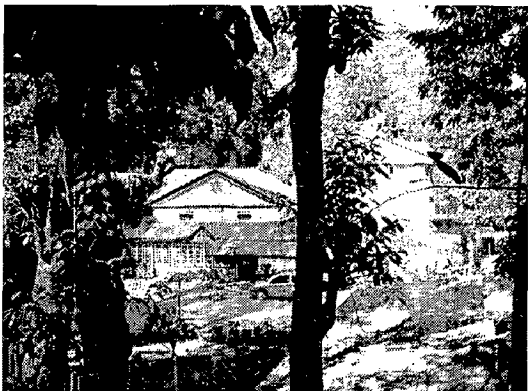


Fig. Typical Cottage setting- Mussoorie



Fig. Roof form in red amidst landscape

The cottage design was typically composed of sloping roofs, small windows, many chimneys and numerous gables. The feature of verandah was not included in the design. The sloping roof was most commonly colored red and was strikingly visible amidst the thick landscape. The cottage was generally one to two story structures. The texture of material used in masonry gave the building a rugged countryside image. The entrance of the compound was characterized by a ramp with an ornate lamp post and name plates in wrought iron. Timber was used for window and doors. Elaborate detailing of trusses and eaves and timber joist flooring was typical in buildings of past.

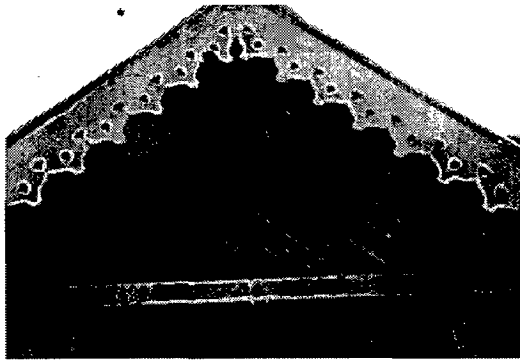


Fig Typical Eaves detail in timber

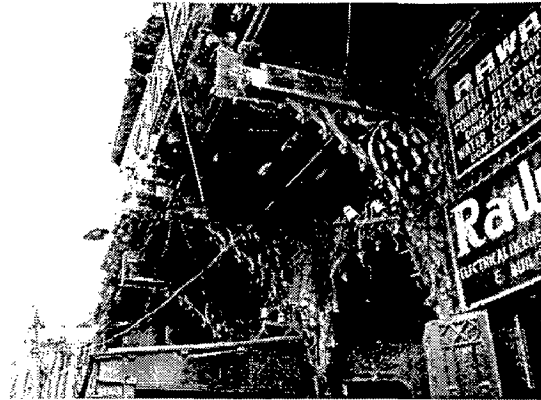


Fig. Bracket detail in wrought iron



Fig. Detail of Bay window



Fig. Typical Roof form of cottage.



Typical cottage - Mussoorie

CHAPTER 7—Character of Mussoorie

HOTELS AND LODGE

The Hotels and lodges were predominantly occupied throughout the summer months. These buildings therefore were located on higher elevations at convenient walking distance from the Mall road. The criterion of privacy, and serenity were determinably forceful for the selection of location. The design of building was specifically extrovert. Balconies and fenestrations were important elements of design as they framed the panoramic views to which the buildings were oriented.

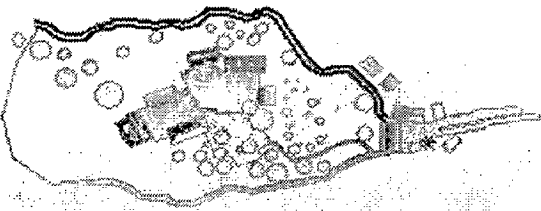


Fig Hotel Savoy - site plan



Fig Image of Hotel Savoy -Mussoorie

Source - Internet

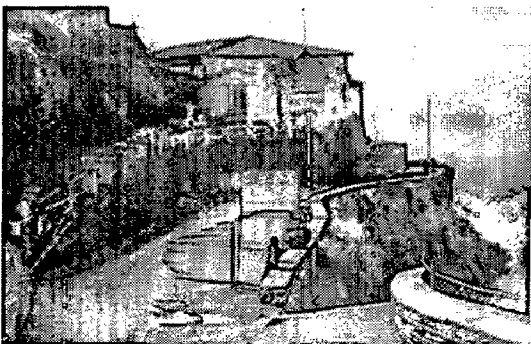


Fig. Masonic Lodge - Mussoorie

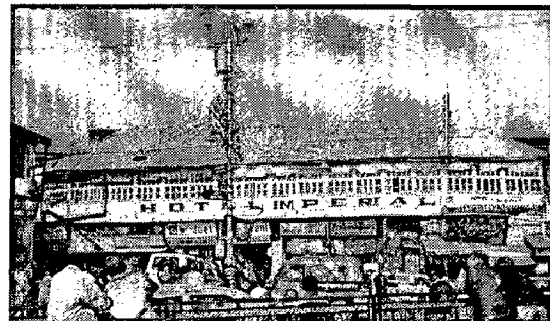


Fig Hotel Imperial on Mall Road- Mussoorie

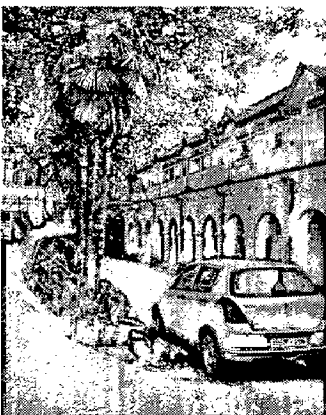


Fig. Facade of a Hotel Building in Mussoorie

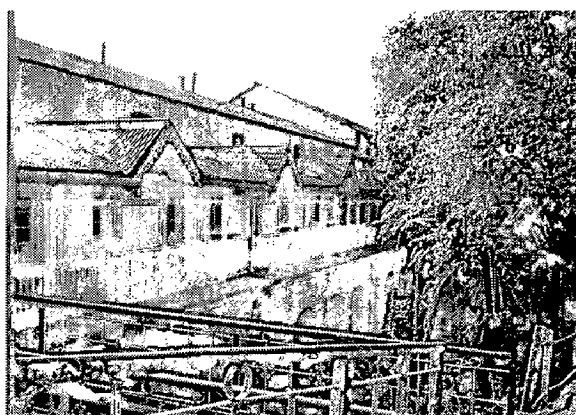


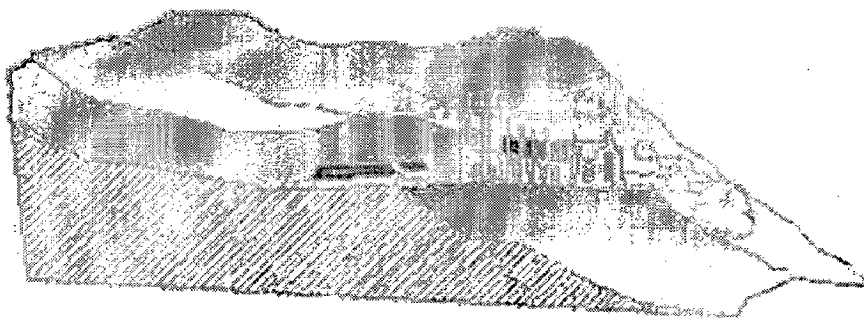
Fig Detail of balcony

CHAPTER 7-Character of Mussoorie

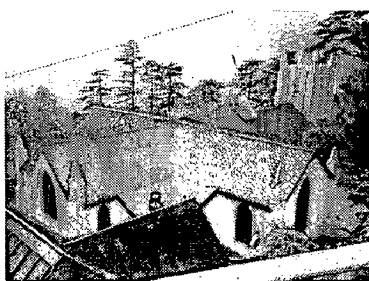
The façade was often marked by 'numerous gables' and 'the sloping roof' was colored in red. The standard detailing of arcades, rubble masonry walls, wooden eaves, wooden posts were imitated from models in plains. The absence of peripheral verandah exposed the façade details more explicitly. The roofscape was lined by numerous chimneys, from the hearth of numerous rooms. Also, the height of hotels and lodges was rarely above 2 stories. The capacity of these buildings ranged from 30-50 units. Most of these buildings stood with their own ground/open space to accommodate the socializing activities of residents. Moreover the modes of conveyance being horses, or carriages, and 'Dandy' needed a reasonable amount of flat land to house these requirements. These open grounds were richly landscaped and were hardly open to the gaze of pedestrian traffic, thus ensuring privacy of the compound.

CHURCH

The church marks a visual terminus of the Mall road from distant viewpoints. Its bell tower commands the skyline of the Mall road with a unique character as it was partly concealed amidst the foliage. The cross plan of the building is prominently visible from its roof form which is painted in Red, while the building stands in a soft yellow shade. The rugged texture of rubble masonry is defined by the vertical grain of joining. The elaborate detailing of fenestration is in timber with limited glazing. The church is amongst the few tall buildings of the hillscape.



View of Church on Hillside



Roofscape of the Anglican Church - Mussoorie

PUBLIC BUILDINGS

The public buildings are easily and typically identified by the bulk of the volume and locations on the major routes. Their entrance is accentuated by the raised platform and arcaded porch while the building is set behind in geometrically rigid layout confirming to the standard colonial design features. Their roofscape in bright colors (red, green) makes them easy to identify and orient towards when seen from various viewpoints on the hill routes. The library however is marked by the typically detailing in wrought iron where the posts railings, and brackets are highly ornate supporting a series of gable end on the façade. The floors and roofing are predominantly detailed in timber joists.

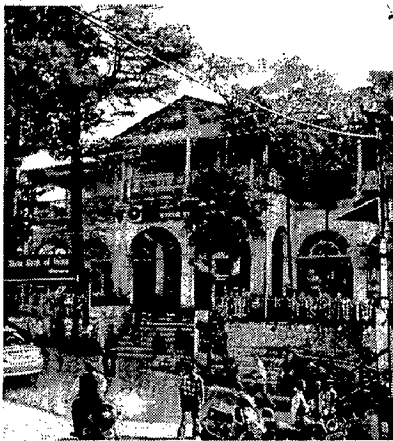


Fig. SBI building – Mall Road



Fig. Library at Mall road

EDUCATIONAL INSTITUTES

The educational institutes were located at distant locations from the hassles of tourist town. Their expansive layout was a solution to accommodate a reasonable population in their compound which was hardly more than 1-2 story structure complexes except for the spaces like auditorium, courts, library, or the pools. These multi-facility complexes had a set of flat lands and the buildings were set in peripheral pattern. This imparted a feeling of enclosure to these courts and grounds. The otherwise spread out building was most commonly colored yellow or left exposed the rugged texture of rubble masonry laid o course highlighting its vertical grain in joinery. The roofscape was invariably red or green in later periods. The indoors were predominantly timber finished floors and surfaces. The imposing character of the main building was achieved by the bold corners which staggered out in plan as well as in elevation, giving an imaginary frame to the main building. the preference for European models encouraged introvert design of

CHAPTER 7 - Character of Mussoorie

complex and standard imagery through arcades, pilaster order on facade to gables terminating with lantern and ashlar masonry in local stones.

The image was rigidly an imitation of European institutes to reinforce the distinguished status of the patrons.

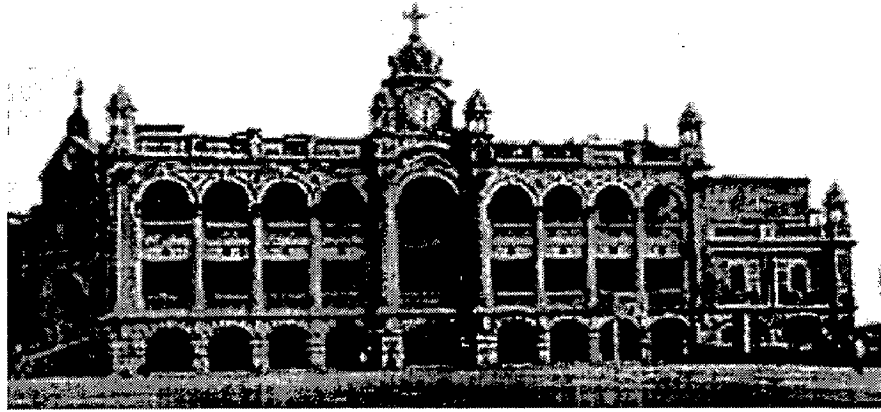


Fig. St. George College Mussoorie

Source- Wikepidea.com

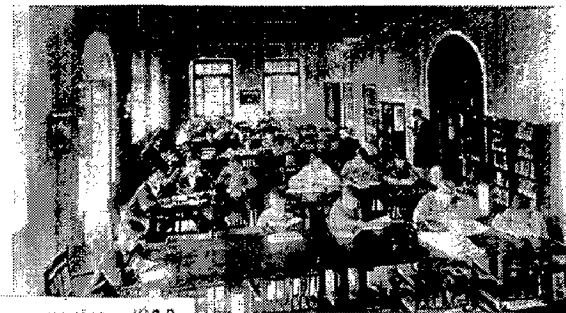


Fig. Study hall- Woodstock

Source- Woodstock archives

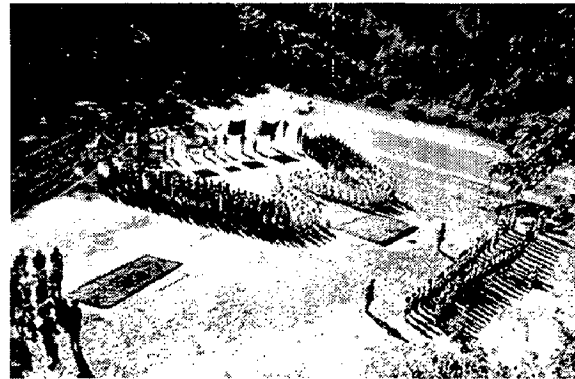


Fig. Open Ground- Woodstock

Source- Woodstock archives

7.3 CHANGING URBAN AND ARCHITECTURAL CHARACTER IN MUSSOORIE

The character of Mussoorie is transforming from a hillscape to urban setting. The Heritage of the settlements faces a threat in two ways:-

- 1) Demolition and replacement of this environment/ setting by modern construction practices.
- 2) The threat of them being camouflaged under new built environment.

The character under the influence of economic forces has altered from a sparingly developed setting to compact development along popular routes. The role of topography, vintage views, and function has been forcefully ignored and the quality of aesthetics compromised. This acceptance of visually contrasting imagery over a period of time has encouraged its further dominance by virtue of changing height, bulk, fenestrations and color pattern. The enormous influx of seasonal tourism had consequently introduced the typical nuisance of urban area, ‘The traffic’ and ‘Parking’. The distinct environment favored for its healthy and peaceful quality had been callously replaced by the smoke of vehicles and noise of horns and crowded street. Further deterioration in character is signified by the lack of any activity which could engage the interests of tourist, who then turn to the next option of shopping. Thus, the promenades have transformed to shopping streets. Consequently the buildings are retrofitted on ground floors to glazing facades and air conditioned interiors. These urban practices have contributed to warming temperature of the hill region, despite the altitude. This is however ironical, as the very attraction of this settlement is being deteriorated by the patrons it thrives upon. Hence, the various practices are complexly interlinked and hastily transforming the character which is a cause of concern. The issue has been deliberated in previous chapters and elaborately discussed in chapters to come. A visual survey has been made of the current practices under various sub heads in following section. The attempt is to emphasize upon the contrasting and derogatory trends of new development which not only challenge the virtue of the heritage of the town, but also stand inappropriately out of context from visual, architectural and environmental point of view.

7.3.1 SETTING

The criteria of setting have become the most undermined of all because of the soaring land prices. The setback norms have been minimized. The height of the adjoining buildings or new buildings is unsympathetic to the existing character. Any design proposed does not appraise the views it opens up to or the views it obstructs. This factor is most strongly transforming the character of the space.

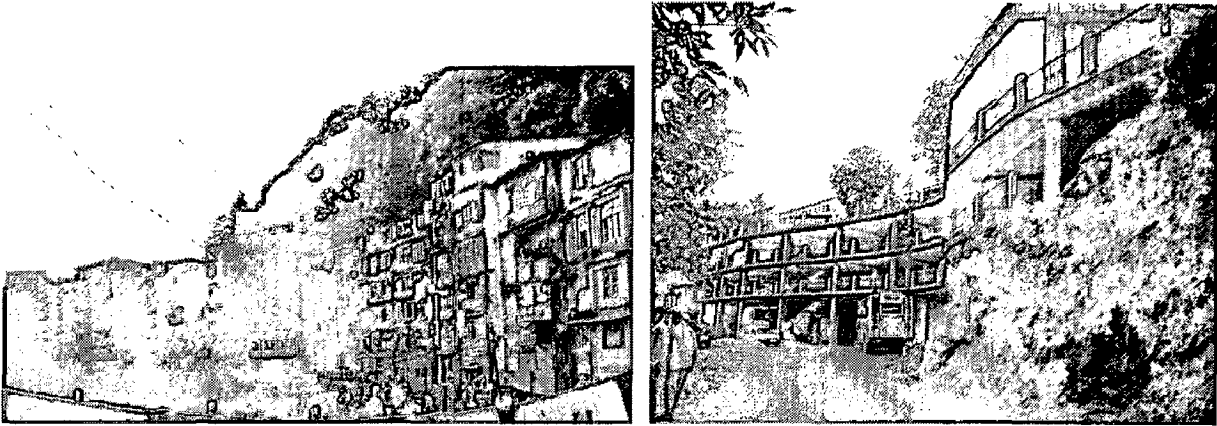
7.3.2 ROAD FORM AND PATTERNS:

The road from ‘Gandhi square’ to ‘Landour’ which has an average dimension of 5.70 mts within the town faces the major problem of encroachment by commercial shops and street front parking. The stretch between ‘Gandhi Chowk’ to ‘Camel’s Back’, from ‘Jhulaghar’ to ‘Kuldi Bazaar’, and from ‘Picture Palace’ to ‘Clock Tower’ are crowded with retail shops and their unauthorized encroachment and illegal construction has narrowed roadway. This trend has caused an unwanted impact upon the tourist pedestrian preferences. This problem has been aggravated by the lack of any planned parking facility. The road to ‘Kempty fall’ is lined with Hotels, rest houses and lodges. As a consequence the parking sprawl in this stretch has reduced the effective width to 6 mts. The town has an excess of small vehicles owing to topography of town and tourist interest. Besides, hand rickshaw, and horse-riding are still popular to attract tourists.

The Bus stands are located at the ‘Gandhi square’ and ‘Masonic lodge’ and ‘New Tehri’ roadway. These locations are convenient but not planned. As a result tremendous traffic load, congestion, reduces the effective width of the roads.

The area’s roads provide access to the town centre. One-way traffic circulation operates in most of the other streets and on Mall Road. This is accompanied with a traffic island and mini roundabout at junctions in Mall Road and a substantial amount of road markings, signage and other furniture, especially at junctions. The street pattern and nature of the development give limited scope for focal points within the newly built townscape, and it also increases the importance of street junctions in the townscape. Consequently their treatment needs to be compatible with the historic character of the area. Relatively generous widths of streets, including pavements contributed to a feeling of spaciousness in much of the area. However, on-street car parking and traffic management measures visually impinge on this character.

Setting of building Mussoorie- Present trends



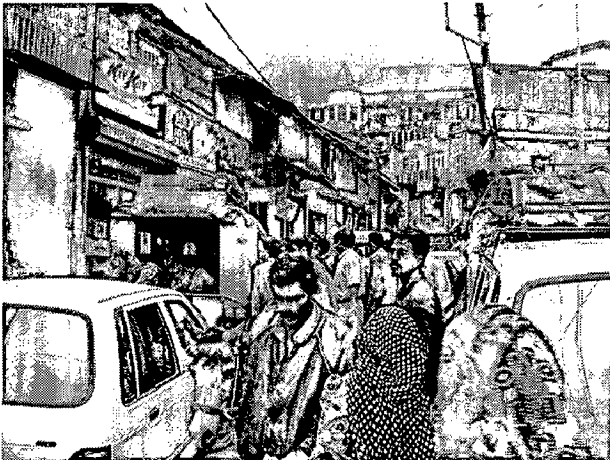
Multistory buildings with minimal setbacks which contradict principles of townscape - Mussoorie

Streetscape- Mussoorie



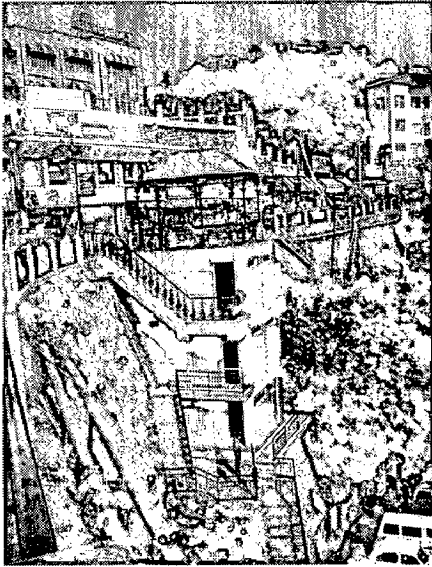
Streetscape - Mall road.

Streetscape - Mall road

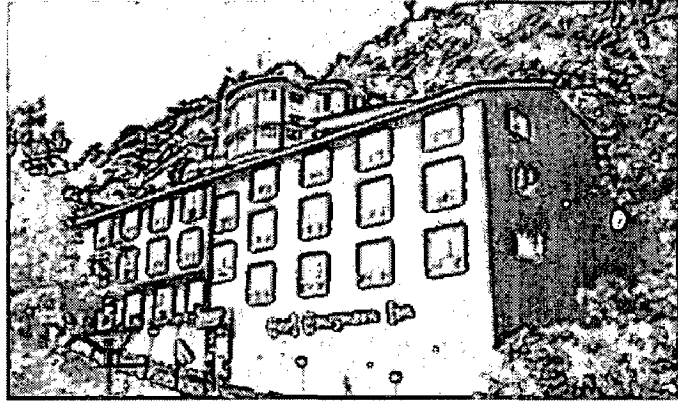


Streetscape – Road to Landour Cantt

Changing Architectural style- Mussoorie



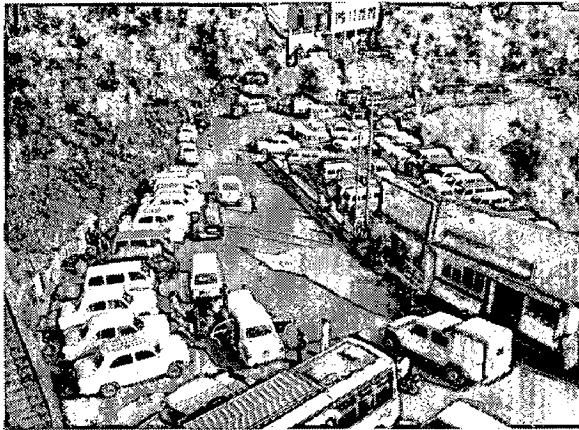
Public toilet below bus stand- Mussoorie



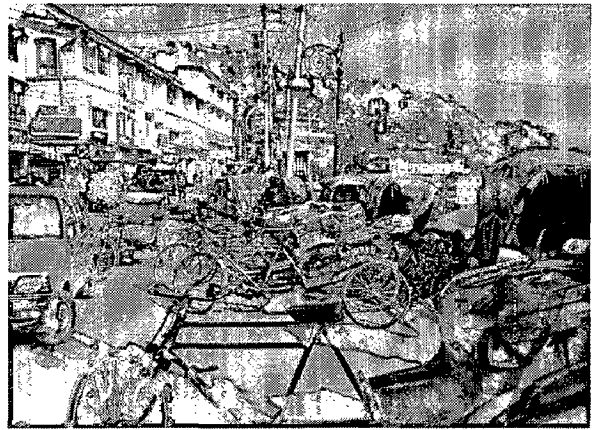
Hotel at Mall road.

Source- samsonttravel.com

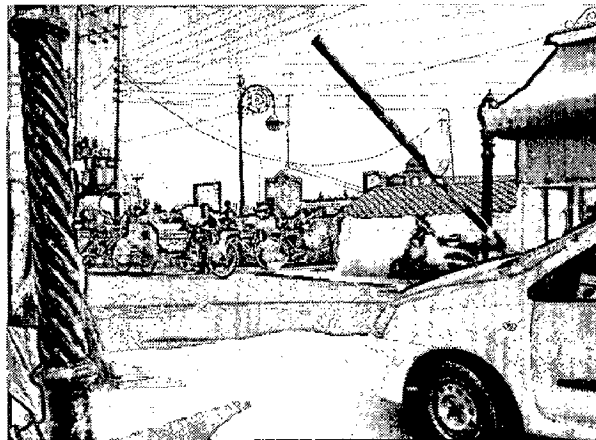
Parking and Traffic – Mussoorie



Taxi Parking at the entrance of Mussoorie



Rickshaw stand at the Mall Road- Mussoorie



Toll Gate at beginning of Mall Road

7.3.3 STREETScape

On-street parking is permitted on all streets in the area with a few exceptions. Parking has a significant impact on the appearance of the area, reducing the feeling of spaciousness and producing a cluttered appearance which harms the setting of the area's buildings and open spaces. Associated signage and equipment add to the clutter. The competing demands for on-street parking space, the pricing of much of the space and the parking restrictions contributing to a demand for off-street residents parking in front gardens and in gardens and yards adjacent to rear alleys. Some of the alleys and have lost their original sense of enclosure with the removal of boundary walls and the creation of wide areas of open parking. Traffic signage contributes to a clutter of non-traditional street furniture in the area, and takes little account of the historic character of the area.

Generally, the mixed surfaces give no strong identity to the area and are at times inappropriate. Where traditional or natural materials remain, however, or a material is used consistently over a wide area, they contribute to local character. Surfaces of roads and pavements display a mix of materials. Original paving remains to the non-motorized paths. Original cast-iron lighting columns survive in along major pedestrian routes and contribute to the character of the promenade. Decorative detailing to the lantern arms is missing on some and many of the original lanterns have been replaced. They contribute to the character of the promenade. Elsewhere, replica columns lanterns have been installed in most of the area. Columns are painted black.

The area along the Mall is dominated by monolithic appearing facades of Hotels, and the bland façade of the Shopping Centre and car parks.

7.3.4 Landmark

Negative focal points which challenge the existing landmarks add to a visual chaos in the hillscape this most dominantly governed by the virtue of height and colour. Hence the new multi-storey structures and hotels either diminish the visibility of the landmarks by overcrowding around it, or by virtue of non coherent colour scheme which is distracting to be interpreted in any scheme/pattern.

7.3.5 Architectural style

Summarizing the typical architectural style of the hillscape the prominent features could be enlisted as:

- I. Setting of hill station architecture which responds to its ridge-top position
- II. The promenade frontage, valley views are the areas for public use
- III. Yellow brick walls , or exposed rubble masonry walls in important buildings
- IV. Hipped tin roofs.
- V. Two and three storey building height.
- VI. Chimneys, detailed eaves, and brackets.
- VII. Protruding porches.
- VIII. Timber-framed sash windows.

Building Alterations, where some substantial unsympathetic alterations prior to designation within the planned state harm the harmony of design. Unsympathetic alterations carried out as permitted development have eroded the character of parts of the area, notably window and door alterations, the formation of hard standings and the removal of boundary walls, gates and railings. Rooftop parking for multistory structures is the latest resolve for accommodating vehicles. The multistory structures planned on grid layout are constructed in rcc ‘trabeated’ modules, with least sympathy to the background, setting and other typical features of cottage design. The restrictions to construct above a particular height of 4.5 mts above adjoining road level on the valley side lead to constructions below ground floor level. These lower stories are accessed from uncovered or partially shaded stairwell, which are often slippery. Moreover, during colder months, the indoor temperature is severely affected and directly in relation to the depth of the floor as it is proportionally subjected to the sunlight.

RESIDENTIAL DEVELOPMENT

The surveys dated few years back highlight the scenario that housing sector faces a shortage up to 12.22%. The limited resources have worsened the situation over a period gradually owing to the fact that ‘*the ever increasing tourism*’ encouraged conversion of

the residences/ cottages/estates into hotels and lodges, and the bigger residential houses being converted into institutes and workplaces.

The most densely developed area of Mussoorie being ‘Kuldi’, ‘Landour’ and ‘Library’, accommodate both commercial and residential building. The residences were either on the first floor and lower levels. This pace was followed by the unplanned disinvestment of the adjoining estates and rapid construction of housing. Some names in such estates would include ‘Jennifer Hall’, ‘Rock cliff Estate’, ‘Kapurthala Estate’, ‘Radhabhawan Estates’, ‘Baroda House Estate’, ‘Phoenix Lodge Estate’, ‘Charlie Villa Estate’, ‘Twin Clark Estate’.

The standard residential design today confers to the urban multistory models, undermining the concepts of setting, compound, background, setbacks, and distance from routes and pathways. The scale of the buildings in the residential areas is altered by their increased storey heights. The width of building plots has also helped establish the distorted harmony of built mass over the periods of development.

7.4 ISSUES RELATED TO CONSERVATION OF CHARACTER IN MUSSOORIE.

Mussoorie was favored by temporary tourist patrons who occupied the lofty ridge overlooking the ‘Doon Valley’ during the Indian summers. This period often extended to months together and the ‘hillscape’ was evidently a leisure destination predominantly by virtue of the activities sustained by the majority of residing population.

The character, therefore, as in other typical ‘hill stations’ of India was marked by its picturesque and sensitive setting amidst the rich flora, its meandering pathways, numerous cottages, recreational destinations and the promenades overlooking the valley. The peaceful ambience, away from the crowd and noise of the plains, and the cool air laden with aromas of thick foliage had its specific contribution to the unique experience of ‘Mussoorie’.

The type of patronage and the population which resided for the quantity of time imparts certain imagery to the popularity of ‘Mussoorie’. Ironically though, each such feature has altered over a period of 70 years except for the economic dependence of Mussoorie’s on tourism. The extended tourism concept has been rashly replaced by

the ‘weekend tourism’ preferred by the urban middle class, whose affordability limitations have improved enabling them to explore the well famed places in India.

A drive to profit from the short term tourism has encouraged short term gain temperament wherein, the infrastructure had been impulsively modified to attend to their need. As a consequence, the ‘*summer cottages*’ have been undermined by ‘*hotels*’, the ‘*promenades*’ have been developed as ‘*shopping streets*’, the foliage replaced by dense development on line with urban models, and traffic and motor vehicles have infused the noise and smoke as ubiquitous nuisance.

Over the period of last few decades the explosion of population had dramatically affected the status and size of tourist catered and also arisen the issue of concerned interests of residing population. Thus, to provide sustaining infrastructure for housing, economic, transportation, and other basic necessities in absence of a planned approach has complicated the issues seriously.

Mussoorie was established as a major sanitarium and military cantonment and evolved as a town since then. The town developed as a centre for tourism and also administrative and prestigious educational institutions. The population of the settlement as per last records was 25000 (static) and 12 lakh (Dynamic). Projected growth of tourist population is approximately 40 lakh. However lack of any policy/guideline for the development of town, the place faces problems from the geographic, scenic beauty, and socio-economic infrastructure.

Various Issues in the town which have been observed throughout have been identified, as following. They need to be addressed in management proposals. These are summarized as:

1. Compromising on setback norms, and setting criterion of building.
2. Division and subdivision of existing properties which alters the mass and scale of the buildings.
3. Increased height and no of stories permissible are out of context of hill character.
4. Some present day buildings have unsympathetic designs and scale, which affect its setting.
5. Loss of traditional enclosed boundaries and planted fronts

6. On-street parking & off-street parking which is over-dominant in most of the streets and road
7. Cluttered and intrusive signage and unsympathetic traffic control measures.
8. Poor quality of some other street furniture.
9. Poor surfaces and the loss of some traditional surfaces in some streets, and alleys.
10. Some pedestrian links and boundaries with the town centre are poor.
11. Some unsympathetic building alterations.
12. Heavy influx of motorized vehicles.
13. Increasing population.

Although the issues have been generalized, their impact and influence varies in intensity according to the activities predominant in an area. The priority of issues to be targeted for an area thus differs from one part of the settlement to another.

An attempt has been made to target these issues in the next chapter.

**8. PROPOSAL FOR CONSERVATION OF CHARACTER OF
MUSSOORIE**

8.1 INTRODUCTION

This chapter discusses the approach which has been undertaken to conserve the character of Mussoorie. The chapter includes discussion on the character areas delineation and characteristics of each zone from character point of view. zone specific proposals to conserve the character of character zones has been provided as a set of guidelines, applicable in their exclusive context.

8.2 APPROACH TO CONSERVATION

The objective of controlling development is to protect the character from being camouflaged, destroyed and replaced. One of the principal aims ought to be the retention of the form of the land as a recognizable unit, for example a hill or a valley which create a definite boundary. If the existing significant features are to be preserved efficiently they must be given both physical and visual meaning as part of the contemporary urban fabric; combining old and new, creating a sense of unity.

The economic spine of the town is supported by tourism as evident by the quantum of dynamic population statistics. The future development must encourage and preserve the interests of this sector. Therefore conservation of character and heritage is important for the day to day functioning of the town. Seasonal tourism could be planned so as to be extended to an annual influx, if their interests are entertained beyond sight seeing.

At the settlement level the planning of the conservation act should proceed with the initial act of identifying areas on the basis of landscape, visibility of hillscape, built and open space relationship, streetscape, view- points, and predominant activities pattern. From the previous assessments of factors it is clear that common elements give the area a coherent character - its views, its predominant residential character in a setting of open spaces, the public promenade along the cliff top with various resort facilities, its historic development, its architecture and its common design themes and materials. But it is also clear that within this coherence there are different character zones which coincide with the developments that have taken place during different periods, the pattern of activities and the different uses of the zones.

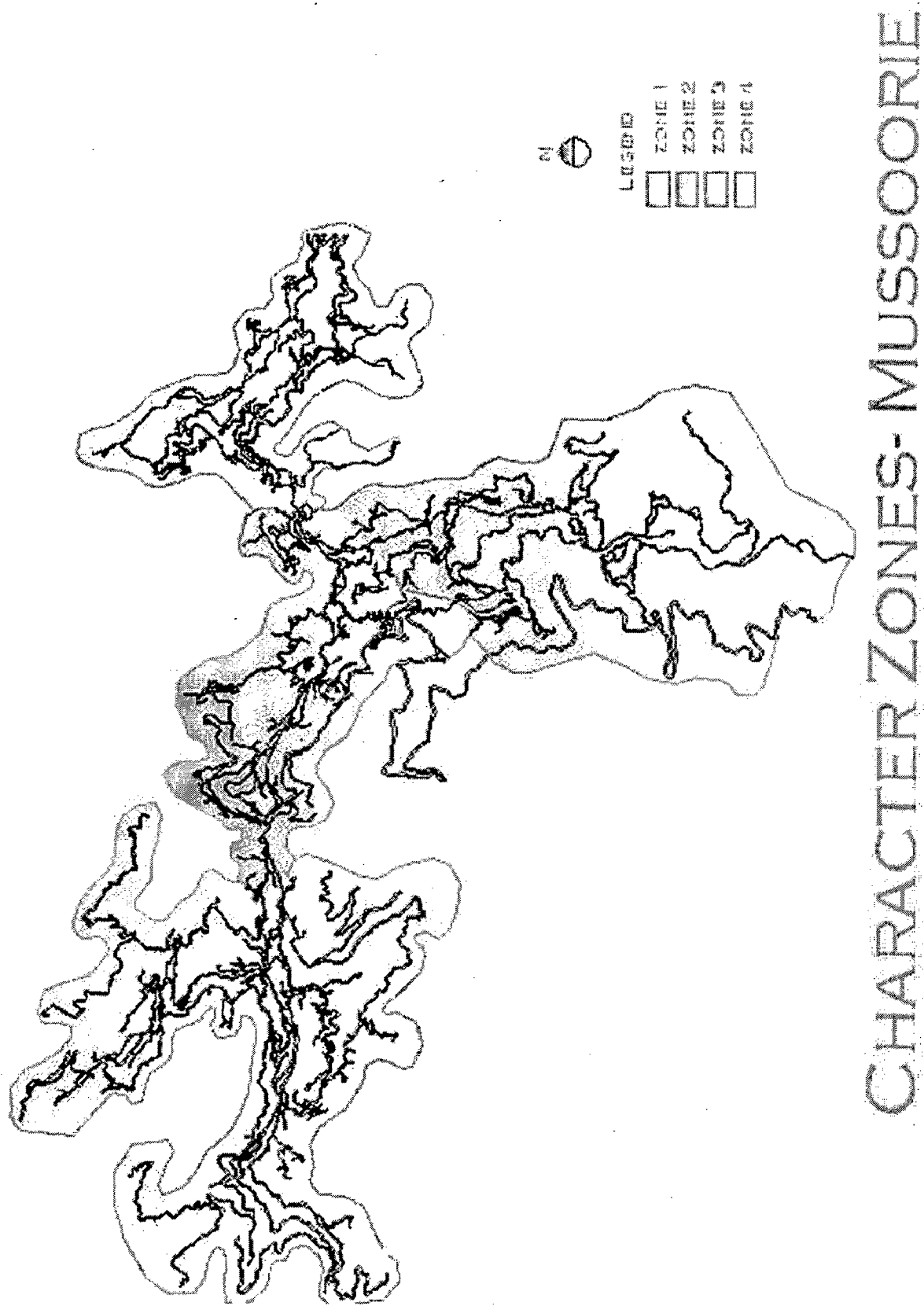
Character Areas could be seen as the *'areas of special architectural or historic interest, the character or appearance of which it is desirable to preserve or enhance'*. Planning a character appraisal for these areas helps us to set out their special interests

and provide the basis for development control and enhancement proposals. In all character zones, the character appraisal can attempt to identify the area's special interest based on its activities, heritage value, serenity, and tourism potential. Identification and delineation of boundaries should help assess the need for enhancement and assist the preparation of the local development document guiding any future proposals for the area.

8.3 CHARACTER ZONES

The entire area of the settlement has been divided by MDDA on the basis of activities, population, and basic infrastructure. These Zones identified on the basis of infrastructures, activities and the impacts of changing character in the hill settlement of Mussoorie are; In NORTH: Includes the 'Mall Road' and 'Camel Back'. The area is oriented east –west along the length of the ridge; In EAST: Includes the long area from 'Happy Valley' and 'Vincent Hill' as two separately identified areas. The region has gentle slopes and rocky terrain. The orientation is broadly north-south; In SOUTH: Includes the profusely developed area of Mall Road. This area also has a reasonable gentle slope certain reserved green pockets; In WEST: It includes the restricted area, and steep slopes and unstable land for construction.

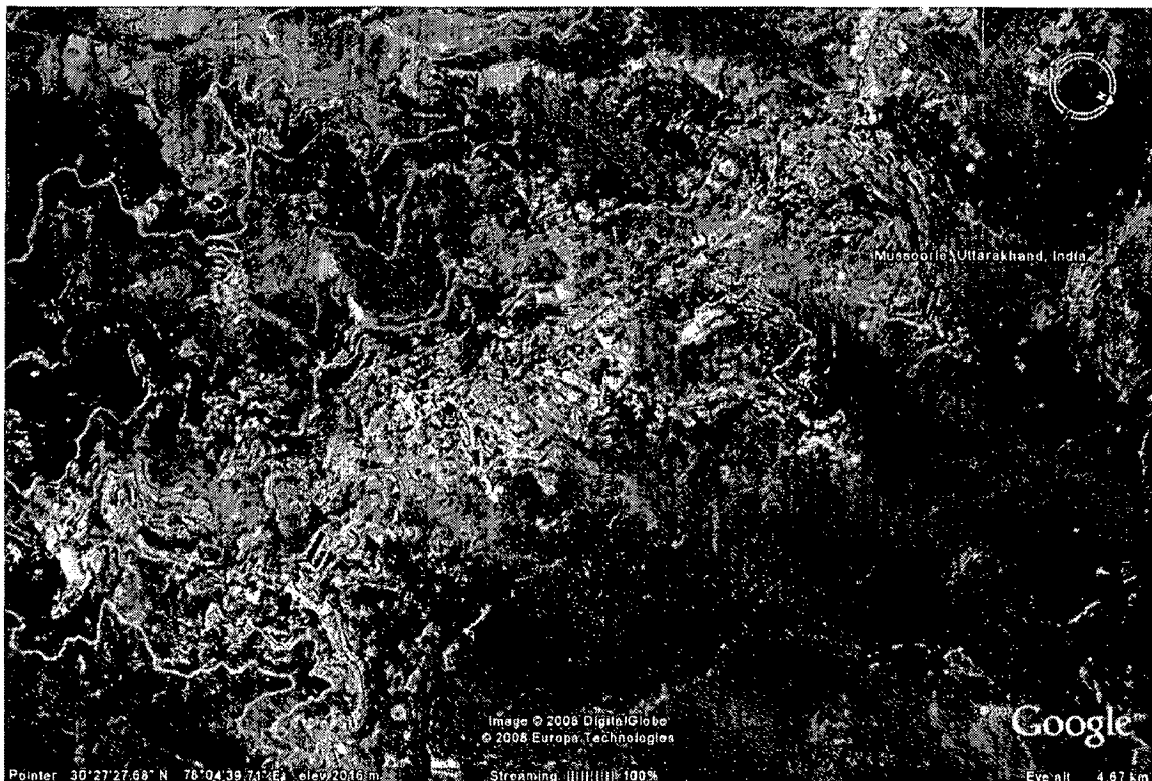
However from the point of view of architecture and urban built form, character and activities, four distinct zones can be identified. These areas have common architectural interests, and appearance which is wanted to be conserved or enhanced for reasons spelled out in previous discussions. Out of these four, 3 are character areas which have their distinctive characters. Each of these character areas has a different set of physiographic characteristics as well as issues of development (also the priority of problems to be resolved varies conspicuously in these zones.). Accordingly approach to planning for these areas has been proposed. Zone 1 most noticeably characterized by the 'Mall Road' and 'Camel Back' area, Zone 2 comprise of the stretched zone from 'Happy Valley' to 'Vincent Hill', Zone 3 Includes the later extent of the developed area of Mall Road continued towards steeply sloping area beyond 'Kin Craig', Zone 4: It includes the restricted area, of Landour Cantt, where construction activities are controlled by non-local government bodies.



Zone 1: most prominently characterized by the 'Mall Road' and 'Camel Back' area, the zone has certain non-green pockets. The zone is unified by its use as planned public promenade, its function and the views it offers of the Doon Valley. The zone has been elaborately discussed as an action area in later part of the chapter.

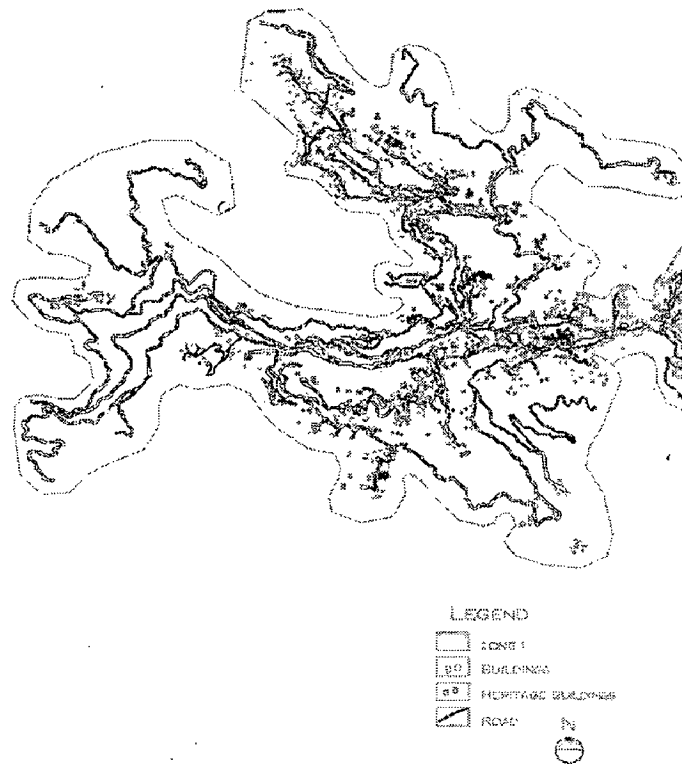


Built up pattern in Zone 1

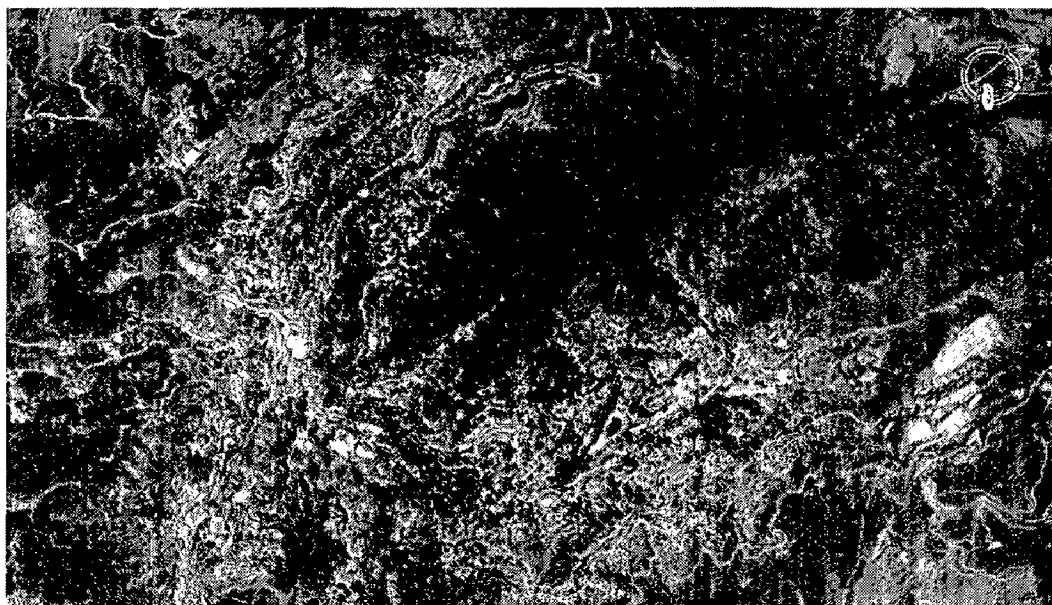


Google Image showing plan of Zone 1

Zone 2 comprise of the stretched zone from 'Happy Valley' to 'Vincent Hill'. (Fig. 7.2) The area has gentle slopes. It also includes the buildings and open spaces of the initial settlement days and also the subsequent infill. The zone has been elaborately discussed as an action area in later part of the chapter.

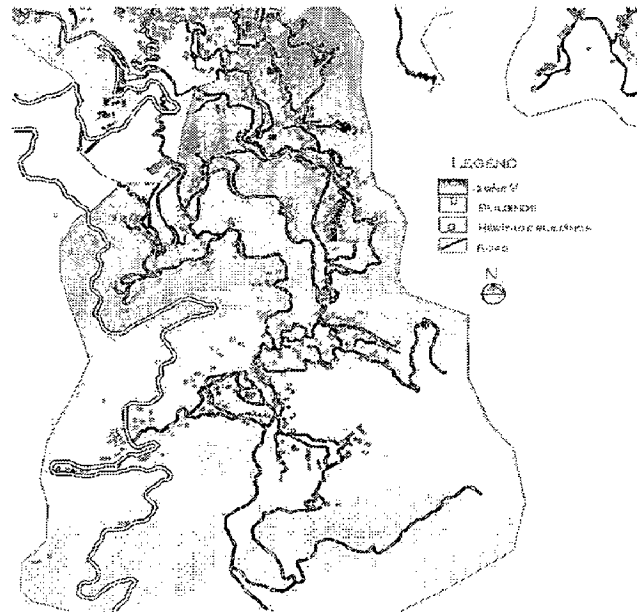


Built up pattern in Zone 2

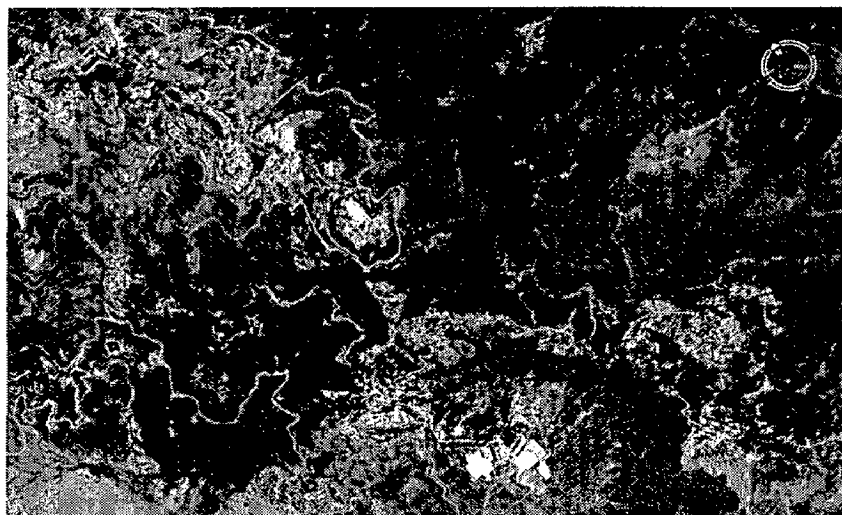


Google Image showing plan of Zone 2

Zone 3 includes the later extent of the developed area of Mall Road continued beyond the steep slope towards 'Kin Craig'. This area also has a reasonable gentle slope and certain reserved green pockets. The zone is characterized by noticeable Concentration of residential units, and compactly planned high story structures. The Commercial Street are disseminated on ground floor units and residences above Narrow streets offering Limited viewpoints to hillscape with Minimal open spaces. The Pathways are flanked by buildings with Very Steep roads at stretches posing inconvenience to traffic movement. No specific typical texture or color scheme and disorganized signage on street façade leads to a chaotic imagery. A few school buildings which occupy the hill top position in this area.

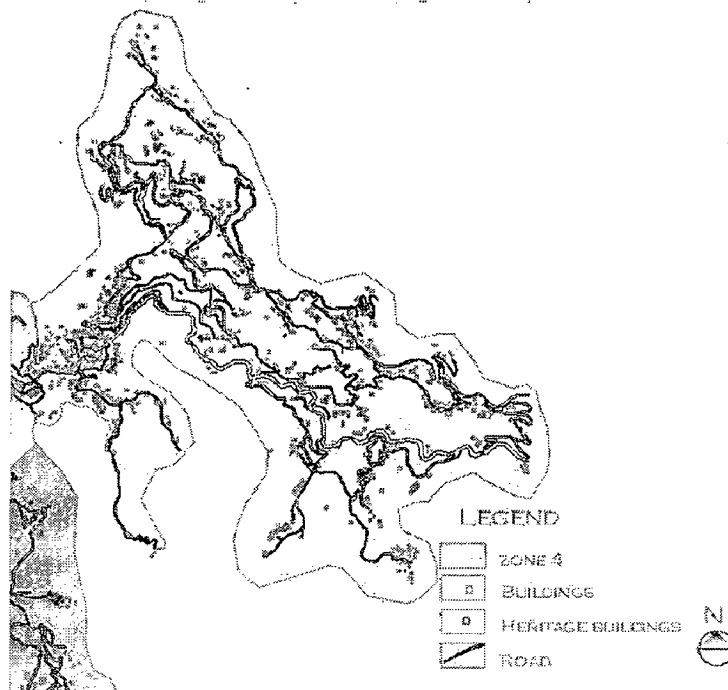


Built up pattern in Zone 3

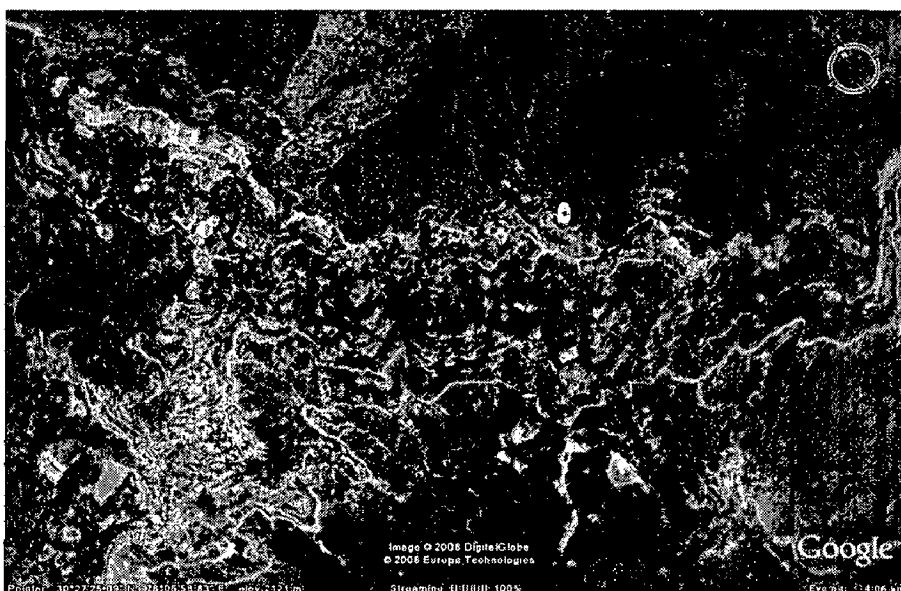


Google Image showing plan of Zone 3

Zone 4: It includes the restricted area, of Landour Cantt, where construction activities are controlled by non-local government bodies. This area is predominantly cantonment and had seen developments along the new road constructed towards 'Tehri'. The small pockets of development house the locals and related commercial activities. This area is of limited interest to the tourists, but is a popular site for major educational institutes of the town. For most of the terrain has steep slopes it discourages expansion in its zone.



Built up pattern in Zone 4.



google Image showing plan of Zone 4

8.4 Zone 1-GUIDELINES

As the hub of tourist interest and activity this zone is of prime importance. The Mall Road forms the center of activity and attraction for the majority of population in Mussoorie.

The buildings fronting Mall Road represent a sub-zone with a greater flamboyance of commercial street and prominent public buildings. With later infill buildings, the zone has a livelier visual character.

The character of this zone is challenged by the heavy tourism activity it sustains and entertains. The shops, the eating joints, the hotels/lodges, the major public buildings are all clustered and now congested because of the never ending upgraded throughout the street. However the scarcity of abundant sunlight is a limitation to development.

The promenade character of the street is threatened by heavy traffic flow load and parking shortage. The new development is in stark contrast and unsympathetic relation to the scale, bulk, and style of the existing buildings from the past. Another issue which is changing the character of the built mass is the unsympathetic division of the property over a period of time. The whims and fancies of the numerous owners have lead to a clutter of hoardings, signage, and shop front design and on-street parking problem.

Due to high density and stress in the specific regions of 'Kuldi', 'Landour', 'Library', it is important to conserve the open pockets and develop Landscape them to control the density below 150 persons per hectare. Any proposal to develop the area between 'Gandhi Chowk' and 'Picture Palace' as the central business zone would lead to enormous complication from land-price escalation to congestion and complete loss of character from historic point of view.

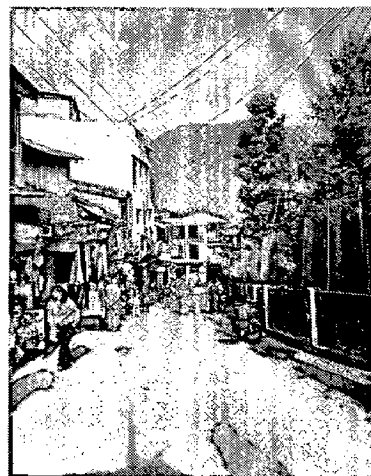
Any proposal to widen the roads would be of a piecemeal style and short term effectively considering the rise in population. It will however permanently damage the setting of the road in terms of proportion and method of usage. A scheme of landscape along and diversion of traffic would help retain the character of past.



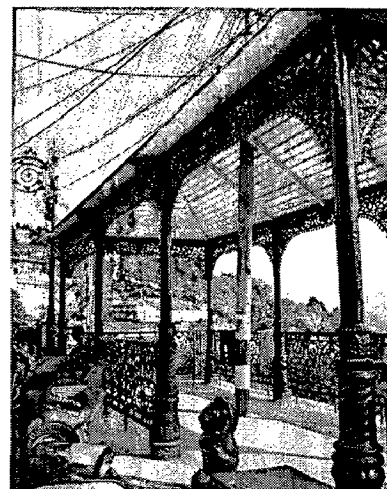
Streetscape- Mall Road



Streetscape- Mall Road



Streetscape- Mall Road



Street furniture- Mall Road



Band Stand- Mall Road



Entrance- Mall Road

Road form of Mussoorie



Fig. Mall Road – Gandhi Chowk

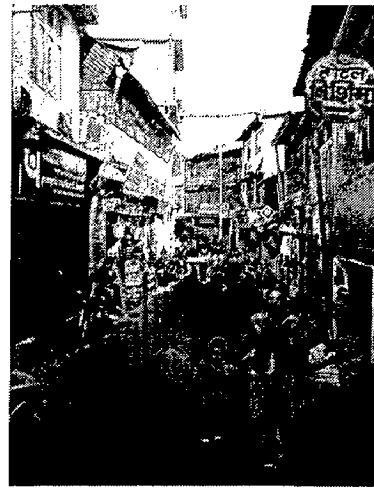


Fig. Local road to Landour



Fig. Mall Road – Parking Stand



Fig. Rickshaws stand at Mall Road



Fig. Local road to Landour



Fig. Mall Road – Gandhi Chowk

For the protection of older buildings, this zone is particularly important. This zone sites major public buildings like '*the Church*', '*the Library*', and the famous hotels like '*the Savoy*'.

1. These buildings could be grouped under a significant category suitable for conservation and attention from heritage point of view.
2. These buildings must therefore be listed and periodically assessed from maintenance point of view.
3. It is also important to curb any new development which challenges the focus away from these listed buildings.

In this zone the most significant character is that of 'The Mall' road. The various measures which could protect and enhance its character can be formed as design guidelines under various sub heads.

THE STREETSCAPE

1. The promenade character of the road must be retained.
2. The width of the road should not be widened to accommodate growing traffic
3. The pedestrian floor should be distinctly treated with a separate paving and the path could be stepped at intervals to discourage their use by vehicles.
4. Bollards should be used only where necessary to restrict traffic from pedestrians.
5. A level difference could be introduced between the walkway and driveway avoiding the role of toll gate at entrance of mall road. Increasing the kerb height and definition could avoid the need for physical barriers.
6. Few pockets must be identified and cleared for on site parking of smaller vehicles.
7. The streets character could be enhanced by planning landscaped stretches to discourage the need to use rickshaws by the tourists.
8. Certain open pockets on the lines of band stand should be deliberately designed and developed as some entertainment spots. Facilities might be needed to be designed for the success of these open areas.
9. The eating joints and restaurants must be restricted to upper floors and a compulsive provision of providing balconies or terraces should define their design. The ground floors should therefore cater to limited crowd.

THE STREET FACADE

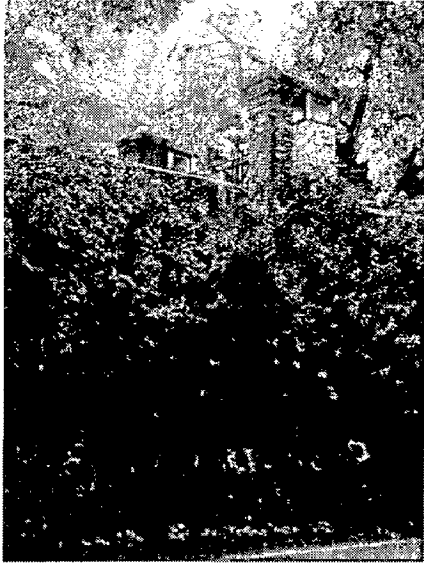
1. The height of the buildings along the Mall should not exceed 2-3 stories.
2. The roofscape must be hipped/pitched style with prominent red/green shade.
3. The size of the buildings/plots must confer to standard set of module so as to maintain uniformity in size.
4. Building facades must confer to a standard height for openings.
5. The sizes of doors and windows must be chosen from a set of standard design which should be availed by the experts. These standard designs must however together maintain a harmony in color, texture, size, and height. Excess use of glazed surface must be discouraged. The window shops should offer less distraction to the pedestrians.
6. The signage on the building must be limited to a few standard design, font, and colors.
7. Also the height of the signboards should be limited above the standard opening height.
8. Compatibility with individual buildings and the street scene should be considered more important than uniformity between branches of one company.
9. The densely packed buildings on Mall should resolve to the proliferation of inappropriate colures and color schemes.
10. Varying styles and modern materials can be particularly damaging to the appearance and architectural form of an existing shopfront as well as disparaging from the character of the street scene. Canopies should be at least 2.4 meters above the height of the pavement.
11. Roller shutters deaden the street scene when down and are not permitted. If additional security measures are required the window may be secured with an open mesh security shutter system located on the inner face of the window between the pilasters.
12. Provision should be made at the design stage to ensure safe independent access of buildings, for all persons, in light of the fact that most of the buildings open very bluntly on to the street.
13. The choice of materials should complement the character of the building and integrate with the streetscape as a whole.

THE STREETScape

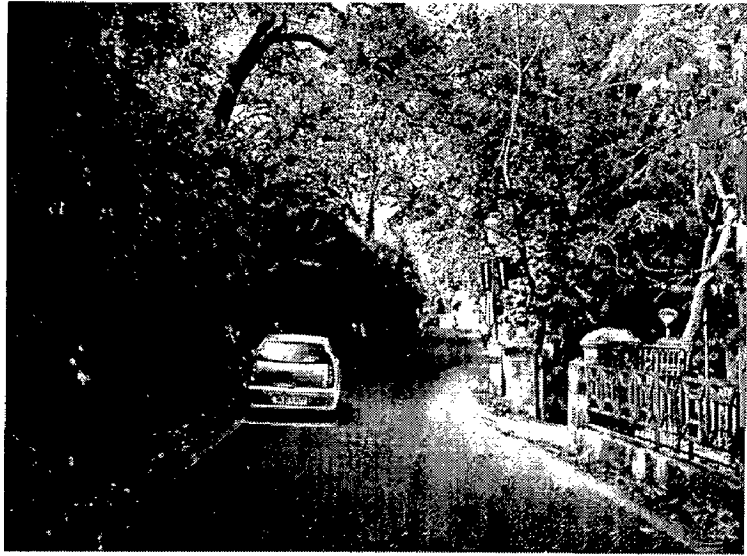
10. Seats and benches should be designed and sited in conjunction with all other street furniture. Seating should be elegant, functional and robust. Timber benches are susceptible to vandalism and deteriorate quickly. Seats should be placed to address a space or street, view, landscape feature or activity, but not where they might cause an obstruction.
11. It is recommended that there should be an audit of existing street furniture and the removal of any surplus elements. Street furniture should be carefully sited to manage movement and replace the need for physical barriers.
12. New designs should be preferably simple, elegant and appropriate to context and designed following consultation with designers groups or disability organizations.

8.5 Zone 2 -GUIDELINES

Zone 2 is characterized by formal cottage/ residential estate architecture and a formal layout, with planting, open spaces, views and distant scenic focal points. Together they give this zone a unity of design and a sense of relaxed formality. The sub zone of Vincent hill is distinguished by sense secluded informality. Majority of roads are cul-de-sac, terminating at important buildings or a cluster of buildings. The streets have the advantage of scenic hillscape view on the southern face of the zone. Majority of the buildings exist as isolated units or a cluster on the south face of the zone. This zone is under the tremendous influence of heightened building activity. The buildings on the north facing zone, towards the happy valley area are changing rapidly to multistory fashioned flat roofed units. They stand in stark contrast to the lush green ambiance. Majority of unplanned development in this region is growing along the depth of the valley obstructing the limited sun of adjoining and existing buildings. Moreover this building activity has been compromised at the cost of trees and open spaces which marked the visual boundary of the town. A few stretches on the streets and routes of the zone have been able to retain the street furniture dating back to more than 50 years. This is majorly composed of street lamps, property signage, lampposts on property gates and railings, majorly finished in profuse wrought iron details. The width of the road hardly increased from more than 6 mts. Few of the stretch site the scenic setting of typical cottages and landscaped streets and compounds. The streets on the north face are densely vegetated. The proposal for conservation for this zone must be initiated under the supervision of experts form field of urban design, Conservation, Environmental planners, Ecologists, and architects. For this purpose a body or institution be devised comprising of professionals and experts in field of conservation architecture and landscape, which could render expert solutions to the unseen dilemmas of private owners. For street furniture and landscape, the body must produce uniform designs of street furniture and a few standard signages in a catalogue to initiate some harmony in design throughout the zone. There must be a formal procedure subject to recommendations of the expert's body to obtain Planning Permission for development which materially affects the appearance or use of buildings or land. This can include, for example, re-roofing and altering windows, extensions and new buildings. These decisions must be



Typical Entrance to a cottage – Mussoorie



Local Route- Mussoorie



Old Cottage- Mussoorie



Old House- Mussoorie

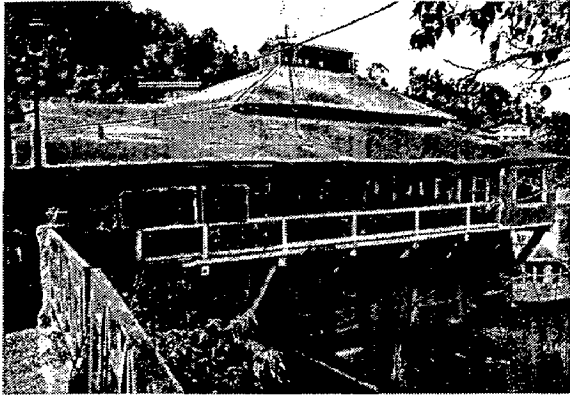


Transforming Character of Zone



Distinct residential Character of Zone.

Present Residential Built form of Mussoorie



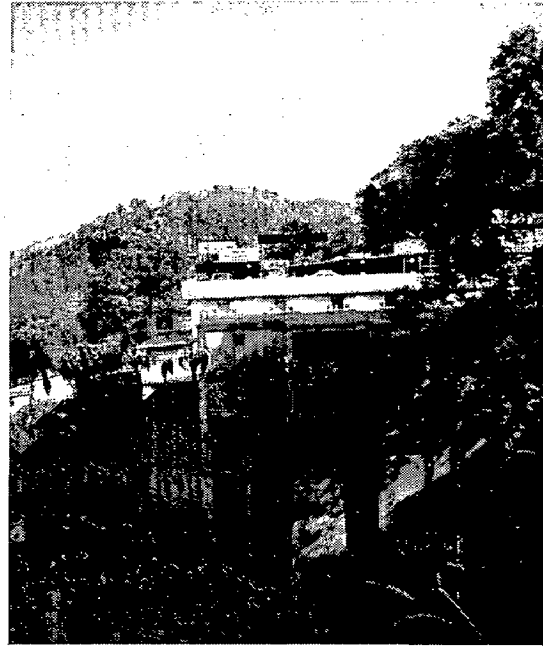
Deteriorating form of an old built house



Row housing with minimal setbacks along the road.
Source- Google earth image



Multistory residential buildings, which insist on building stories below the restricted height along the accessible road



Transforming Hillscape profile as seen from a distance

made after site specific analysis and evaluation as to how much do the new scheme affect the existing. Moreover, Consent for demolition of all or a substantial part of a building must be subject to approval of the expert's panel decision. All these provisions/clauses should be in addition to the regular assessments of structural safety and development norms of the town.

All buildings, open spaces, gardens, trees, views from public spaces and other aspects of the character of this zone should be recognized, protected and enhanced. Proposals for demolition and development should be permitted only where they would not be detrimental to the local scene and the character of the area. All development affecting the local areas of the zone should meet the following requirements as this zone houses certain pockets suitable for future developments.

AT PLANNING LEVEL

1. Density restriction must be assessed after evaluation of carrying capacity of the zone and henceforth implemented severely
2. The terracing of hill terrain must conform to IS code specification for stability and ecological constancy.
3. Any destruction of green pocket must not be for the exclusive cause of new development
4. Change of use must also be programmed with land use proposals for the whole town.
5. Landscape or green pocket development is crucial to the environmental aspect and quality of local character.

THE LOCAL ROADS

1. Much of the local character is by virtue of landscaped local ways and walkways. the landscape must therefore be strictly preserved and upgraded
2. The width of the local streets must not be altered for accommodating growing traffic.
3. Parking on roads must be discouraged.

THE BUILDING LEVEL

1. The position / setting and design of new buildings should respect the general pattern of development of the surrounding and should preserve or enhance as appropriate its townscape character.
2. The bulk of extensions on existing buildings and new buildings should be in scale and harmony with the existing and neighboring buildings and also with the immediate surrounding.
3. The proportions, detailing and materials of extensions, alterations and new buildings should be related to the immediate neighborhood styles in the area and also be sympathetic to the local areas character.
4. The height of buildings must not exceed a limit so as to be incontinently low below ground level and obstructive of views for other surrounding buildings.
5. Rooftop parking must be discouraged, for multi-storey units.
6. Stacking of stories should be discouraged and the cluster type of grouping of small height buildings with a possible common compound should be encouraged.
7. Division of property must not drastically affect the façade of the building
8. Any division of property must not be for the purpose of change in use/ activity of the building.

THE FINISHES AND DETAILS

1. Materials and Designs - when considering alterations or repairs to the property original materials and designs should be respected.
2. Yellow/white colour brick walls and soft red colour hipped roof are typical local façade finishes which give attractive "warm" tones and texture to facades also add the factor of distinct image association to buildings of older styles.
3. Fenestration must avoid excessive glazing and should preferably follow the proportions common in the vicinity to maintain a uniform character.
4. to encourage owners to enhance the property when considering alterations, by restoring any missing features and improving poorly designed alterations of the past.
5. Regular maintenance is needed to protect original features. But if more extensive work is found necessary, repair rather than replacement should be the first option and will often be better value.
6. Bricks tiles, paving slabs, stone sets, cast-iron brackets or lamps can be stored for eventual reuse; occasionally an offer of suitable building material can be made to a householder by a Preservation Trust.

9 – Conclusion and Recommendations

9.1 INTRODUCTON

In this chapter overall summary of the thesis have been discussed and general recommendations for the town of Mussoorie for its charchter conservation have been provided.

9.2 SIGNIFICANT FINDINGS OF THE THESIS

9.2.1 BACKGROUND OF HILL STATIONS IN INDIA: Hill stations in India emerged as a distinct typology of settlement which has more than often been defined as ... "*Culturally constituted behavioral environment*". Most of these stations were established from 1815-1947, around 80 in no. and were located in four clusters on the lower mountain ranges of India. The standard location was at an elevation ranging from 4,000-8,000 ft, for their climatic suitability. Apart from climatic factors, various other socio-cultural- political factors debated the cause for their establishment. These factors together determined the built morphology of these towns, resulting in a set of typical characteristics, unique to their typology. The various attempts which have been made to define the types of hill stations are limited to the criteria of their size, and location. Stratification had been attempted on the form of the layout of settlement also. Morphological pattern, value system and social organization have been so finely integrated in the form of the hill stations that they reflect a tremendous amount of information about the community which patronized them.

This feature of the stations is echoed from the typical characteristics of its built fabric, which has been analyzed in its various components of setting, road form and road layout, cottages, public buildings, open spaces, streetscapes, landscape and so on.

An analogy to these types of settlements in India has been faintly traced in the hill towns of England which have been taken up as the case study. Their evolution, their form, their characteristic features and issues faced have provided an insight to the concerns of the hill stations in India.

Also the study of various urban conservation aspects, and international charters on urban conservation have guided the approach to identify and target the problems of the hill station.

9.2.2 MUSSOORIE AS A TYPICAL HILL STATION IN INDIA: For the purpose of focusing on character appraisal of hill station a select hill town had been undertaken – Mussoorie, which is a typical example of ridge town and facing problems related with growing population and tourism. The resulting change in activities and their implication of the character of the station has been therefore identified as the major subject for study.

This Hill station was established in 1813. For various reasons, the '*hill settlement*' of Mussoorie was acknowledged amongst the esteemed tourist destinations of independent India. Mussoorie was favored by temporary tourist patrons who occupied the lofty ridge overlooking the 'Doon Valley' during the Indian summers. The character, therefore, as in other typical 'hill stations' of India was marked by its picturesque and sensitive setting amidst the rich flora, its meandering pathways, numerous cottages, recreational destinations and the promenades overlooking the valley. The peaceful ambience, away from the crowd and noise of the plains, and the cool air laden with aromas of thick foliage had its specific contribution to the unique experience of 'Mussoorie'. A complex situation is posed by the hill town, which is surviving the agonies of transition from one role to another. The status and size of tourist catered has also arisen the issue of concerned interests of residing population. Thus, to provide sustaining infrastructure for housing, economic, transportation, and other basic necessities in absence of a planned approach has complicated the issues seriously. Although tourism remains the backbone of its economic structure, the settlement through its unorganized and unplanned techniques of development is severely detrimental to the aesthetic and picturesque quality of the hill environment.

9.2.3 ISSUES OF CHARACTER CONSERVATION IN MUSSOORIE: The need to study this town is to acknowledge the concerns for the town where only marginal efforts have been initiated so far in terms of a planned future of the hill town. Important stations like Shimla and Nainital have been attended to after their character were profusely altered, and therefore any measure applied in terms of planning and designing was superficially surgical in approach. Mussoorie in light of the failed attempts of organizing and controlling the development in Hill stations needs more attention, where the charm of its character still survives to attract an annual population of 40 lakh.

9.2.4 CHARACTER APPRAISAL OF MUSSOORIE: To appraise the forces of change and their impact on the 'hillscape' is the first aspect of conserving the character. The character although needs to accommodate the new changed must however not be threatened as it still remains the major attraction for the tourist form all over India. The character appraisal has in first step delineated the character zones on the basis of activity, infrastructure and extent of development. Issues specific to the interests of the zone have then been prioritized and then a remedial approach has been suggested in form of guidelines for new development and preservation of old.

9.3 GENERAL GUIDELINES

Conservation Zones are sensitive development areas, which are a part of larger urban agglomeration possessing significant evidence of heritage. Recommendations have been framed as a specific solution for the character zones. However general guidelines which could be applicable to the overall built morphological setting of the hill station of Mussoorie have been enlisted later.

The proposal for conservation for this zone must be initiated under the supervision of a body or institution which is recommended to be devised, comprising of professionals and experts in field of conservation, architecture, and landscape, which could render expert solutions to the unseen dilemmas of private owners. For street furniture and landscape, the body must produce uniform designs of street furniture and a few standard signages in a catalogue to initiate some harmony in design throughout the zone.

There must be a formal procedure subject to recommendations of the expert's body to obtain Planning Permission for development which essentially affects the appearance or use of buildings or land. Urban conservation plans must be incorporated into the statutory Master Plan of cities.

9.3.1 GUIDELINES AT SETTLEMENT LEVEL

Guidelines at settlement level are recommended as follows.

1. The conservation of unprotected architectural heritage and sites must be sensitively planned.
2. Regulations to control or mediate development within the conservation area, including new construction, demolition or modification to existing buildings around historic structures or within historic precincts can be formulated and incorporated within the “Special Area” provision of the Town Planning proposal.
3. All buildings, open spaces, gardens, trees, views from public spaces and other aspects of the environment which contribute to the character of Character Area should be protected and enhanced.
4. Proposals for demolition and development should be permitted only where they would not be detrimental to the local scene and the character of the area.
5. Density restriction must be assessed after evaluation of carrying capacity of the zone and henceforth implemented severely.
6. The development proposal should attend to encouraging job opportunities. For example the bed and breakfast scheme in Delhi distributes the load of tourists population, reducing the demand of no. of lodges, and hotels.
7. Change of use must also be programmed with land use proposals for the whole town. For example, allowing office accommodation to replace residents’ uses will absorb some of the demand for new office redevelopment.
8. The larger individual properties are often the grandest architecture a town possesses. These must be audited and enlisted as heritage buildings.
9. Landslides, boulders on cultivable land, clogging and disruption in water channels or resources are major consequences of unplanned activity permits. these need to attended to from environmental point of view.

9.3.2 GUIDELINES FOR PUBLIC REALM

All development plans for public realm should meet the following requirements:

- 1) Provide alternate solutions to the parking shortage.
- 2) Consider the restricted passage capacity of roads- developing such pockets on outer areas and connecting them with pedestrian ways to appropriate destinations can be considered.
- 3) Proposing the qualitative upgrading of such pedestrian ways is of critical importance to maintain the character of promenades.
- 4) Any proposal is to decentralize the development from the Mall Road area and develop other potential tourist interests could be considered embarking upon.
- 5) The increased use of vehicles questions the compactness of development. The removal of all traffic over an extensive area may inadvertently destroy much of the area's visual vitality, though this is obviously a matter of selection and degree.
- 6) Piecemeal proposals to accommodate traffic which will result in widening and straightening streets, should be avoided wherever possible, at least until a full assessment has been made of the long-term proposal. Restriction of on-street parking will probably be essential to avoid widening or straightening streets.
- 7) New permanent off-street car parks will be an early necessity.
- 8) Public transportation plays important role in reducing private vehicle movement. This provision should be explored.
- 9) Provision should be made at the design stage to ensure safe independent access of buildings, for all persons, in light of the fact that most of the buildings open very bluntly on to the street.
- 10) Varying styles and modern materials can be particularly damaging to the appearance and architectural form of an existing shopfront as well as disparaging from the character of the street scene.
- 11) The signage on the building must be limited to a few standard design, font, and colors.
- 12) Rationalizing street furniture, such as street lighting, bus shelters and litters and its establishment at relevant locations is important.

- 13) Seats and benches should be designed and sited in conjunction with all other street furniture. Seating should be elegant, functional and robust.
- 14) Seats should be placed to address a space or street, view, landscape feature or activity, but not where they might cause an obstruction.
- 15) Bollards should be used only where necessary to restrict traffic from pedestrians

9.3.3 GUIDELINES FOR NEW BUILDING

All proposals for new buildings should meet the following requirements:

- 1) The setting and design of new buildings should respect the general pattern of development of the area, and should preserve or enhance as appropriate its townscape character.
- 2) The extensions and new buildings should be comparative and in accord with the existing and neighboring buildings and with the area as a whole.
- 3) The proportions, detailing and materials of extensions, alterations and new buildings should be appropriate to the area and sympathetic to the existing and neighboring buildings.
- 4) Colour of walls and hipped roof are typical local façade finishes typifying its tones and texture adds the factor of distinct image association to buildings of older styles of an area. These must be retained.
- 5) Buildings immediately along the road should be discouraged.
- 6) The no. of stories in a building should be appropriate to maintain a desirable population density in the area.
- 7) The height of buildings must not exceed a limit so as to be incontinently low below ground level along the valley side and obstructive of views for other surrounding buildings.
- 8) Rooftop parking must be discouraged, for multi-storey units.
- 9) Cluster type of grouping of small height buildings with a possible common compound should be encouraged, and the stacking of stories should be discouraged.
- 10) The terracing of hill terrain must be in accordance with safety and environmental sustainability norms.

- 11) An area of low-cost housing can result in the deterioration of more expensive historic buildings near by.
- 12) When considering alterations or repairs to the property original materials and designs should be respected.
- 13) Opportunity to enhance the property must be programmed, when considering alterations, by restoring any missing features and improving poorly designed alterations of the past.
- 14) Division of property must not drastically affect the façade of the building
- 15) Any division of property must not be for the purpose of change in use/ activity of the building.
- 16) Maintenance - regular maintenance is needed to protect original features. But if more extensive work is found necessary, repair rather than replacement should be the first option and will often be better value.
- 17) Priorities for improvement for all types of housing areas must be established, and phasing of proposal lined up with those over the town as a whole.
- 18) Bricks tiles, paving slabs, stone sets, cast-iron bollards or lamps can be stored for eventual reuse; occasionally an offer of suitable building material can be made to a householder by a Preservation Trust.

9.3.4 GUIDELINES FOR LANDSCAPE AND OPEN SPACE

Considerations for landscape and open spaces proposed are-

- 1) Preservation and rejuvenation of green pockets must be an integral part of the development scheme.
- 2) Landscape or green pocket development is crucial to the environmental aspect and quality of space program.
- 3) The inconvenience of living in traffic noise and fumes make could be resolved by a simple device such as a wall or embankment to tree planting.
- 4) Any destruction of green pocket must not be for the exclusive cause of new development.

9.4 CONCLUSION

The conservation of character of hill town is an important issue which should be attended to with utmost sensitivity and sincere intentions. The unique culture-built up morphology relationship which exists in these town by the virtue of their tourism based sustainability is a classic typology of settlement variants which prevail in their exclusive context in the Indian sub-continent.

The main issues to be considered for the character appraisal and conservation are based on a participatory approach towards conservation and progressive approach on planning and urban designing with sensitivity on the part of all experts, responsible in framing and supervising the development of Mussoorie.

Successful implementation of character conservation should establish a long term economically and physically viable and successful future for the hill station of Mussoorie.

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