

ARC 512

REDESIGNING GULISTAN HAWKERS' MARKET, DHAKA

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ABSTRACT

Gulistan is an overcrowded street of Dhaka city in Bangladesh. It means 'Flower Garden', but there are no flower gardens at this place. Several important streets are connected to Gulistan which makes it busy and crowded. The street is full of roadside shops. Thousands of people visit this place for their daily needs. The professional community that deals with urban issues, planning and development studies are thinking seriously about the urban issues in Dhaka city. They all think interventionist and revivalist projects on a massive scale in various aspects is required to rescue Dhaka City from its race to self-destruction. This paper will try to establish a form of invention, in typological, morphological and functional dimensions. The basic idea is to integrate the development projects in specific urban areas and merge it with city scale.

INTRODUCTION

1.1 PROJECT BRIEF

- **PROJECT TITLE:** Urban Integration of Gulistan, Dhaka
- **PROJECT CLIENT:** Dhaka South City Corporation
- **PROJECT SITE:** The location of the site is at Gulistan, Dhaka. The site starts from the Bangabandhu Avenue in front of the Bangladesh Secretariat and will extend accordingly.

1.2 INTRODUCTION

Dhaka is a thriving, colorful and congested metropolis of some 18 million people. Given the number of people that live there, and the density they live in, Dhaka is one of the most frenetic places on Earth. The streets and rivers are filled with colorful chaos. The existence of a settlement in the area that is now Dhaka dates from the 7th century. Dhaka city has population density of 45,000 per square kilometer, nearly 75 percent more dense than Hong Kong. No city in the world uses land as efficiently as Dhaka. Dhaka city being the center of administration, business, trade and commercial, education as well as traditional cultural center, a large number of people from all over the country flock to Dhaka city in pursuit of education and job opportunities.

Gulistan is an overcrowded street of Dhaka city in Bangladesh. It means 'Flower Garden', but there are no flower gardens at this place. Several important streets are connected to Gulistan which makes it busy and crowded. The street is full of roadside shops. Thousands of people visit

this place for their daily needs. The road is always occupied with traffic and passersby. One of the oldest transports of Dhaka City 'Tom Tom' can be seen in this street. From street to multistory build every place of Gulistan is market. The road is always busy with street selling, continuous moving of rickshaw, bus, bike however moving of restless men and women.

Along with multistory market all roads side of Gulistan has temporary hawker's shops. Marginalized community general low income people are the main customer of this market. There are more two thousands hawker shops where more than 20000 people works. There is a shrine right at the middle of the road. It is called "Golap Shah's Shrine". Thousands of people show their devotion to this shrine every day and make donations so that their desire can be fulfilled.

There is one major bus stand situated in Gulistan, called the Gulistan (Fulbaria) Bus Station. (Butler; John , 2008). Most of the buses here are public and the number of buses is very few according to the number of passengers. People often get on top of the bus as there are no longer spaces inside the bus. Some people can be seen hanging at the doorways. Banga (or Bango) Bazar is the prime shopping place here. New and fashionable clothes can be found here with reasonable price. There are hundreds of shops inside the place. The narrow pathways make it hard to roam inside the vicinity. The place is so congested and hot that it is hard to stay long time inside the complex. There used to be a Cinema complex ('Gulistan Cinema Hall') here which was one of the oldest architectural monuments. Even though the design was not eye catching and the structure was bizarre, it was one of the modern buildings in Dhaka city. (Hossen, Asiatic Society, p. 518)

1.3 Problem Statement

Due to the ever-increasing economic activities Dhaka today has turned into a busy city. True that Dhaka continues to ensure means of sustenance for its inhabitants but in lieu Dhaka is losing the ecological balance. A cursory look at the newspapers reveals dazzling apartments, shopping centers and skyscraper office buildings and in the same persistent encroachment of the lakes or forced squeezing of parks and gardens. The open places where the citizens have opportunities to meet are also being reduced. According to reports in the daily Janakantha on

March 20, 2002, a market has been erected piercing the boundary wall of Gulistan Park with the approval of no one other than the Mayor himself.

The Bangabandhu Avenue of Gulistan is always crowded with people and vehicles that it has become the busiest road in the city. The problem starts with the unplanned stopping of the buses and unethical behavior of the vehicles as well as the passengers.

There is that another problem that has the worst impact is the misuse of pedestrian walkways of that area. The problem was created by the vendors who have illegally taken over the pedestrian walkways. So the dwellers are using the main road as they have no other options left. That causing serious traffic and congestion that causes problems to the other parts of the city connected to Gulistan area.

There are a significant number of hawker's markets and vendors in that area. Fruits, clothes, ornaments, and much other merchandise are on display on these streets, giving the look of a rundown outdoor bazaar. On Sunday, these streets are fully grabbed and no space is left for pedestrians to walk by. There is no way one can use rickshaws or vehicles on these streets. The vendors and illegally parked vehicles cause frequent traffic snarls in the area where important offices like Dhaka South City Corporation and Fire Service headquarters are located. Wholesale markets of clothes, footwear and other goods are also situated in Gulistan.

Police are seen struggling to control the traffic, but they seem indifferent about the encroachment on the streets of Gulistan. Police have set up barricades on a lane of the street linking the 'Underground Market' beside Mahanagr Natyamancha and Golap Shah Mazar. The street is entirely taken over by the vendors, who are selling goods on paper or baskets. Some have even set up makeshift shops. Many alleged that the encroachers pay up the police and politicians for grabbing the streets at Gulistan.

1.4Project Rational

In many Asian metropolitan areas and large cities, transportation issues are major concerns among ordinary citizens and policy-makers alike. Road congestion is the most common issue, arising when traffic volumes exceed the free-flow design capacity of the facilities that channel traffic flows. There are numerous measures that can be taken to alleviate urban traffic congestion. There are numerous measures that can be taken to alleviate urban traffic

congestion. At a conceptual level, it is possible to identify and classify these measures according to three broad categories. The first category comprises measures that address the supply side of transport facilities (i.e., they are basically directed at increasing urban transport capacity). Measures in the second category are aimed at managing the demand side, specifically, in terms of encouraging efficient use of existing transport facilities (e.g., road space in congested central areas). The third set of measures concerns the development of alternative urban structures conducive to the dispersal of economic activities and improved physical integration between employment, amenities, and housing.

1.5 Scope of the Project

A notable part of the large population of Dhaka belongs to the middle class. Though in terms of number the low income group of people is in majority, yet it is also true that the middle class wields a bigger impact on policy formulation, planning and on implementation process and they form the most conscious part of the society. In respect of the existing recreational facilities, particularly out of door facilities, the thinking of the middle-income group of the community is important. The reason is that, through it the aspect of the mental comfort of this most conscious part of the society can be known on one hand and on the other, a comprehensive idea about the outdoor recreational facility in the city can be obtained. Transport experts have criticised the plan of constructing an elevated walkway in Gulistan area instead of freeing the existing footpaths, saying it could be disastrous for the city's future transport plans. This paper reviews land transport policies and the various measures that Dhaka City Corporation has undertaken to alleviate urban traffic congestion. Its focus is on the actual implementation of policies and the lessons learned from Singapore's experiences. The paper's objective is to identify the implementation process and those policy elements that appear most replicable in other Asian cities, given the opportunities and constraints faced by each city as well as the particularities of their contexts.

1.6 Aims and Objectives:

Scope of this project can be incorporating architecture and urban design issues together. Scope of this project can be incorporating architecture and urban design issues together. This project deals with issues such as urban Transport Planning, Urban Intervention, Pedestrian network, and Urban Regeneration. The fun and the challenge of this project lie on how to address these issues and simplify them into a precise solution. The challenge of this project lies in accommodating efficient commute system for the large number of people from both inside and outside of the city. This project should not become hindrance for the local inhabitation farther more it should provide a local inhabitation not only with transportation system but also civic facilities and a cultural destination.

- Finding a proper solution for the existing road network.
- Relocating and integrating the existing business and administrative built areas and merging the commercial and civic space.
- Preserve urban green and create urban civic space.
- Integrating commercial, recreational and cultural activity.

LITERATURE REVIEW

Public place and urban life - these two words are inextricably related with each other. As a historic city, in context of Dhaka, the traditional public places were the center of city image. These impulsive spaces played a significant role in the physical setting of the city as well as to form community culture and social value. The changes of Dhaka through different social and political period of times have resulted in a dynamic transformation of its public place and public life. Especially, in recent times, many of the public places are losing their inclusive characters. No more, these places remain as key attraction points for common people. Hence, from urban planning perspective regeneration of these places as an inevitable component of the city has become imperative to ensure an inclusive urban environment. But prior to that, exploration of the changing nature of public places and identification the key issues have become important to bring desired improvement through proper planning, design and management.

2.1: DHAKA CITY

Dhaka city has undergone with massive changes in its social, economic, political, morphological and psychological aspects. Only these three facts are enough to give an impression

- 1947: Capital of Provincial East Pakistan: 336,000 inhabitants
- 1971: Political center of new Bangladesh: 1 million inhabitants
- 2001: World's first megacity in a less developed country: >10 million inhabitant

As made clear in the introduction, this paper aims to show the potential of a designed architectural context in creating a positive impact in the city and ways it can be maximized by integrating it into the ongoing development. By no means is this treatise an attempt of city planning proposals or reformations but rather an analytical view of how the already planned development projects can be integrated, first in an urban scale and then on a city scale into a singly defined entity to achieve maximum efficiency. Since the idea sought after in this paper works with existing proposals of various developments, the planning issues are not scrutinized

at all. Yet, it is important to analyze the city from various aspects map that is ever evolving at a rapid pace. No idea for the city should be conceptualized without a sound background of all the issues affecting the city. In this chapter, such an attempt is made to know the city better, not just from the viewpoints of urban issues but rather an overview of an array of perspectives on Dhaka and then arrive at a summary of the problems the city faces and current development proposals.

Dhaka is now a member of the —mega-city|| family of the world. Dhaka, the fifth largest mega city, comprises Dhaka City Corporation (DCC) and five adjacent municipal areas i.e. Savar, Narayanganj, Gazipur, Kadamrasul and Tongi (BBS, 1991). The area of Dhaka mega city is 1,353 km² of which DCC occupies 276 km² (BBS, 2001). According to United Nation Population Fund (UNFPA) the total population of Dhaka mega city is now over 12.3 million of which population of DCC is about 8.4 million. According to Bangladesh Bureau of Statistics, population of Dhaka mega city and DCC is about 9.9 million and 5.3 million, respectively (BBS, 2001). The population density of DCC is 19,286 per km² which is more than double of the mega city average of 7,918 per km². The city is situated between 23°42' and 23°54' north latitudes and 90°20' and 90°28' east longitudes. It is surrounded by the river Buriganga on the south, Turag on the west, Tongi river on the north and Balu river on the east (Banglapedia, 2003). The geographical location and administrative units of the city is given in Figure 1.1. The city usually experiences characteristics of tropical monsoon climate with an annual average temperature of 25°C and 2000 mm of average annual rainfall (Wikipedia 2011). There are a number of services providing organizations. Of them, the key organizations are Dhaka City Corporation (DCC), Dhaka Metropolitan Police (DMP), Dhaka Water and Sewerage Authority (DWASA), Dhaka Electric Supply Authority (DESA), Titas Gas Limited, Bangladesh Telephone and Telegraph Board (BTTB), Rajdhani Unnayan Kortripakhkha (RAJUK), Dhaka Electricity Supply Company (DESCO) and Department of Environment (DoE) serving city dwellers with specific utilities (Siddique et al, 2000). Area under jurisdiction of different authorities serving Dhaka also varies. Dhaka Metropolitan Area (DMA) is somewhat larger than the DCC, and currently holds 21 police Stations. Dhaka Statistical Metropolitan Area (DSMA), which is considered as Dhaka Mega city. Rajdhani Unnayan Kartripakkha (RAJUK) has a Strategic Planning Zone-wise definition of Dhaka city which is known as Dhaka Metropolitan Development Plan (DMDP).

It currently consists of total 26 zones of which 19 may cover Dhaka Statistical Metropolitan Area, though the total area is about 1528 km² (DMDP, 1997). Boundary of different authorities, and built up and low-lying areas of Dhaka city respectively. But it is true that most people think that Dhaka means the municipal corporation and few adjoining developed areas.

Historical sites and nature spots such as the Lalbagh Fort, Ahsan Manzil Museum, Bahadur Shah Park, Curzon Hall, Baldha Garden, Ramna Green, Suhrawardy Uddyan (Garden), National Park,

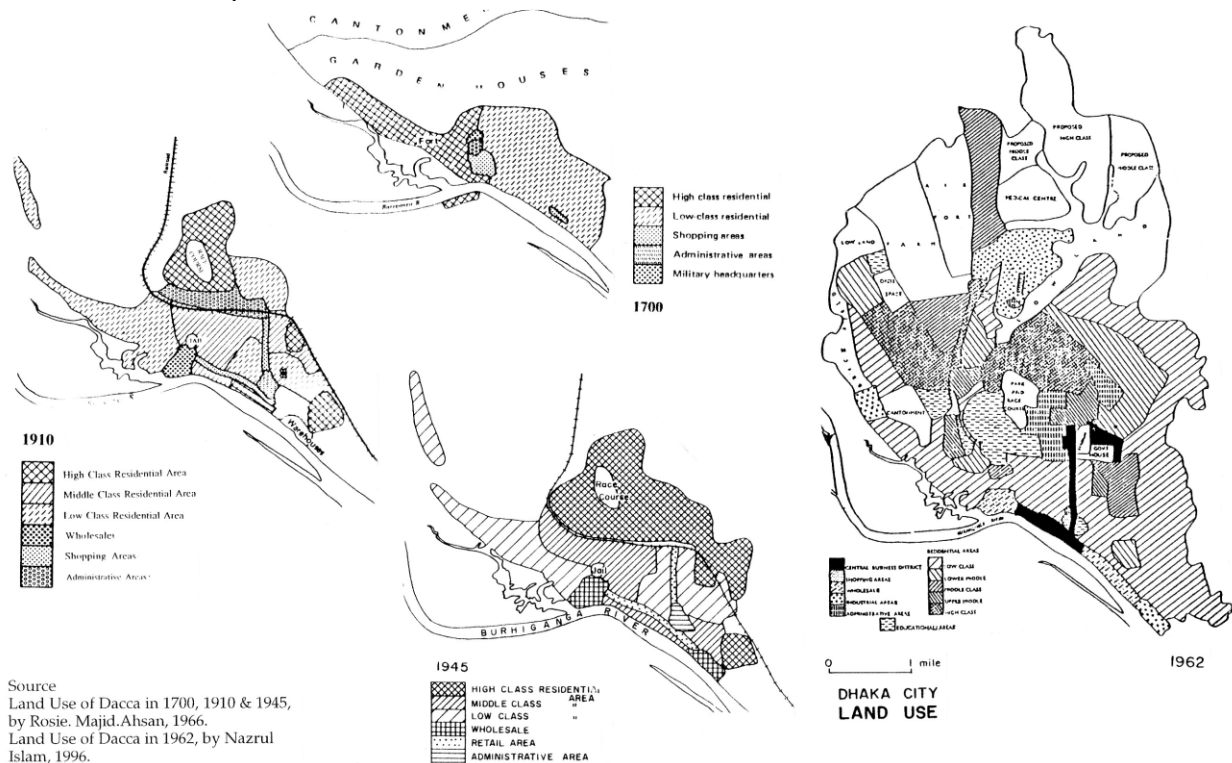
Botanical Garden, Dhaka Zoo, Shaheed Minar, National Museum stand as witnesses to the legacy of Dhaka. Figure 1.3 depicts location of historical places of Dhaka city. Most of the government and non-government regulatory and administrative headquarters are situated in Dhaka. The advantage of multi-way communication system with all districts, location of primary international business house, trade and commerce play as the primary pull factor. Rapid and unplanned urbanization, commercial development, along with population pressure have made Dhaka an environmentally polluted city in the world. The surrounding river systems have become badly polluted due to chemical and microbial contamination by the industries situated on the banks of the major rivers and untreated sewerage discharge from large part of the city. The groundwater level of the city is also being affected with a fall of more than 0.75 meter per year (Hasan, 1996).

2.2 LAND USE PATTAERN

Historically, the use of land for development of city started from the present old town and along the bank of Buriganga River. Later it expanded towards the north, and the flow of expansion was more or less continued in most of the regime though the remarkable growth was observed after the independence. The spatial distribution of land use distribution of Dhaka city is shown in Figure 2.1.

Dhaka City Corporation (DCC), central nerve of the Dhaka Mega City, presently covers more than 25 percent of the total land area of mega city. In fact, after the liberation war, the physical feature of the main city has been changed and covered by rapid development both by the government and private sectors. These include development of commercial, industrial, educational, health, communication and residential sectors. Presently, the city development including all the above sectors covers approximately 40 km from north to south and 14 km from the east to the west (DCC, 2004). Many areas of the eastern part of the city, being low lying, support agricultural practices, which ultimately meet a major part of the regular vegetables

demand of the city dwellers.



2.3 Planned Schemes - Geometric Layout

The grid pattern of roads was introduced in the city for the first time in Wari and Gandaria in 1885. The state sponsored planned extensions for the upper classes were contrasted with the unsanctioned, spontaneous, tawdry development in the old city. Comprehensively planned residential areas of Dhanmondi, Gulshan, Banani, Baridhara and Uttara etc. are the successors of this type. Their street layout follows a rigid gridiron pattern with some semicircular arcs. [Fig.3b] The land formation exerted a little influence on the new development and this why they are found globally to be in some way more logical or imposed upon their surroundings. The high space and service standards and physical designs of these schemes have an aura of Western suburbia, modernity, and status. They essentially follow the civil lines model, though

without the Imperial grandeur. Such planned schemes were generally situated at the fringes when the plans were undertaken; however now a days they are surrounded by the high density low income living due to the increase of population.

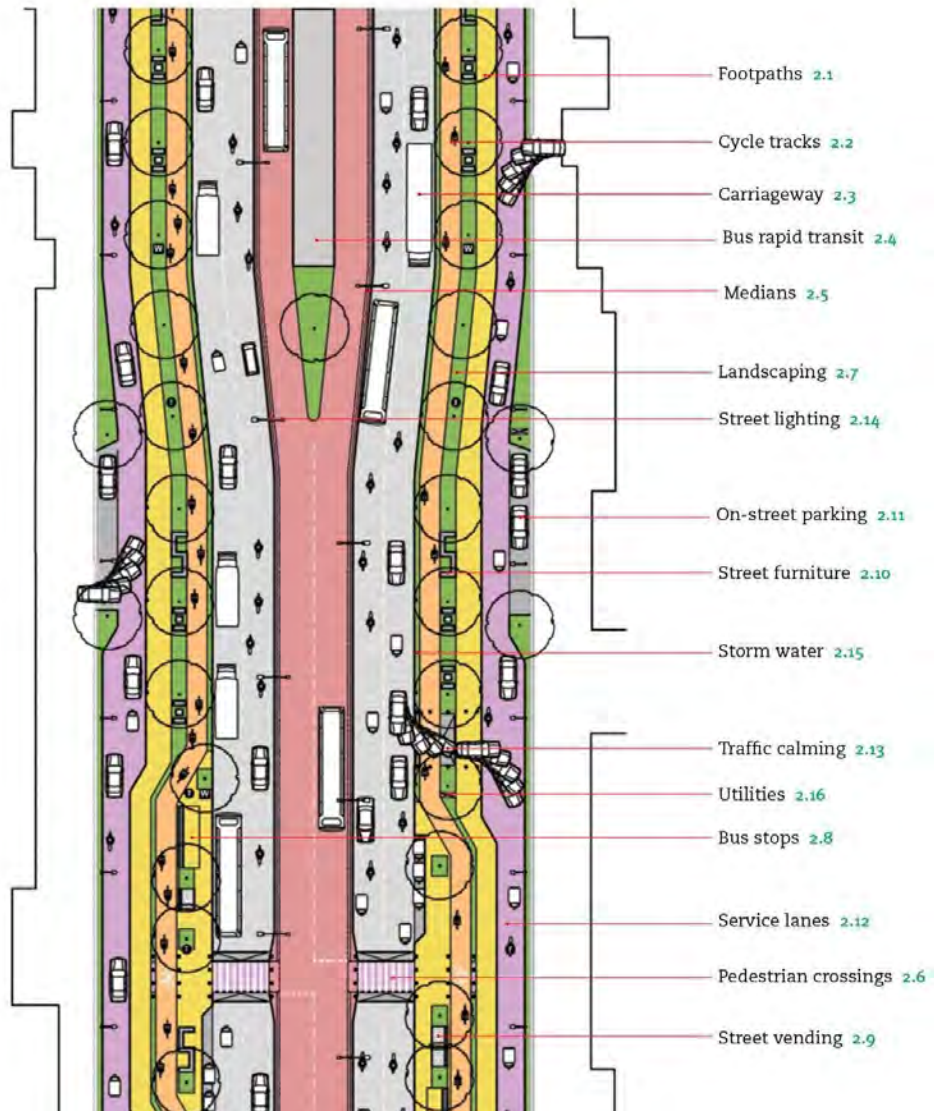
2.4 TRANSPORTATION SERVICE AND MANAGEMENT

According to the National Encyclopedia of Bangladesh (Banglapedia), the roads of Dhaka city occupy only 8% (2,230 km) of the total surface area whereas according to standards, at least 25% is required to facilitate a smooth transport system (Banglapedia, 2003). The width of the city roads vary from 6m to 40m, though some of the roads are found to be less than 6m in width in the old town (Meenar, 2000). The total length of the DCC roads in another report is 1,968 km, (Rahman, 1998) but according to DCC officials, the length is 2,300 km, of which 200 km are main thoroughfares, 110 km secondary roads, 152 km feeder roads and the rest are narrow lanes and by-lanes (The daily Star, January 18, 2004). The transport The high concentration of tanneries in the Hazaribagh area is the main source of water, air, soil pollution resulting occupational health problems. 27 Environment and Social Situation network of Dhaka city is shown in Figure 2.5. It is important to note that 300,000 rickshaws of Dhaka city account for 56% of the total vehicles which occupy 73% of its road surface (Ahmed, 1998 in Siddiqui and others, 2000). But the DCC has the registration for only 88,000 rickshaws (The Daily Star, Oct 26, 2003). The total number of registered motor vehicles up to 2002 in Dhaka was 293,973, which accounted for 39% of the total transport mode, whereas walking and rickshaws share 45.8% and 15.2%, respectively (BRTA, 2001). However, the government has taken initiatives to remove unregistered rickshaws and restricting their movement in some of the main roads. With rapid urbanization and excessive growth of population and settlements, the city failed to upgrade its road transport and network system, even though the growth of motor vehicles per year is about 6-7%, which is equal to or may even be more than the average population growth, (Siddiqui and others, 2004; DTCB, 2002). Of the proposed total of 59 electronic traffic signals, a few have already been installed in different parts of the city, particularly, in Gulshan and Dhanmondi. This will be controlled by the DCC as soon as the installation is completed. According to a daily newspaper, nearly 80% of the licenses of taxicabs are illegal though they regularly ply the roads along with the huge number of nonmotorized vehicles (rickshaws) and create severe traffic congestion (The Daily Star, 22 September, 2003). Bangladesh Road Transport Authority (BRTA), with the total manpower of 291, is responsible for the control and management of road transport (BRTA, 2004). The Dhaka Metropolitan Police (DMP) is responsible for traffic management. The DMP comprises a total of 2,008 people including 479 traffic sergeants and 1,406 constables (DMP, 2004). These two organizations work as the supreme authority of controlling the total road transportation and managing the traffic of Dhaka city, with the necessary participation of a few other organizations such as the DoE, DCC, BRTC and the private transport sectors. Bangladesh Inland Water Transport Authority (BIWTA) deals with the development, maintenance and control of inland water transport. The H o q u e | 30

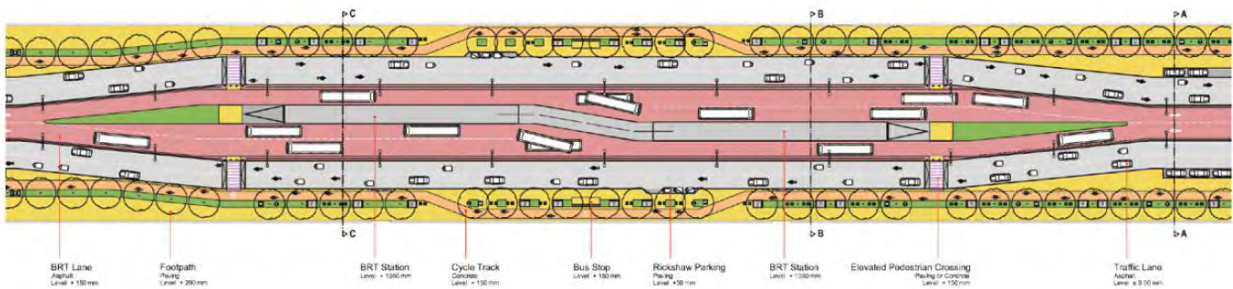
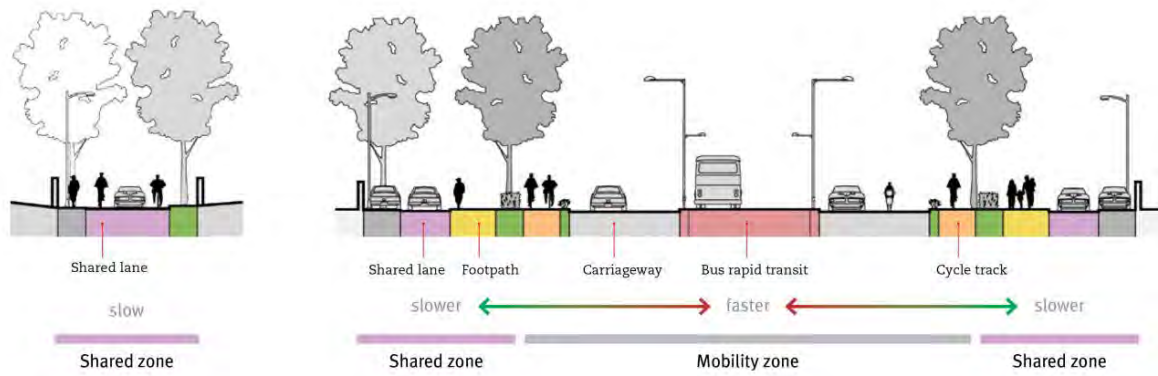
river port established on the Buriganga River at the extreme south end of the city is used for water transport communication to all over the country. Bangladesh Railway is responsible for railway communication throughout the country. The largest station, the Kamalapur Railway Station, is situated at Kamalapur, close to the Motijheel area. The Civil Aviation Authority of Bangladesh (CAAB), an autonomous body is situated in the northern part of Dhaka. CAAB deals with all the aspects of aviation including airports, runways and air traffic control, control towers, operation and administrative buildings, car parking, air navigation, radio communication system, etc. Both domestic and international flights are handled at this airport.

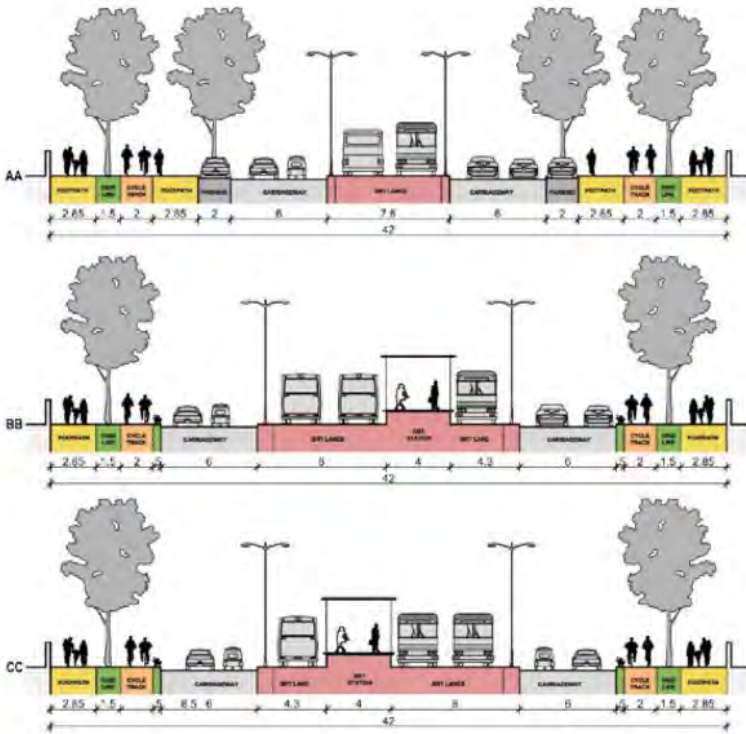
2.5 City, roads, streets and people

According to Kevin Lynch a city is formed by five urban elements; paths, edge, nodes, landmark and district. Paths are the most dominant element of the city. First and foremost, a path must be identifiable, and then followed by its continuity. Moreover, paths with clear and well-known origins and destinations have stronger identities and help tie the city together. After the directional qualities are determined, the next step is to consider the scale characters of paths. A series of nodes and landmarks are the most common way to achieve it. In general, it is impossible to create a clear city image while its paths remain confused and disordered(WenhaoYue ,2014, on Kevin Lynch's image of the city.) For Dhaka city where it is overbuilt everywhere, paths are the only remaining voids. Paths or streets are the main transport infrastructure of the city, however, it is what is most neglected in this city. Most of the roads and streets are overtaken by buildings illegally. However, widening the streets is no solution. Even if a road widening or flyover reduces congestion, the improvement is usually short-lived, since, expanding the available road space initially increases speed and comfort and thereby encourages more people to travel in private motor vehicles. More users use the wider road eventually, it returns to its original level of congestion—but with significantly more vehicles stuck in traffic. Street design should include safety, mobility, pedestrian accessibility, liveability, sensitivity to local context and creative use of street space.



Dhaka's roads are dominated by a couple of vehicle types. Each of them differs in speed, comfort, access, size. They include, rickshaw, cycle, autorickshaw/cng, private motor cars and Bus. Rickshaws have become a symbol for Dhaka, as thousands of rickshaws are seen on the streets. They provide easy and affordable short distance mobility but due to slower speed create traffic congestion where motor vehicles are also driven. A large number of people in Dhaka use private motor cars and the private car owners are disregarded for using one car per person. To solve this scenario the government has suggested using more buses. Bus rapid transit (BRT) can offer high-capacity and high-quality public transport- similar to a metro rail but at a lower cost—by providing an exclusive right-of-way for BRT buses.





In Dhaka, buses tend to stop at various places in the road to take up passenger. Even though there are designated bus stops, the bus conductors halt as they wish to take passengers. A possible solution for a crowded city like Dhaka is rail based system, where the passenger will not suffer for immobility as they suffer in buses.

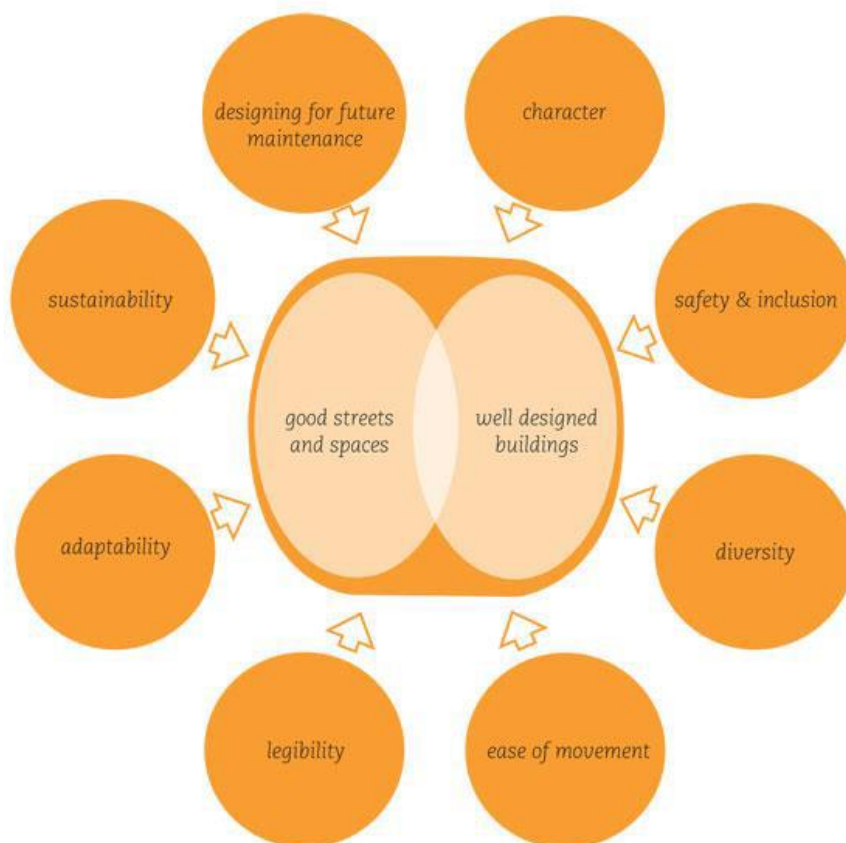
2.6 URBAN DESIGN AND PUBLIC PLACE

The terms urban space, public space or place, civic space, community, neighborhood are very closely related. They are all both prior and pro concerns of urban design. There is no commonly – agreed definition of urban design.

“ (Urban design) Located in a “gray area between planning and architecture” (Davis, 1982, planning and architecture)

Urban design concerns the arrangement, appearance and functionality of towns and cities. In particular the shaping and uses of urban public space. It has traditionally been regarded as a disciplinary subset of urban planning, landscape architecture, or architecture. In more recent times has been linked to emergent disciplines such as landscape urbanism. So, urban design is the tool for shaping urban spaces which includes cities and towns and specially shaping of public spaces. That indicates that a city or town without proper public spaces indicates poor urban. Urban design theory deals primarily with the design and management of public space (i.e. the 'public environment', 'public realm' or 'public domain'), and

the way public places are experienced and used. Public space includes the totality of spaces used freely on a day-to-day basis by the general public, such as streets, plazas, parks and public infrastructure. A civic center is a prominent land area within a community that is constructed to be its focal point or center. The notion of civic center has changed by time and still varies city to city. It usually used to contain one or more dominant public buildings, which may also include a government building. But recently, the term "civic center" has been used in reference to an entire central business district of a community or a major shopping center in the middle of a community. In this type of civic center, special attention is paid to the way public structures are grouped and landscaped. In some American cities, a multi-purpose arena is named "Civic Center", for example Columbus Civic Center. Such "Civic Centers" combine venues for sporting events, theaters, concerts and similar events. Though the parameters & design elements of urban design or planning are too vast & immense in area and volume, one thing is obvious that it is the people or the dwellers or users that are the most essential concern of urban design. In a public space it is the behavior of public and using pattern of the place that determines livability, compatibility of the space and denotes how much effect it leaves upon the user as well as the city dwellers.



2.7 Elements of Urban Structure:

City planners must weave a complex, ever-changing array of elements into a working whole: that is the perennial challenge of city planning. The physical elements of the city can be divided into three categories: networks, buildings, and open spaces. Many alternative arrangements of these components have been tried throughout history, but no ideal city form has ever been agreed upon. Lively debates about the best way to arrange urban anatomies continue to rage, and show no signs of abating.

2.7.1 Networks

Every modern city contains an amazing array of pathways to carry flows of people, goods, water, energy, and information. Transportation networks are the largest and most visible of these. Ancient cities relied on streets, most of them quite narrow by modern standards, to carry foot traffic and carts. The modern city contains a complex hierarchy of transportation channels, ranging from ten-lane freeways to sidewalks. During the nineteenth century, rapid urban growth and industrialization caused overcrowding, pollution, and disease in urban areas. After the connection between impure water and disease was established, American and European cities began to install adequate sewer and water systems. Since the late nineteenth century, cities have also been laced with wires and conduits carrying electricity, gas, and communications signals.

2.7.2 Buildings

Buildings are the most visible elements of the city, the features that give each city its unique character. Residential structures occupy almost half of all urban land, with the building types ranging from scattered single-family homes to dense high-rise apartments. Commercial buildings are clustered downtown and at various sub centers, with skyscrapers packed into the central business district and low-rise structures prevailing elsewhere, although tall buildings are becoming more common in the suburbs. Industrial buildings come in many forms ranging from large factory complexes in industrial districts to small workshops.

2.7.3 Open Spaces:

Open space is sometimes treated as a leftover, but it contributes greatly to the quality of urban life. "Hard" spaces such as plazas, malls, and courtyards provide settings for public activities of all kinds. "Soft" spaces such as parks, gardens, lawns, and nature preserves provide essential relief from harsh urban conditions and serve as space for recreational activities. These "amenities" increasingly influence which cities will be perceived as desirable places to live.

2.7.4 Evolution of Urban Form:

The first true urban settlements appeared around 3,000 B.C. in ancient Mesopotamia, Egypt, and the Indus Valley. Ancient cities displayed both "organic" and "planned" types of urban form. Since the 1950s, city planners have increasingly paid attention to the economics of urban areas. When many American cities experienced fiscal crises during the 1970s, urban financial management assumed even greater

importance. Today, planners routinely assess the economic consequences of all major changes in the form of the city.

2.7.4 Evolution of Urban Form:

Several basic concepts underlie urban and regional economic analysis. First, cities cannot grow if their residents simply provide services for one another. The city must create products which can be sold to an external purchaser, bringing in money which can be reinvested in new production facilities and raw materials. This "economic base" of production for external markets is crucial. Without it, the economic engine of the city grinds to a halt.

Once the economic base is established, an elaborate internal market can evolve. This market includes the production of goods and services for businesses and residents within the city. Obviously, a large part of the city's physical plant is devoted to facilities for internal transactions: retail stores of all kinds, restaurants, local professional services, and so on.

Modern cities are increasingly engaged in competition for economic resources such as industrial plants, corporate headquarters, high-technology firms, and government facilities. Cities try to lure investment with an array of features: low tax rates, improved transportation and utility infrastructure, cheap land, and skilled labor force. Amenities such as climate, proximity to recreation, parks, elegant architecture, and cultural activities influence the location decisions of businesses and individuals. Many older cities have difficulty surviving in this new economic game. Abandoned by traditional industries, they're now trying to create a new economic base involving growth sectors such as high technology.

2.7.5 Good City Form:

A most useful guide in this enterprise is Kevin Lynch's *A Theory of Good City Form* (Cambridge, MA, MIT Press, 1981). Lynch offers five basic dimensions of city performance: vitality, sense, fit, access, and control. To these he adds two "meta-criteria," efficiency and justice.

For Lynch, a vital city successfully fulfills the biological needs of its inhabitants, and provides a safe environment for their activities. A sensible city is organized so that its residents can perceive and understand the city's form and function. A city with good fit provides the buildings, spaces, and networks required for its residents to pursue their projects successfully. An accessible city allows people of all ages and background to gain the activities, resources, services, and information that they need. A city with good control is arranged so that its citizens have a say in the management of the spaces in which they work and reside.

2.7.6 Town Squares

A town square is an open public space^[2] commonly found in the heart of a traditional town used for community gatherings. Other names for town square are civic center, city square, urban square, market square, public square, and town green. Most town squares are hardscapes suitable for open markets, music concerts, political rallies, and other events that require firm ground. Being centrally located, town squares are usually surrounded by small shops such as bakeries, meat markets, cheese stores, and clothing stores. At their center is often a fountain, well, monument, or statue.

2.7.7 Street Vendors:

According to the Dhaka City Corporation there are around 90,000 street vendors in the city. They operate mainly in Motijheel, Baitul Mukarram, Gulistan, Shahbagh and New Market Areas. Street vending is considered an illegal trade and the street vendors face constant harassment from the authorities. The vendors have to pay a sizeable part of their income as bribes in order to keep plying their trade. According to one report, 2 vendors in the New Market area pay Tk 2,00,000 a month to a gang that shares the collection with the law-enforcement agency. Each vendor in this area pays around Tk 200 a month to run their business. In other areas such as Baitul Mukarram, GPO and Purana Paltan vendors pay the police Tk 5 daily to avoid harassment.

According to the Bangladeshi delegates who had attended the Asian Regional Workshop on Street Vendors held on February 10-12, 2002 in Bodh Gaya, India, the street vendors of Bangladesh were more vulnerable than those in the neighbouring countries due to poverty, lack of space for vending and lack of awareness about their rights. The positive aspect is that there is a fair level of unionization among them. There are several unions working among street vendors. The most important is the Bangladesh Hawkers' Federation as it is linked to the trade union federation of the ruling Bangladesh National Party. The federation has been negotiating with the government for a policy on street vendors. The first step towards this direction is of forging alliances with other trade unions of street vendors so that a national alliance emerges. This can in turn pressurize the government to take up the issue of a national policy for street vendors. However till such a consensus emerges, the street vendors in Bangladesh will continue to be regarded as illegal traders and will continue to be harassed by the authorities.

Political parties in Bangladesh continue to render lip service to street vendors, without doing anything concrete to improve their insecurity. For example, a news item in a popular daily in Dhaka newspaper had the following headline: "Huda assures hawkers to protect their rights". The report noted that while addressing a rally organised by Bangladesh Hawkers' Federation at Dhaka, barrister Nazmul Huda, communications minister, assured hawkers that he would provide them all support to protect their rights and continue their profession in the city. He added that the government is „pledge bound" to protect the human rights of the citizens. After these statements, the minister launched on an attack on the opposition saying that they wanted to disrupt the development efforts of the ruling party and the people (hawkers) should ensure that these people are not voted into power. It hence appears that the hawkers were brought there mainly to support government policies and not for any concrete legal benefits. This approach is not unique to Bangladesh alone. In most countries where the number of street vendors is large, the ruling parties mobilise them for their political purposes. Due to their insecurity, street vendors tend to flock to these parties for protection. These parties use street vendors for their political gains, though the vendors themselves do not get any tangible benefits from this alliance.

2.7.8 Food Vendors:

Food vendors are an important feature in the cities of Bangladesh. A paper by Qazi Saif Uddin Ahmad, social welfare and cultural officer of Dhaka City Corporation provides interesting information on these vendors. He notes that the street food industry provides employment to women and migrants with low educational background. The prices of street food are low and the urban poor benefit from this. Day labourers, rickshaw pullers, migrants from rural areas and the homeless depend on street food vendors for their nutrition. However, because of poor hygiene people often fall ill after eating street food. They are mainly victims of water borne diseases. Ahmad feels that there must be cooperation between the municipalities and the police for proper management of street food vending. He suggests that municipalities can formulate rules and regulations for the management of street food vending, but these

need to be enforced by the police. How far this is feasible is anyone's guess. It is the experience in India that such rules only help increase rent-seeking among corrupt officials. They may not help in improving hygiene. A study conducted by the Intermediate Technology Development Group⁶ on food vendors in Bangladesh and Sri Lanka notes that as street vendors are in the informal sector, there is no systematic documentation of the number of street food vendors.

2.7.9 Mixed-use development:

It is the practice of allowing more than one type of use in a building or set of buildings. In planning zone terms, this can mean some combination of residential, commercial, industrial, office, institutional, or other land uses.

Today's thoughtfully designed and visually striking mixed-use buildings are symbols of modernization and regeneration. Unlike traditional single-use office blocks which draw in commuters during the day and then close at night, these people-centric developments bring a vibrant 24-hr lifestyle to sometimes run-down areas of the city.

Depending on its size a mixed-use building can incorporate offices, flats, retail malls, restaurants, cinemas, health clubs, plazas, galleries and gardens. Designed to complement the urban fabric and reflect the aspirations of the local community, they allow people to live, work and enjoy leisure activities at a single convenient location.

Mixed-use allows developers to tailor the blend of elements in order to make the buildings more economically viable – on the ground floor, for example, shops may provide a better return on investment than offices. Importantly, planners favor them for the social benefits they can provide, such as the potential to include affordable housing in the residential mix.

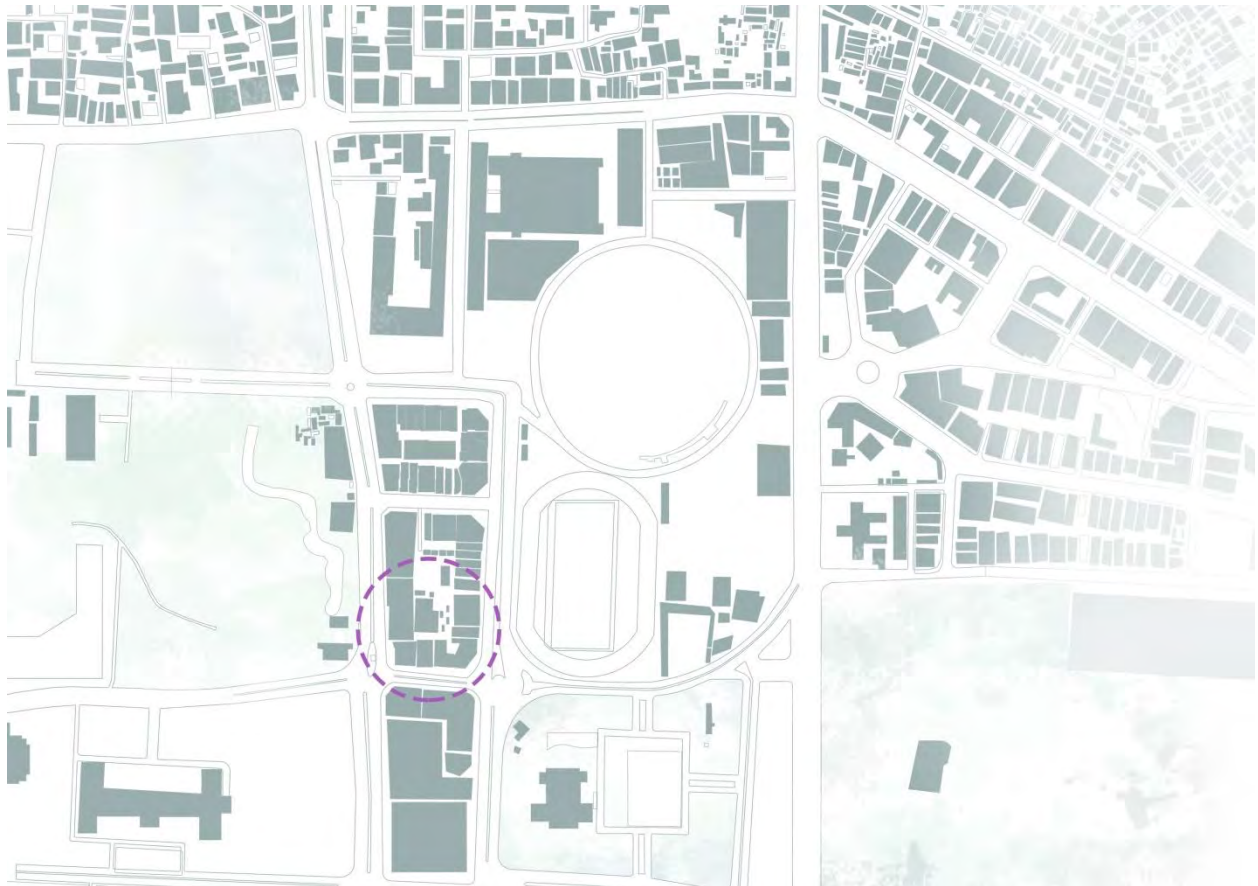
Usually built on brown field sites, the buildings require complex infrastructure, including transport links, car parking and delivery access. Mixed-use presents many technical challenges: for example, the position of the load bearing structures has to change from level to level, going from the rigid grid of the underground car park to column-free retail space, then to residential room layout. Fire engineering is another key element in creating vibrant, attractive open spaces.

CHAPTER 3

SITE ANALYSIS

3.1: SITE LOCATION:

Gulistan is an overcrowded street of Dhaka city in Bangladesh. It means 'Flower Garden', but there are no flower gardens at this place. Several important streets are connected to Gulistan which makes it busy and crowded. The street is full of roadside shops. Thousands of people visit this place for their daily needs. The road is always occupied with traffic and passersby. One of the oldest transports of Dhaka City 'Tom Tom' can be seen in this street. There is a shrine right at the middle of the road. It is called "Golap Shah's Shrine". Thousands of people show their devotion to this shrine every day and make donations so that their desire can be fulfilled.



3.2: TROPOGRAPHY:

The topography of the site is plain land. The soil condition of the area is good. It is in the low danger zone in the site amplification map of Dhaka City for earthquake. The area is also free from flood affected zones.

3.3: HISTORICAL BACKGROUND:

After Indian subcontinent became independent of British rule in 1947 and Pakistan was created, Dhaka restarted its life as capital of East Pakistan. Migration of people from India caused 10.3% increase in population. Dhaka's area increased from 6 sq.miles in 1947 to 25 sq.miles in 1962. Population Increased from 2.1 lakh in 1941 to 5.5 lakh in 1961. According to available information.

- New industries grew and business expanded.
- Motijheel Commercial area and New Market in Azimpur area developed as shopping centres according to plans.
- Motijheel-Gulistan area became the modern urban core and the CBD.
- The Chawk, Patuatuli and Shadarghat remained the traditional center of the city.

Thus in dhaka, according to Rosie Majid Ahsan, like in other eastern cities, developed two commercial nodes with distinctive characteristics - i) The indigenous center and ii) The modern center. The landscape of Dhaka city has been undergoing rapid alteration with the economic and political changes in the country since the creation of Bangladesh. The city is developing northward through expansion of the upper class residential area. The retail trade areas are also projecting itself towards the northern part of the city. The retail business centre which had developed in Gulistan area changed its characteristic totally as it became the center for political friction.

As such, the shopping areas, like olden days, are growing along the major roads. Some of these are using only the street level frontage forming a ribbon pattern. Others are clustering at nodal points.



Bibi Mariam in front of Gulistan cinema, DIT Avenue, in late '50s



In front of Gulistan cinema hall, Dhaka, 1954



Dhaka Stadium (1950) Bongo vobon and zero point



Golap shah mazar and Baitul Mukarram mosque



Crowd of Gulistan

3.3 MAPS AND DIAGRAMS

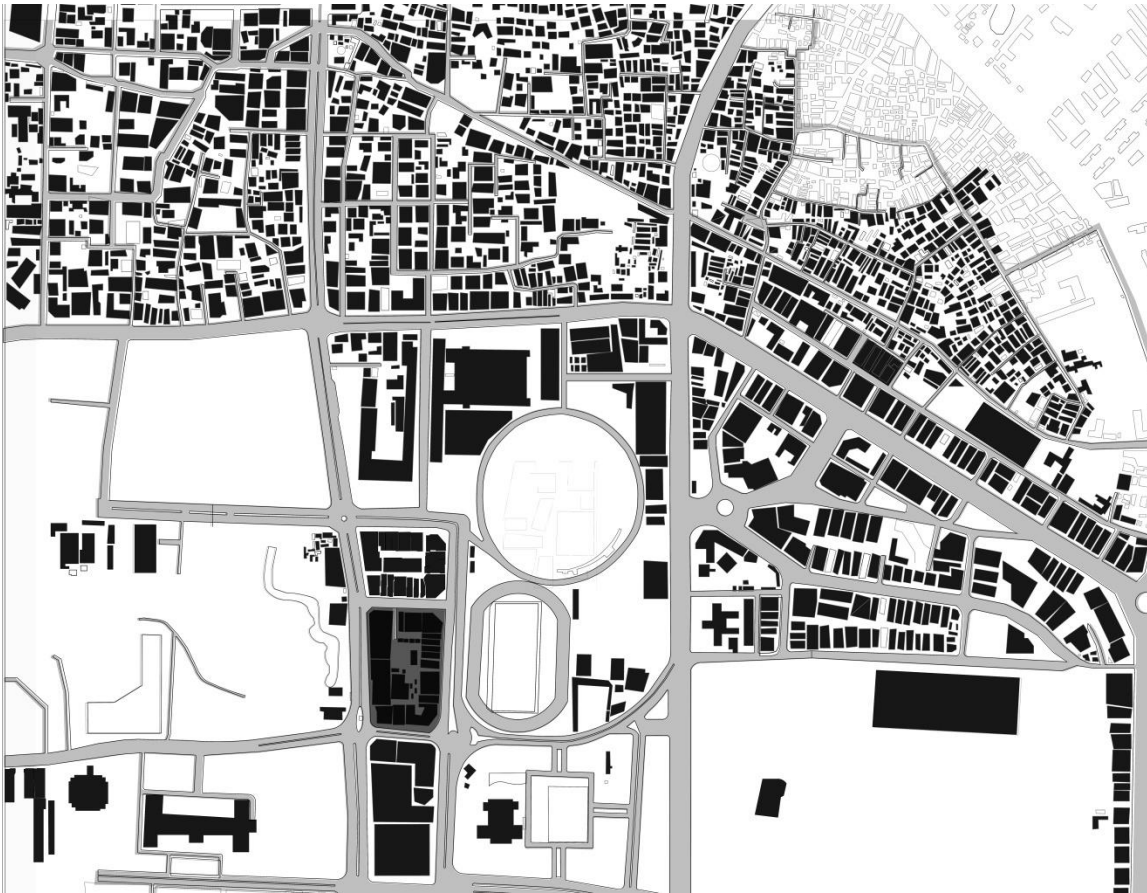


Fig: Building Manufactures

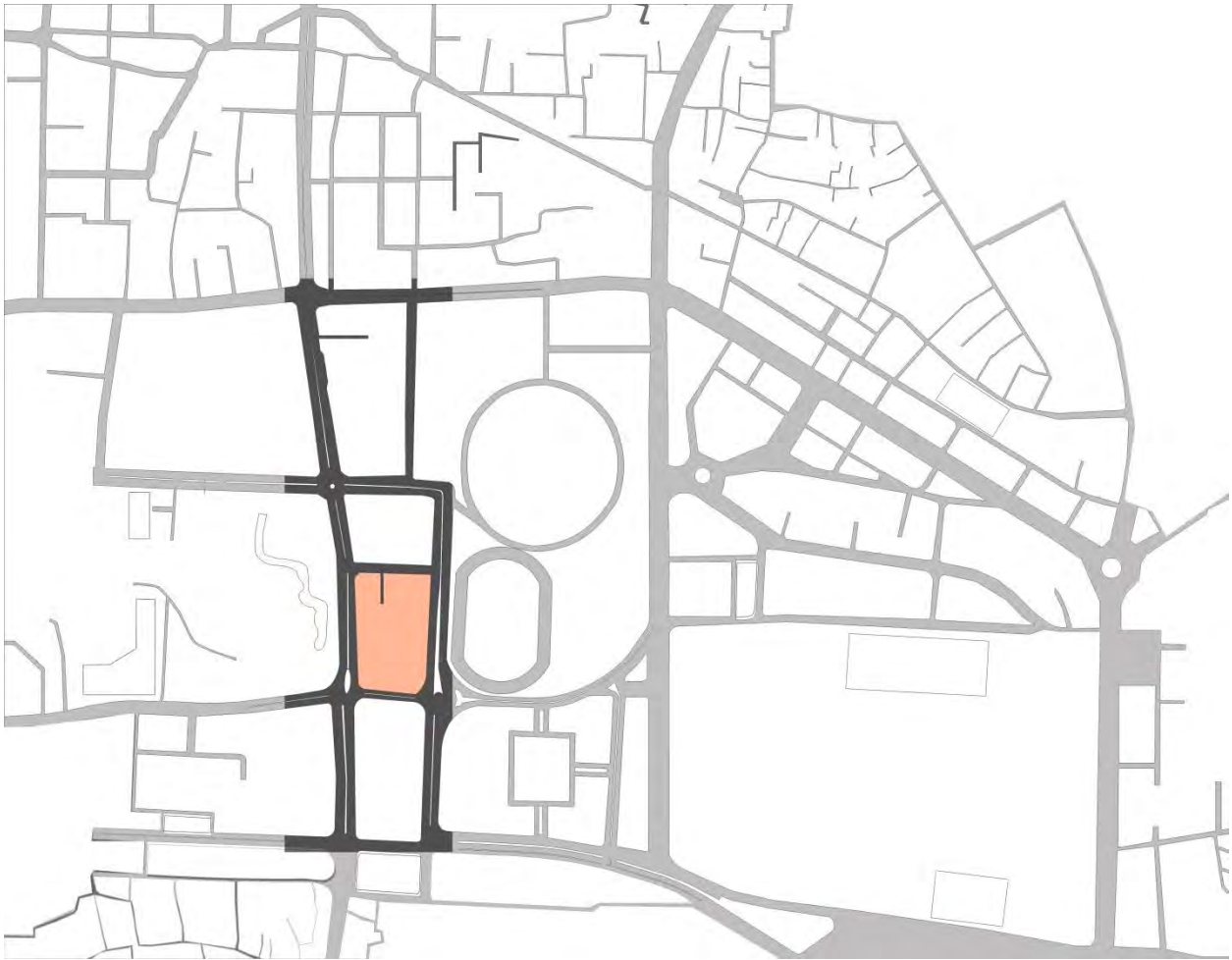


Fig: Road Network

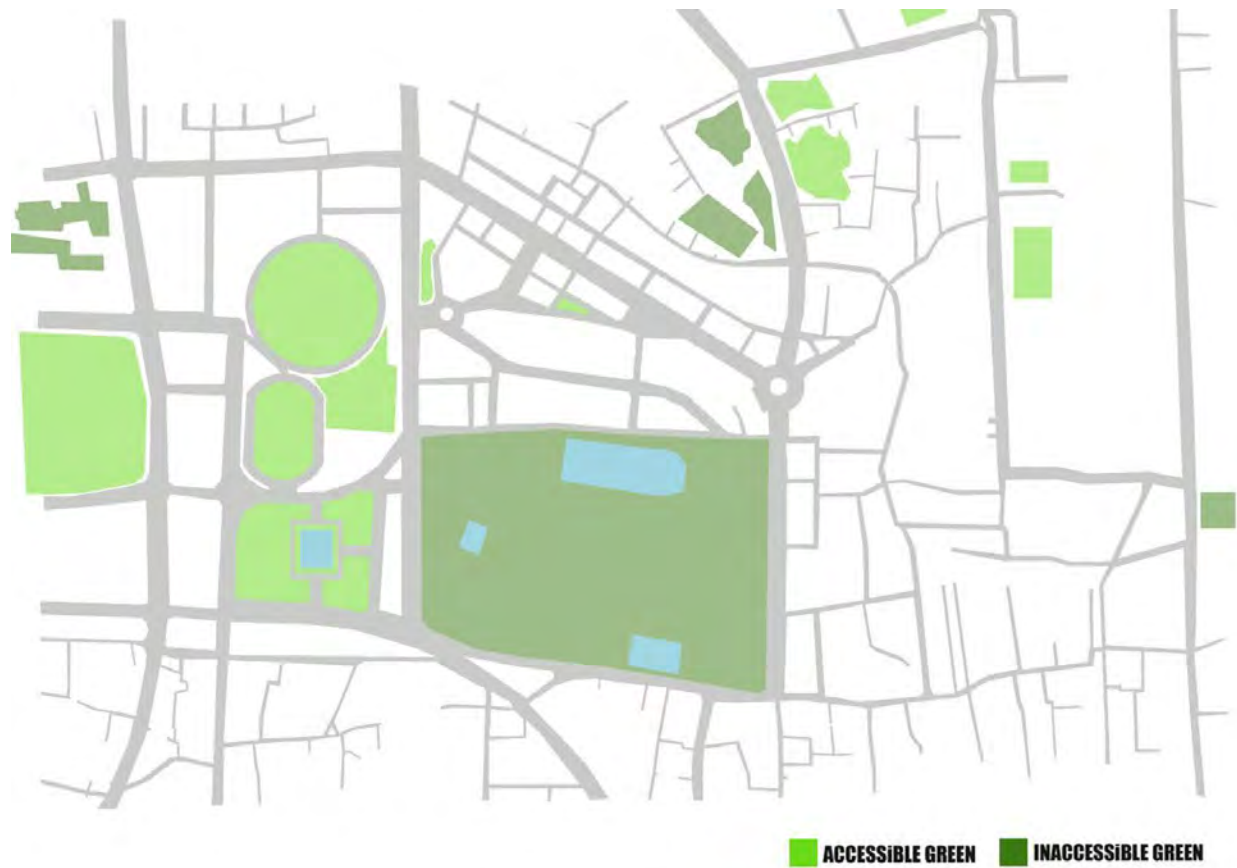


Fig: Neighborhood of the site.

3.4: SWOT ANALYSIS:

3.4.1: STRENGTH:

- One of the most connected place of the city.
- Various transportation system working, thus ease of mass access.
- Close proximity to monorail station project and car parking building project
- Close to landmark and important structures.

3.4.2: WEAKNESS:

- Poor traffic management.
- Poor waste management.
- Undefined public places

3.4.3: OPPORTUNITY:

- Has the potential to be developed in a vibrant CBD by incorporating diversified use.
- Potential public and civic places can be created.
- Create a transportation hub for monorail, bus station and other public vehicles, which will integrate with the office and commercial space
- Developed a Recreation and breathing space

3.4.4: THREAT:

- Threat of developing unplanned haphazard commercial spaces

- Misuse of government plot, and turn into small industrial zone
- Lack of diversified use as only commercial development is currently planned.
- Can be developed as a commercial dead zone, where no public spaces are allocated.



4.1 Urban Porosity, Sydney, Australia

- Architects: Billard Leece Partnership (BLP)
- Client: Willoughby City Council, Altomonte Holdings
- Total Built Area: 29,000 sqm
- Program: Mixed-use
- Commercial Space - Office
- Retail - Shopping
- Community Centre
- Residential Units

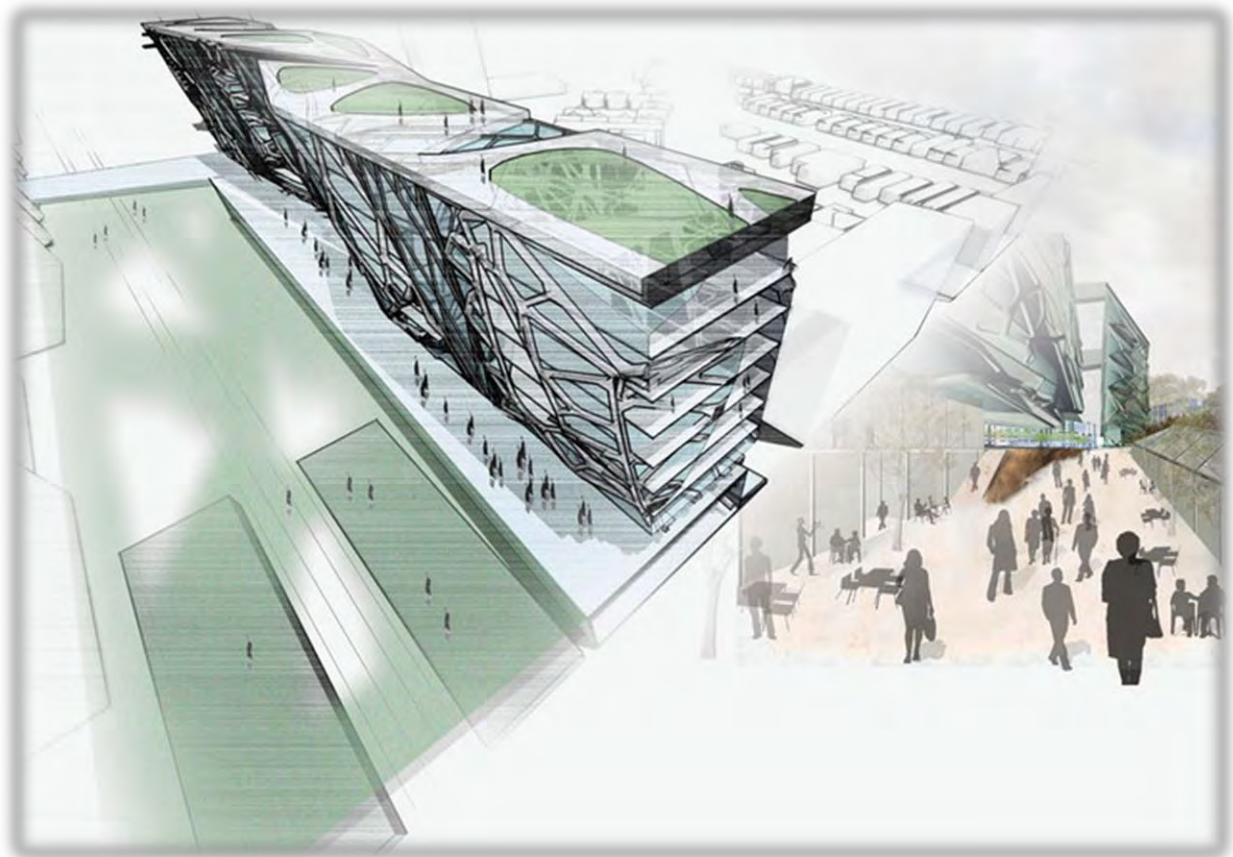


Fig: Rendered Illustration (source: arch daily website)



Fig: Diagrammatic Presentations of Key Concepts (source: arch daily website)

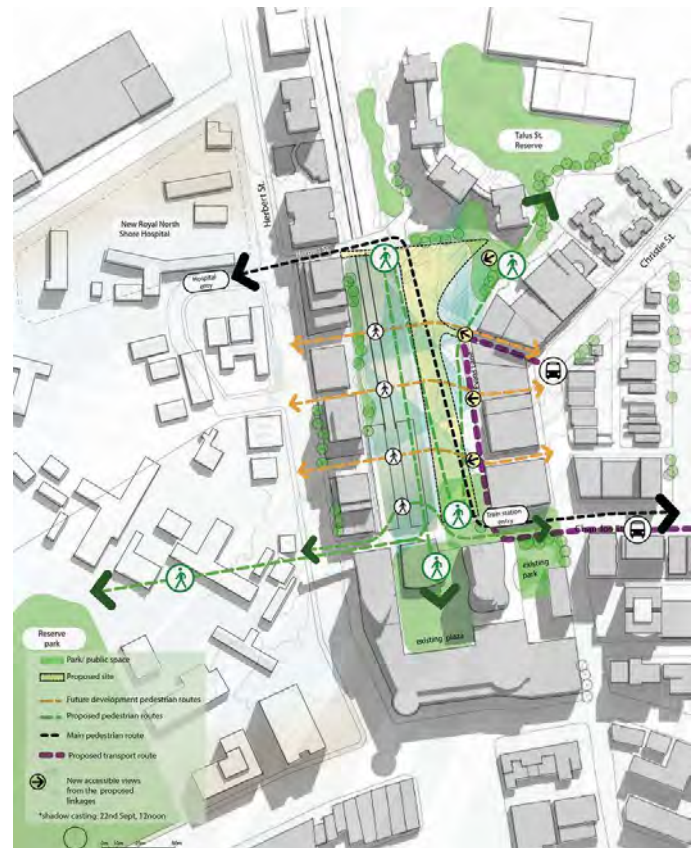


Fig: Accessibility views from the proposed linkages
(source: arch daily website)

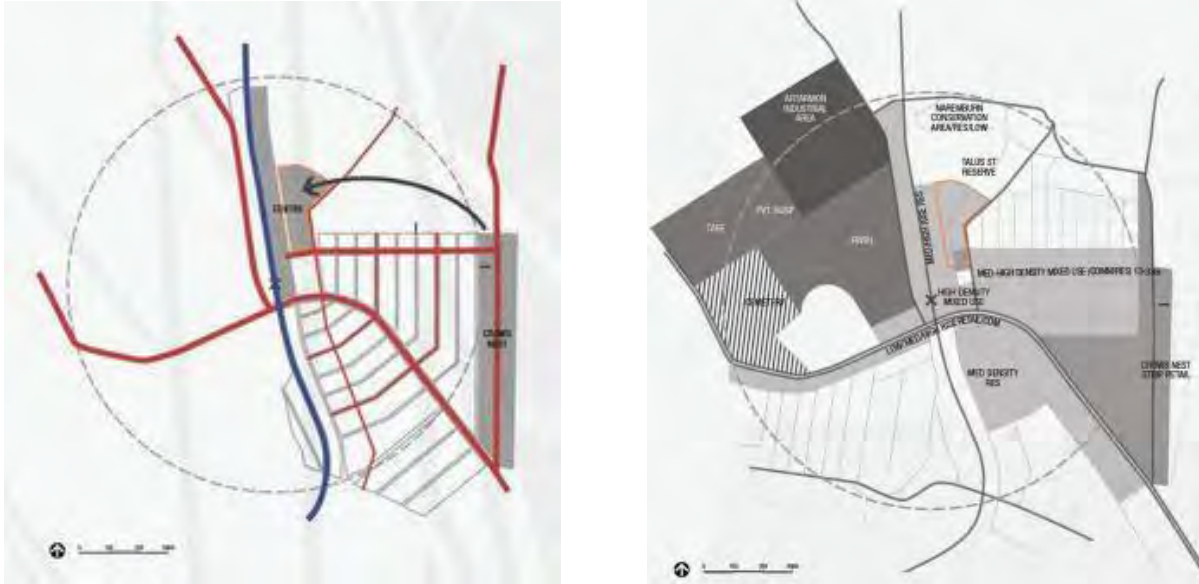


Fig: Diagrammatic Presentations of Key Concepts (source: arch daily website)

- CONCEPT:** The principle concept for the site is to provide strong pedestrian connections between Chandos Street, Herbert Street and the Talus Street Reserve, whilst simultaneously creating a new public-access and commercial spaces for the inevitable expansion of the business district and incorporating the integration of cultural and leisure activities to the area.
- DESIGN DEVELOPMENT:** Seemingly suspended over the new site datum, wiry buildings encase flexible floor-plates, divided by atria that align with the east west street grid, and occupied predominantly by commercial office space. The built form exposes the internal street with a site-imposed deformation that replicates the atria but exposes the pedestrian street below. The buildings are further articulated by responding to neighboring form and amenity: folding back from the residential tower at Chandos Street; perching next to the railway as a buffer; leaning back from the reservation. Internal site amenity is greatly enhanced by the shallow floor plate, allowing solar access, natural cross ventilation, views from and through the site. Visual bulk and overshadowing are curtailed to the north, south and east boundaries.

4.2 The Bazaar of Tabriz

The historic Bazaar of Tabriz (Fig. 2 and 3) is the largest traditional covered bazaar in the world with the finest art and sustainable architectural features. Its strategic location on the Silk Road has always contributed to its economic vitality. Social, religious, communicational, political and cultural functions can also be witnessed throughout history. These elements have been kept alive until today. The Bazaar of Tabriz covers an area of over three square kilometres and in 2010 it was included on the World Heritage List by the United Nations Educational, Scientific and Cultural Organization (UNESCO, 2010). The Bazaar was built on the main circulation axis of the city, connecting the east to the northwest, dividing the Bazaar into two main parallel *rasteh*: The main “*rasteh*”; The “*kohne rasteh*”. In recent times, some parts of the Bazaar were destroyed and some functions were changed along the main *rasteh* and streets of the Bazaar. The Mehran River separates the Bazaar into two parts: the northern part of the Bazaar that includes Saheb Abad Square and Akbarieh Madrasa, which was added to the Bazaar complex during the nineteenth century, and the southern part, which was the main area of the Bazaar (Edgu et al., 2012).

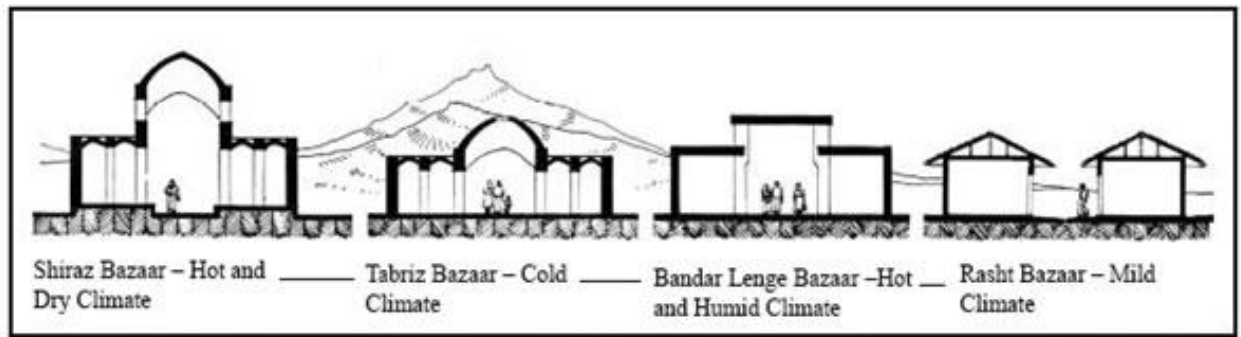


Figure 1 – Bazaar Structure in four Climates of Iran, source: Qobadiyan, V. “A Study on Iran’s Traditional Monuments”

PROGRAMME ANALYSIS

5.1 EXISTING PROGRAMES IN THE SITE:

- Office and commercial spaces
- Hawkers' market
- Sports Market
- Osmani Uddyan
- Gulistan park
- Public transport station
- Street Vendors
- Restaurants and street food stall
- Garbage collectors shop
- Store house
- Private residence

5.2 REQUIRMENTS OF SURROUNDING AREA:

- Recreational activity
- Public gathering spaces
- Public transport station
- Hawkers market
- Park and visual green
- Proper car parking

5.3: PROPOSED PROGRAMS:

5.3.1: OFFICE SPACES:

Fully rentable office towers is important as a part of CBD zone. Offices are organized into two zones:

- Public oriented offices: Travel Agency, Banks, Customer Care, etc.
- Client oriented offices: Specialized offices, Head-quarters, etc

5.3.2: SHOPPING:

In order to redesign the hawkers' market area, shopping area is essential. The various goods will ensure a social and economic mix of people. There will be 300 shops. Allocating 15,000 sft for these shops. Size of the shops will vary as large, medium and small.

5.3.3: HAWKERS MARKET:

There are so many street vendors on shapla chottor site. They seats haphazardly and make chaos. There should be defined place for them. They will pay rents for it. Government gets revenue from here. People also come to this fixed places for street shopping.

6.3.5: CONVENTION CENTER:

To serve the CBD as well as the city, this mixed-use rentable program will ensure a lot of activity. It can serve as business conference centre, convention hall, exhibition hall and community centre.

5.3.6: RECREATIONAL FACILITIES:

The entire city people need the recreational facilities. The area is always so tensed up. So there must be a resting place. They could take a break and breathe. Also diversify the users groups and create vibrancy.

- Restaurants
- Fitness Centre
- Clubs
- Games Centre
- Auditorium
- Exhibition Centers
- Street Food Facilities
- Food Court

5.3.7: TRANSPORTATION FACILITIES:

- Bus stop and station for other public vehicles

- Adequate number of car parking for the whole complex.

5.3.8: AREA REQUIRMENT:

SL	Title	Unit	No. of People	Area/Unit	Total Sft
1	Vendors	300	600 per shop maximum 3 and minimum2	4' x 5' = 20sft	300 x 20 = 6000 sft
2	Clothing Stores (Traditional: like Hawkers Market)	300	500 per shop minimum 3	8' x 6' = 48 sft	14400 sft
				12' x 6' = 72 sft	21600 sft
				10' x 6' = 60 sft	18000 sft
				7' x 6' = 42 sft	12600 sft
3	Bag Stors	200	600 per shop minimum 3	10' x 6' = 60 sft	12000 sft
				12' x 6' = 72 sft	14400 sft
4	Fruits and Vegetables	100	200 1 person	5' x 6' = 30 sft	3000 sft
5	Office	500	30000	20' x 30' = 600 sft	300,000 sft
		750	22500	20' x 50' = 1000 sft	750,000 sft
6	Hotel		500		
7	Gallery		400		6000 sft
8	Bus DEPO/STOP				

CONCEPTUAL STAGE AND DESIGN DEVELOPMENT

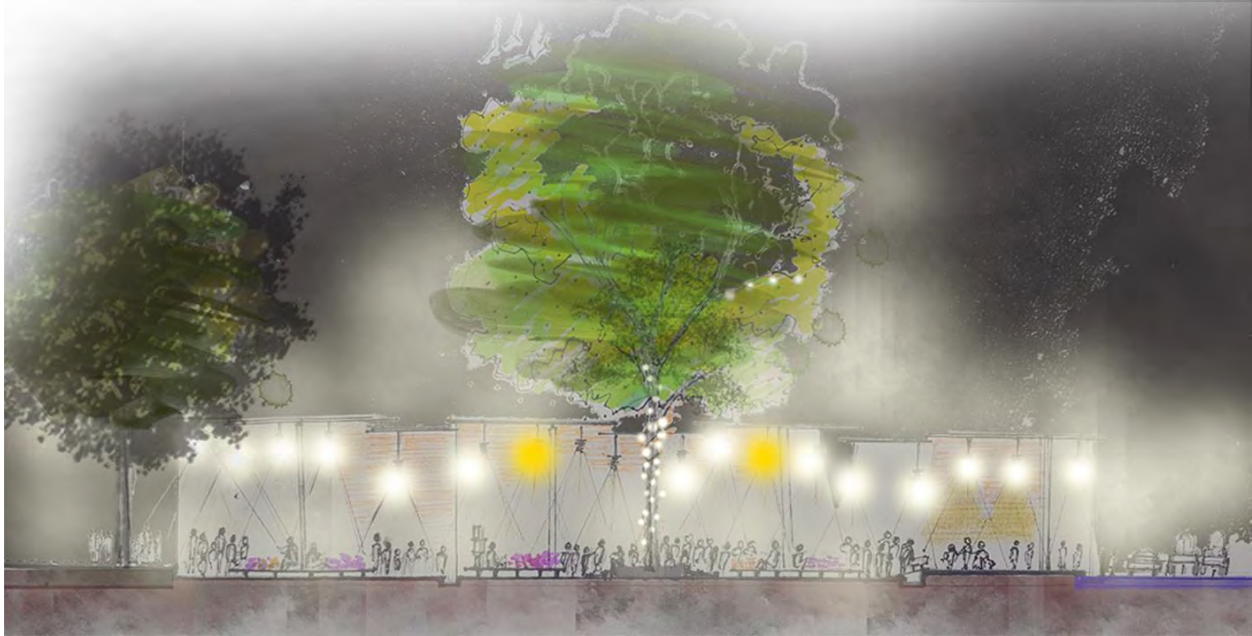


FIG: CONCEPTUAL SKETCH

THE CONCEPT CAME FROM THE TRADITIONAL BAZAARS OF THE RURAL AREAS. THOSE BAZAARS ARE USUALLY CROWDED WITH LOTS OF ACTIVITIES AND COLORS. THE SAME SORT OF BUSINESS CAN BE SEEN IN GULISTAN. SO THE IDEA IS TO CREATE AN IDEAL SPACE FOR THE EXISTING LIVELINESS.



FIG: CONCEPTUAL SKETCH



FIG: CONCEPTUAL SKETCH

THE CONCEPT CONSISTS OF BRINGING THE TWO GREEN PATCHES INTO THE GIVEN AREA AND TO MERGE THEM CREATING A NEW BREATHING SPACE FOR THETHOUSANDS OF PEOPLE WHO CROSSES THAT PLACE DAILY. THERE MIGHT BE SOME PLACES TO EAT GOSSIP AND TO ENJOY THE SURPRISING GREEN AMONGST THE EXTREME COMMERCIAL PLACE OF GULISTAN.



FIG: CONCEPTUAL SKETCH

PASSERS BY WERE ASKED TO GIVE THEIR OPINION ON PEDESTRIAN MOVEMENT, CONVENIENCE, ACCESS AND SWITCHING TRANSPORT

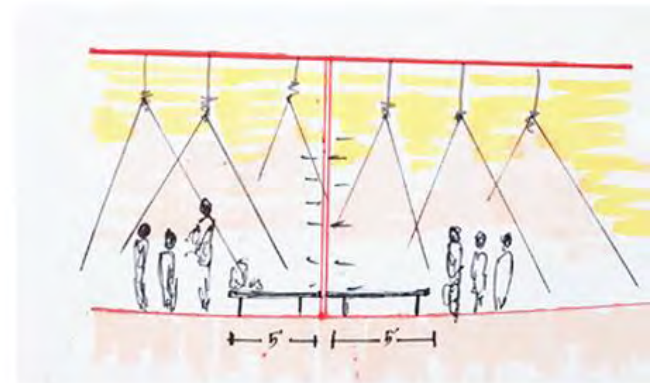
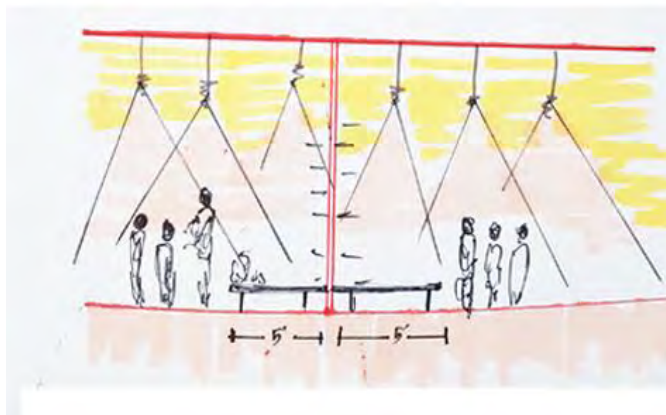
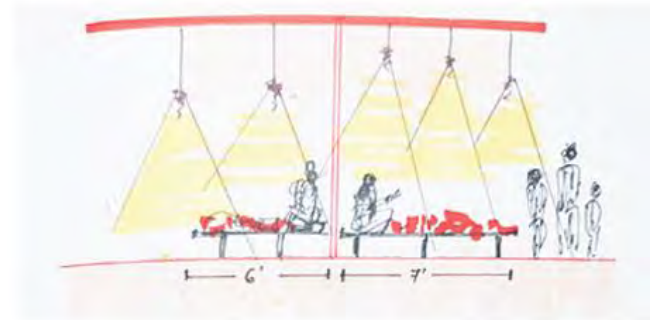
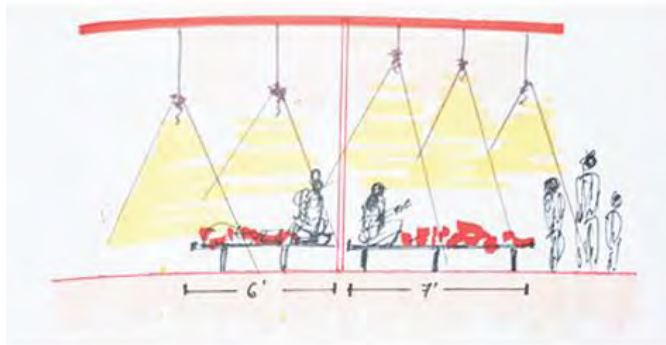


PASSERS BY EXPRESSED THEIR INSATISFACTORY CONDITION OF THE CURRENT SITUATION OF THE SERVICE, OBSCURITY AND DEMANDS OF GULISTAN HAWKERS MARKET



FIG: EXISTING CONDITION OF HAWKERS’ MARKET

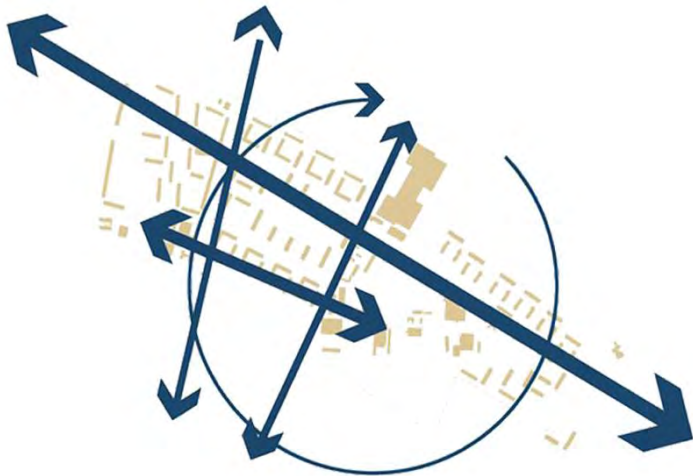
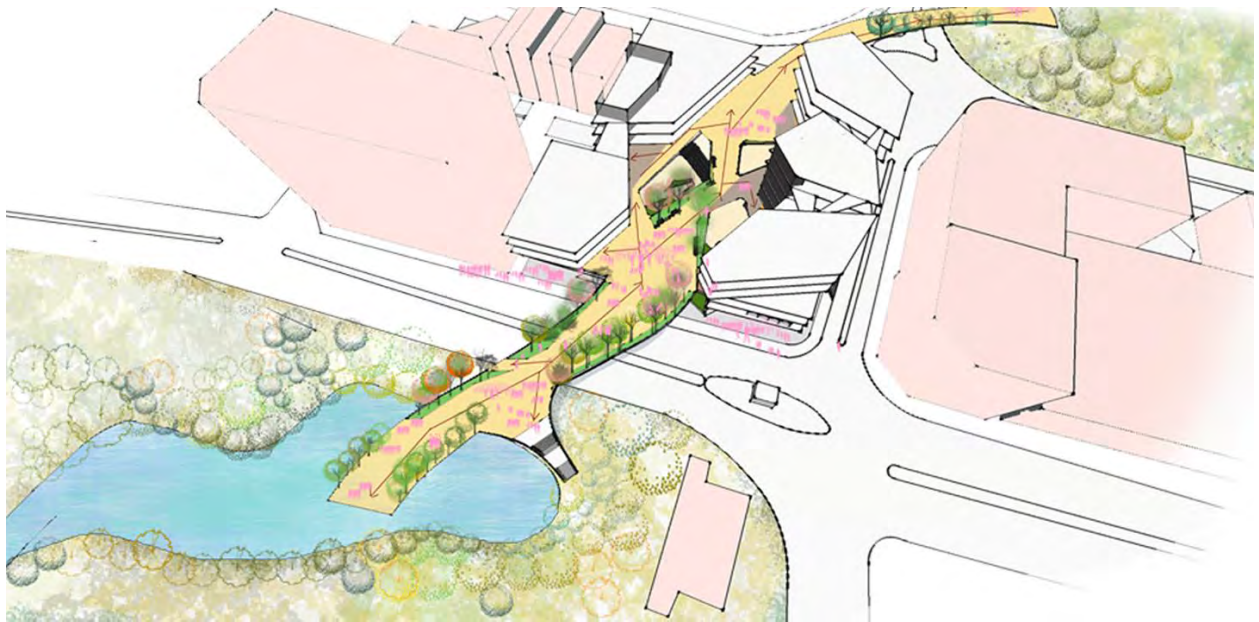
TYPES OF SHOPS IN THE HAWKERS' MARKET :



6.1 DESIGN STRATEGY AND FORM DERIVATION

The strategy was to create a hierarchy between the streets and the pedestrian walkway of the market and the traffic. The existing building masses are too regular and been there for a really long time. If the masses were to relocate and reshuffle, then some interesting spaces might get created.

The vow was **CONNECTING THE GREEN AND CREATING A GREEN PATHWAY...**

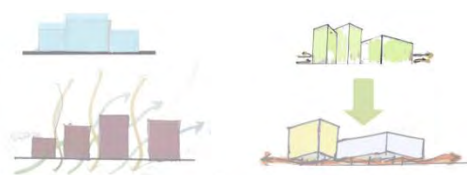
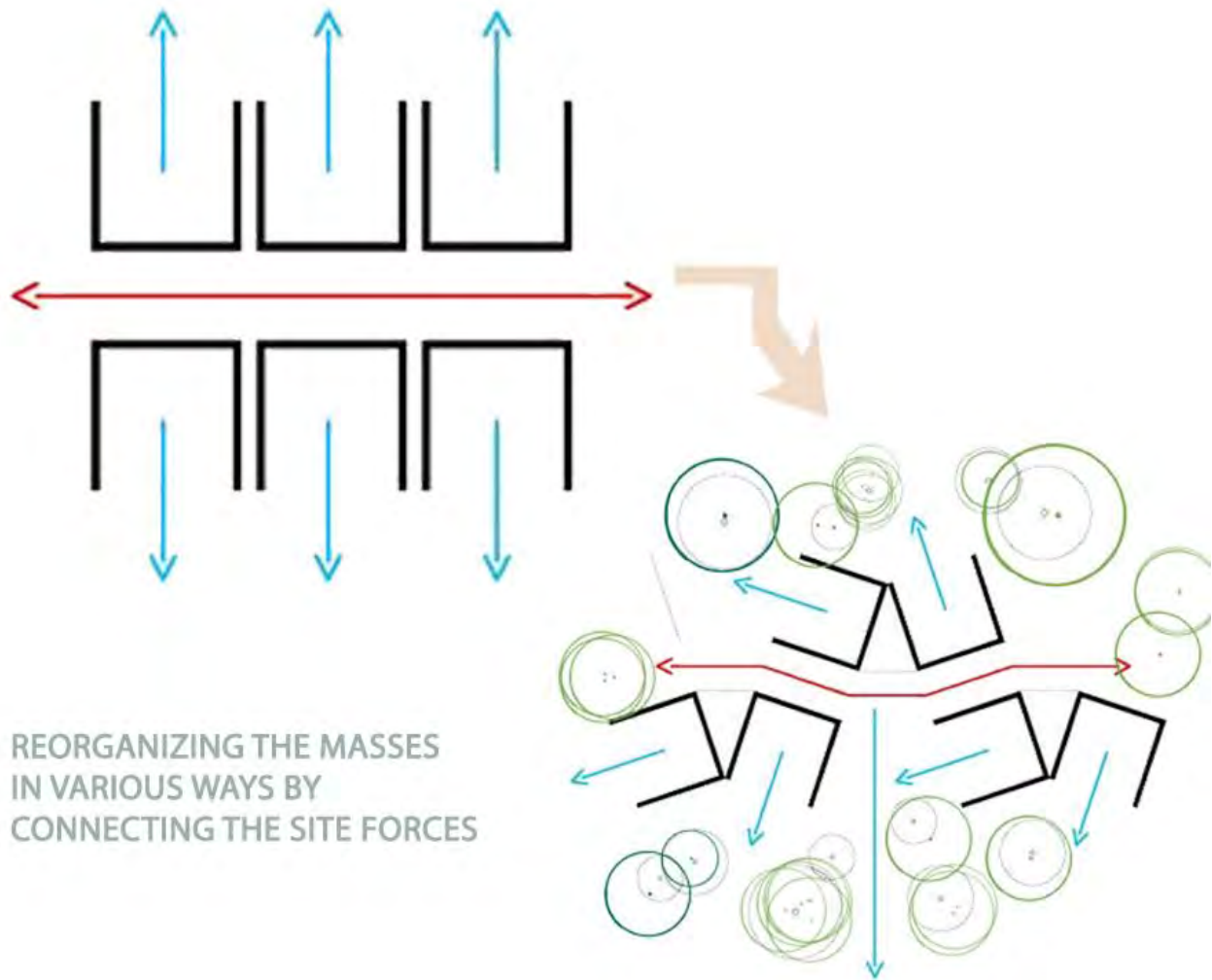


A new network of streets connects the different neighborhoods in the area to the surrounding areas. All modes of traffic are represented in the new streets.

Through densification the spatial hierarchy is made clear – defining streets and squares are public and allowing the courtyards to be more private.

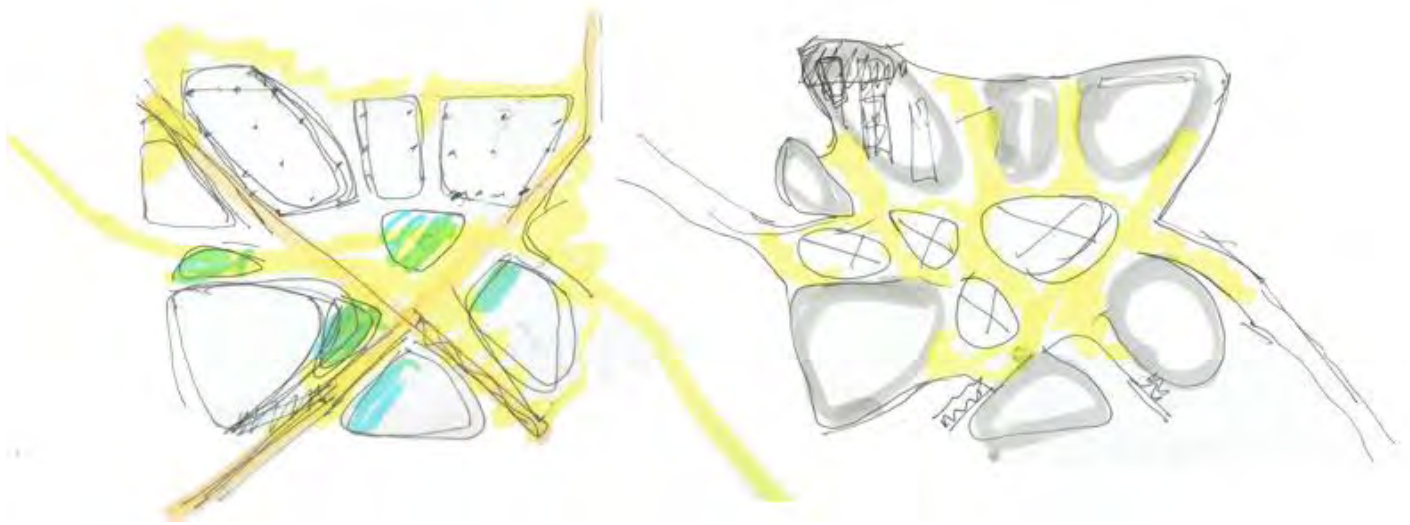


Integrate through-traffic, but prioritize pedestrian



6.2 DESIGN CONSIDERATIONS

- to create physical connectivity
- to create visual connectivity
- to grant proper accessibility
- to provide permeability



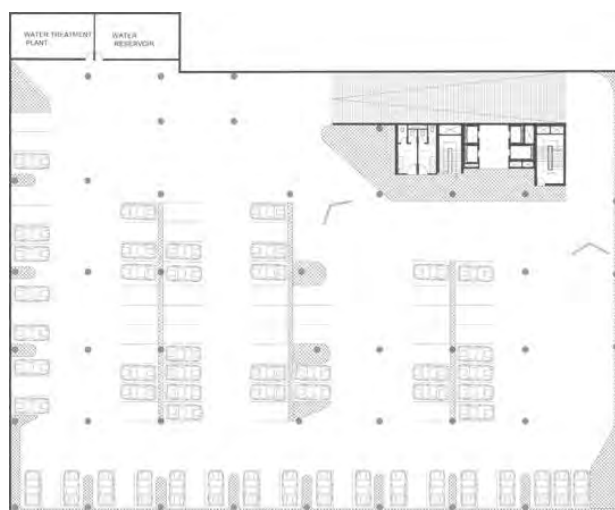
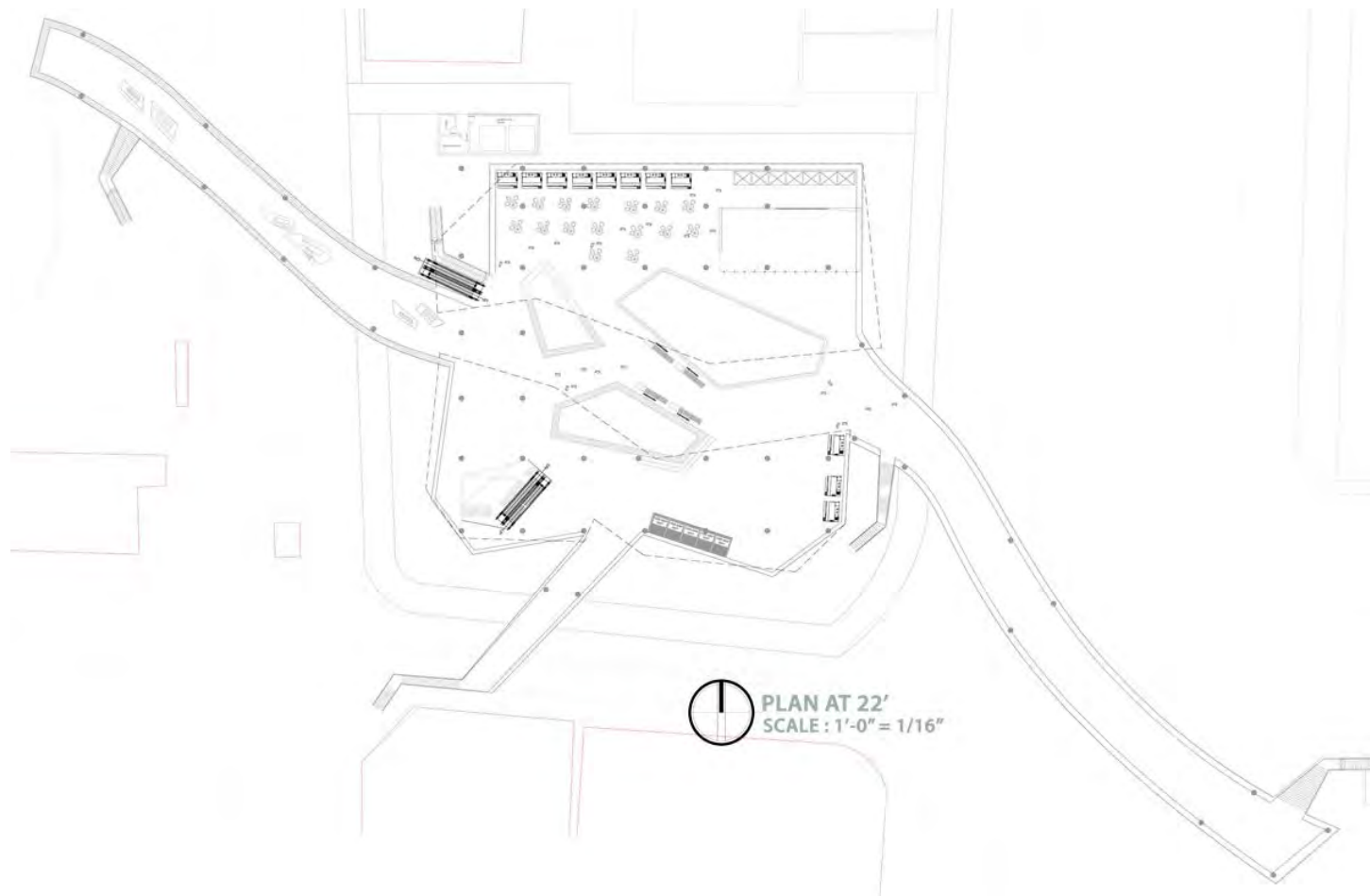
6.3 FORM DERIVATIONS



CHAPTER 7

DESIGN DECISIONS





BASEMENT PLAN
SCALE : 1'-0" = 1/16"





FIG: THE CONNECTING BRIDGE

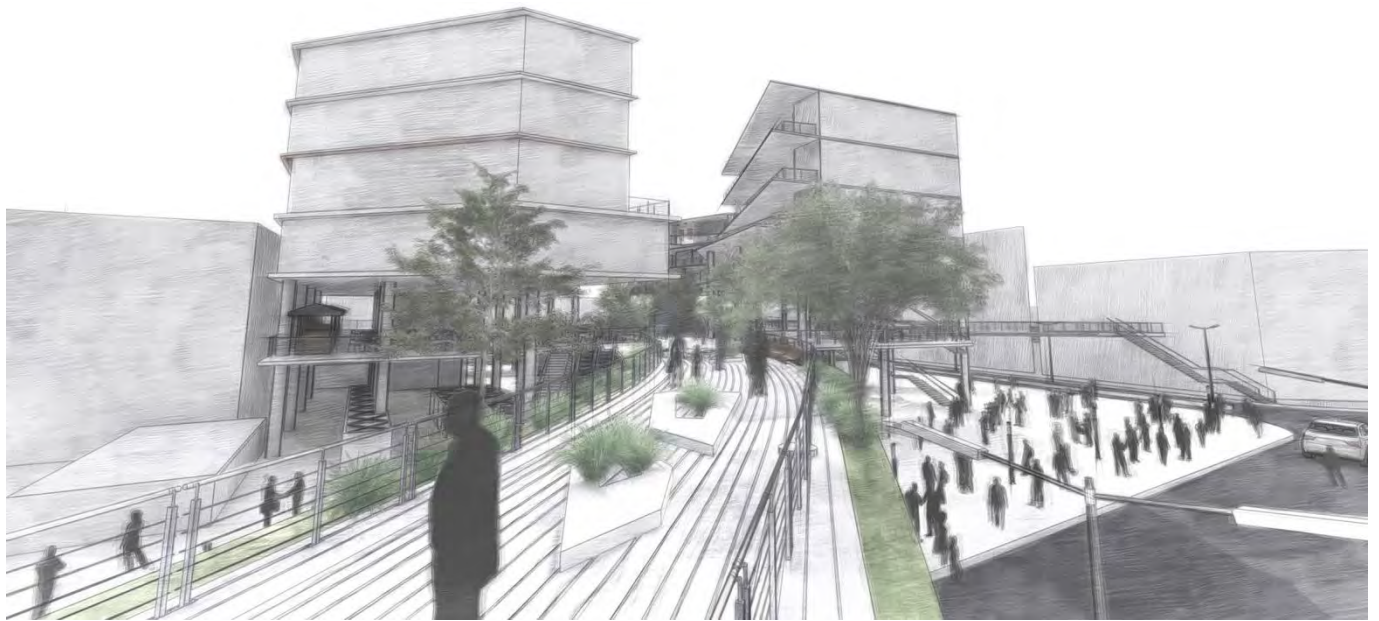


FIG: REDESIGNED HAWKERS' MARKET



FIG: SITE MODEL





FIG: Model with the shopping and office mass

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