ORPHANAGE AT PUBACHAL, DHAKA, BANGLADESH

BY

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ABSTRACT :

Orphanage is a house for the orphan children, from where they can get all the facilities and all their needs for their physical and mental development. I wanted to design a house where they can easy develop their mental and physical developments without facing any kind of problems. There are also some facilities which may also develop their psychological development and train them for their better future. Basically it is a girl orphanage and the girls from 5 to 18 stay here. There are 3 house tutor and total 7 staffs and 3 care takers for their safety and needs. Basically orphans are far away from their family so I wanted here to create a family space for them and also create some spaces for their better future and also for their physical and mental development.

Key words: Orphan, family, care, identity.

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CHAPTER 01

BACKGROUND OF THE PROJECT

1. BACKGROUND OF THE PROJECT

1.1 Introduction

Architects have a duty towards children in society. Every child has the right to receive their basic needs and has the right to family life. If the child is bought up correctly when the child grows, he can serve the people properly. Many children are deprived in our society from the family, the basic needs of orphans in our society, etc. is a condition of the child is without parents, and the orphanage is the Institute to protect and treat children without parents.
Children's Homes formed to house and care for those bereaved children or orphans. In our country, many orphans are neglected. In particular, the girl orphans are much neglected. The aim is to create a child-friendly facilities and environmental plans and specifications and that the children know a family life.
Orphans are far away from their families, they live in an untreated life. You can give them a good way to live, train them in future life, good luck to them and also help to develop the mindset and to guide them all the problems in an orphanage is the best institute.

Project name : Girl's orphanage at purbachal

Client : Ministry of children and women welfare

Target group : Middle class

1.2 Key aspect and objective of the project

Bangladesh is a populous country. Its current population is nearly 14,86,37,160. Nearly 31 percent of the total population is children and nearly 9.70 percent of them are orphans. Bangladesh has basically two types of orphanages. One is a state-run orphanage and the other is a religious orphanage. A few large, international charities continue to fund orphanages, but they are still generally composed of smaller charities and religious groups. It is an orphanage at Purbachal, Dhaka treated by children's ministry and women's well-being. This orphanage houses for those children who are neglected and not have any family. The children live here are the girls. Basically, it's a girl's orphanage. The children live here are aimed to bring up in a way so that they can get their own identity in society when they grow up. And my goal is to design a positive orphanage, which has a friendly environment for the orphans.

1.3 Reason for choosing site

I have chosen this site because it is a residential area, so that there is no risk. It is a safe and secure for orphans. Although it is a residential area as an orphan does not feel alone from others. This site is a three-sided 60 ft wide road. It's a simple shuttle service to the public. It has also a Water view.

1.4 Reason for choosing this program

Orphanages, some children feel that they are plentiful. They feel that they have no value. They are deprived from their family. Some of them have no family, and some of them have family, but they are not able to bring them up. Girls are neglected in our society. When they are orphan they ignored much. This program builds our attention to the girl orphans. Through the design I wanted to give them a chance to grow so that they can get a good family life and to get their identity and make their own position in society. Through the design I wanted to give them the opportunity to learn handicrafts, paintings, electrical and mechanical and other cooperation body's curricular activities. I also wanted to give them a chance to develop into a hobby like gardening, reading, etc. so I can create space in my design. There are some other features that are needed to run an orphanage in correctly. In addition, some of the other features were added to achieve an academic and cultural component of the right.

1.5 Proposed program

Administration office
Visiting section
Security office
Medical unit
Primary school
Library
Multipurpose hall
Vocational training
Girl's residence
Staff residence

CHAPTER 02

SITE APPRAISAL

2. SITE APPRAISAL

2.1 Site location and surroundings:

This site is in Purbachal, Dhaka. It is located at the 11 no. sector of Maijgaon in Purbachal. There is a water body adjacent to this site and it is part of Shitalakkha. It is a residential area.

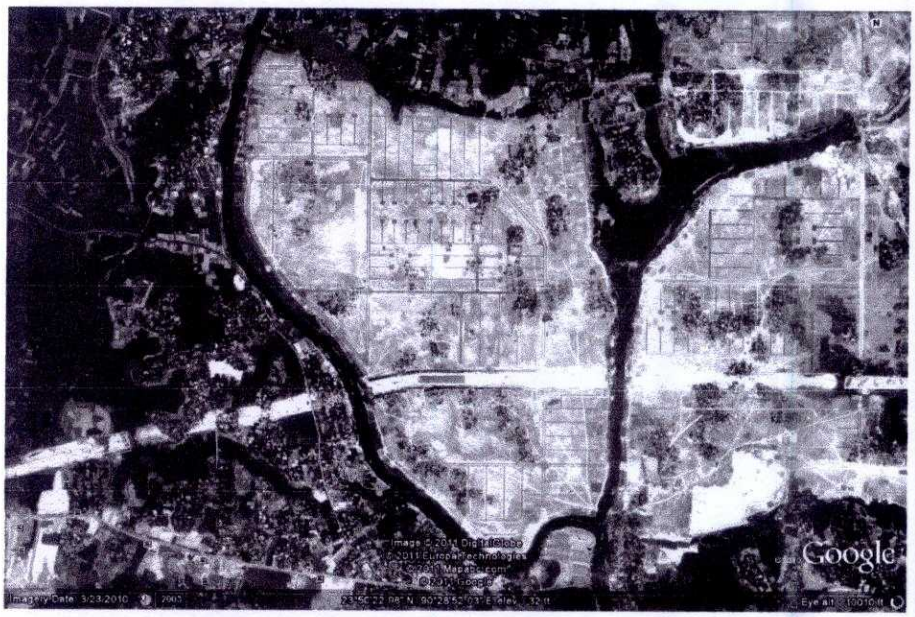


Fig 1 : site (source : Google Earth)

Fig 2 : panoramic view of a portion of a site (source: Naher,2012)

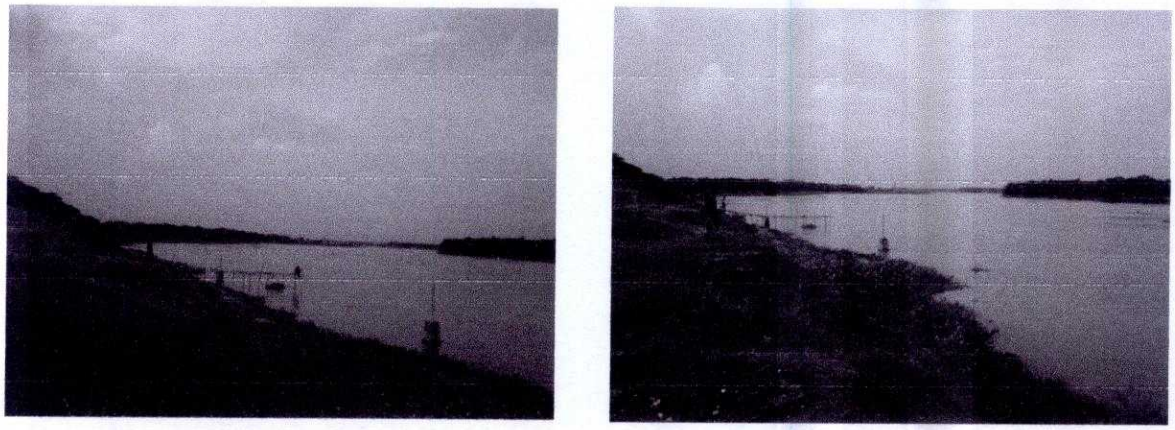


Fig 3 : views of a portion of a site (source: Naher,2012)

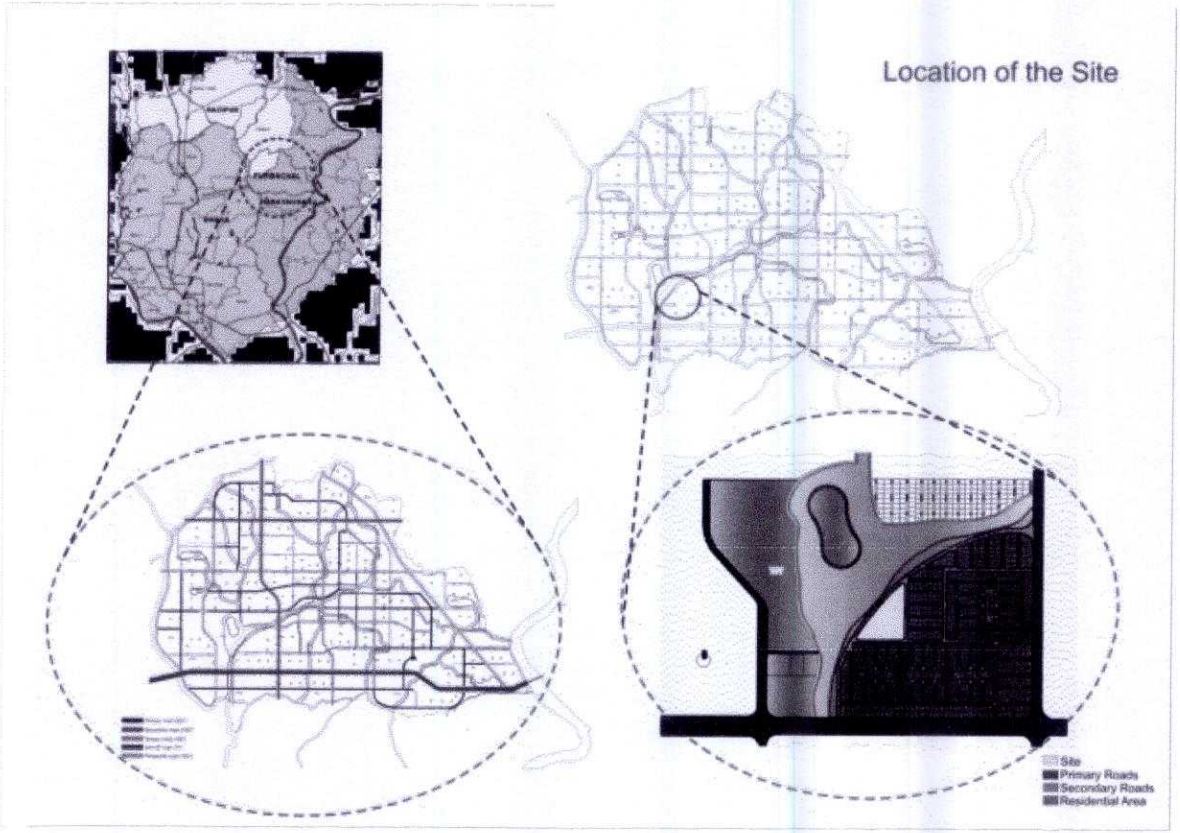


Fig 4 : location of the site (source: Naher,2012)

2.2 Site topography

The site is a flat land and the land is smooth and appropriate for construction.

Total site = 5,25,761.63 sft

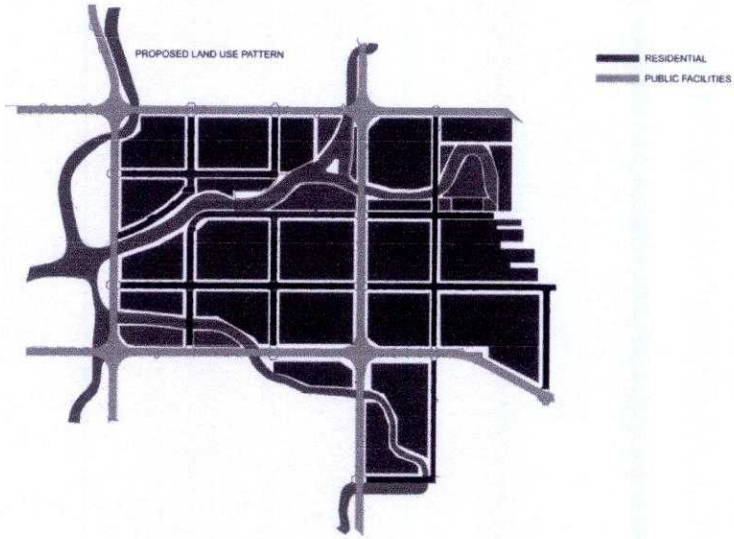


Fig 5: residential and public facilities of the site (source: rajuk,2012)

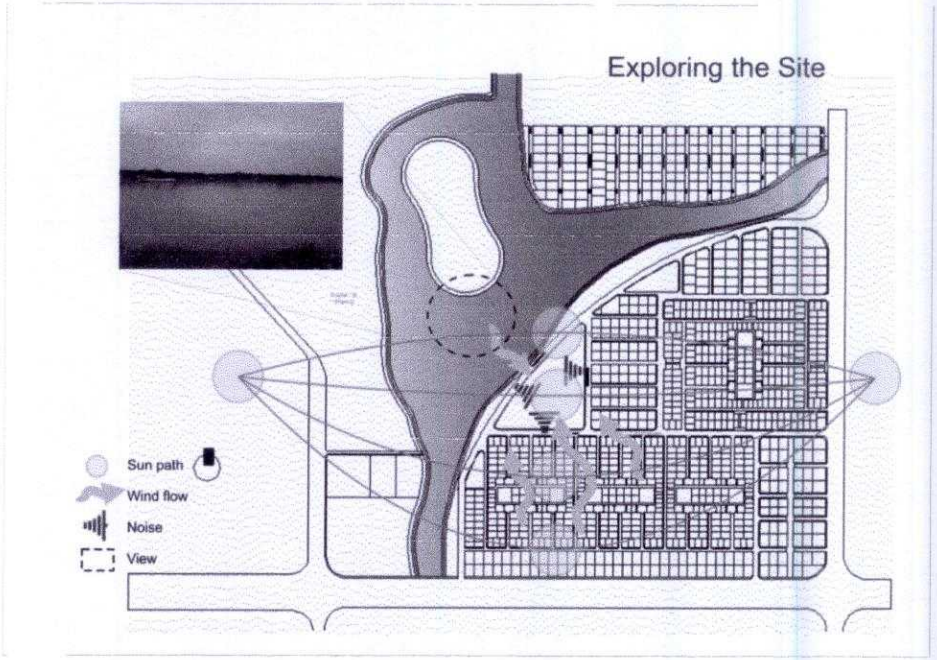


Fig 6: analysis of the site (source: Naher,2012)

2.2.1 Temperature

Temperature is low in November to January

Temperature is high in May to August

2.2.2 Rainfall

Torrential rains in June, July, August and September.

2.2.3 Humidity

Humidity rise in May to September.

2.2.4 Wind

The wind comes from north-south during winter and from south-east during summer.

2.2.5 Road pattern

at present the site is connected to the secondary road of purbachal but very near to the primary road.

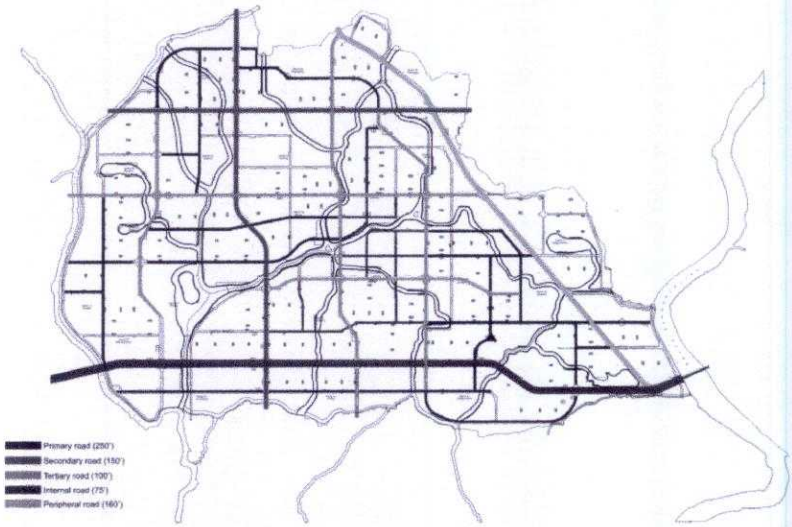


Fig 7: road pattern of the site (source: rajuk,2012)

2.3 Strength and Weakness of the site

The site is just placed near a water body and because of that it has a nice view. It is a residential area so it is very safe for an orphanage. The side has 60 ft wide road surrounded it, which is very suitable for the people and for the vehicles.

There is a massive noise pollution from the roads.

CHAPTER 03

LITERATURE STUDY

3. Literature study

3.1 Definition of orphanage

Orphanage is defined as "an institution that houses children whose parents died or whose whereabouts are unknown." The term is generally out of date in the United States, although it is often used to describe the institutions abroad, which is a more accurate term, because the word orphan has a different definition of the international adoption. Orphanage is a residential institution dedicated to the treatment of a large number of children.

Although many people assume that most of the children are orphans living in this is often not the case with four out of five children in orphanages has at least one living parent, and most have some extended family. Most of the orphanages have closed on the West. That leaves a large number of state-sponsored orphanages in the former Soviet block, but many of them are gradually fading in favor of direct support to vulnerable families and the development of foster care and adoption services, if that is not often considered at possible. Orphans care homes called Orphanages.

A few large international charities continue to fund orphanages, but they are still commonly formed of smaller charities and religious groups. Some of the orphanages, particularly in developing countries, it preys on vulnerable families at risk of breakdown, and actively recruit children to ensure continued funding, in orphanages in developing countries are rarely treated the state.
Other child care facility can be called a group home, orphanage, shelter, rehabilitation center or juvenile shelter care center.

3.2 Origin of the orphanage

The first orphanages, called "Orphanotrophia", were founded the Catholic Church 1 century in the middle of a variety of alternative orphan support. Definition of this term has been "Adoption Glossary," which defines a variety of words that relate to adoption and infertility.

In 1747 Thomas Conram was so shocked by the number of children abandoned in London and established the first orphanage in Bloomsbury.
Only 1866 more notoriously known as Thomas Barnardo established a charity, "Dr Barnardos," and in 1870 his first home was opened in Stepney. This was for boys only three years later, the Girl's home was opened in Barkingside, Essex, and it is amazingly more than 1,500 orphaned girls alone.

When he died in 1905, his charity for 96 homes and a population of more than 8,500 children. As

life expectancy continues to decreased number of homeless children, but even now, still a lot of orphans, a number of reasons.

Char Fasson orphanage is located in the countryside of South Bangladesh. The climatic problems as well as Bangladesh's southern coast make the nine coastal districts poorest and least developed throughout the country, a country in which personal income is lower even than the neighboring country of India.

Bangladesh, the weather was really destructive factor causing the founders of the orphanage. It was built in 1972 in response to a devastating cyclone and tidal surge that killed hundreds of thousands of people in November 1970.A local landowner donated the land and UNICEF contributed to the construction of assets resulted in an orphanage.

The former Australian MP, Sir Len Reid approved the leadership in an orphanage since the visit of the region damage. His organization ran an orphanage until 1992, when Mr. Reid's advanced age makes it impossible to continue the management of daily operations. Unfortunately, there was no one else in the organization available to him, so he turned the reins over Maninuddin AHM Ahmed (Jahangir), son of the original landowner. Jahangir was able to get some funding for the Dutch children's rights organization, which lasted until 2006, when the commitment was closed. Since then, an orphanage is barely able to scrape by an annual $ 5,000 scholarship from the Government of Bangladesh.

3.3 Role of orphanage

By definition, the word orphan: means a child who was left without parents to care for him, because they are dead. Today, our international orphans tend to be older, but they have abandoned them or their parents' rights have been terminated. There are many reasons why people abandon their children; the causes appear to be similar all over the world.

Below is a list of the most common reasons why children are placed for adoption worldwide.

1) Poor economic conditions, poverty
2) parents' illness, and mental or physical
3) Drug or alcohol abuse by parents
4) Mental retardation
5) Incarceration
6) Termination of parental rights because of neglect or abuse
7) The political and economic policies of different countries (one-child policy)
8) The complexity of disease, the family can handle.

Children's homes are part of the culture of every society. How good or how bad the orphanage is, according to the national outlook for abandoned children and of course the economic situation in these countries.

CHAPTER 04

CASE STUDY

4. Case study

Orphanage is defined as "an institution that houses children whose parents died or whose whereabouts are unknown." The word "orphan " comes from old Latin and Greek words- meaning bereavement. Orphanages are formed to house and care for these bereaved children or orphans as they came to be known.

4.1 Case study 1

Name of the project : SOS CHILDREN VILLAGE

Location : Bogra

Designed by : Architect Raziul Ahsan

SOS CHILDREN VILLAGE is an organization which is a huge project. It is a huge presentation of an orphanage. I choose this project for my case study because it can give me a fundamental idea of this project.

The project is based on the courtyard of the method. All functions are arranged around courtyards. There are plenty of open green spaces. The number of service areas and the core are considered to be perfect. The children are kept in individual houses. One mother takes care of ten children in one house.

4.1.1. Findings

1. Brick build structure which is not much energy consuming and it is environment friendly.

2. Houses are arranged around small courtyards.

3. The zoning of the whole project is perfectly arranged.

4. Lots of open spaces and greens make the project beautiful and also environment friendly.

5. Ventilations are properly done in the whole project.

Fig 8: master plan (source author)

Fig 9 : children dorm(source author)

Fig 10 : paved spaces (source author)

Fig 11 : green spaces (source author)

4.2 Case study 2

Name of the project : JAGATJYOTI CHILDREN WELFARE HOME

Location : Ramu, Cox's Bazar

Designed by : Architect Bruno Lamquang

This is basically a Buddhist orphanage and houses only Buddhist children. It is run by the fund from the Buddhist temple. There are 76 children and 4 teachers.

This is basically a brick built structure with wooden doors and windows. The light and ventilation is not so good. There are huge amount of green spaces and the zoning is also done properly. Adequate circulation is provided.

4.2.1. Findings

1. Brick build structure which is not much energy consuming and it is environment friendly.

2. Wooden doors and wooden window with glass surface make this project also non energy consuming.

3. Huge lobby.

4. The zoning of the whole project is perfectly arranged.

5. Lots of open spaces and greens make the project beautiful and also environment friendly.

6. Ventilations are not properly done in the whole project. Adequate light cannot enter into the rooms.

7. Services are also done properly and the circulations are also highly provided.

8. There is no medical room or sick room for the children.

9. There is no indoor games or indoor spaces, gym or common room.

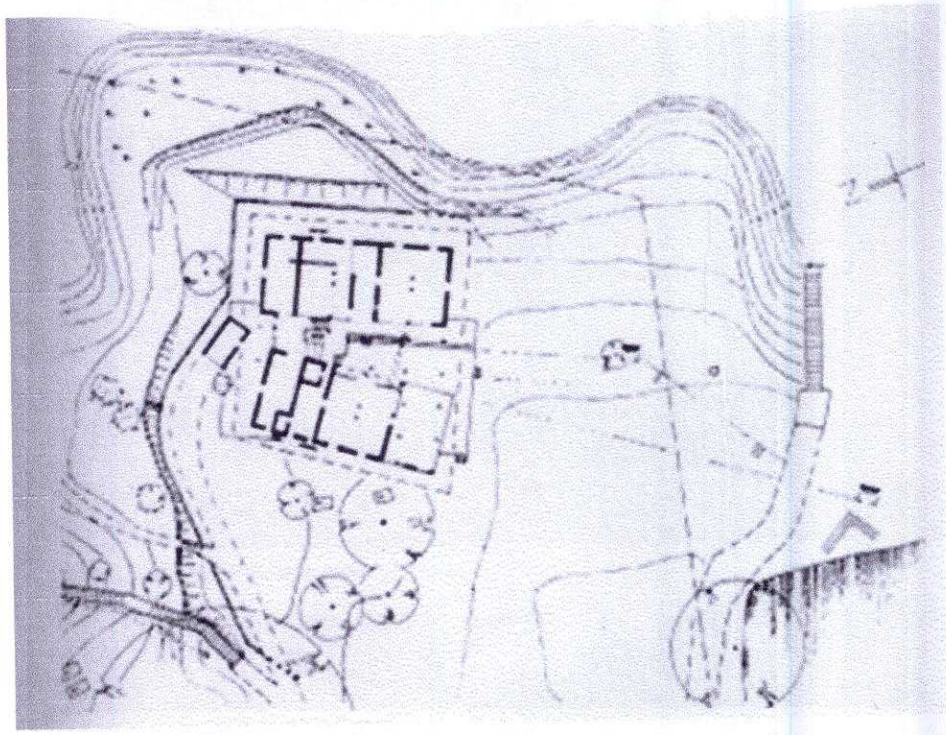


Fig 12: master plan (source author)

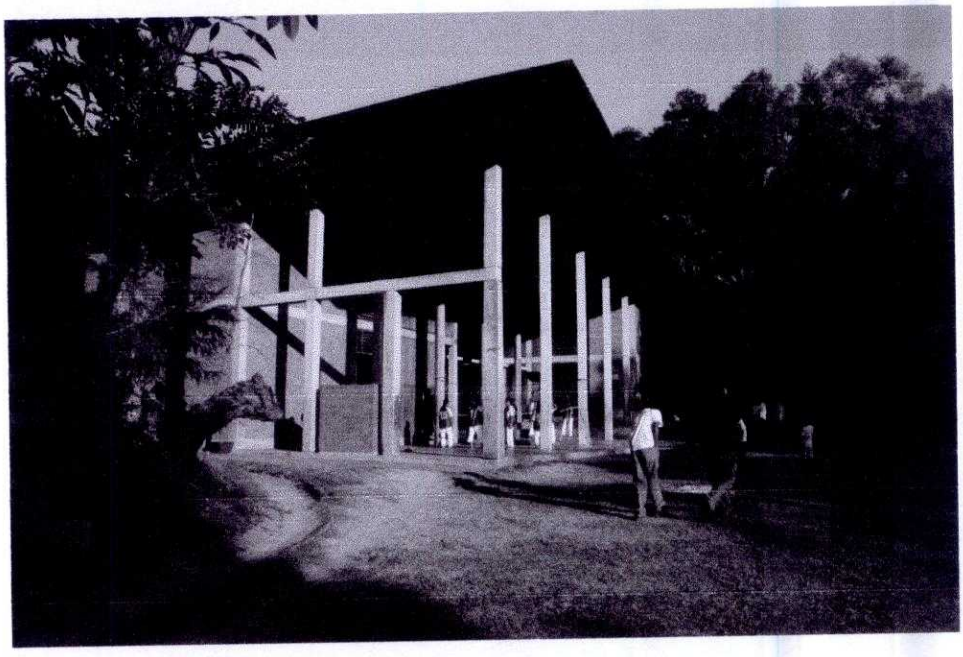


Fig 13: school (source author)

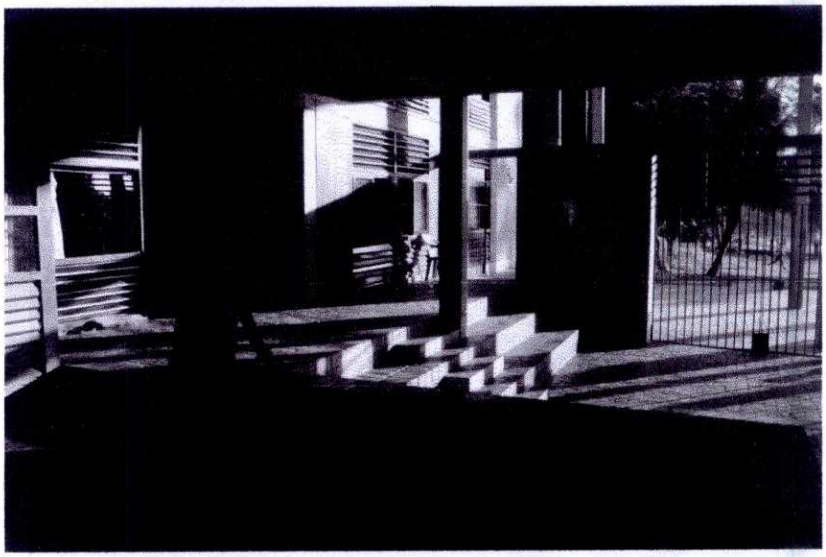


Fig 14: entrance to the orphanage (source author)

Fig 15: room (source author)

Fig 16: stair (source author)

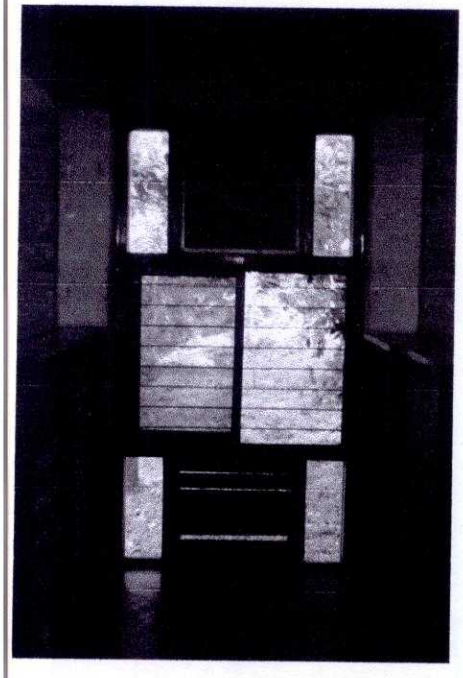


Fig 17: window (source author)

4.3 Case study 3

Name of the project : ANJUMAN MOFIDUL ISLAM YATIM KHANA

Location : Gendariya, Dhaka

This is basically a Muslim orphanage and houses only Muslim children. It is run by the fund from different organizations. There are 140 children and 3 teachers.

This is basically a brick built structure with wooden doors and windows. The light and ventilation is enough for the rooms. This is not a designed project but the building blocks have been arranged by some rules.

4.3.1. Findings

1. One building is provided the whole facilities, except the educational sections.

2. The zoning is good.

3. Lack of green spaces.

4. Ventilations are properly done in the whole project. Adequate light enter into the rooms.

5. Adequate circulation is provided.

6. No gym, common room and indoor games room.

7. This is a girl orphanage and the security system is also appreciated.

Fig 18: children dorm (source author)

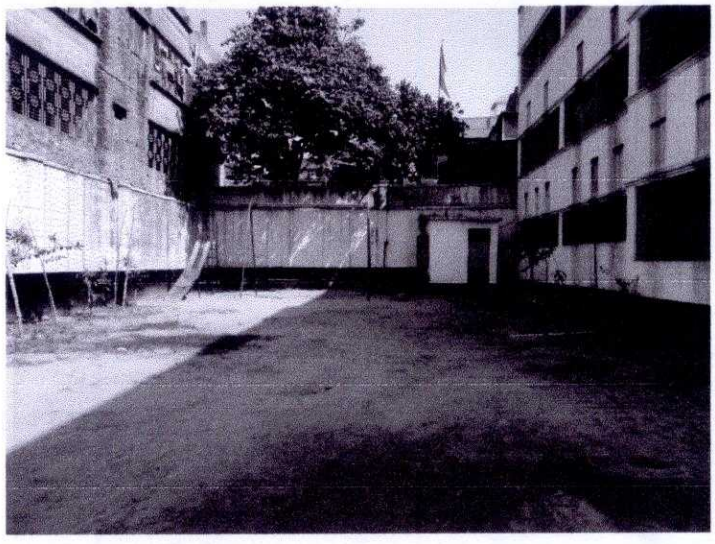


Fig 19 : playground (source author)

Fig 20: kitchen (source author)

CHAPTER 05

PROGRAM AND DEVELOPMENT

5. PROGRAMME AND DEVELOPMENT

5.1 Program

This proposal is for 110 orphan children, age limitation: 5-8 (50 orphans), 9-13 (30 orphans), 14-18 (30 orphans) and there are also 2 seats for especially able children. The car parking is only allowed for the orphanage and also for the guests. So 7-8 parking would be enough for this orphanage.

ADMINISTRATION

SL. NO.	SPACE	UNITS	AREA
01.	DIRECTOR	1	260 SFT
02.	GENERAL OFFICE	1	220 SFT
03.	MEETING ROOM	1	235SFT
04.	WAITING		300SFT
05.	CO-WORKER'S ROOM	1	370SFT
06.	TOILETS	1	120SFT
07.	STORE	1	80SFT

RESIDENTIAL FACILITIES

SL. NO.	SPACE	UNITS	AREA
01.	ROOMS FOR GIRLS (5-8) 50 PERSON	2	4600SFT
02.	ROOMS FOR GIRLS (9-13) 30 PERSON	2	2760SFT
03.	ROOMS FOR GIRLS (14-18) 30 PERSON	2	2760SFT
04.	DINING (120 PERSON)	1	4500SFT
05.	COMMON ROOM	1	1500SFT
06.	KITCHEN	1	2000SFT
07.	SICK ROOM	1	390SFT
08.	TOILETS	2	310SFT

STAFF SECTION

SL.NO.	SPACE	UNITS	AREA
01.	BED ROOM	3	190SFT
02.	DINING AND LIVING	3	120SFT
03.	KITCHEN AND STORE	3	70SFT
04.	TOILETS	3	45SFT

PRIMARY SCHOOL

SL.NO.	SPACE	UNITS	AREA
01.	CLASSROOMS	10	1000SFT
02.	PLAYROOM	1	600SFT
03.	HEADMASTER ROOM	1	270SFT
04.	COMMON ROOM	1	400SFT
05.	TEACHER'S ROOM	1	425SFT
06.	OFFICE	1	320SFT
07.	STORE ROOM	1	100SFT
08.	TOILETS	2	363SFT

LIBRARY

SL.NO.	SPACE	UNITS	AREA
01.	LIBRARY	1	1000SFT

MULTIPURPOSE HALL

SL.NO.	SPACE	UNITS	AREA
01.	DISPLAY	1	6000SFT
02.	LOUNGE	1	740SFT
03.	STORE	1	400SFT
04.	TOILETS	1	525SFT

VOCATIONAL TRAINING

SL.NO.	SPACE	UNITS	AREA
01.	CRAFTS	1	600SFT
02.	MECHANICAL	1	630SFT
03.	ELECTRICAL	1	630SFT
04.	TOILETS	1	240SFT
O5.	OFFICE	1	340SFT

5.2 Rational of the Program

Besides the needs of the children there are some other facilities which I incorporated in my design. These functions are there because of their mental and physical development. This project is not only for their need it can also help their psychological development. This project should give them all the facilities and all their needs for their mental and physical development.

For their basic needs like education there is a primary school for the children. And also considering their health, this program also provided health facilities for the children. For their physical development there are also some indoor and outdoor game facilities are provided.

Except the academic activities there are also some extra curriculums here, which would help them to develop their skills. Vocational training and gardening are also provided for their better skills and which may also help in their leisure time.

CHAPTER 06

CONCEPTUAL STAGE AND DESIGN DEVELOPMENT

6. CONCEPTUAL STAGE AND DESIGN DEVELOPMENT

6.1 Concept development

To design an orphanage, the concept was to build a house for the orphan children which make them free. They don't have family with them. So most of the children feel lonely. And they are also not allowed to go outside when they want. So the main idea was to create a space where they feel safe and secure and create a space where they feel their freedom.

The idea was to give the children a family and a secure life. While designing an orphanage I considered the freedom and their family life. They think they are derived from their family. But in this design I tried to give them a secure life.

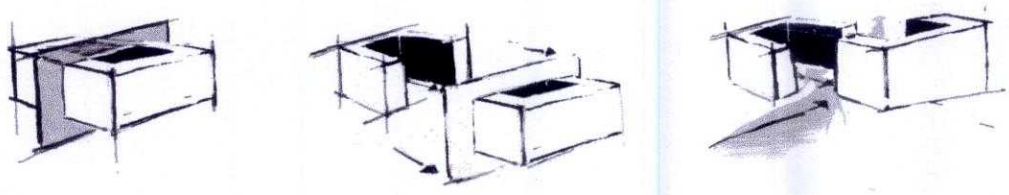


Fig 21: concept development

How a form separated from a basic form and make their own identity, thus I tried to give them their own identity through my design.

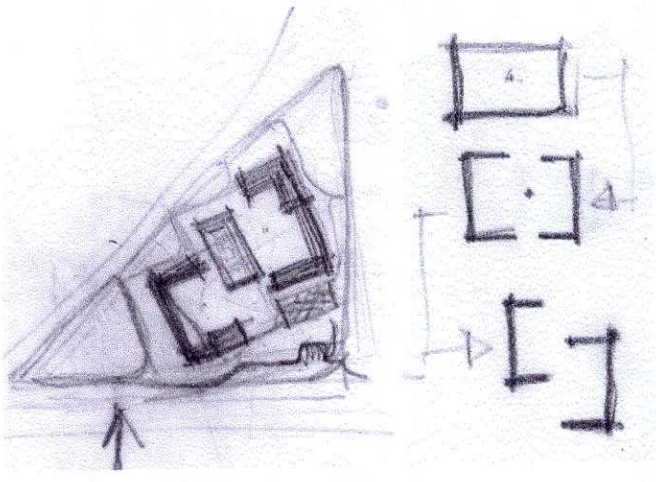


Fig 22: concept development

6.2 Conceptual sketches

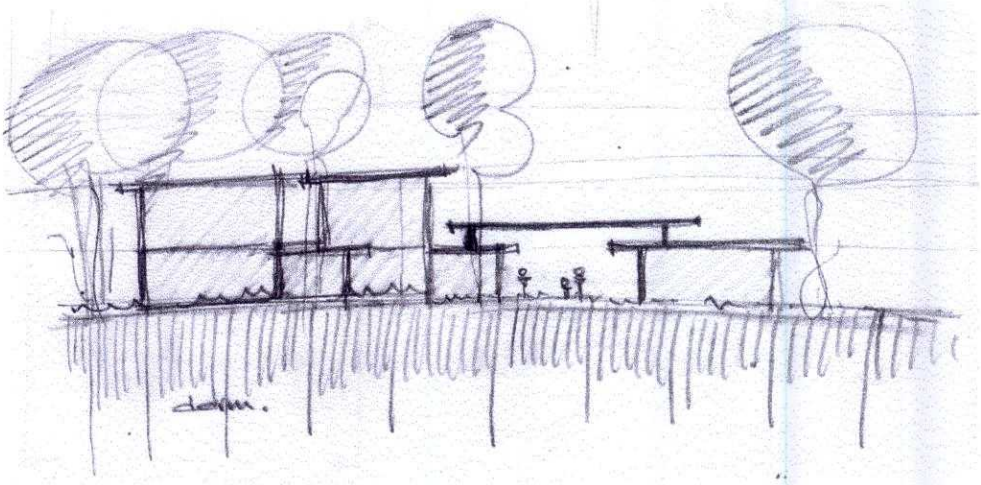


Fig 23: conceptual sketches of entrance

I wanted to create transparency through the dorms and also maintaining the security and privacy into the other sectors.

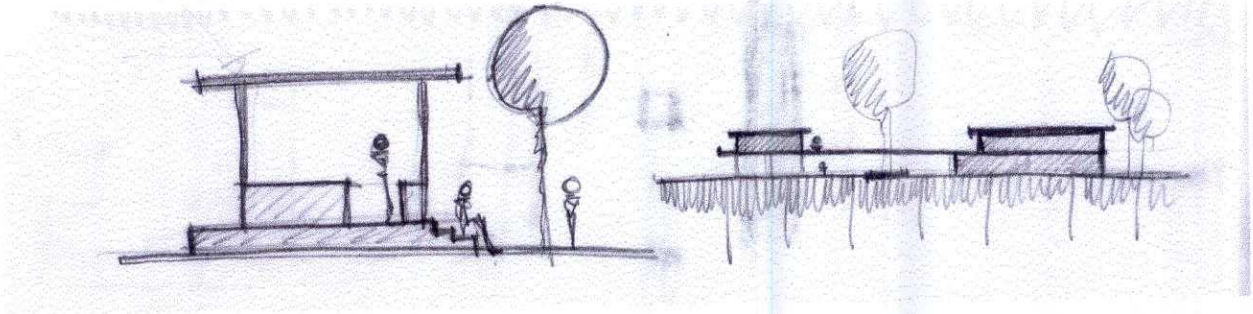


Fig 24: conceptual sketches of connection spaces

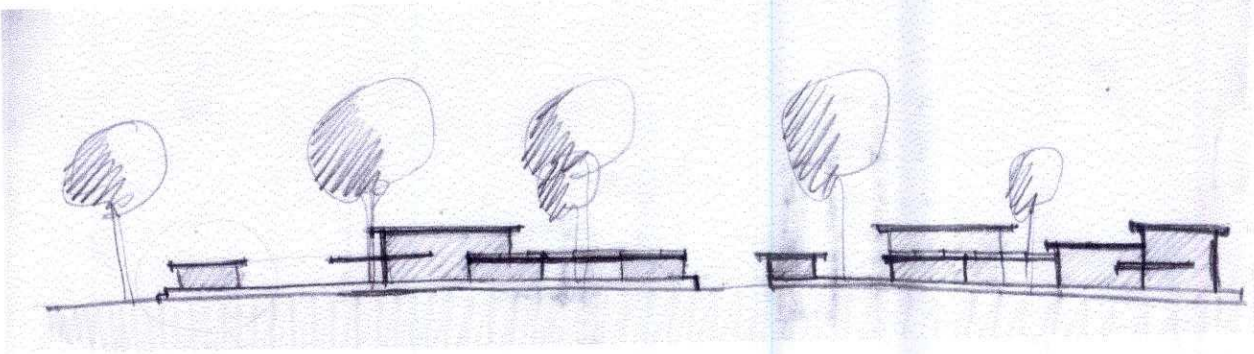


Fig 25: conceptual sketches of dorms and other buildings

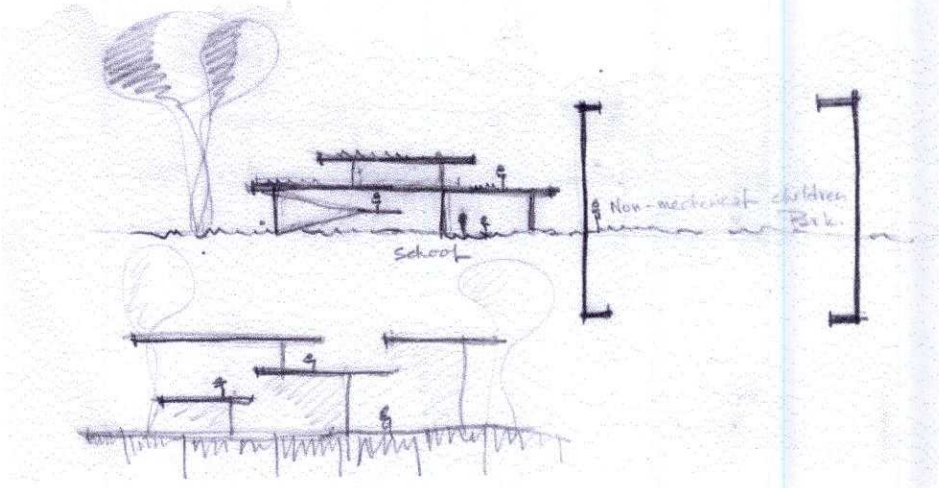


Fig 26: conceptual sketches of school and other buildings

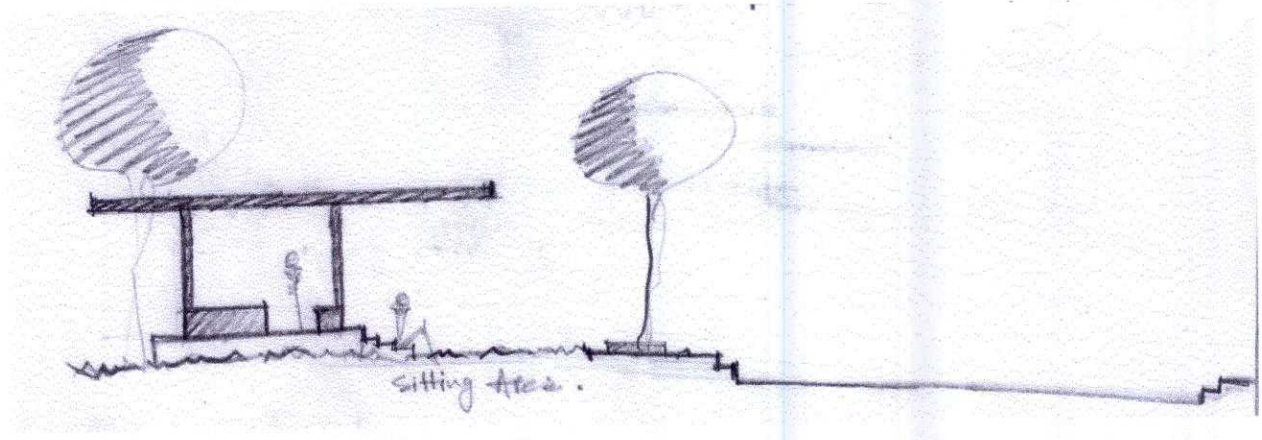


Fig 27: conceptual sketches of sitting spaces

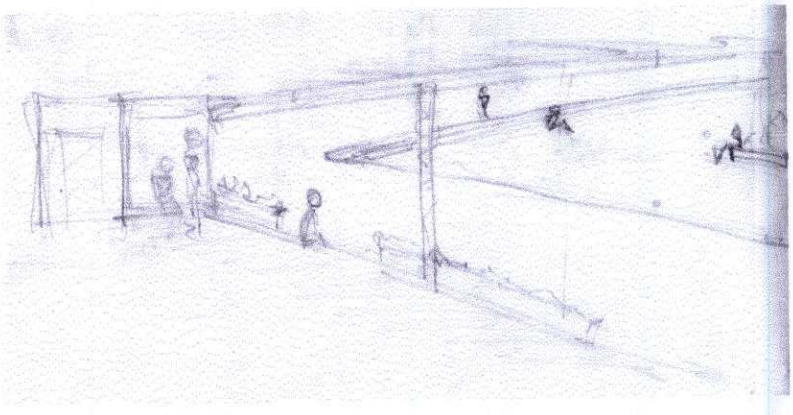


Fig 28: conceptual sketches of open spaces

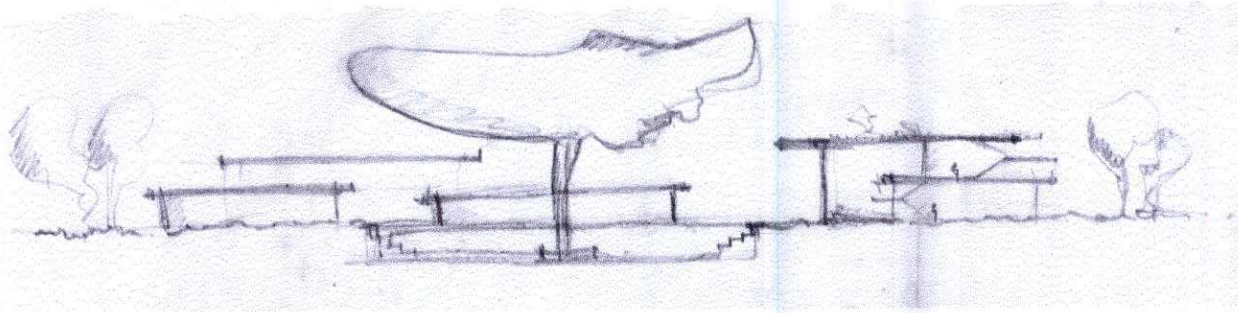


Fig 28: conceptual sketches of connection spaces

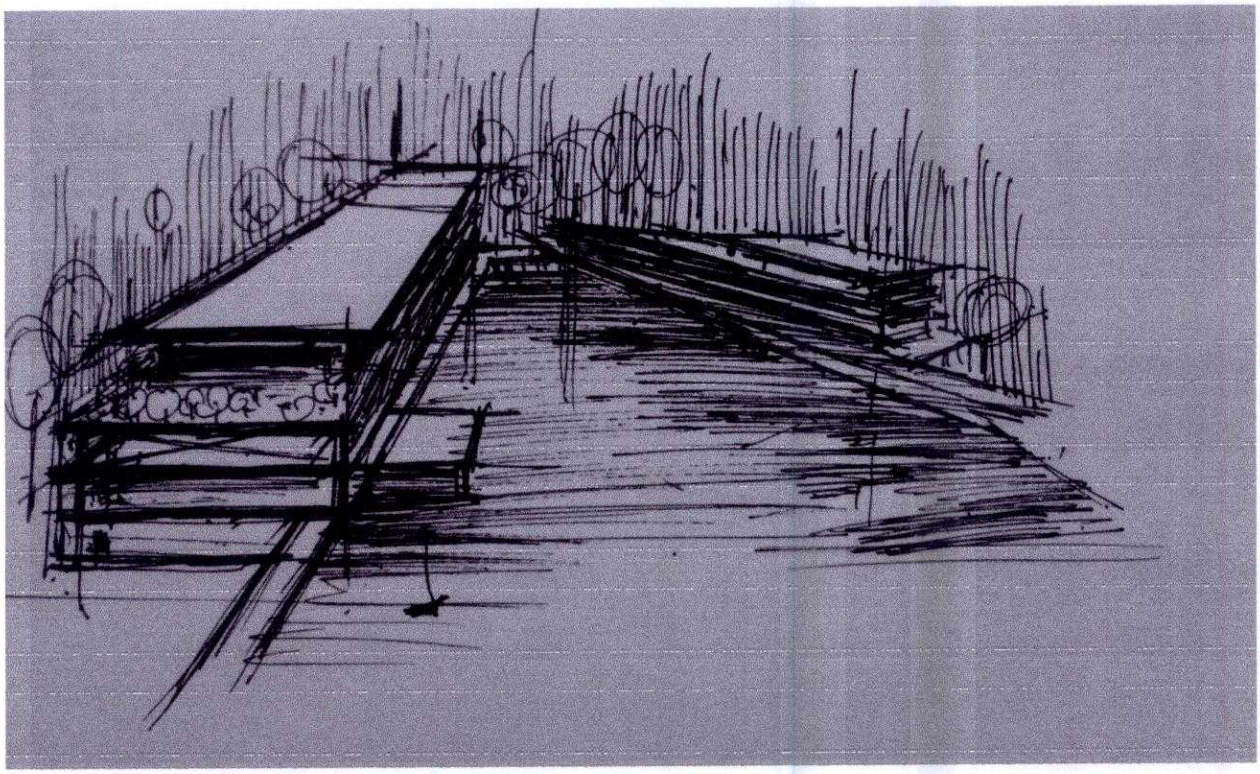
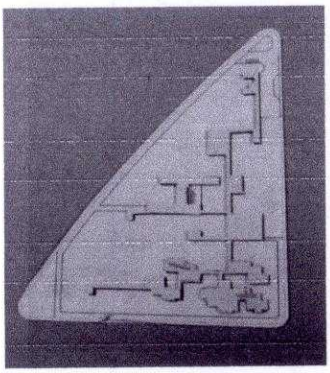


Fig 29: conceptual sketches of form development

6.3 Development phase

6.3.1. phase 01



I wanted to place the residential sections in to the end of this site. According to the zoning system the administration office came first then the multipurpose hall, primary school, dining hall then the residential zone.

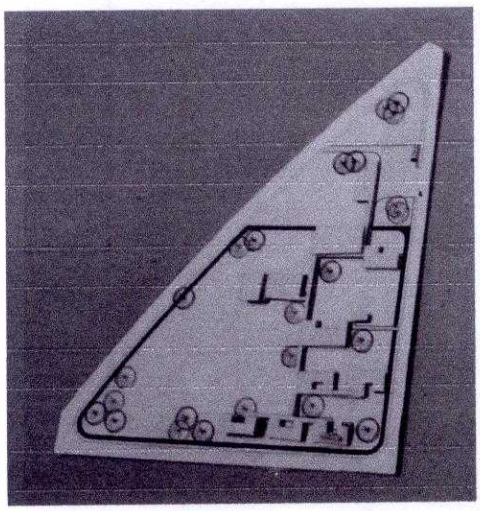
Problems:

Circulation very complex

Ventilation problem

School circulation not solved

6.3.2. phase 02



In this phase I tried to solve the circulation. Minimize the whole project and create huge open spaces for children.

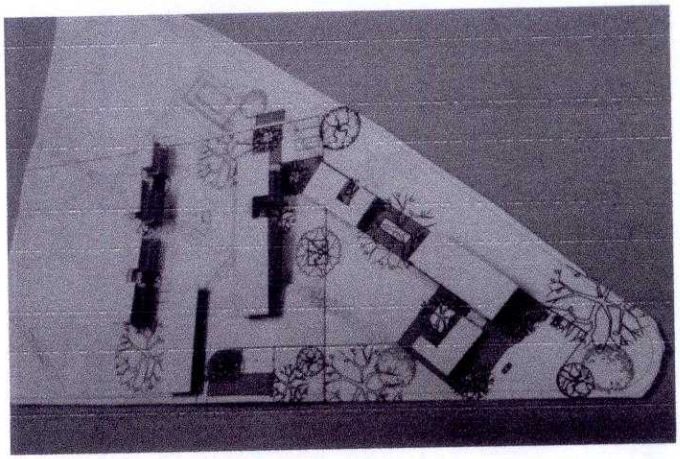
Problems:

Form not respecting the whole site

Problem on plaza level

Too many distances from the building

6.3.3. phase 03



In this phase I tried to respect the site through the buildings. And also minimize the total build area.

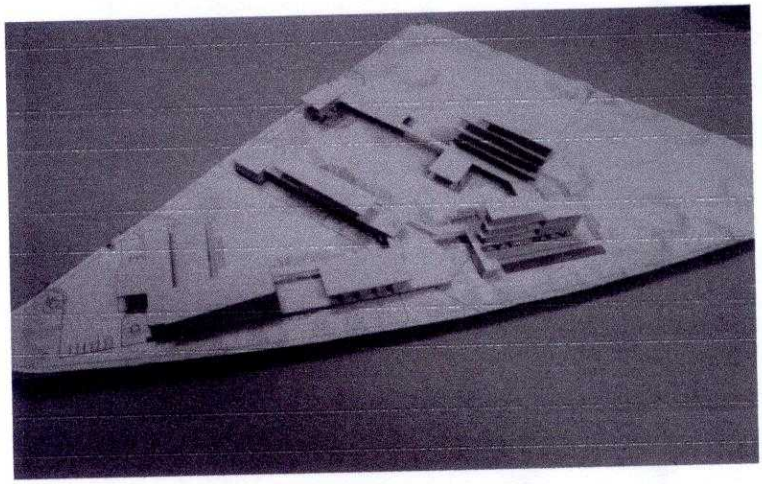
Problems:

Plan is not solved properly

West treatment needed

Distances from the building

6.3.4. phase 04



In this phase I tried to solve ventilation problems by designing the buildings in north south orientation. Dorms are three and four storied but I create some open courtyard for ventilation. Staff sections are separated from the girls residential zone. Residential zone is restricted so that the privacy and the security is heavily maintained.

6.3.5. phase 05

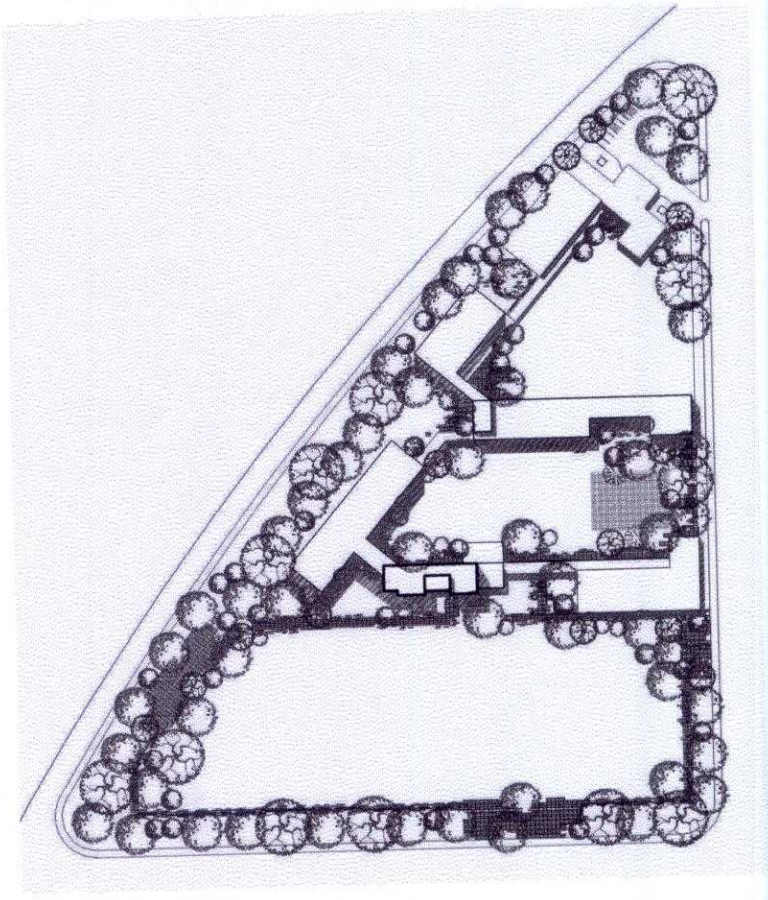
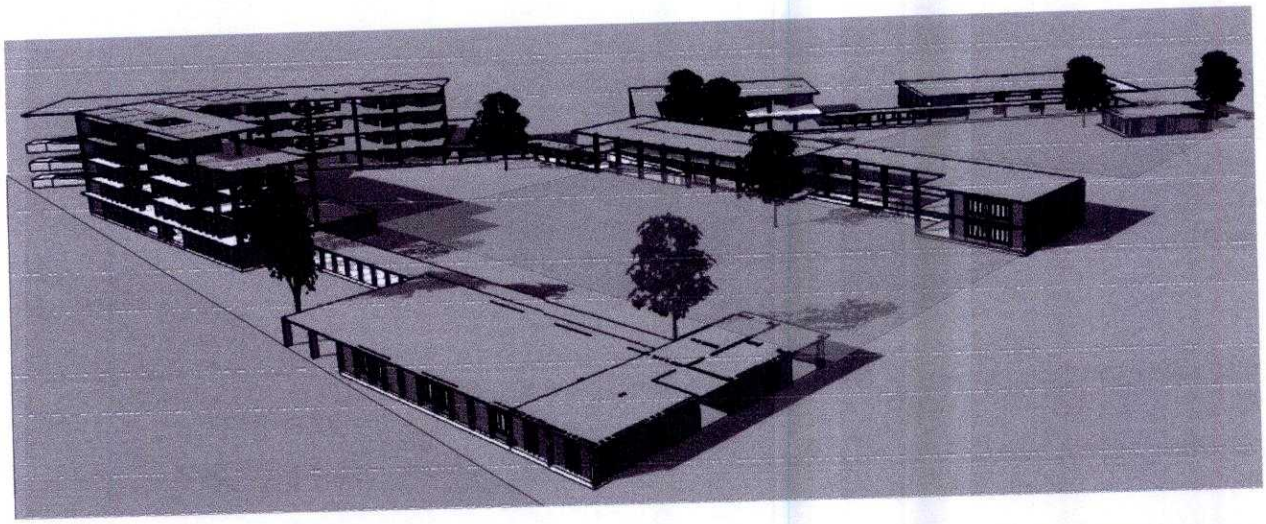
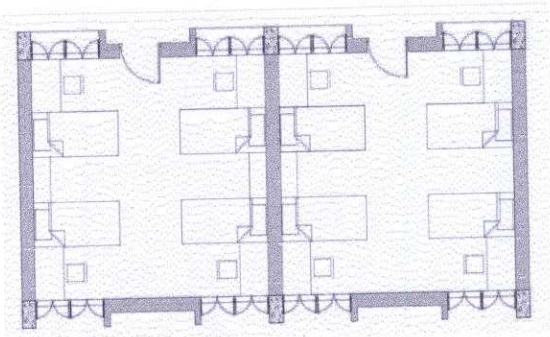


Fig 30: Master plan



My idea was to create different sizes courtyard into this design. According to the child psychology they need spaces for their mental development. So I tried to create some different types of courtyards for different activities. They need spaces and proper care for their mental and physical development.



The children (5-9 years) they cannot take proper care of themselves, so for every 7 children there are 1 volunteer, who is adult.

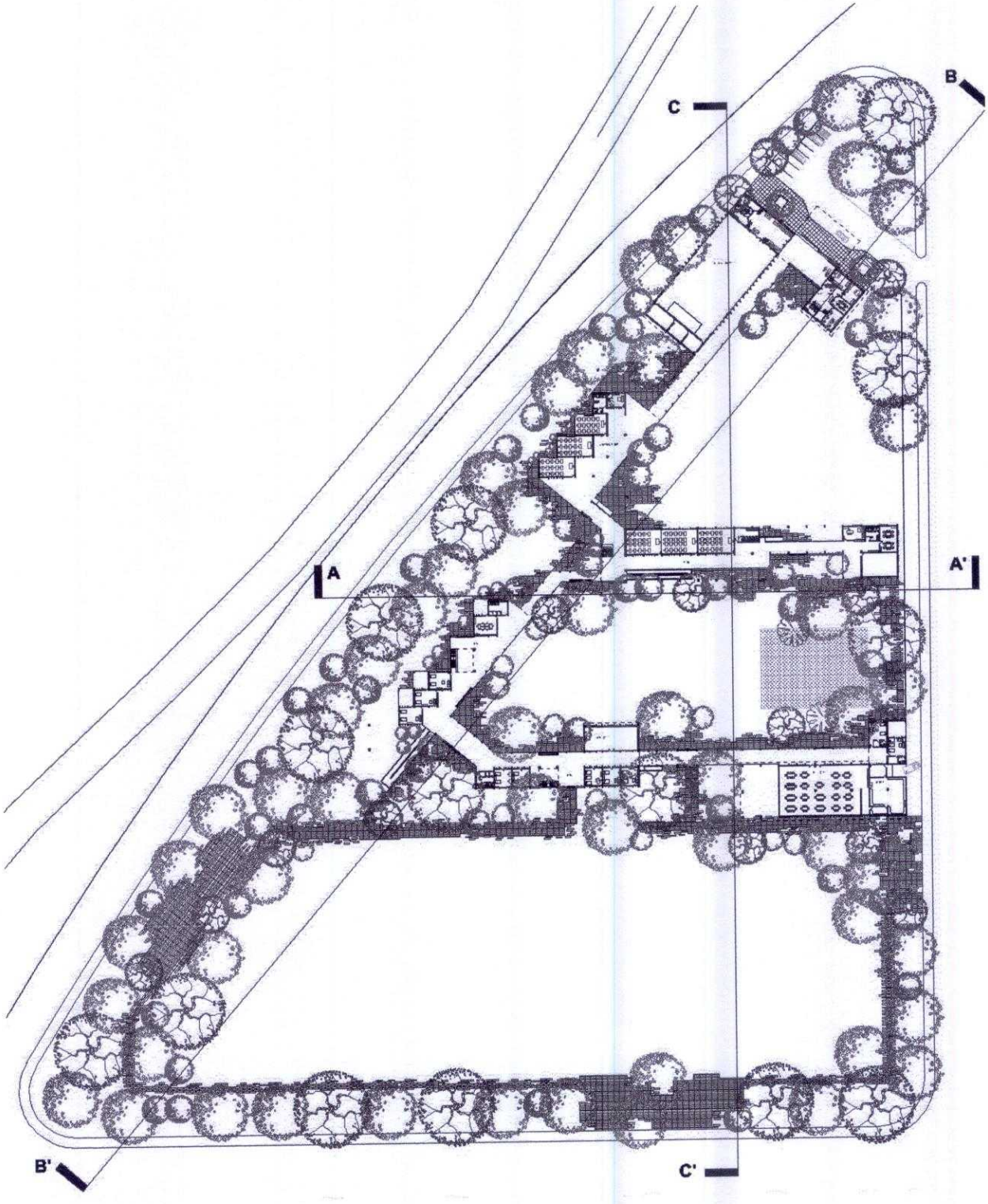


Fig 31: Ground floor plan

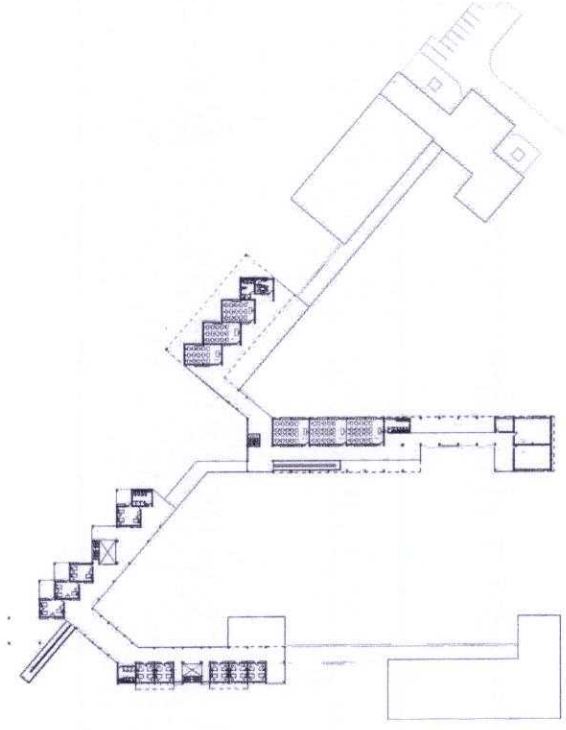


Fig 32: First floor plan

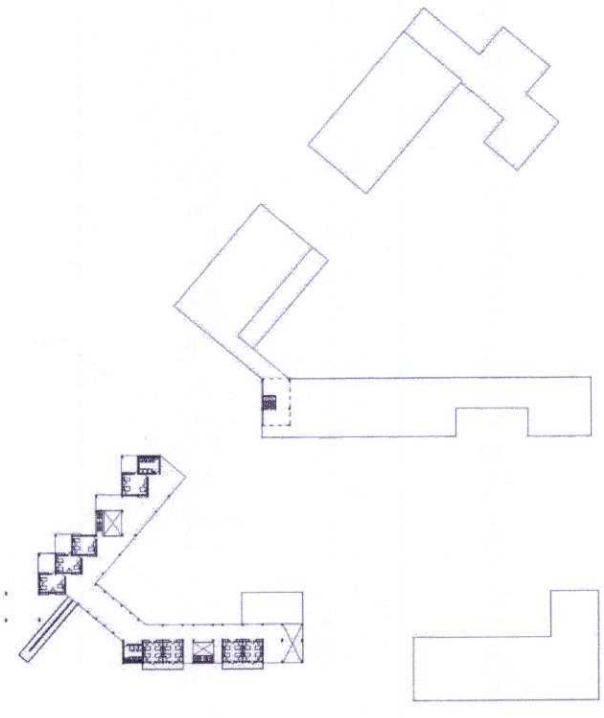


Fig 33: Second floor plan

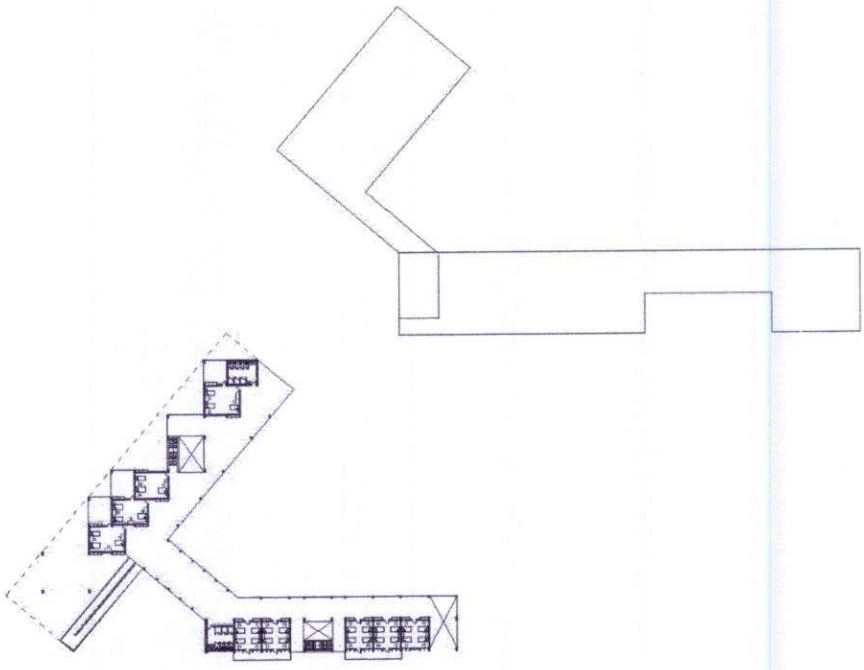


Fig 34: Third floor plan

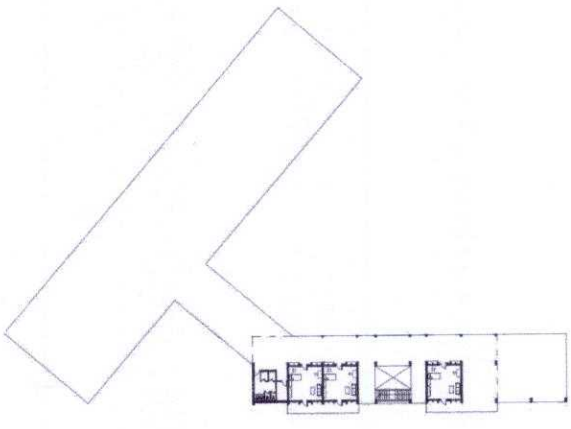


Fig 35: Forth floor plan

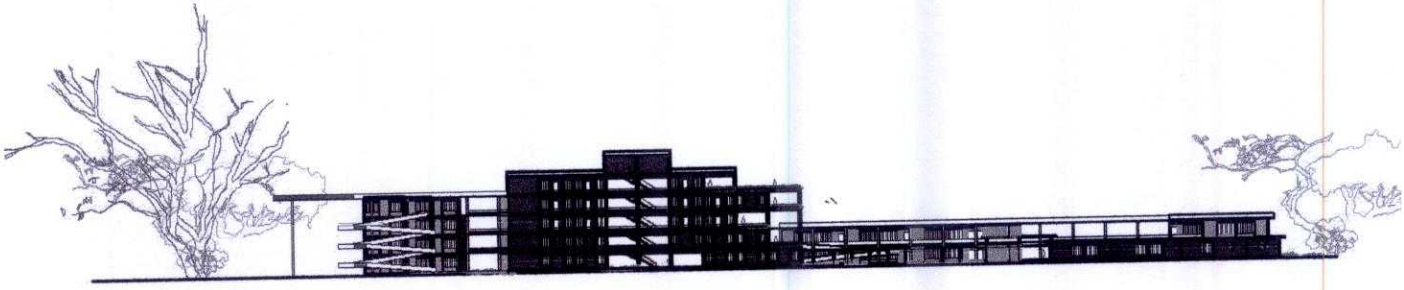


Fig 36: South elevation

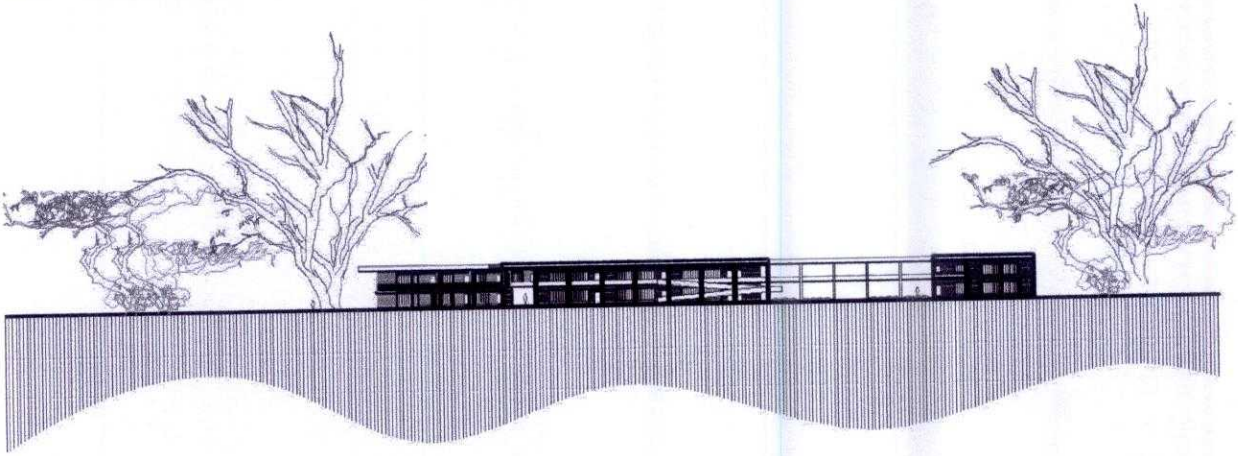


Fig 37: Section AA'

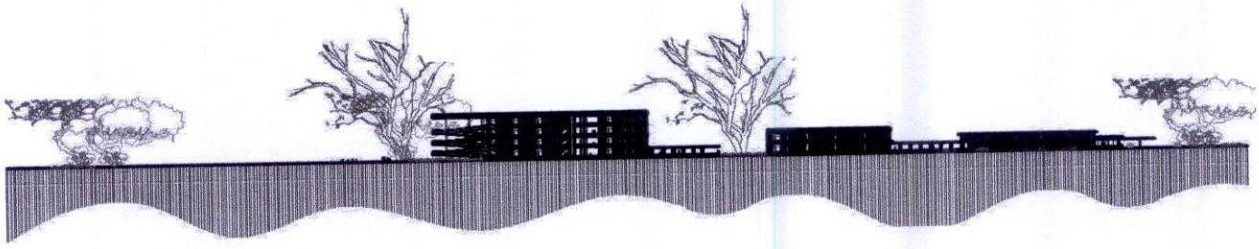


Fig 37: Section BB'

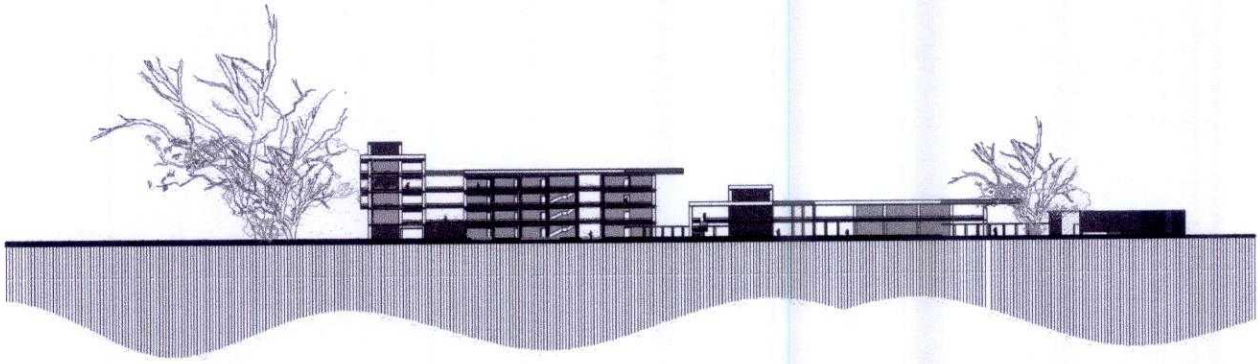


Fig 38: Section CC'

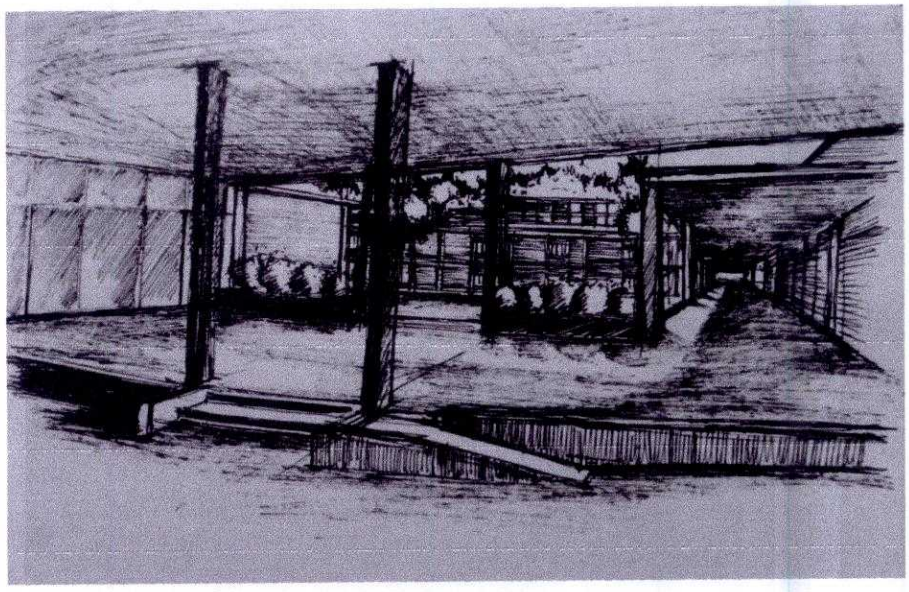


Fig 39: Entrance of the orphanage

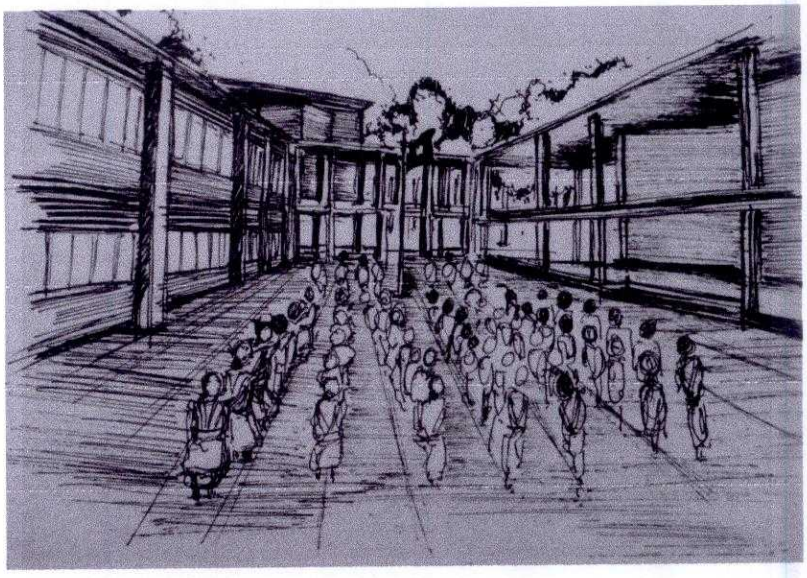


Fig 40: In front of the school, assembly space

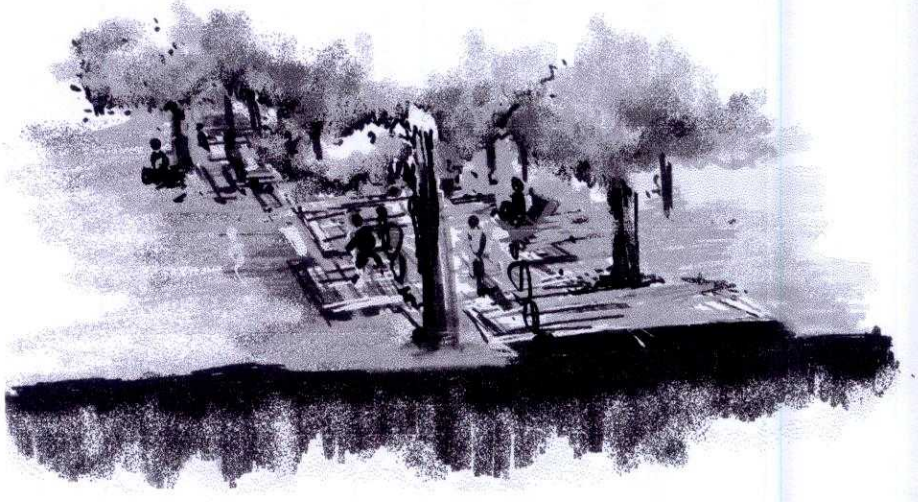


Fig 41: Peripheral walkway

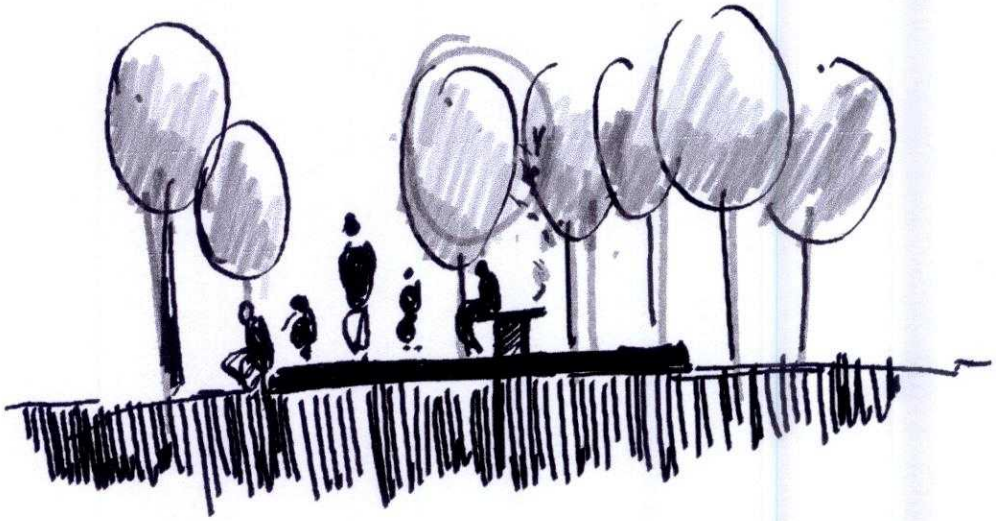


Fig 42: Peripheral walkway and sitting spaces

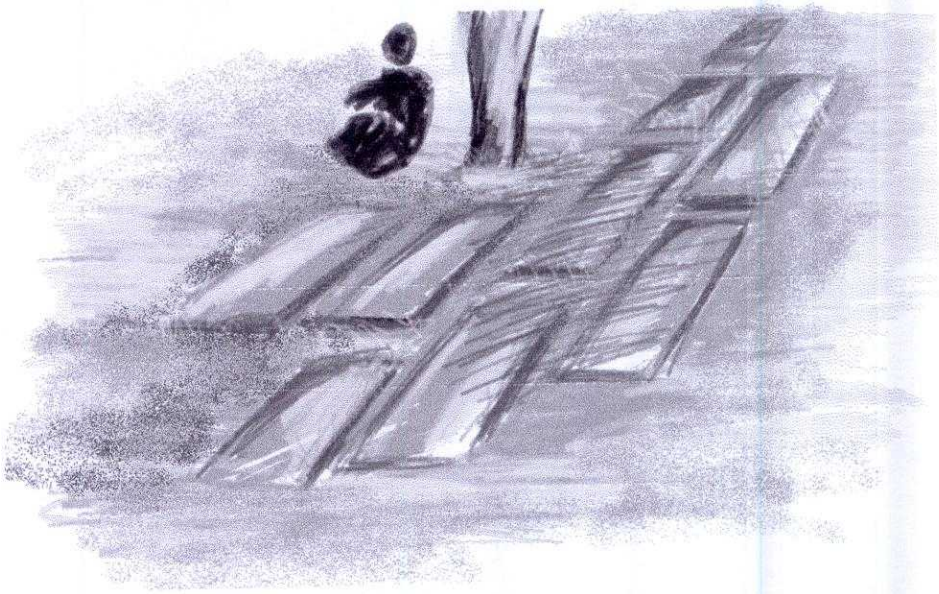


Fig 43: Pave detail

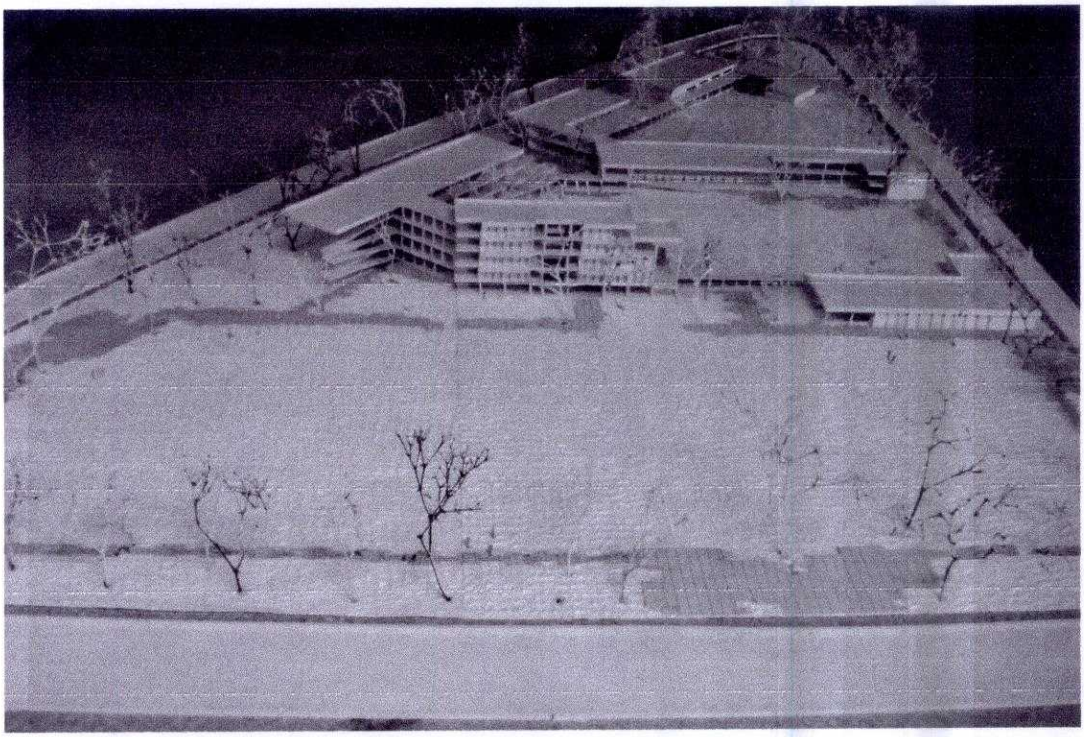


Fig 44: Image of model

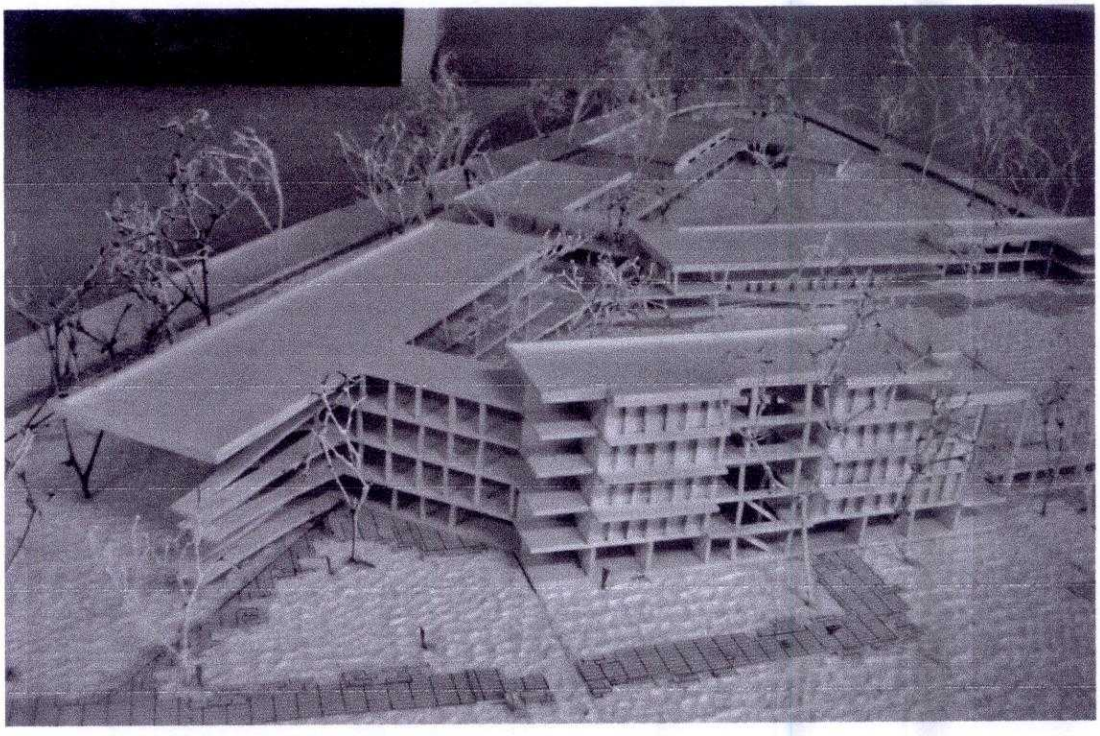


Fig 45: Image of model (dorms)

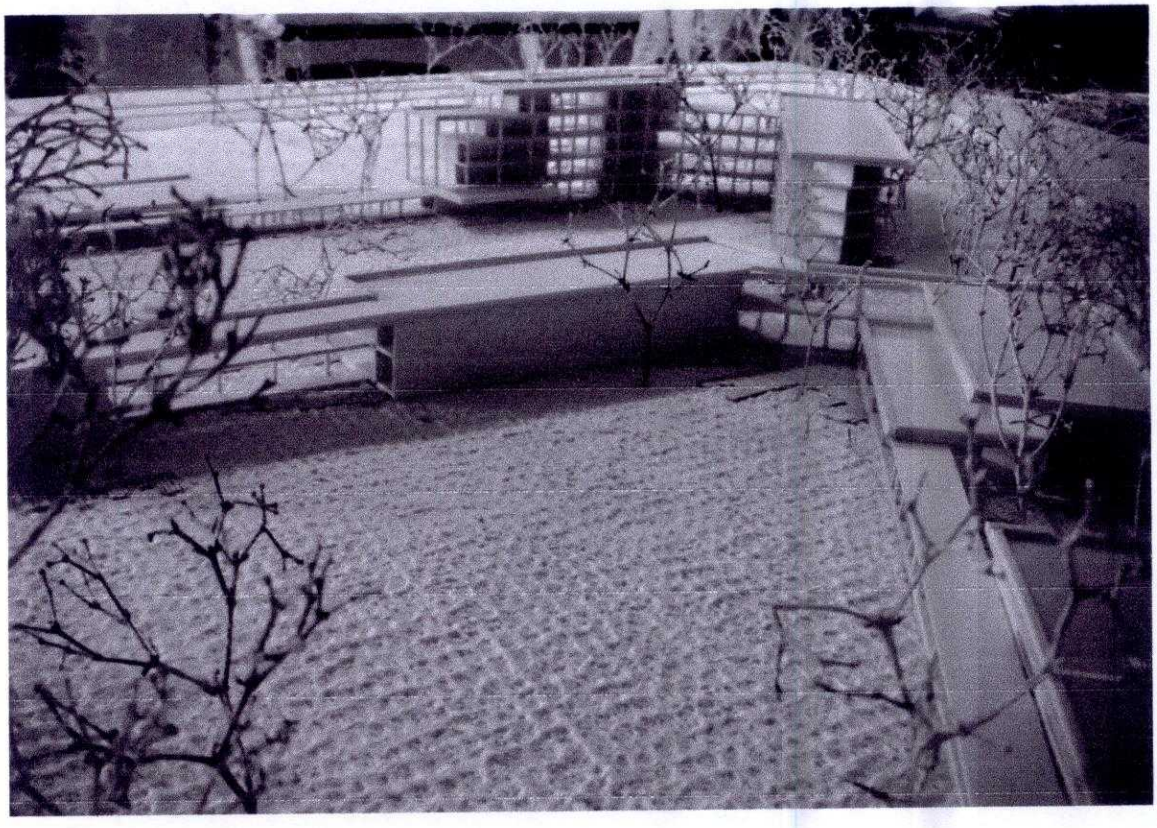


Fig 46: Image of model (in front of the school)

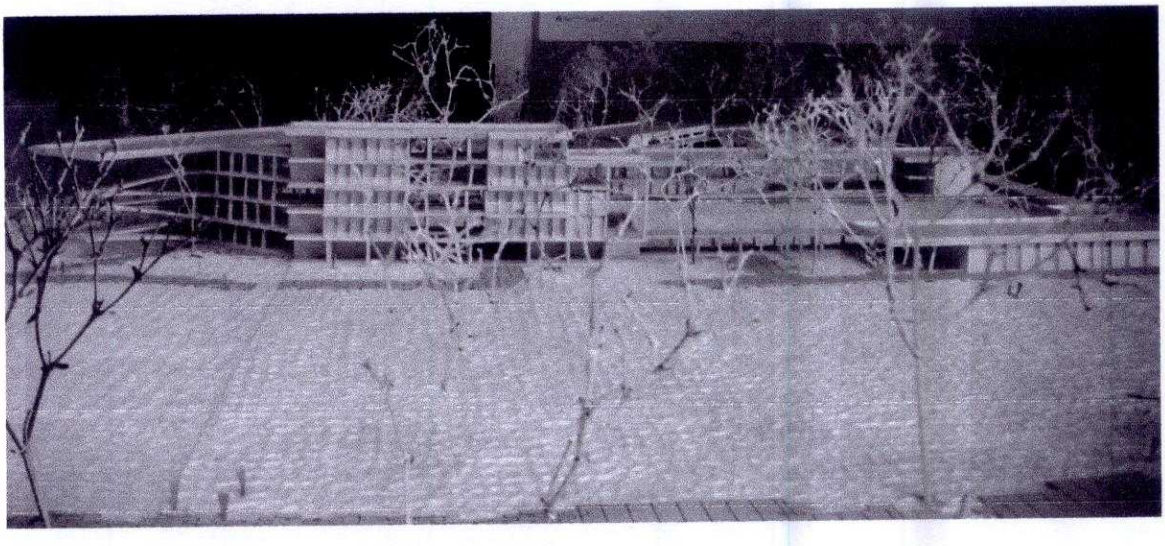


Fig 47: Image of model (dorms and dining hall)

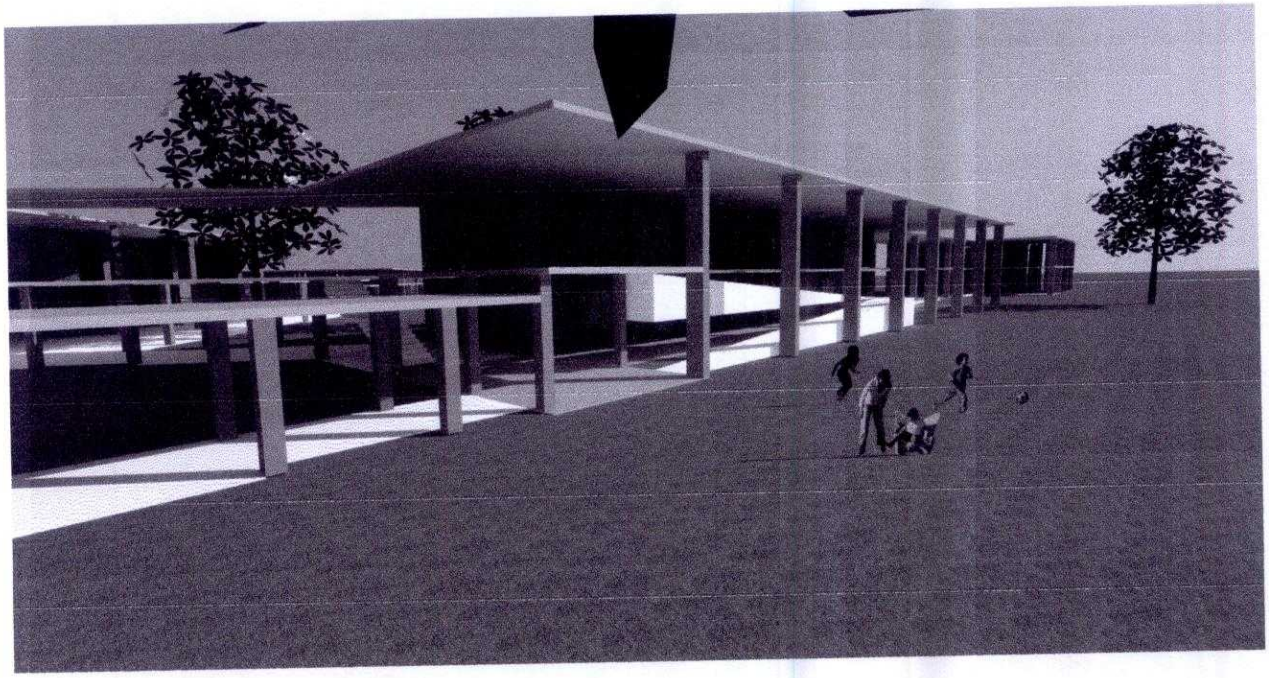


Fig 48: 3D Image (in front of the school)

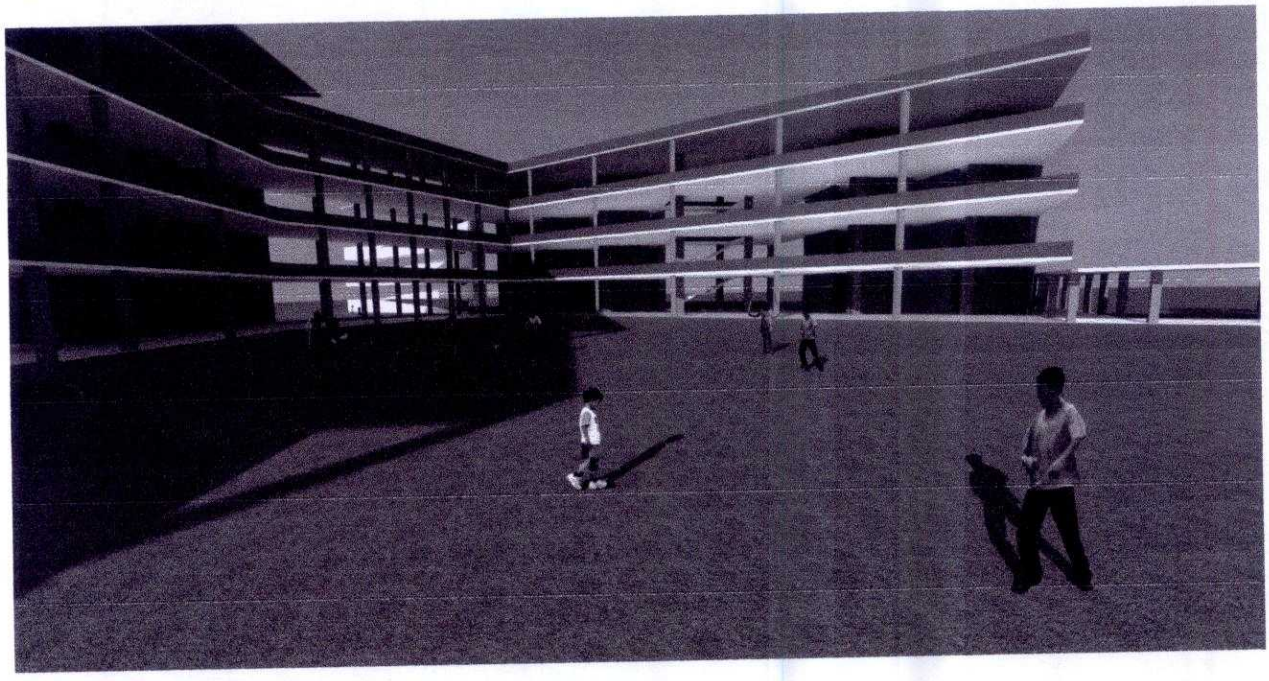


Fig 49: 3D Image (in front of the dorms)

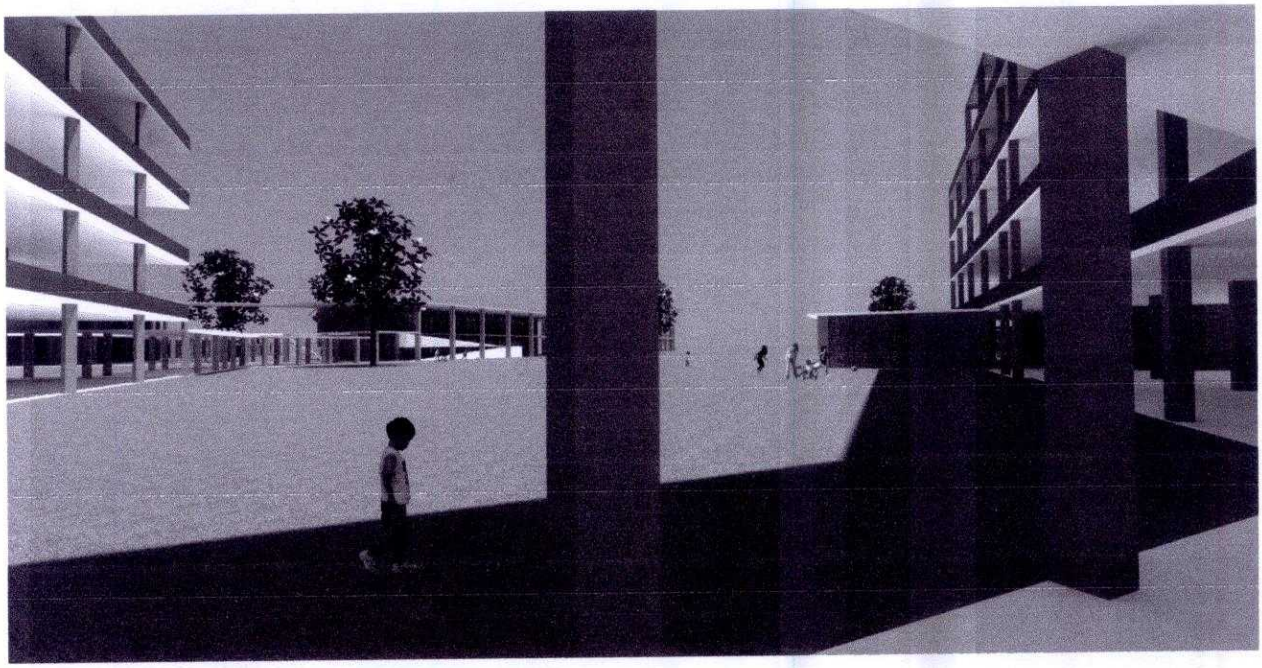


Fig 50: 3D Image

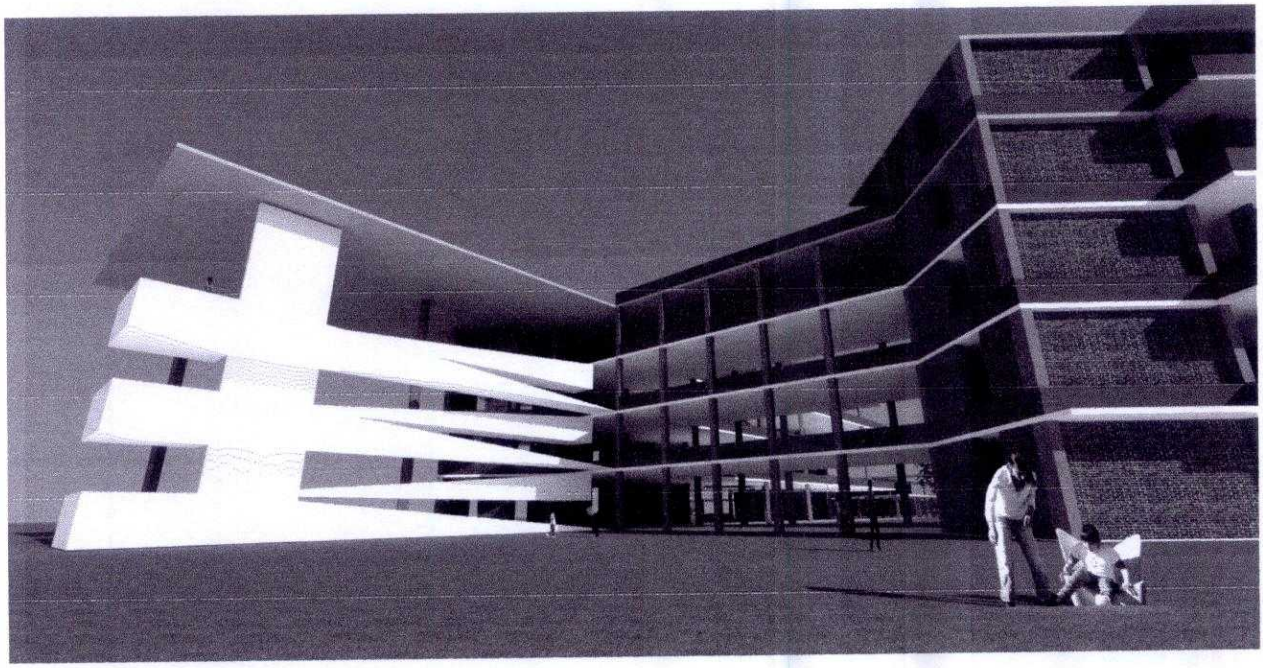


Fig 51: 3D Image(backside of the dorms)

Fig 52: 3D Image(entrance)

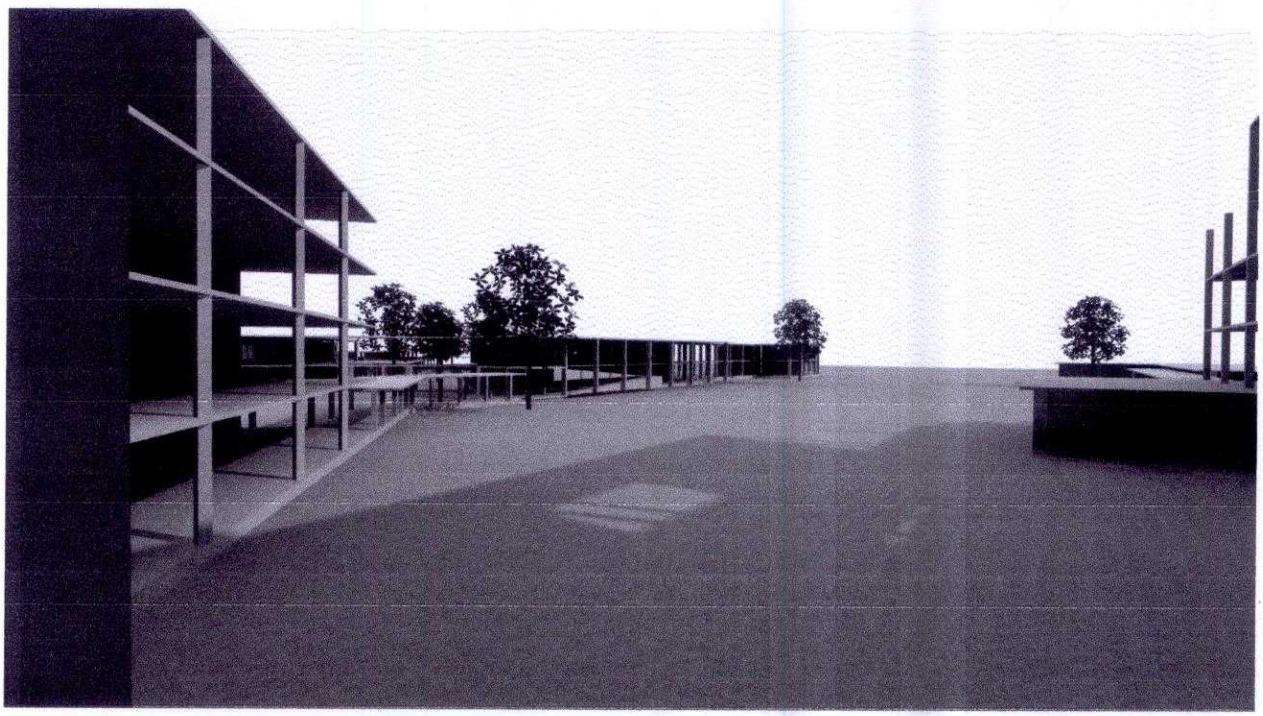


Fig 53: 3D Image(courtyard between school and dorms)

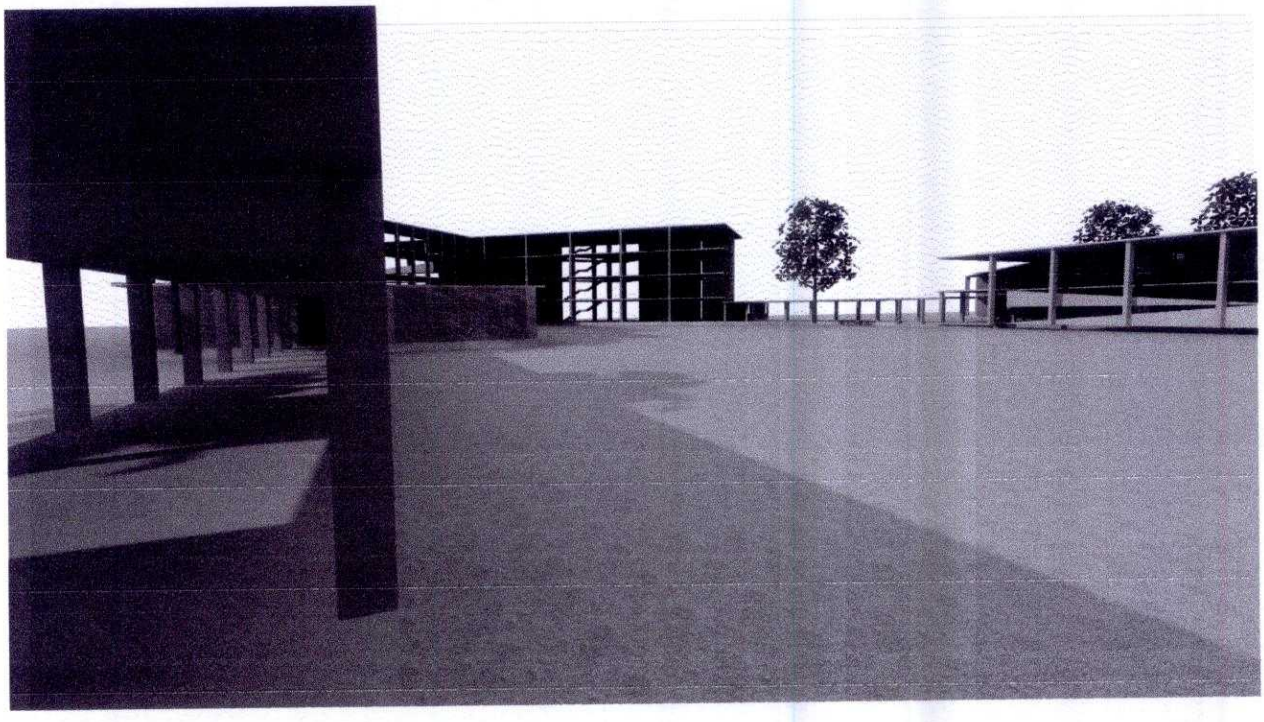


Fig 54: 3D Image(courtyard between school and dorms)

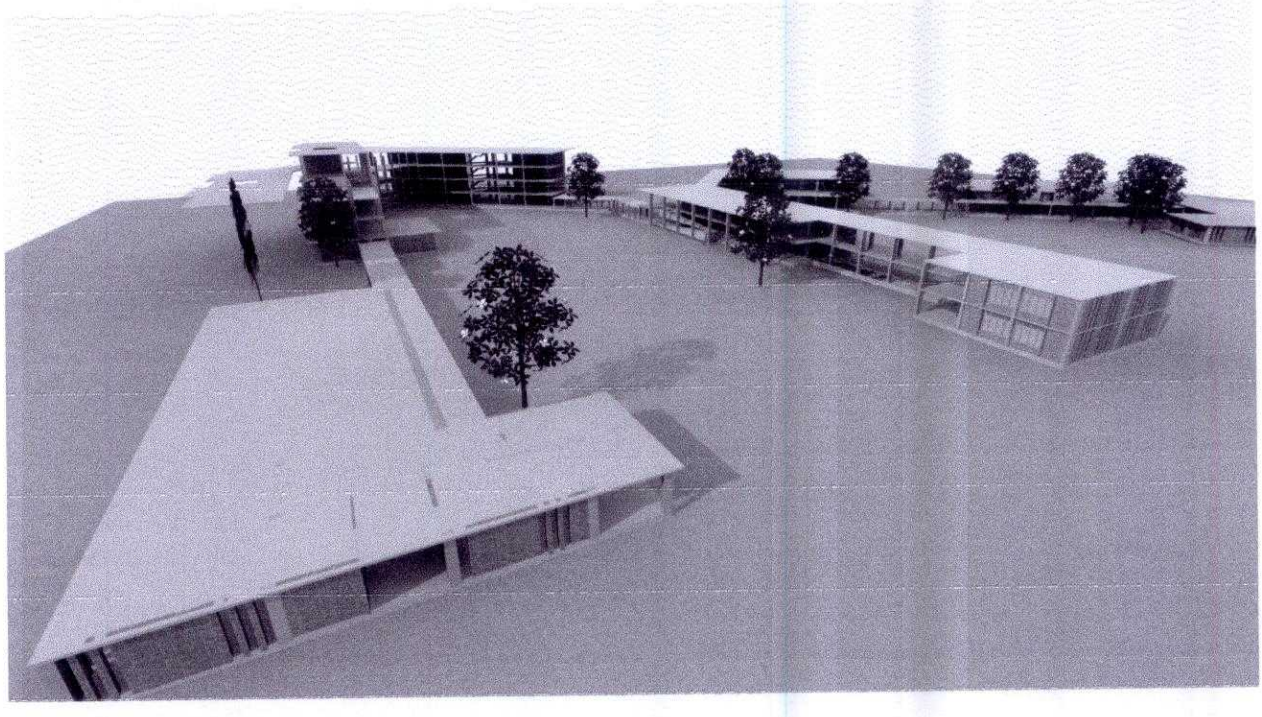


Fig 55: 3D Image

CONCLUSION:

Children are the future asset of our country. A big portion of children are orphan in our country. So we should take care of them and should help them to grow up in a secure and a friendly environment. If they grow up well then they can serve our country well. So we , the public and also the government should come forward and help them to grow up well and serve them their basic needs.

Reference :

http://www.ceped.org/cdrom/orphelins_sida_2006/pdf/sengend1.pdf

www.google.com

http://en.wikipedia.org/wiki/Orphanage