Sheikh Hasina Youth Development Institute

By

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17308021

A thesis submitted to the School of Architecture in partial fulfillment of the requirements for the degree of Bachelor of Architecture

> School of Architecture BRAC University September, 2023

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Declaration

It is hereby declared that

- The thesis submitted is my/our own original work while completing degree at Brac University.
- 2. The thesis does not contain material previously published or written by a third party, except where this is appropriately cited through full and accurate referencing.
- 3. The thesis does not contain material which has been accepted, or submitted, for any other degree or diploma at a university or other institution.
- 4. I have acknowledged all main sources of help.

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Approval

The project titled "Sheikh Hasina Youth Development Institute " submitted by Samira Akter, 17308021 of Summer, 2023 has been accepted as satisfactory in partial fulfillment of the requirement for the degree of Bachelor of Architecture on 09-09-2023.

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Abstract

According to the 2011 Census, Bangladesh has 50.67 million young people. Therefore, the Ministry of Youth Development and the Department of Youth Development were established in 1978 and 1981, respectively, to provide the one-third of the population with appropriate guidance and institutional support to engage the youth in socioeconomic activities and encourage them towards productive employment. Since then, the Department of Youth Development has worked to build skills by offering training facilities appropriate for the time.

This project's main objective is to provide a living and breeding environment for urban youth who may direct their intense passion and energy into a range of beneficial activities. Urban children would be able to enjoy a variety of entertaining and educational activities at this facility while also nourishing their developing minds.

Acknowledgement

With the help and cooperation of numerous people, this thesis was made possible. I want to express my sincere gratitude to everyone. I would first like to thank Almighty Allah for the knowledge He has bestowed upon me, as well as for the courage, serenity, and health I need to finish my thesis. I also want to express my gratitude to my family for their support in getting me through college. My parents were always by my side and showed me unwavering love, encouragement, and affection. I'd want to express my gratitude to the Department of Architecture's faculty for helping me navigate this important time of my life.

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Chapter 1: Introduction

1.1 Background of the Project

The government has taken up development projects aimed at reducing unemployment and making youths self-employed in the country. The age range between 18 to 35 years is referred as "youth" in Bangladesh. The need for youth training centers is becoming apparent to make this youth more productive and more involved in the community. The role of youth development has been focusing on multidimensional impacts among the young participants who took part in different training courses. It helps young people develop physical, social, emotional and cognitive skills and achieve a sense of accomplishment.

1.2 Project brief

Name of the Project: Sheikh Hasina Jubo Unnayan Institute Project type: Institution Location: Savar, Dhaka, Bangladesh El Site area: 4.0 acre

Built area: 150,000 sqft Client: যুব ও ক্রীড়া মন্ত্রণালয়

1.3 Aim and Objectives of the Project

The purpose of this concept is to establish training institutions for specific age groups in the country. Users can participate in various programs offered by the Institute to eliminate the country's unemployment problem. The project must meet local demand by providing accommodation and all other institute services. The project's main objective is to become the ultimate gathering place for urban youngsters from all over the world to get together and connect, exchange their ideas and perspectives, activities they enjoy. learn about one another, and invest their energy in whatever.

1.4 Programs

- •
- Reception [F] CCTV room [F] •
- First aid room [sep]
 Mechanical room [sep]
- Multipurpose hall [1]
- Seminar hall SEP •
- Conference room [SEP]
- •
- Work station •
- Training room •
- Instructor's room
- stepICT labstepLanguage clubstep
 Argo and livestock club
- Fashion design studio
- Electrical lab
- Indoor game
- Canteen [L]
- Prayer room
- GYM
- Beauty parlor
- Staff quarter
- Officer's quarter

Chapter 2: Literature review

In order to empower young people and give them the tools they need to contribute to the growth of their nation, Bangladesh's Sheikh Hasina Youth growth Institute (SHYDI) was founded in 2014. In this literature review, we will examine various studies and articles related to SHYDI and its impact on youth development. According to an article published in The Daily Star, SHYDI aims to develop leadership and entrepreneurship skills among the youth of Bangladesh. To help young people reach their potential and make a difference in their communities, it provides training, mentorship, and networking opportunities.

The effect of SHYDI on youth development in Bangladesh was investigated in a 2017 study by the International Journal of Business and Management. According to the survey, SHYDI has been successful in helping young people develop their entrepreneurial abilities and in fostering the growth of new companies and job prospects. The study also found that SHYDI gave young individuals a feeling of purpose and direction in life while also assisting in boosting their confidence and self-esteem.

Another study published in the Journal of Contemporary Research in Business in 2018 focused on the impact of SHYDI on social and economic development in Bangladesh. The study also noted that SHYDI has contributed to the reduction of poverty and unemployment in Bangladesh by creating new businesses and employment opportunities.

Type of trainings introduced in this institute:

- 1. Professional training
- 2. ICT skill development training
- 3. Language training
- 4. Fashion design training
- 5. Livestock quality training
- 6. Electric professional training

Sheikh Hasina, the organization's creator, underlined the value of youth empowerment in a Dhaka Tribune piece about how to create a bright and long-lasting future for Bangladesh. She emphasized that SHYDI is devoted to giving young people the abilities and resources they require to create change and have a positive effect in their communities.

The body of research demonstrates that SHYDI has been effective in advancing youth development in Bangladesh by giving young people the abilities, information, and resources required to succeed as leaders and business owners. The group has benefited the nation's poverty and unemployment by fostering the growth of new enterprises and employment possibilities.

Chapter 3: Site Analysis

The Savar region was once mostly classified as agricultural land because it consisted of fields used for raising crops, but it underwent a fairly quick phase of industrial growth. Savar is considered the second largest upazila within the Dhaka district having had a total area of 280.11 square kilometers.

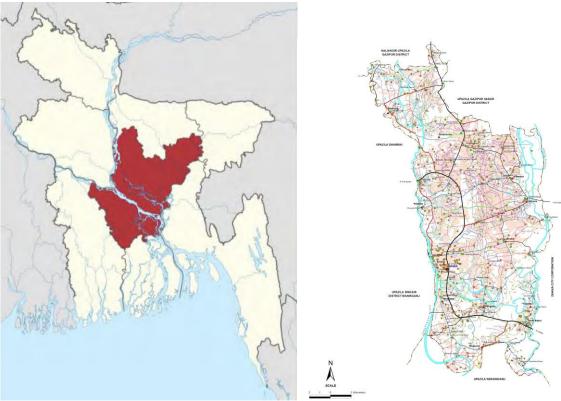


Figure 01: Dhaka city

Savar upazila; Source: Google

3.1 History

Savar's historical roots can be attributed to the Hindu emperor Raja Harish Chandra. It originally served as the Sanbagh kingdom's capital. The unearthing of artifacts from the 7th and 8th centuries in Savar led to an estimate that traders visited the city during that time for commercial interests. Savar was a significant city for political ruling as early as 869 AD, but as time went on, it once again rose to prominence as a commercially significant city even if not for political ones. During the British colonial period, Savar was an important trading center for jute and other agricultural products. The British also established several schools and colleges in the area, which helped to promote education and literacy among the local population.

Savar was one of the first locations the Pakistani army struck during the liberation struggle and one of the final barriers before the declaration of our independence. The Battle of Savar was an important turning point in the war, as it helped to secure the victory of the Bangladeshi independence movement. Due to its proximity to the Dhaleshwari and Bangshi Rivers, the city has always had convenient transit.

Site Location

The location of this site is at Savar, Dhaka, Bangladesh, and Latitude 23°52'50.5"N, Longitude 90°16'25.4"E. The area of the site is about 4 acres.

The site is close to one of the major highways that connects Bangladesh's northern area to the nation's capital, Dhaka. Its western neighbor is Jahangirnagar University. The location is separated from the nearby homes and university campus by a roadway. Road access is available from Dhaka-Aricha highway. BLRI is situated in the south of the site.

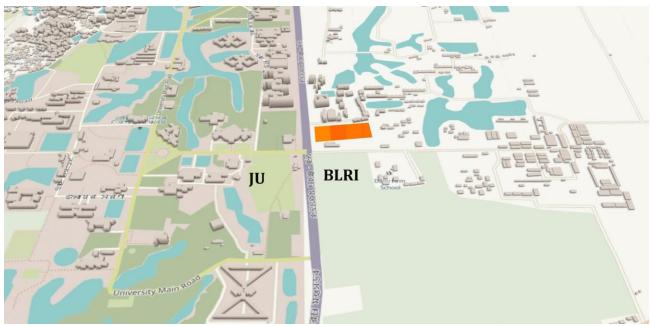


Figure 02: Site Location : Source (google earth)

3.2 SWOT analysis

Strength:

- Strength: 24 kilometers northwest of Dhaka.
- Both the Dhaka-Aricha and Dhaka-Ashulia highways lead to the site.

- The site's placement in the center of Bangladesh makes it incredibly accessible to all people. Bus stations are more frequently spaced out around the facility, making it more accessible.
- Green space around the site.

Weakness

- Lack of security due to the sparse population on the north-eastern side.
- The site's tertiary road is still under construction.
- The site necessitates multifunctional activities, so it is of utmost necessity to accommodate the range of activities.
- Serious noise pollution brought on by being so close to Highway.
- Dust and traffic to and from the site are unavoidable.

Opportunities include:

- Enough room for amenities that are both recreational and educational.
- The complex might become a landmark in the JU neighborhood. Convenient to a variety of amenities.

Threats:

- The elderly and risky over the bridge between JU and three other institute can be perilous
- Lack of protection could mean a major threat to the youth.
- Due to the site's topographically lower ground height and recent site filling, extra caution is needed before beginning any type of urgent building.

3.3Development around the site

Savar is a city in central Bangladesh, located in the Dhaka District. It had a population of 1,387,426, which is a less dense area. It is mostly defined as agricultural land, having mostly fields for crops.



Figure ground mapping

3.4 Chronological development



2004

2014

2023

Findind

- 1. Decreased water body
- 2. More Green 3. More build area



Savar is an area that lies mostly on the lower Madhupur tract and lower Brahmaputra floodplain, which has an undulating topography. As the Savar region has three major river systems, with the Bangshi River, Dhaleshwari River and Turag River flowing through the region, they affect the flooding hazard of the land. The two main geological components of deltaic, recent floodplain and Pleistocene terraces, are both found in Savar.

3.5 Climate consideration



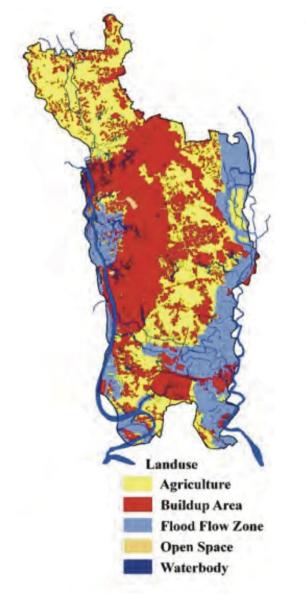
Water body 21%

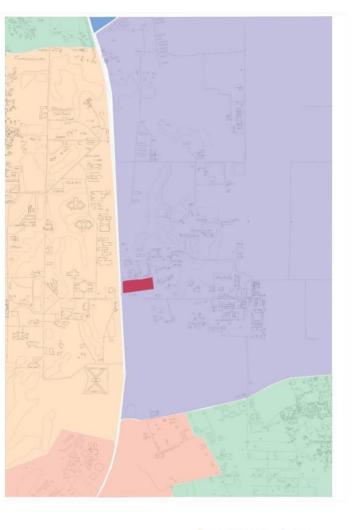
The Jahangirnagar campus and the opposite site of the road's land is the natural vegetation covering nearby Chala land (Flood free land; main landmass of Madhupur tract). In the 70's many projects were built, so they gradually disappeared.

These natural influences are so strong and adequate that it has turned into a great eco region and habitation for many floras and faunas.



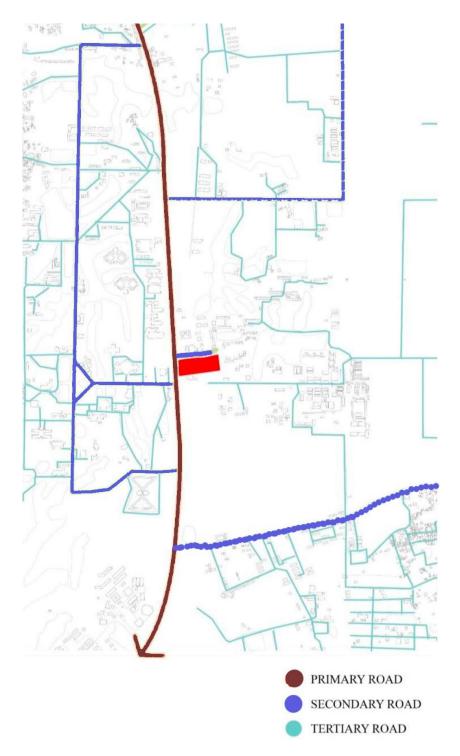
3.6 Land-use pattern of the surrounding





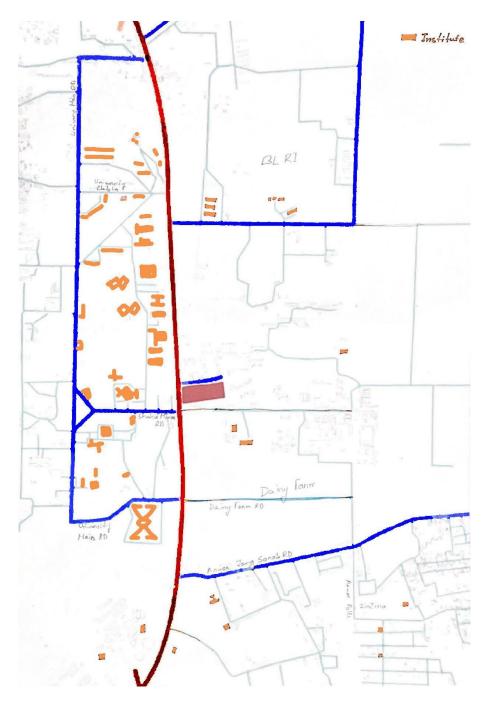


3.8 Accessibility and Connectivity



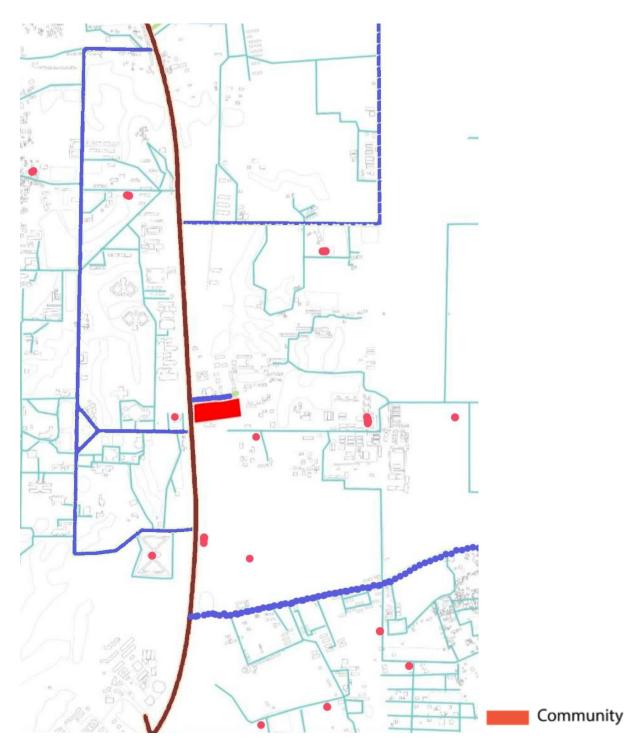
Access to the location is provided through the Dhaka-Aricha highway road. There is little to no link between the site and the nearby residential community. The western portion of the neighborhood is severely divided by the university and the motorway.

3.9 Institute



Institution around the site to determined the youth in the area. There are schools; university students can involve in extracurricular activities.

3.10 Community



community places of this site. As there are two mosques in 5-8 minutes distance there's no need for another mosque in this site.

3.11 Climate Condition

0 hrs -

Jan

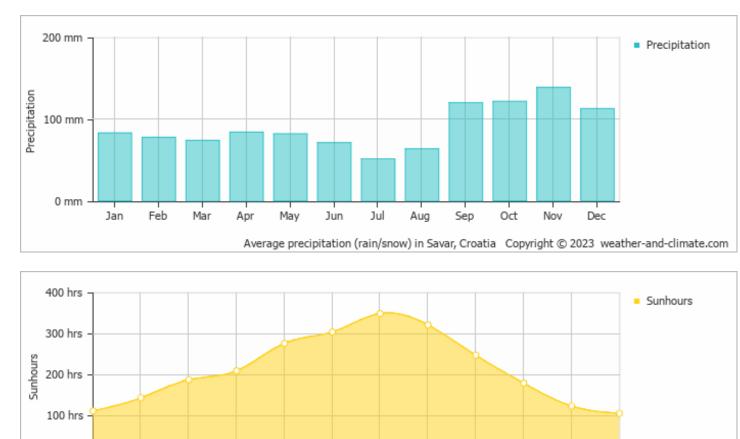
Feb

Mar

Apr

May

As with most regions in Bangladesh, Savar experiences very heavy monsoon rainfall, having had high precipitation and humidity, and is prone to flooding.



Jul

Aug

Sep

Oct

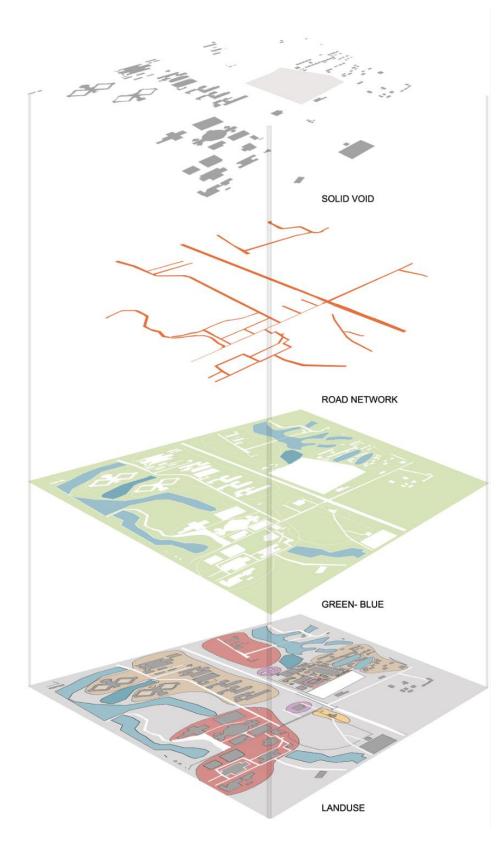
Average monthly sunhours in Zadar, Croatia Copyright © 2023 weather-and-climate.com

Nov

Dec

Jun

3.12 Micro Site surrounding Study



Chapter 4: Case Study Appraisal

A case study is an in-depth examination of a certain subject and can be on an event, a group or society, or even an individual. It also includes research, investigation, and analysis of any information. An architectural case study is undertaken to comprehend the various perspectives of the project's theme in relation to other projects of a similar nature. To further understand the various features of a training and youth center, the following case studies were conducted. The study would concentrate on functional analysis, space correlation, climatic responsiveness, material selection, and other factors.

4.1 CASE STUDY 01: Euralille Youth Centre

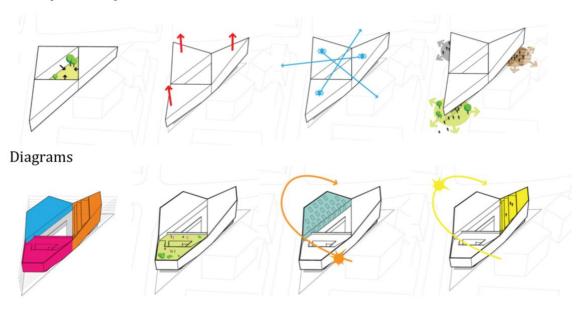
Site: Euralille, France Project Area: 6000 sqm

Architects: JDS Architects

The youth club at Lille in France is a, 6000 sqm design that reverberates the strong artistic heritage of the megacity. Keeping in mind the fluidity of the point, the design of the project keeps in mind the significance of wanderer inflow, which has been combined with the galleria in all three directions where the public inflow is kept abandoned yet, functional. The structure also ensures that light and ventilation is sufficient for its users, where visibility is given high significance. The three bodies of the structure has also been segmented into the three main functional zones, i.e. services, youth hotel and day care and kindergarten installations.



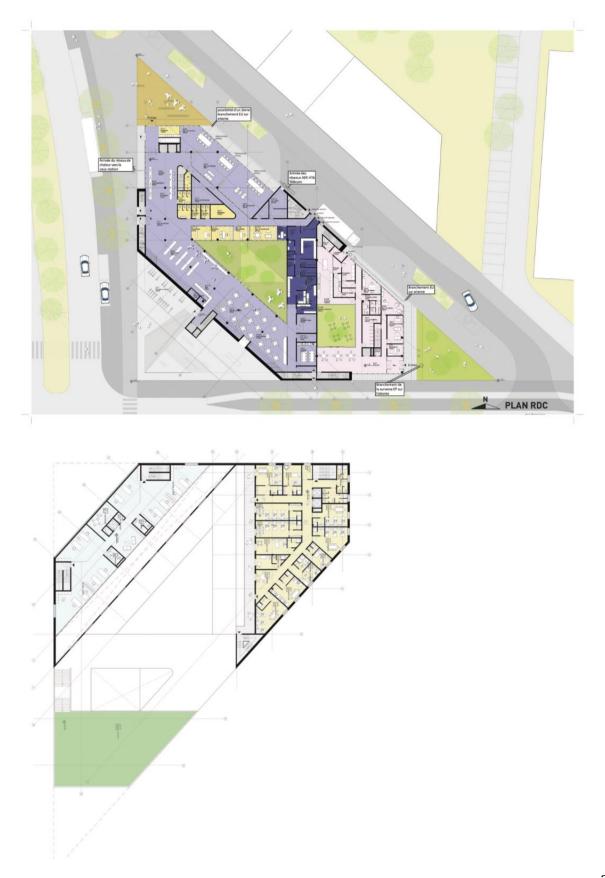
Concept Development



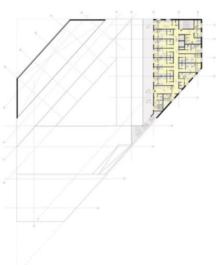
According to the sun direction and connectivity to the city the following functions were arranged accordingly at the three corners.

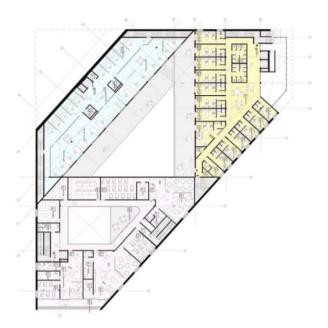
The three public spaces are divided into three different orders, one for green space, the other for public galleria and the other for integrating the conterminous public space within the megacity. The structure offers sequestration to its users at the center, which is again perforated to produce connection to out-of-door installations. The lift core is placed in the center of the structure, which avails all the users to a central space for use. The inhabitants are given ample amount of privacy in addition to equally public activities. Also, The entry to the building is now used a new public space, with canopies and benches to welcome wider range of public.











Student Housing

The Student Housing in Elsevier Office Building involves the reuse of an existing building which was previously used for commercial purposes. The ground floor of the building is raised above so as to create a public space to the entrance of the building. The dormitory also has laundry and bicycle parking in its basement.

4.2 Gehua Youth and Cultural Centre



Project brief

- Location: [1] Qinhuangdao, Beidaihe, China
 - Built area: 2700 m2 [L]
 - Client: Gehua group, LAA fund [SEP]
 - Architects: OPEN Architecture
 - Project year: 2012 [L]

This project was selected for study to understand the correlation of the spaces. Although the project area is less than 3000 square metre and a one storied building still the free flowing space connects the indoor and outdoor space for more social interaction.

The central courtyard is not only part of the landscape throughout the year but it is also an extension to the theatre for hosting a much larger crowd watching performances. The roof is covered with green and a variety of suitable outdoor activities, so 100% of the land is effectively used an important aspect of the camp's operation. Climatic Consideration

SEP

The site is located away from urban chaos. According to the architects, the building is totally blended with nature. Passive energy strategy was practiced in this building. The floor height glasses let enter the daylight and illuminate the corridors and even classrooms. Besides, the building has also got the natural ventilation.

Form and Function $\frac{1}{SEP}$. The functions of the building are:

- Theatre
- DIY space [SEP]
- Hall of DIY space
- Central control room $\begin{bmatrix} I \\ SEP \end{bmatrix}$
 - Multi-functional room SEP
 - VIP room SEP
 - Guest room [SEP]
 - Infirmary [SEP]
 - Café sep
 - Kitchen [sep]
 - Small activity space [SEP]
 - Gallery [1]

One of the most important features of the building is the theatre. Although the theatre is rather small with 120 seats, the theatre can be extended towards the multipurpose courtyard. There are two operable walls which can be opened up to use the whole space as a one space. The educational block is located at the eastern side of the building and the theatre is one the west.



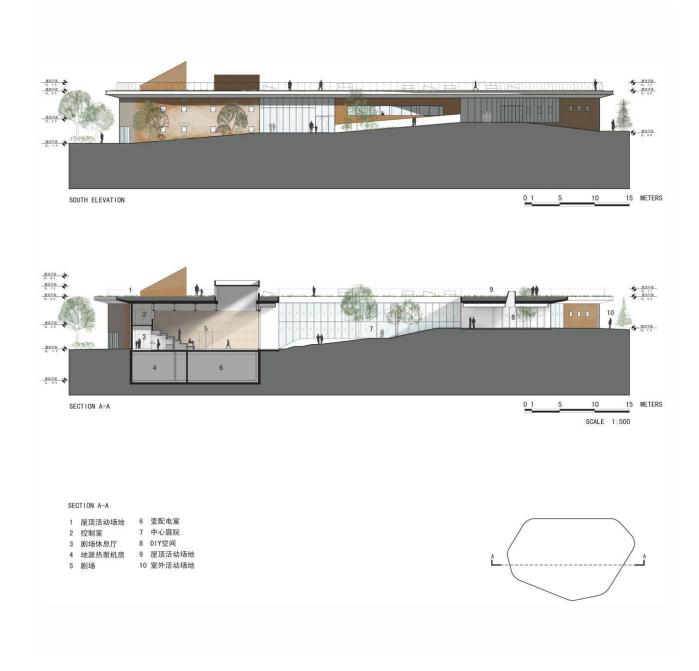
the courtyard raised along the slope can be an ideal auditorium for both performances and openair cinema. The building is funded by Beijing Gehua Cultural Development Group, and will be the base for the Little Angle Action Fund under the China Youth Foundation for their Camp Experience and Training Center. It also serves as a cultural center for Beidaihe's local communities.





Horizontal and vertical circulation

The vertical circulation includes one staircase to the roof and steps to reach multiple levels of the floor. Horizontal circulation includes the corridors connecting the spaces.



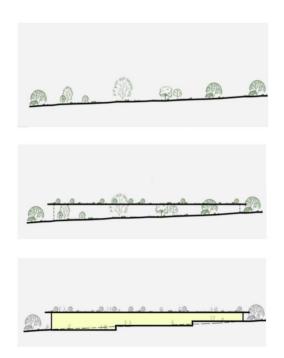
Site Planning and Landscape detailing

At the beginning of the design process, the building was developed as a one whole roof and the form was derived from off-setting the site and then the functions were put according to its space requirements. The building is placed following the natural slope of the site of about 3 metres which accommodate 3 different types of functions. The theatre is placed on the lower end of the slope and the activity spaces like classrooms which are of low height are placed on the higher end of the slope. A multipurpose courtyard was developed in the middle which has paved ramps and soak -able green area.

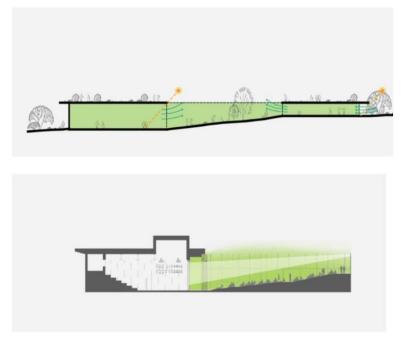
The central courtyard is not only part of the landscape throughout the year but it is also an extension to the theatre for hosting a much larger crowd watching performances. The roof is covered with green and a variety of suitable outdoor activities, so 100% of the land is effectively used an important aspect of the camp's operation. The concrete walls in the middle work as the load bearing wall and cover a large span of spaces.



Figure 4.2.3: design development



Design development



Chapter 5 : Program Appraisal

The International youth center is going to be the ultimate hub for the students of the world therefore, the facilities and activities provided should be for both the local and foreign youths from all over the world

According to Bangladesh's National Youth Policy, those between the ages of 18 and 35 are considered "youth." They are the most active and productive group in Bangladesh. As a result, their initiative and work ethic are crucial to the country's success. The youth center will serve as the ultimate meeting place for youngsters from all around the world. As a result, the facilities and activities provided should be suitable for both local and international youths.

5.1 Proposed program

According to the client's proposal the following functions are to be included to create the built environment of the project.

- i) Administrative facilities [1]
- ii) Academic facilities [L]
- iii) Residential facilities

1. Administrative Building

Functions	Quantity	No. of User	Sft
Lobby and Reception	1	80x15	1,200
CCTV room	1	50x3	150
First aid room	1	50x5	250
Mechanical room	1	10x500	5,000
Office	2	(80x20) x2	3,200
Conference room	2	(25x10) x2	500

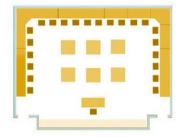
Multipurpose hall	1	10x500	5,000
Seminar hall	1	30x50	1,500
Common washroom	1	12x10	120
Total		16,920	
Circulation 30% of the total area		507.6	
			17,427.6

2. Academic Building

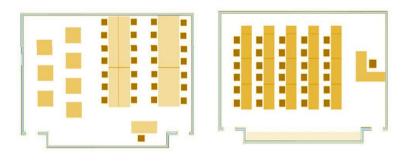
Functions	Quantity	No. of User	Sft
Lobby	1	80x20	1,600
Training room	12	30x20	7,200
Instructors room	12	80x2	1,920
Club room	12	30x20	7,200
Lab	6	80x20	9,600
Library	1	4x500	2,000
Indoor gaming zone	1	25x50	1,250
Work space	1	110x20	2,200
Auditorium	1	10x500	5,000
Total		37,970	

Functions	Quantity	No. of User	Sft
Lobby	1	80x20	1,600
Training room	12	30x20	7,200
Instructors room	12	80x2	1,920
Club room	12	30x20	7,200
Lab	6	80x20	9,600
Library	1	4x500	2,000
Indoor gaming zone	1	25x50	1,250
Circulation 30% of the total area			113.91
			38,083.91

Different type of classrooms



a. Perimeter Classroom



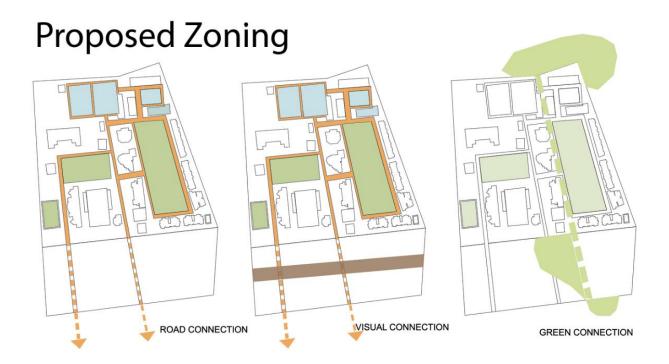
a. Back to back Classroom

c. Lecture Classroom

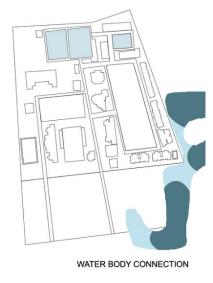
3. Dormitory

Functions	Quantity	No. of User	Sft
Lobby	2	80x10	1,600
Double room	36	144x2	10,368
Single room	96	144x1	13,824
Dining	1	12x168	2,016
Kitchen	1	4	800
Common room	2	80x20	3,200
Gym	2	12x80	1,920
Prayer space	2	8x200	3,200
Canteen	1	12x300	3,600
		Total	40,528
Circulation		30% of the total area	121.58
			40,649.58

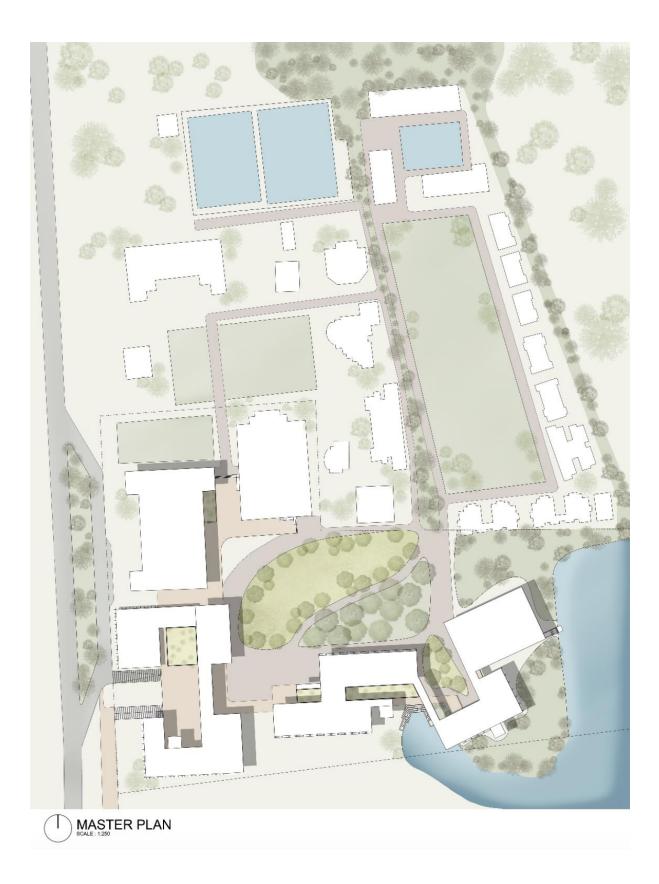
Functions	Total sft
Administration building	17,427.6
Academic building	38,083.91
Dormitory	40,649.58
Total	1,40,62001







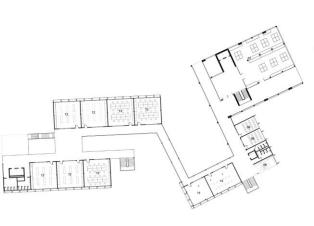
FORM DEVELOPMENT



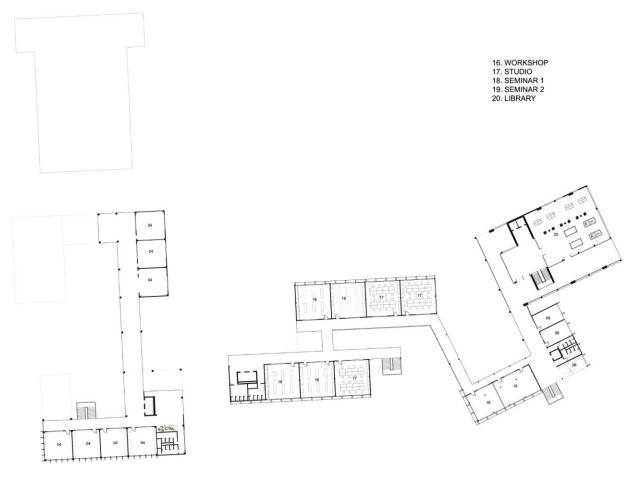




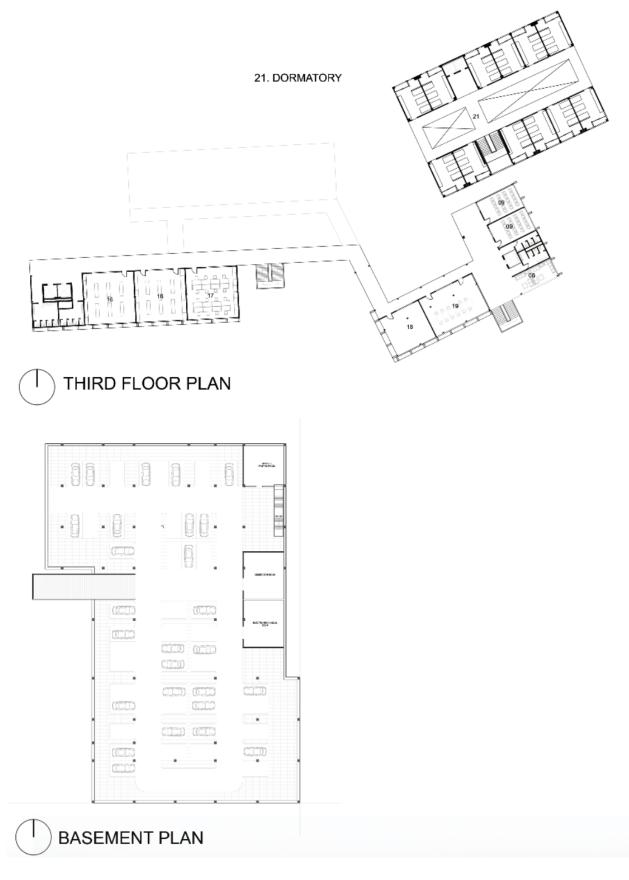




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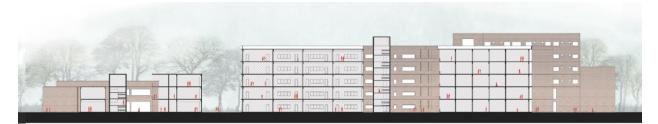


(T) SECOND FLOOR PLAN

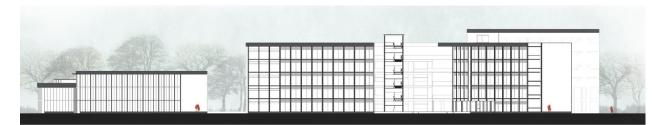




SECTION AA'



SECTION BB'



NORTH ELEVATION

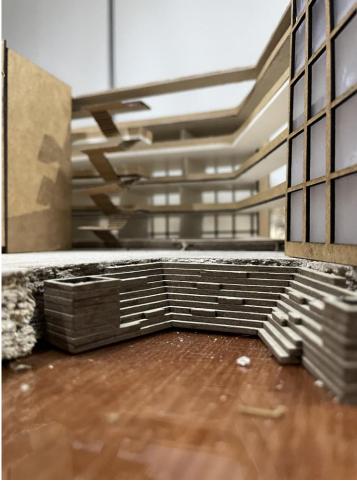
















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