

# ACAE

# STUDENT DESIGN COMPETITION

CONTEXTUALITY - DESIGN OF A  
BUS SHELTER FOR YOUR CITY

## !!! WINNERS ARE HERE !!!

**1<sup>st</sup> Prize**

- Huimin Li, China

**2<sup>nd</sup> Prize(Joint)**

- Md.Iftekhar Rashid Rafat, Bangladesh

- Jezim B. Fuentes, Philippines

**3<sup>rd</sup> Prize**

- Siddharth Waze & Saqib Abhishek, India

**Honorary Mention**

- Mohd Hazimi Afif Bin Fairus &  
Mohd Zulkamal Arif B. Abd Ghani, Malaysia

- Sitang Suvannaketa &  
Napasson Khemphusit, Thailand

AN INITIATIVE BY



**ACAE**

ARCASIA COMMITTEE  
ON ARCHITECTURAL EDUCATION

AWARD COURTESY  
NIPPON PAINT



**NIPPON  
PAINT**

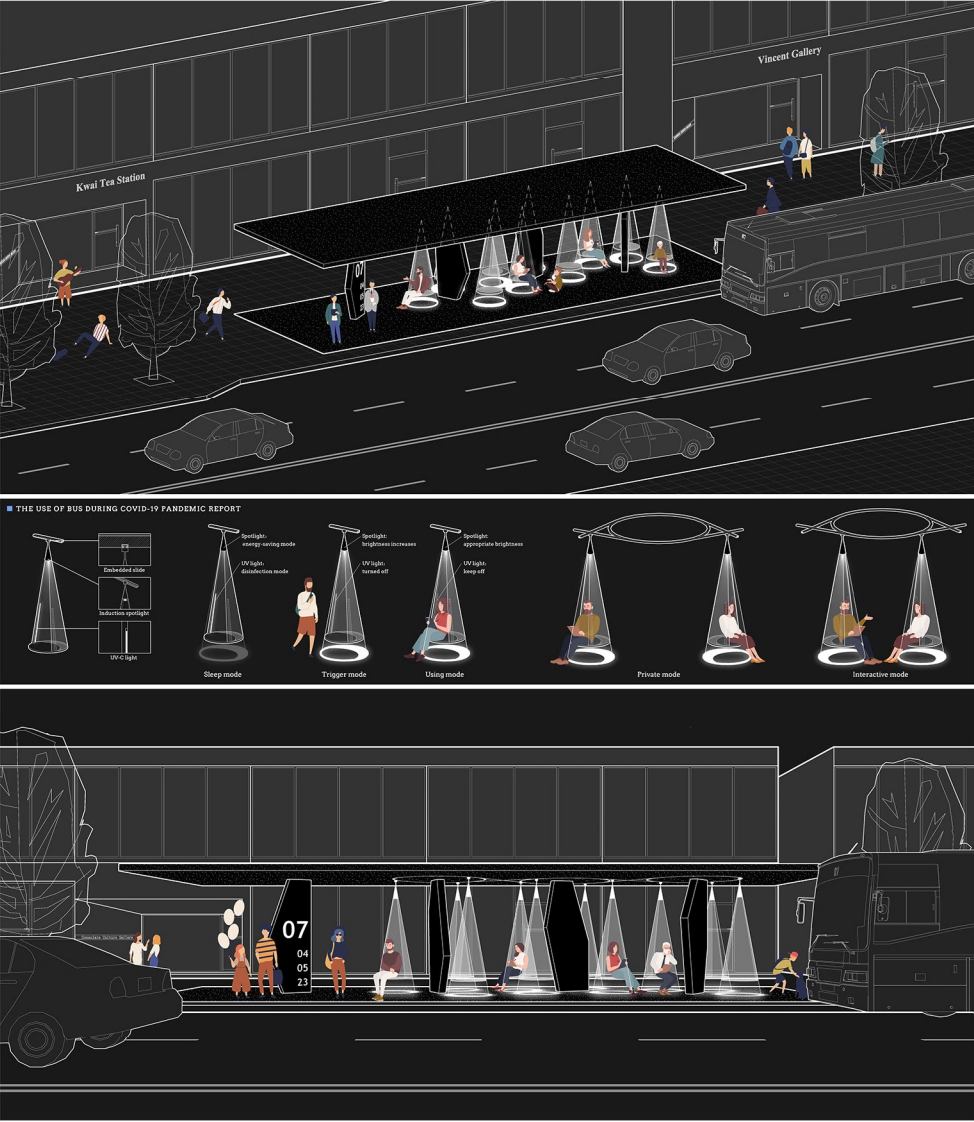
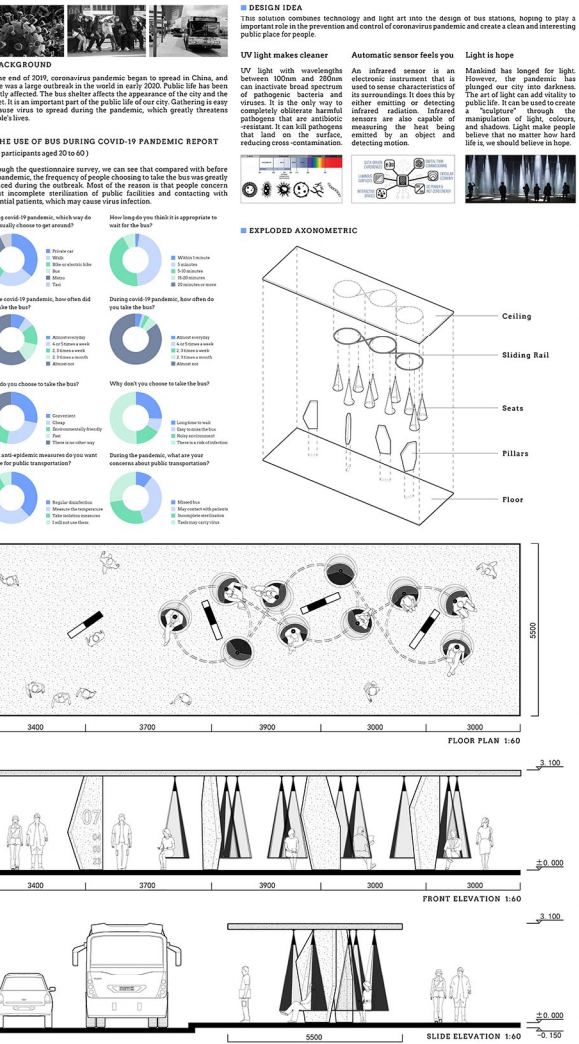


STAY HOME | STAY SAFE

1<sup>st</sup> Prize

Huimin Li  
School of Architecture and Urban Planning - Chongqing University, Chongqing  
CHINA

AS CLEAN AS MOONLIGHT



canopy of life

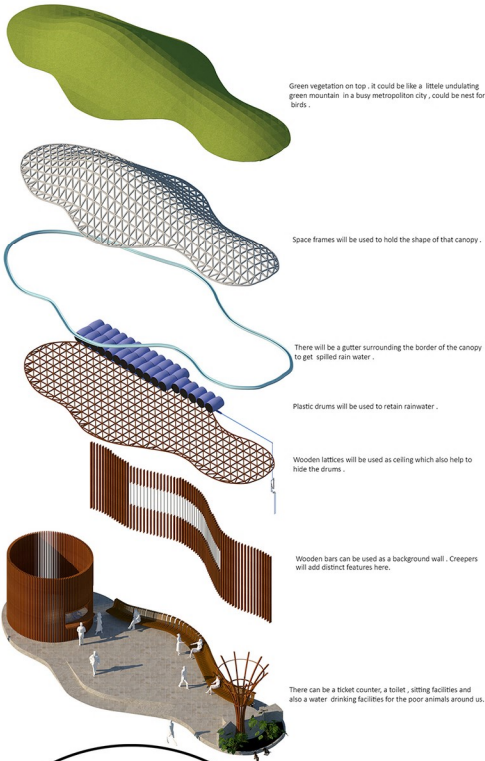
A BUS SHELTER IN DHAKA CITY

Dhaka is one of the most densely populated city in South East Asia . Bus transportation is very important in this busy city . But unfortunately we don't have enough bus shelters in this town,so people try to get on the bus in the middle of the street.

I have tried to design a bus shelter that will not only be used for getting on the bus but also for the people and the helpless animals around.

This type of shelter can be used both in dry and rainy season . Rain water harvesting , Green vegetation, Proper Sanitation, and a drinking facilities for poor animals will be provided here .

This is not only a Bus shelter but also a landscape for city street .



Green vegetation on top .it could be like a little undulating green mountain in a busy metropoliton city , could be nest for birds .

Space frames will be used to hold the shape of that canopy .

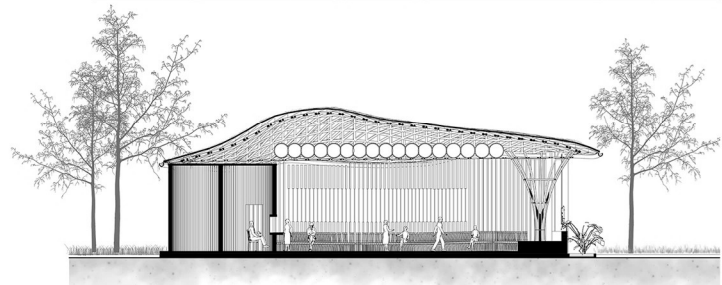
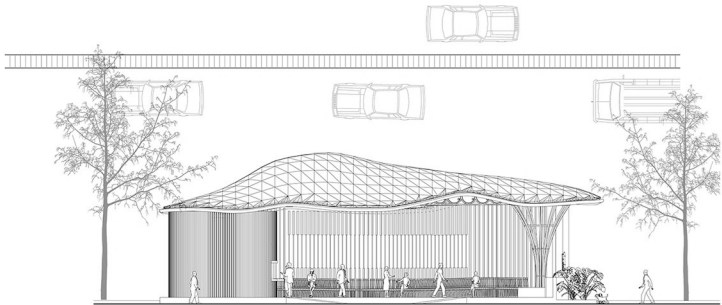
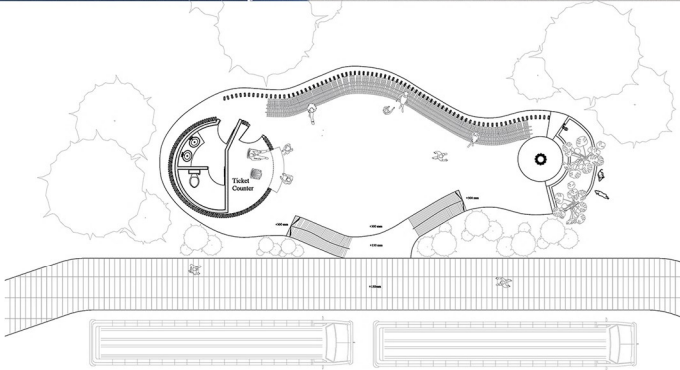
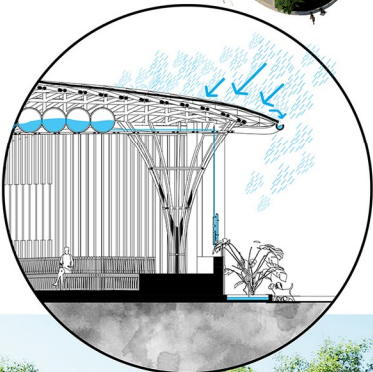
There will be a gutter surrounding the border of the canopy to get spilled rain water .

Plastic drums will be used to retain rainwater .

Wooden lattices will be used as ceiling which also help to hide the drums .

Wooden bars can be used as a background wall . Creepers will add distinct features here .

There can be a ticket counter, a toilet , sitting facilities and also a water drinking facilities for the poor animals around us .



2<sup>nd</sup> Prize(Joint)

Jezim B. Fuentes  
National College of Science & Technology, Cavite  
PHILIPPINES



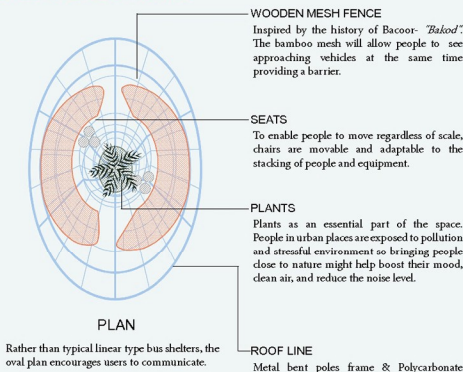
MICROASIS  
'mīkrō'āsīs

Bacoor has been transformed by a bustling, progressive city responsible for the congestion of major thoroughfares and overpopulation. As a result, many commuting citizens suffer from heavy traffic daily. Amidst the heavy traffic and huge amount of waiting, commuting citizens have a habit of socializing to pass boredom and reduce stress.

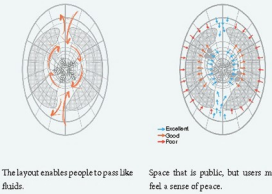
In response to the context, this proposal uses the idea of building relationships as the key driver for design. To provide a big impact through an eye-catching structure that reflects both history and vernacularism of Bacoor. The design approach seeks to turn the stereotypical bus shelter designed in Bacoor to an interactive space refuge.

Inspired by local products and innovation of architecture manufacturing techniques, The proposal seeks to explore complicated geometries to enhance the performance of the microstructure.

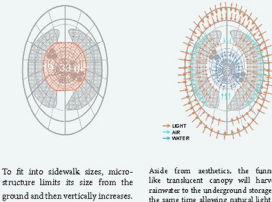
LAYOUT  
FLEXIBLE & ERGONOMIC



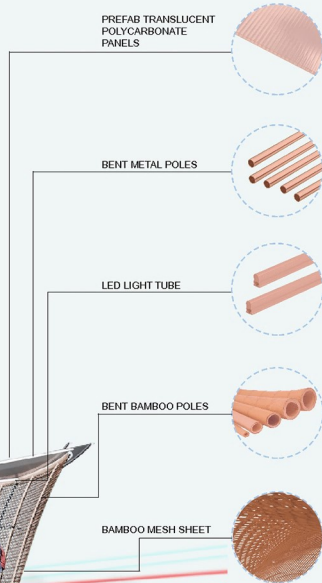
MOVEMENT- FLUIDITY    VIEW- SEMI PUBLIC SPACE



SIZE    PERMEABILITY



MATERIALS  
INEXPENSIVE & VERNACULAR



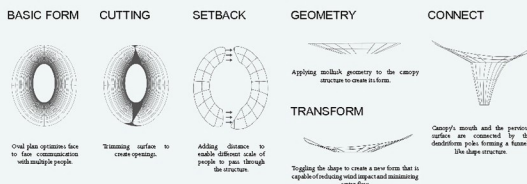
CONNECTORS  
CONSTRUCTION DETAILS



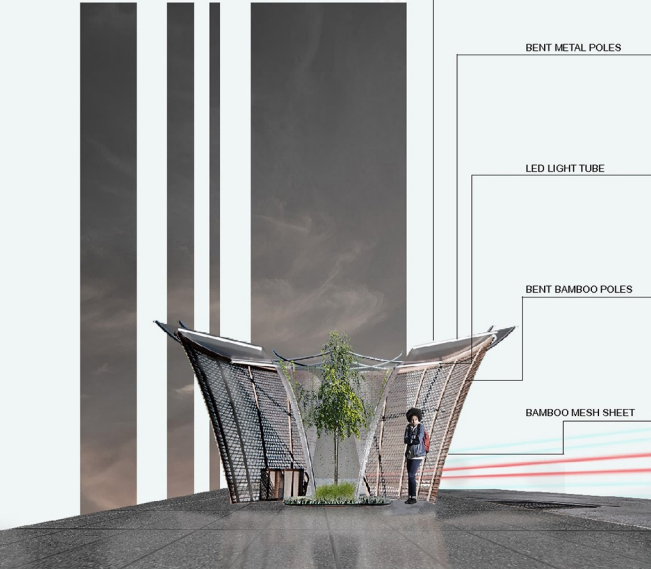
ELEVATION  
SIDE



FORM  
FENCE



SECTION PERSPECTIVE  
NIGHT SCENE



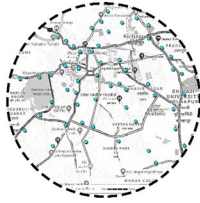
# Siddharth Waze & Saqib Abhishek

## DY Patil College, Kolhapur

### INDIA

#### CITY CONTEXT

**KOLHAPUR CITY:** The state of Kolhapur was established by Tarabai in 1707 because of the succession dispute over the Maratha kingship. The Maratha throne was then governed by descendants of Tarabai. One of the prominent Kings was Rajarshi Shahu Maharaj (Shahu of Kolhapur). The state was annexed by the British in the 19th century. After India's independence in 1947, the Maharaja of Kolhapur acceded to the Dominion of India on 14 August 1947 and merged with Bombay State on 1 March 1949. Kolhapur is sometimes found spelled as Colapore. Often, Kolhapur is also referred as Dakshin Kashi (Dakshin in Hindi means South, Kashi is a holy city in Northern India) due to its rich religious history.

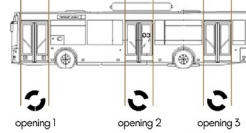


#### MAJOR IDENTICAL ANALYSIS OF MAJOR BUS STOP IN KOLHAPUR CITY

There are about 100-120 bus stops and three bus stations in Kolhapur city

#### THE IDEA

- The initial idea was to design a bus stop which reflects the context of the city and also the importance of environment because bus stop is the space where people from all over gather to reach their destinations.
- So firstly, considering the functionality of a bus. A city bus has usually two to three doors, two at the sides and one in the middle. One is for the people to come in and the other one to go out & the middle door is used for physically handicapped people.
- Secondly, the form of the bus stop is inspired from the rich heritage culture of Kolhapur dating back to the 19th century where in most of the structures of the royal chattrapatis we find the ten pointed arch. Reflecting this into our design we have created an abstract form of the arch which visually appear to be arch from inside because of its diagonal connection.
- The Bus design incorporates use of landscape and bamboo as a sustainable environment free material. Thus, encouraging people to be more nature friendly.

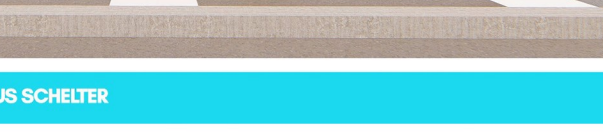
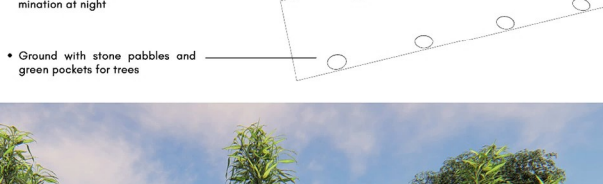
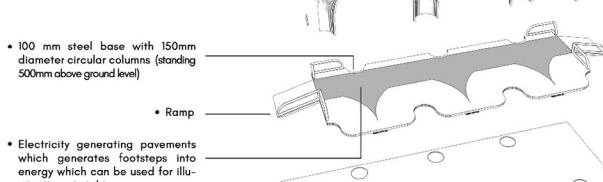
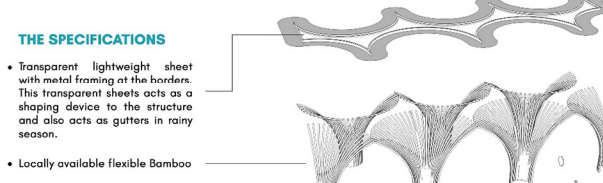
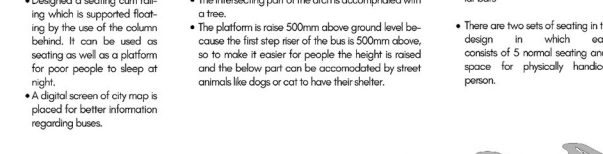
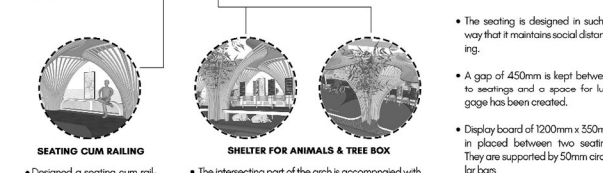
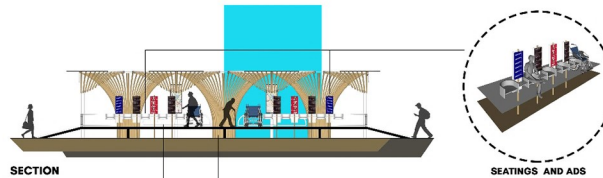
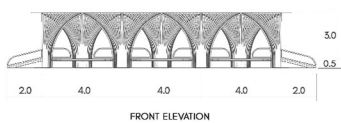
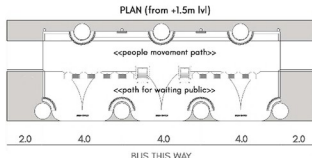
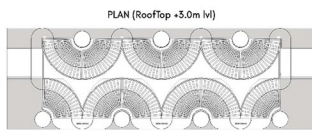


#### THE ARCH

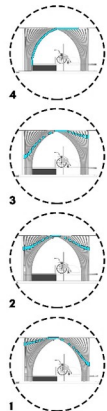
This type of arch are found in Kolhapur's Shalini Palace, New Palace, Panhala Fort, Bhavani Mandap, Juna Rajwada and many other heritage structures here.



#### THE DETAILS

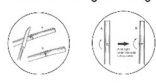


AS WE WALK WE CAN SEE THE RHYTHMIC PATTERNS CREATED IN THE INTERIORS

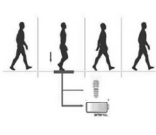


#### USE OF BAMBOO

80-100mm durable and strong mature locally available bamboo can be used which can be flexible, molded to any medium by means of heating or cutting.



#### USE OF ELECTRICITY GENERATING PAVEMENT



Honorary Mention

Mohd Hazimi Afif Bin Fairus & Mohd Zulkamal Arif B. Abd Ghani  
University Science Malaysia, Penang  
MALAYSIA



# Honorary Mention

Sitang Suvannaketa & Napasson Khemphusit  
King Mongkut's Institute of Technology Ladkrabang (KMITL), Bangkok  
THAILAND



### ITS LINE ITS COLOR , BUS-STOP ITSELF

## COLORING THE GREEN

13° 43' 45" N  
100° 31' 26" E

THIS BUS SHELTER HAS BEEN DESIGN BASED ON A SENSE OF ITS PLACE ;13° 43' 45" N 100° 31' 26" E A TROPICAL CITY NAME "BANGKOK".  
ONCE HAS BEEN KNOWN AS VENICE OF THE EAST BUT BECAUSE OF URBAN SPRAWL  
DUE TO RAPID ECONOMIC GROWTH, THE CITY HAS TURN INTO  
A COMPLEX CONCRETE FOREST TOWN WHICH COME UP WITH MORE AND MORE SERIOUS  
AIR-POLLUTION AND WELLBEING ISSUES EACH YEAR. TO PREVENT THIS CONSEQUENCES  
WE AIM TO BRING BACK DIVERSITY AND KEEP BALANCING BETWEEN CITIZENS AND FLORA&FAUNA  
THROUGH THE IDEA OF GREEN INFRASTRUCTURE ON BANGKOK BUS-STOP ITSELF.  
HOPEFULLY MASSIVE TRANSPORT WHICH CAUSED THE MOST POLLUTION  
CAN WAVE A BIG MOVE ON OUR NEIGHBORHOOD.



NO NEED SENSE OF FRONT&BACK  
ALL SPACE ARE FUNCTIONAL

OVERHEAD PLANE PROVIDE COMFORT  
DURING THE DAY AND COLLECT WATER  
FOR PLANTS&TREE ,DRAIN ALONG  
CURVE TO GROUND

#### CONSTRUCTURAL DIAGRAM



• NATIVE TREE  
ONE BIG TREE AND DIVERSITY ON GREEN WALL  
MAINLY HELP CAPTURE DUST AND  
FOOD FOR BIRDS & BUTTERFLIES

• SOLAR CELL  
SUSTAINABLE ENERGY RESOURCE  
TO ILLUMINATE BUS MAP AND  
WAITING AREA  
GET CITY SAFETY AT DARK

MAP

CITIZENS  
FLORA  
FAUNA

GREEN WALL

ECO MATERIAL  
SEAT TOP

MAIN STEEL  
STRUCTURE WITH  
ALUMINIUM COMPOSIT

BICYCLE LOCK

BUS STOP  
SIGNAGE

DISABLE  
ALUMINIUM  
HOLDER

TRANSPARENT  
ACRYLIC  
PARTITION&MAP

#### STEP BY STEP

04. GREEN INFRASTRUCTURE  
GREEN BLOCK, SOLAR CELL, BIODIVERSITY  
FRESH AIR, WATER RESILIENT  
HEALTHY ENVIRONMENT  
FOR HUMAN,FLORA,FAUNA

03. GRAY INFRASTRUCTURE  
CONCRETE BLOCK, ASPHALT, METAL SHEET  
PM2.5, TOXIC ENVIRONMENT

02. URBAN SPRAWL  
BUSINESS, TRAVELER, ECONOMIC GROWTH  
AN ENORMOUS AMOUNT OF DEMAND  
FOR SERVICES AND SUPPLIES

01. CULTURAL DIVERSITY  
BANGKOK'S LIFESTYLES  
AND ATTRACTIVENESS

#### SHELTER WITHIN TOWN



DRAINED ROOF  
AND MORE GREEN FUNCTION

UNIVERSAL DESIGN  
FOR WHEEL CHAIRS

TWO SIDE CHAIR DESIGN  
FOR ENOUGH WAITING

#### ARCHITECTURAL DRAWING



PLAN

ROOF PLAN

SECTION

FRONT ELEVATION

RARE ELEVATION

RIGHT ELEVATION

LEFT ELEVATION

WATER BANK