FOR DESIGN THESIS
(For Partial Completion of B. Arch. 10th Semester)

PROPOSAL
Topic: **INLAND WATER TERMINAL CUM WATER FRONT**

Enrollment No: 1150101081
Session : (2019-2020)

THESIS GUIDE:-
PROF SANGEETA SHARMA
AR. NAVEEN SINGH

INSTITUTE OF ARCHITECTURE
BABU BANARASI DAS UNIVERSITY, LUCKNOW

REMARKS BY THE THESIS COMMITTEE

CERTIFICATE

Here by recommend that the thesis, entitled "**INLAND WATER TERMINAL CUM WATER FRONT ,KANPUR** ", prepared by UTSAV BAJPAI, roll no. 1150101081,

Under by supervision, is the Bonafide work of the student and can be accepted as a partial fulfillment for the award of bachelor's degree in (Ar) school of architecture BBDU, Lucknow.

…….. ……

NAME, DESIGNATION, SCHOOL NAME, DESIGNATION, SCHOOL

(Signatures of the supervisor)

Recommendation: Accepted

Not accepted

…….. ……

Examiner 1 Examiner 2

BABU BANARASI DAS UNIVERSITY, LUCKNOW

CERTIFICATE OF THESIS SUBMISSION FOR EVALUATION

1. Name:
   ……
2. Roll No:
   ……
3. Thesis title:
   ……
   ……
   ….
4. Degree for which the thesis is submitted:
   ……..
5. Faculty of the university to which the thesis is submitted:
   ……
   …..
6. Thesis Preparation Guide was referred to for preparing the thesis. YES ☐ NO ☐
7. Specifications regarding thesis format have been closely. YES ☐ NO ☐
8. The contents of the thesis have organized based on the guidelines. YES ☐ NO ☐
9. The thesis has been prepared without resorting to plagiarism. YES ☐ NO ☐
10. All sources used have been cited appropriately. YES ☐ NO ☐
11. The thesis has been submitted elsewhere for a degree. YES ☐ NO ☐
12. Submited3 spiral bound copies plus one CD. YES ☐ NO ☐

……
…
(Signature(s) of the supervisor
NAME, ADDRESS

(Signature of Candidate)
NAME
……
ROLL……
…
Enrollment No……

AKNOWLEDGEMENT

The demands that I express my gratitude to those who have been a part of my stay in **B.B.D.U.,** It's been great, all these years, but life moves on…. And so do us…..

I express my deepest gratitude to my thesis guide PROF. SANGEETA SHARMA & AR. NAVEEN SINGH for their passionate guidance, discussions, suggestion and continuous support through my B. Arch thesis.

Express my gratitude to DEAN, **AR. MOHIT AGARWAL**, and Department of architecture, B.B.D.U., Lucknow, for being there to listen to and solve our problems.

I am grateful to our thesis coordinator **Ar.Urvashi Tiwari**, for providing their useful comments at the various stage submissions.

"Thank you" was not the exact phrase on my mind when I wrote this,

It was something each deeper, but I am unable to fine word for it.

All teachers, your support, encouragement and guidance have given us the strength to mark on this rigorous journey.

Could also like to express my gratitude to various persons without whose help, this thesis would not been possible. All the experiences that All shall relate in the drawing pages would not have been possible without them.

Parents:- saying thanks is nothing, just accept this as a tribute to what you have inspired in me.

Through words hardly express the true emotions, still I would like to thank all my near and ones who helped and guided me.

UTSAV BAJPAI

A Letter

I would like to add another page of appreciation towards my friends ,who are more than family to me.

This thesis would have been like just another curriculum work but presence of my friends made it a moment that is unforgettable and a memory to always cherish about.

This thesis time gave me so many experiences ,many moments some good and some bad .

Writing some names here would mean to remember only those who mean to you ,but there are many whom we forget .

So here my friends without whom this would have not been possible Gaurav sir the ideologist best ideas always came from him.

Somya my extra hand who from lettering to detailing helped me.Vishal so called Papaji best comedian and detailing master. Ashish ,the creative head .Vineet sir, the man with solution ,Aishwarya the golden arm ,Sonakshi the model girl.

I would also like to thank Naveen Umrao ,my senior who made architecture possible for us by giving the early concepts and way to excel.

I may have missed some names or you can say that this paper hold no more space ,but I would like to thank you all for your support affection.

Thank you all

TABLE OF CONTENTS

A:INTRODUCTION

Kanpur is the industrial capital of Uttar Pradesh is one of the fastest growing cities in India. Tied up between the two great India rivers , river Ganges and Yamuna .

The city posses a rich cultural and industrial background .But over the period of the period developing times, the historical core of the city , which was the water front of the river Ganges with the trading ports has been overlooked and turned into backyard of the city which once was the face of the city .

This thesis is intended is to rediscover the potential of the core of this industrial city through rejuvenation of the old trading ports by creating a water front which will act as the face of the city and also will bring down congestion on other means of transport .

B:HISTORY

The industrial city had journeyed from Kanhiyapur to Kanpur in last 144 years.

Located on the west bank of the Ganges,river, it was a major trade and commercial centre in North India with the first woollen mill of India, the British India Corporation established here in 1876 by Alexander McRobertt. The city is widely regarded as "The Leather City of the World" and is also nicknamed as "Manchester of India".

According to 2011 Indian census, it is the eleventh most populous urban city while the population of city and its suburb were around 5 million making it the eighth-most populous metropolitan area in India.

C:NEED OF THE TOPIC

Kanpur is the 8th most populous city in India and the most populous city of the city . Located just 80 km from the state capital Lucknow .

Beside being the economic capital of the state has been shadowed from the development policies on the contrary Lucknow has developed in an astonishing way.

According to a survey, Kanpur has been rated as the worst city to live in India.
The Times of India

Kanpur's infrastructure has totally collapsed because of the local politicians and authorities. This in long term could leave Kanpur as a deserted city because no sensible person would like to stay in a city where there is a lack of political representation, urban planning, public amenities and citizen participation.
:The times of India

Beside this the lacks a proper a water front and a proper means of transport in the city .

The inland water way cum water front will not only provide an alternative source of transport but will also reinforce the the city's civic status and serve to reconnect the people to their past .

THE PRIMARY GOAL OF THIS THESIS IS TO RE-INTERPRET THE HISTORIC CORE OF THE CITY , WHICH ONCE HAD PORTS ALONG THE MAIN WATERFRONT.

This transport node will connect the 3 main important cities of the state .

ie KANPUR – ALLAHBAD -- VARANASI , 332 km via NH 19

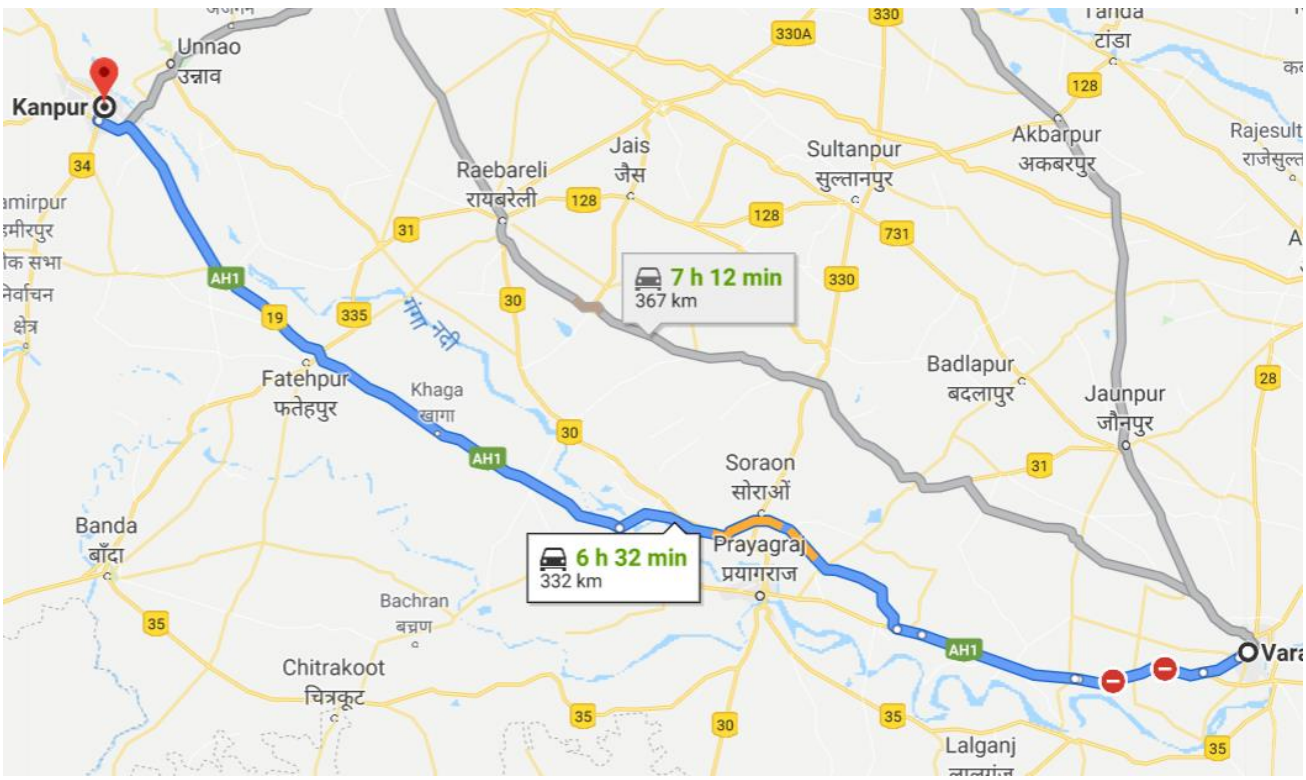
D:AIM AND OBJECTIVE

The selected design project is a mixed use development at the banks of river Ganges .

1, To create a Transportal Node / Social place.
2, To design a development which is in harmony with the natural of character the area.
3, Inclusivity : social , economic , demographic

This transport node will connect the 3 main holy cities of the India ie KANPUR – ALLAHBAD -- VARANASI , 332 km via NH 19

Where KANPUR is the Industrial capital of the state.
ALLAHBAD is the Judical Capital of the state,
VARANASI is the Piligrimage Capital of the India .



E: SCOPE AND LIMITATION

To rejuvenate the historic core and transport facilities of the city.

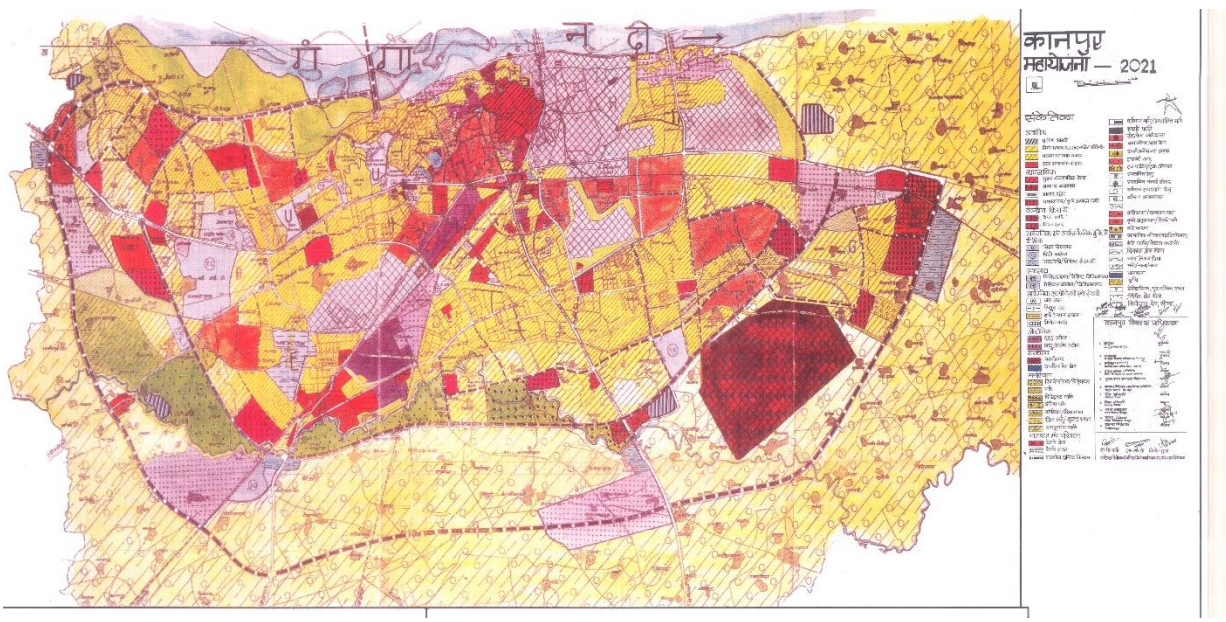
The water front will act as a window reflecting the quality of the city.

Will contribute the formation of the image and the identity of the city.

Apart from all this it will provide a sustainable strategies like onsite waste water treatment plant ,use of prevalent breezes for passive cooling of the built mass.

The drive ways and pedestrian path will be shaded and will be oriented north-east to north-west with pergolas overhead reducing the landscape heat gain.

F: SITE DETAILS



F: SITE DETAILS

Site is 300 meters to LUV-KUSH barrage.

200 meters from river bank cannot be used for permanent construction.

Site has connectivity through NH-91.

G: PROJECT REQUIREMENT

Site area is 40 acres i.e 1***61840 sq.m.***

Covered area in % = ***15***

Total area covered on site 1***61840*** x 15% = ***24360 sq.m.***

Far = ***1.0***

F: PROJECT REQUIRMENT

FERRY TERMINAL

a. TERMINAL
b. RESTRAUNT
c. ACCOMODATION
d. WAITING
e. PARKING

WATER FRONT

a. COMMERCIAL / RETAIL
b. EXHIBITION
c. WATER SPORTS
d. RESTRAUNT
e. PARKING
f. SWIMMING POOL

CARGO TERMINAL

a. JETTY
b. WORKER AMENITY
c. ADMINISTRATION
d. OPEN AND CLOSE CARGO STORAGE
e. SUBSTATION
f. CANTEEN

G: METHODOLOGY

Live and virtual case studies.

Data collection and documentation of information related.

Visit to the site gathering information available.

Analysis and conclusion based on the observations made during the process mentioned above evolving the concept and further enhancing the design which can be converted into reality. .

H: SITE STUDY

SITE SURROUNDINGS

H: SITE STUDY

SITE SURROUNDINGS

H: SITE STUDY

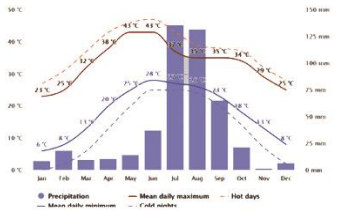
WHAT IS LACKING AT SITE ?

- UNPLANNED PARKING, WATER TREATMWNT STATION,
- NO PROPER STAIRS TO GET TO THE RIVER BANK .
- TOURIST USUALLY DO NOT GO FURTHER ALONG THE RIVER
- ONLY ONE TOURIST DESTINATION HAS NOT CONNECTED WITH OTHER TOURIST DESTINATION PROPERLY IE BITHOOR.
- NO TAXI OR OTHER MEANS OF TRANSPORT.
- PUBLIC SERVICES NEAR THE SITE ARE MISSING.

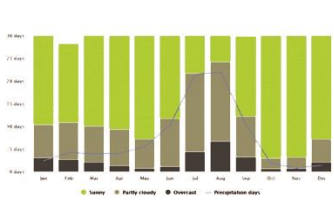
WHAT IS LACKING IN CITY ?

- PROPER DRAINAGE SYSTEM
- URBAN SPRAWL
- UNTREATED SEWAGE WATER INTO GANGES
- PLACES FOR RECREATION
- NO PROPER URBAN PLANNING
- NO PEDISTRIAN MOVEMENT PLANNING ON ROADS

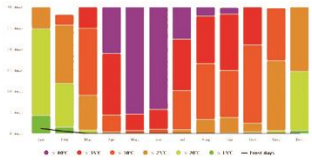
CLIMATIC STATICS



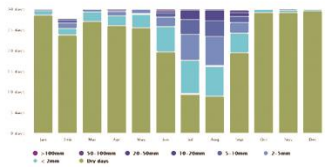
AVERAGE PRECIPITATION & TEMP.



CLOUD , SUNNY PRECIPITATION DAYS

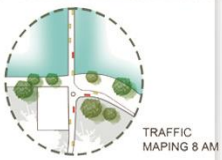


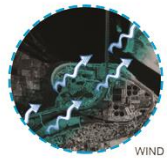
MAXIMUM TEMPRATURE



PRECIPITATION AMOUNT

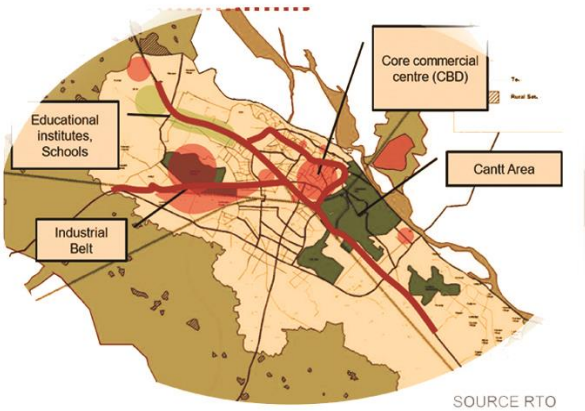
SITE





H: SITE STUDY

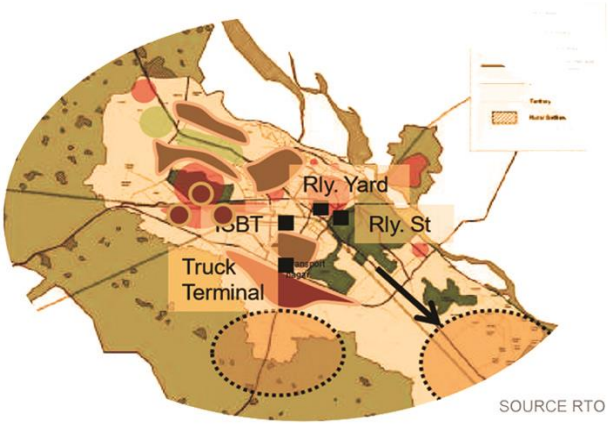
ZONING OF KANPUR NAGAR



SOURCE RTO

- EDUCATION BELT
- INDUSTRIAL BELT
- CORE COMMERCIAL AREA
- CANTONAMENT AREA

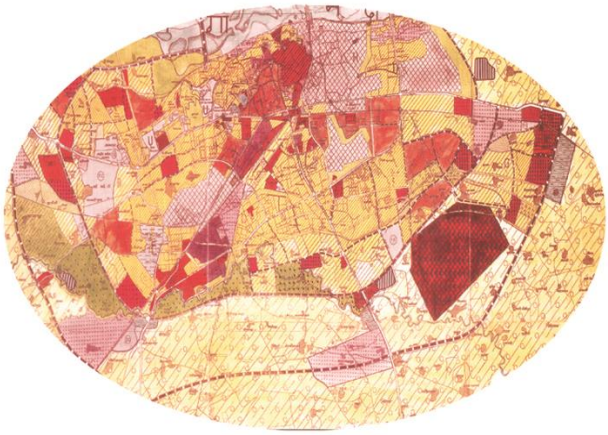
NODES OF KANPUR NAGAR



SOURCE RTO

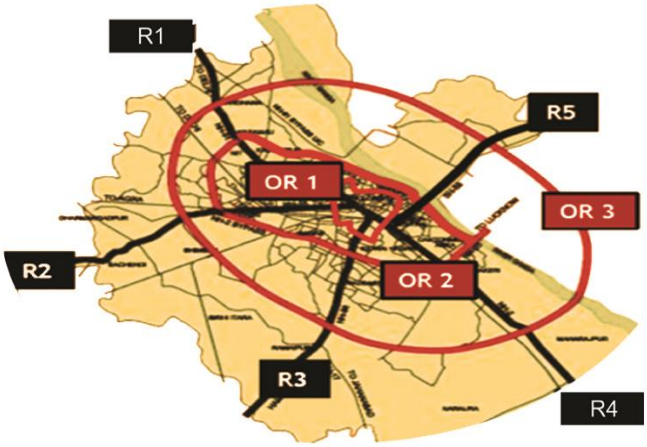
- RAILWAY YARD
- RAILWAY STATION
- TRUCK TERMINAL
- ISBT

LAND USE OF KANPUR NAGAR



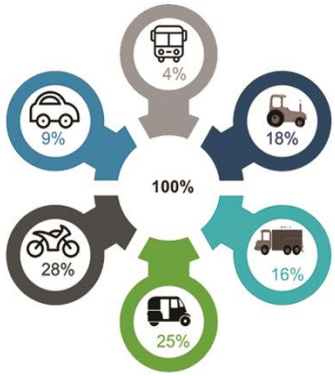
- 42% RESIDENTIAL
- 3% COMMERCIAL
- 14% GOVERNMENT /SEMI GOVERNMENT
- 10% TRAFFIC & TRANSPORTATION
- 10% PUBLIC & SEMIPUBLIC
- 10% RECREATIONAL
- 5% INDUSTRIAL

ARTERIAL ROADS OF KANPUR NAGAR



- R1 , R2 , R3 , R4 , R5 ARTERIAL ROAD
- OR 1 , OR 2 , OR 3 ORBITAL ROAD

MAJOR MODES OF TRANSPORTATION USED IN THE CITY



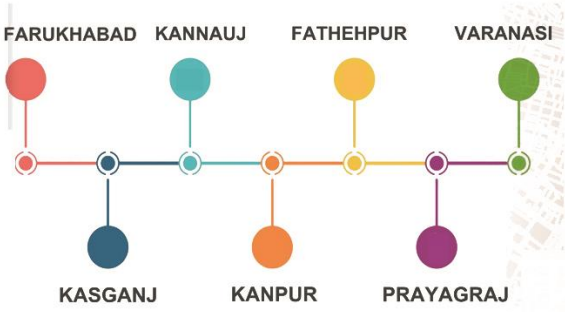
MAJOR INDUSTRIES IN THE CITY

ANIMAL & FOOD PRODUCTS OF ANIMAL ORIGIN	ORES (BASE METAL), SLAG, ASH BASED INDUSTRIES
CORRUGATED PAPER & CONVERSION PRODUCTS	MINERAL FUELS, OIL PRODUCTS AND BY PRODUCTS
POWERLOOM TEXTILES	GAS (FUEL) NATURAL AND MANUFACTURED.
PLASTIC PRODUCTS	NON – METALLIC MINERALS, MINERAL PRODUCTS,
PAN MASALA	CHEMICAL AND ALLIED PRODUCTS 9. PHARMACEUTICAL AND MEDICAL PRODUCTS
AGRICULTURE BASED INDUSTRIES	FERTILIZER / PESTICIDES / PLANT PROTECTION MATERIALS
LEATHER TANNING	SOURCE : MSME

I: GANGES FLOW AND NODE STUDY

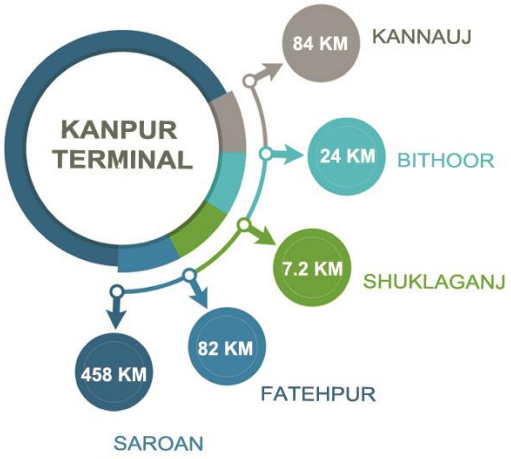
GANGES FLOW

THE 2,525 KM (1,569 MI) RIVER RISES IN THE WESTERN HIMALAYAS IN THE INDIAN STATE OF UTTARAKHAND, AND FLOWS SOUTH AND EAST THROUGH THE GANGETIC PLAIN OF INDIA.



DEVELOPING THE NODES

MORE THAN 2.3 MILLION PASSENGERS PER DAY TRAVEL THROUGH KANPUR RAILWAY STATION . SO TO DEVELOP VARIOUS INTERNODES IN THE WATER WAY CAN BE FRUITFUL.



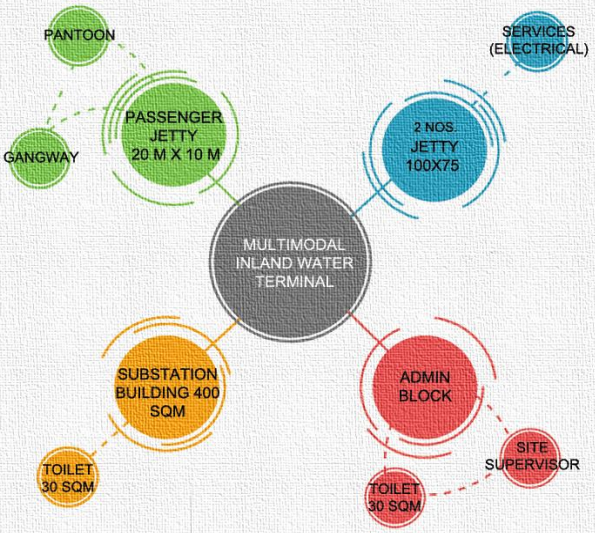
PROS OF USING WATER AS A MODE OF TRAVEL

- FUEL EFFIENCY ONLY 50 PAISA V/S 1.5 ON ROAD
- 1 LITRE OF FUEL MOVES 24 TONNE-KM ON ROAD, 85 ON RAIL AND 105 ON INLAND WATER TRANSPORT.
- COST OF DEVELOPING WATERWAYS MUCH LOWER THAN RAIL AND ROAD
- REDUCES TRANSPORTATION LOSSES
- CARBON DIOXIDE EMISSION IS 50% OF TRUCKS
- SAFE MODE FOR HAZARDOUS AND OVER DIMENSIONAL CARGO
- REDUCES PRESSURE ON ROAD AND RAIL ,REDUCES ACCIDENTS ON ROAD

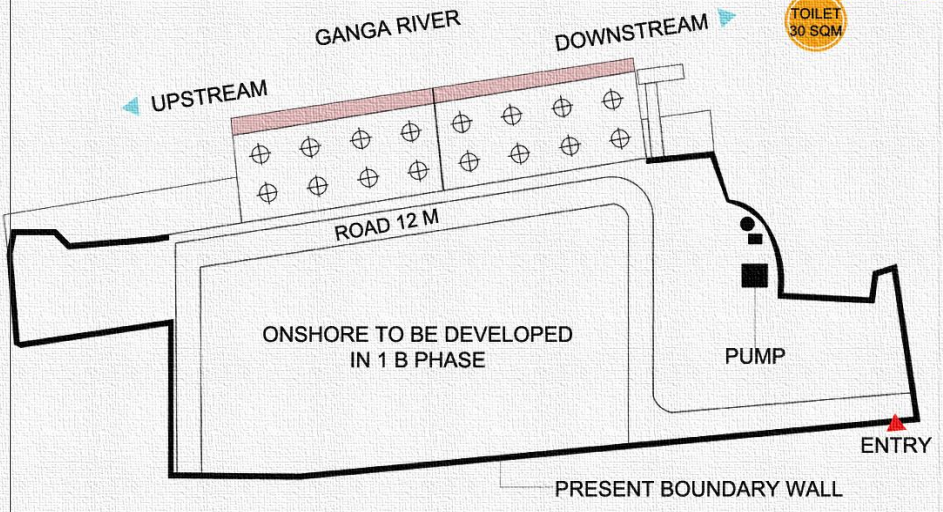
J: CASE STUDY IWAI TERMINAL, VARANASI

IWAI, MANDATED TO DEVELOP THE INLAND WATER TRANSPORTATION SYSTEM IN COUNTRY HAS PROPOSED A PROJECT "CAPACITY AUGMENTATION OF THE NATION WATERWAY 1 (1620 KMS, WITH MINIMUM WATER DEPTH OF 2.5-3 M) BETWEEN HALDIA AND ALLAHABAD". NATIONAL WATERWAY 1(NW 1) HAS THE POTENTIAL TO DEVELOP INTO A MOST ECONOMIC, RELIABLE, SAFE AND ENVIRONMENTALLY FRIENDLY FORM OF TRANSPORT.

UNDER THIS PROJECT, IWAI HAS PROPOSED TO DEVELOP A MULTIMODAL INLAND WATER TERMINAL AT RAMNAGAR, ON RIVER GANGA IN VARANASI DISTRICT IN UTTAR PRADESH.

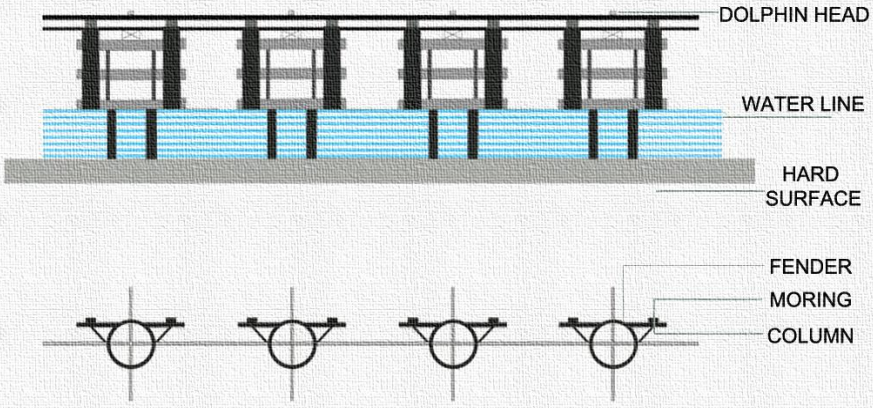


FLOW CHART OF SITE

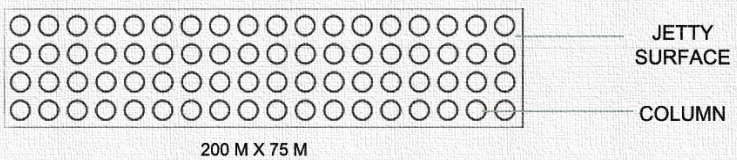


OVERALL LAYOUT PLAN

JETTY IS THE SLAB ON WHICH THE CRANES REST AND LOADING UNLOADING IS DONE.BUILT OVER THE RIVER OR ANY WATER BODY.

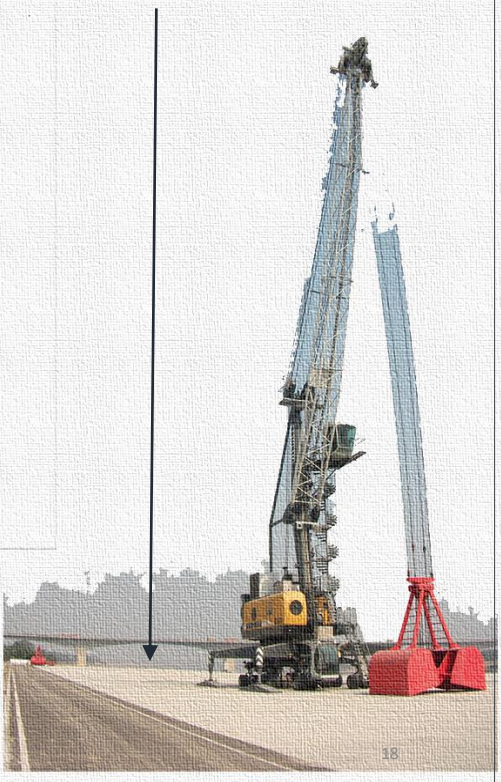


PLAN AND FRONT ELEVATION OF JETTY



18 X 4 PIERS
FRICTION PILE

TYPICAL SECTION OF JETTY



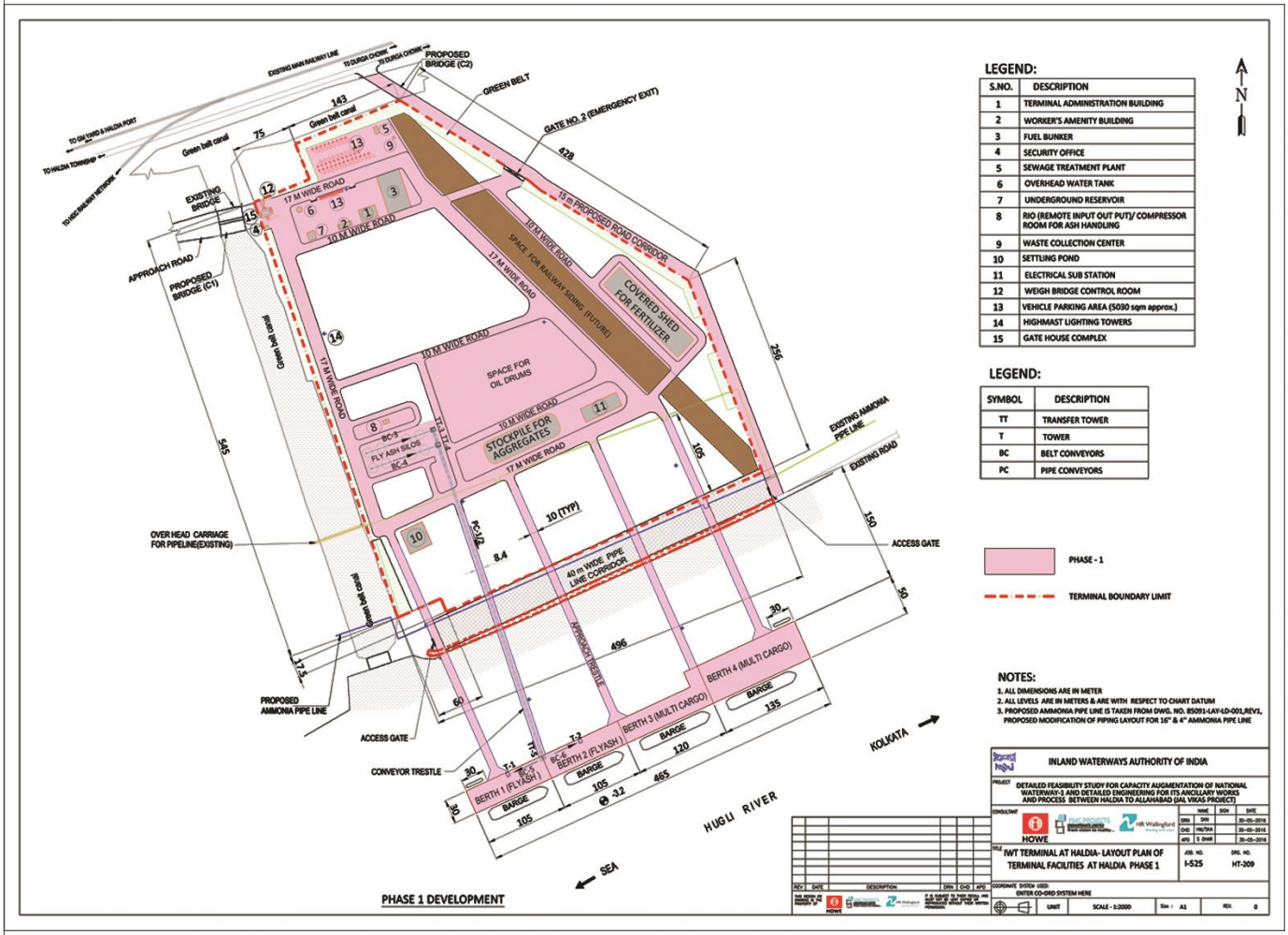
JETTY AND CRANE AT IWAI TERMINAL

I: CASTE STUDY IWAI TERMINAL ,HALDIA ,WEST BENGAL

THE SITE PROPOSED FOR THE DEVELOPMENT OF HALDIA MMT IS LOCATED ON HUGLI RIVER.
SITE IS LOCATED 600 METERS SOUTH TO DURGACHAK RAIL-WAY STATION AND 12 KMS FROM HALDIA RAILWAY STATION.

HALDIA, BEING A RIVERINE PORT LOCATION WITH GOOD CONNECTIVITY BY ROAD AND RAIL, HAS TREMENDOUS POTENTIAL FOR ATTRACTING TRAFFIC THROUGH IWT. IT IS FAVOURABLY LOCATED TO ATTRACT TRANSHIPMENT OF IMPORT CARGO TO FEED THE REQUIREMENTS OF POWER PLANTS, STEEL PLANTS AND VARIOUS INDUSTRIES IN WEST BENGAL, BIHAR AND UP LOCATED NEAR **NW1 ROUTE FROM HALDIA TO ALLAHABAD**

FENDER TO PROTECT THE JETTY FROM SHIP CONTACT



Tonnage (T)	Length (m)	Beam (m)	Draft (m)
650 - 1000	60 - 80	8.20	2.20
1000 - 1500	80 - 85	9.50	2.20
1500 - 3000	85 - 95	15.00	2.50

THE MINIMUM DIAMETER OF THE TURN-ING CIRCLE SHOULD BE 1.7 TO 2.0 TIMES (1.7 FOR PROTECTED LOCATIONS AND 2.0 FOR EXPOSED LOCATIONS) THE LENGTH OF THE LARGEST VESSEL.

SIZES OF SHIP ACCORDING TO THEIR TONNAGE (DRAFT IS THE DEPTH OF SHIP INSIDE THE WATER SURFACE

I: CASTE STUDY PHOTOS

DOLPHIN HEAD ,THIS IS USE TO TIE SHIP (VESSEL)

PHOTO OF JETTY ON GANGA RIVER AT IWAI,VARANASI

CRANE HEAD

K:LITREATURE STUDY, WATER FRONT ,KANPUR

SOURCE :SPA DELHI LIBRARY

PROJECT I ARCHITECTURAL PROGRAM

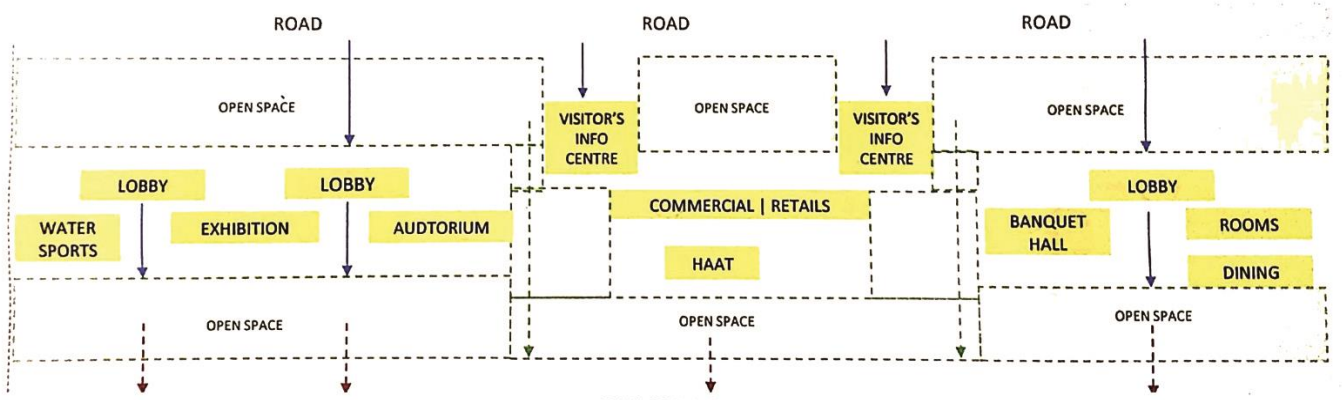
WATER SPORTS COMPLEX
ACTIVITY CENTER
COMMERCIAL I RETAIL
HOSPITALITY
DRIVE IN CINEMA
PARKING

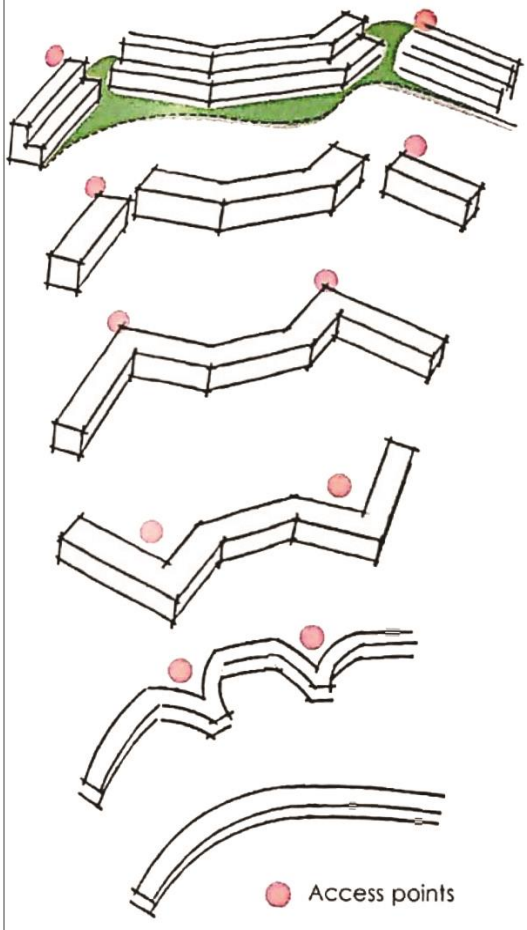
REQUIREMENTS

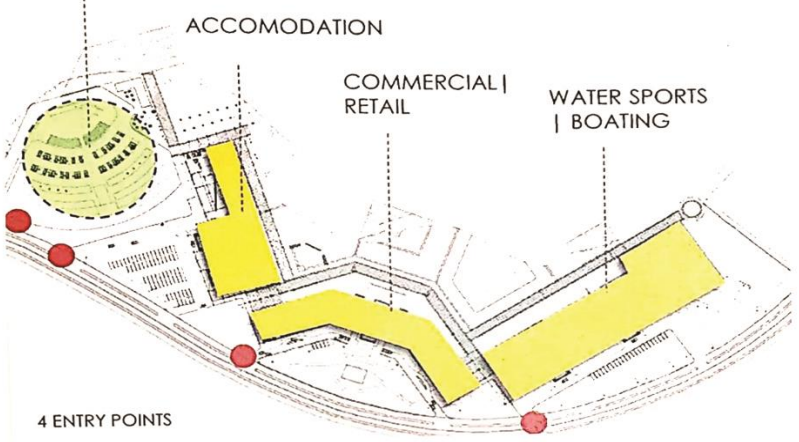
EATRIES
KIOSKS
SMALL SHOPS
MEDIUM & LARGE SHOPS
ANCHOR COURTS
RESTRAUNTS
VIEW POINT

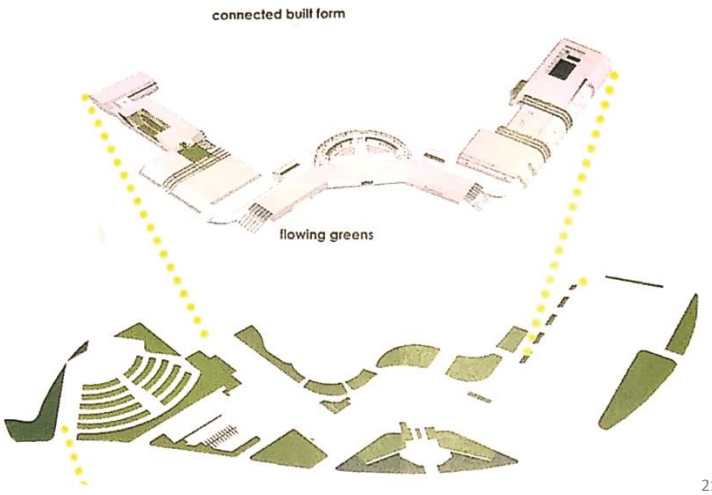
GYM
FOYER I WAITING
STORAGE
OUTDOOR BOATING
MESSAGE I THERAPY
SPA FOR WOMEN
SPA FOR MEN
WORKSHOP

HOTEL
SEATING SPACE
HAAT
PEDESTRIAN WALKWAY
SWIMMING POOL
ARTIFICIAL LAKE
BANQUET HALL
AMPHITHEATER
CYCLE TRACK









K:LITREATURE STUDY,FERRY TERMINAL,GUJARAT

SOURCE :BBD LIBRARY

DEPARTURE PASSENGER BY - PEDESTRIAN

ENTRY ⇒ ENTRANCE PLAZA ⇒ FOYER ⇒ WAITING AREA OR RESTAURANT & COMMERCIAL

DEPARTURE ⇐ WAITING AERA AT JETTY ⇐ COMMERCIAL

DEPARTURE PASSENGER BY - CAR

PARKING ⇒ ENTRANCE PLAZA FOYER ⇒ WAITING AREA OR RESTAURANT & COMMERCIAL

DEPARTURE ⇐ WAITING AERA AT JETTY ⇐ COMMERCIAL

REQUIRMENT CUM AREA

PARKING OF VEHICLES 2375 SQM

PASSENGER SHED 5000 SQM

BUS STATION 1500 SQM

FOYER 3450 SQM
TICKET COUNTER
WAITING ROW
ENQUIRY COUNTER
WAITING AREA & CAFETERIA
CONTROL ROOM
ANNOUNCEMENT ROOM

TOTAL AREA 32 ACRES

NO. OF FLOORS 129497/42735
3.03 FLOORS

PERMISSIBLE AREA 1 X 129497
129497SQM

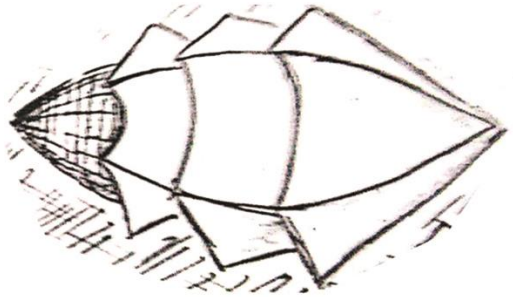
DEPARTURE LOUNGE 1180 SQM
WAITING AREA AT JETTY
TOILETS

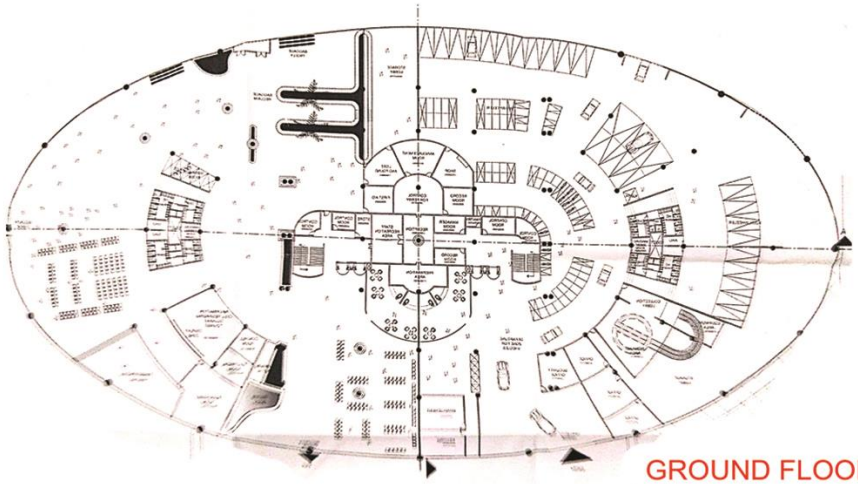
ARRIVAL LOUNGE 1180 SQM
WAITING AREA AT JETTY
TOILETS

CONTROL BUILDINGS
ELECTRICAL ROOM
CONTROL TOWER
STAFF OFFICES
STAFF RECREATION AREA
STORE ROOM

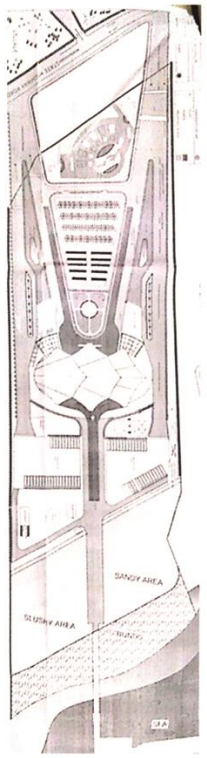
GROUND COV. 42734 SQM

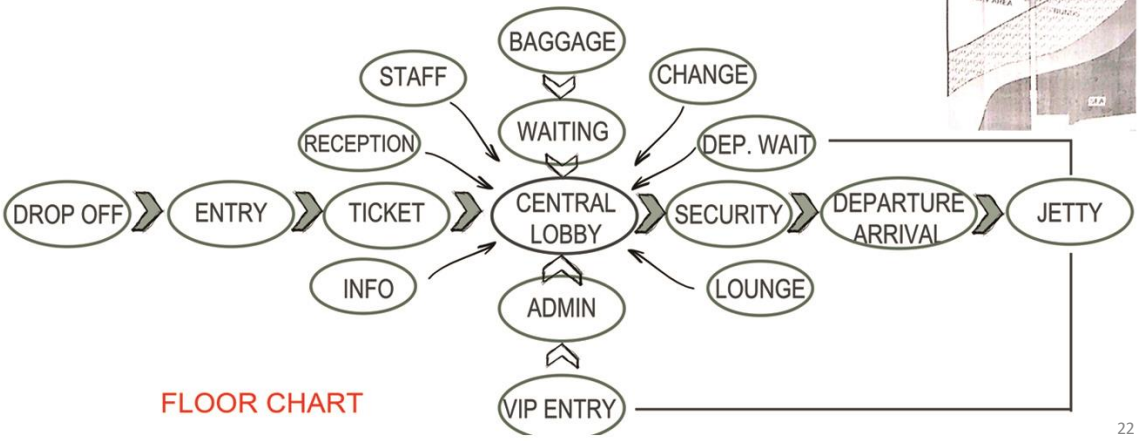
FAR 1.0





GROUND FLOOR PLAN





FLOOR CHART

L:COMPARITIVE STUDY

S. NO.	PARAMETERS	MMT VARANASI	MMT HALDIA	FERRY TERMINAL	WATERFRON -T
1	SITE AREA	5.685 HA	35 HA	32 HA	21000 SQM
2	COVERED AREA	-	-	129497 SQM	34000 SQM
3	FAR	1	1	1.0	1.5
4	CAPACITY PER DAY	4,000 - 5,000 TONNE	8378 TONNE	-	-
5	CONNECTIVITY	NH-7	DURGACHAK RAILWAY ST.	SURAT RAILWAY ST.	NH- 91
6	INTERNAL CONECTIVITY	22 M & 12 M	22 M & 12 M	18 M & 6M	6 M & 3M & 2 M
7	SOIL QUALITY	SANDY & LOAMY	SANDY CLAY / CLAY LOAM	SALINE / ALKALI	SANDY CLAY / CLAY LOAM
8	SEISMICITY	ZONE 3	ZONE 3	ZONE 3	ZONE 3
9	SERVED AREAS	VARANASI & SURROUNDING	SOUTHERN BENGAL	GUJARAT	KANPUR CITY
10	ARCHI. STYLES	-	-	MORDERN	LANDSCAPE
11	TRANSPORTATION	ALLOWED	ALLOWED	ELECTRIC VEHICLES	RESTRICTED IN SITE
12	PARKING	SURFACE	SURFACE	SURFACE BASEMENT	ON EDGES
13	FUNCTIONS	PASSENGER / CARGO	CARGO / INDUSTRIAL	PASSENGER TRANSPORT	RECREATIONAL COMMERCIAL
14	ACTIVITIES	INDUSTRIAL COMMERCIAL	INDUSTRIAL	FERRY	BOATING SHOPS ,CINEMA

Water Front

shops				*2950*
	small shops	15	75	1125
	meduim shops	22	50	1100
	large shops	29	25	725
exhibition area				*1000*
	covered	1000	1	1000
	on road			0
amphitheater				*1176*
	seating	500	1.2	600
	green room	18	2	36
	common toilet			0
	reherseal stage	240	1	240
	storage	60	1	60
	stage	240	1	240
boat club		4.5	222	*999*
	foyer / waiting			0
	storage boathouse			0
	toilets			0
	restaurent			0
	live guards			0
	training member			0
	pantry			0
	toilets			0
cultural stage				*1136*
	standing area	1000	0.9	900
	green room	18	2	36
	storage	200	1	200
florist shop		100	1	100
restaurent		500	2	1000
eateries		150	2	300
urban beach				0

kids recreation zone				*3050*
	non electrical	1000	1	1000
	electrical	2000	1	2000
	electrical room	50	1	50
lotus pond				0
cascade waterfall				0
water sports				0
water polo		50	20	1000
swimming pools				*1980*
indoor swimming pool		180	1	180
		180	10	1800
outdoor swimming pool				0
commercial				*1814*
spa for men		5.5	30	165
spa for women		5.5	30	165
saloon men		50	1	50
gym		4.5	100	450
message / therapy		150	1	150
dance floor		4.5	222	999
cyclecross track				0
pathway				0
ghats				0
urban beach		4.5	100	576
	changing	1.2	30	36
	storage	90	1	90
total				11891
circulation space	11891	30%		3567.3
TOTAL AREA WITH CIRCULATION				**15458.3**

N: AREA AND REQUIREMENT

Water Terminal

foyer				*657*
	ticket counter			9
	enquiry counter			9
	waiting row			10
	waiting area	2.3	200	460
	cafeteria	1.5	20	30
	control room	80	1	80
	announcement room			10
	security check	4	4	16
	store			20
	pantry	4	1	4
	cloak room			9
	common toilets			
departure lounge		2.3	100	230
arrival lounge		2.3	100	230
electrical room				50
staff office		6	20	120
staff changing		1.5	10	15
staff recreational				10
first aid counter				10
janitor room		4	2	8
store				20
atm				4
passenger meet and greet area		100	1	100
retail shop		6	18	108
public telephone		4	1	4
internet excess to passenger		12	1	12
	1574			
restaurent				*157.5*
	sitting area	1.5	75	112.5
	kitchen and storage			45
bus port				*348*
	waiting	1.5	50	75
	parking of bus	4	60	240
	control + enquiry			20
	store			9
	janitor			4
total				2083.5
circulation space		30%		625.05
TOTAL AREA WITH CIRCULATION				**2708.55**

Cargo

cargo jetty	75*100		7500
crane	112*2		224
watch tower			15
guest house for eng.	15	10	150
guard room	4	1	4
staff quarter	12	20	240
surveillance room	20	1	20
substation	400	1	400
labour quarter	9.5	20	190
			0
canteen	1.5	20	30
pantoon	20	10	200
infirmary	15	1	15
fuel berth			0
vessel parking			0
			0
storage			
open			2000
covered			2000
packing area			1500
common toilets			0
future expansion			
admin	20	10	200
TOTAL			4764
circulation space			1429.2
TOTAL AREA WITH CIRCULATION			**6193.2**

TOTAL AREA OF WATER TERMINAL AND CARGO **24360**

FAR 1

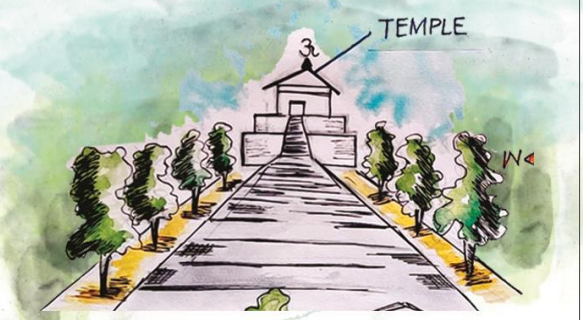
SITE AREA 40 ACRES

161840

G. COVERAGE % 0.15051934 **15.0519**

M: CONCEPT AND TOUGHT PROCESS

FERRY TERMINAL
CONCEPTUAL



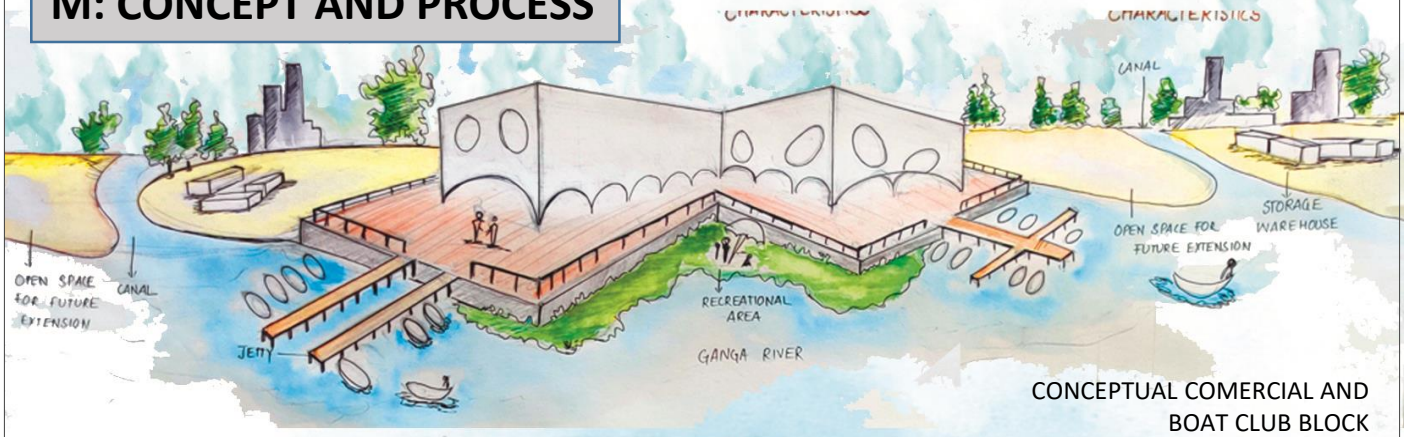
TEMPLE AT A RAISED
PLATFORM

CONCEPTUAL SITE PLAN

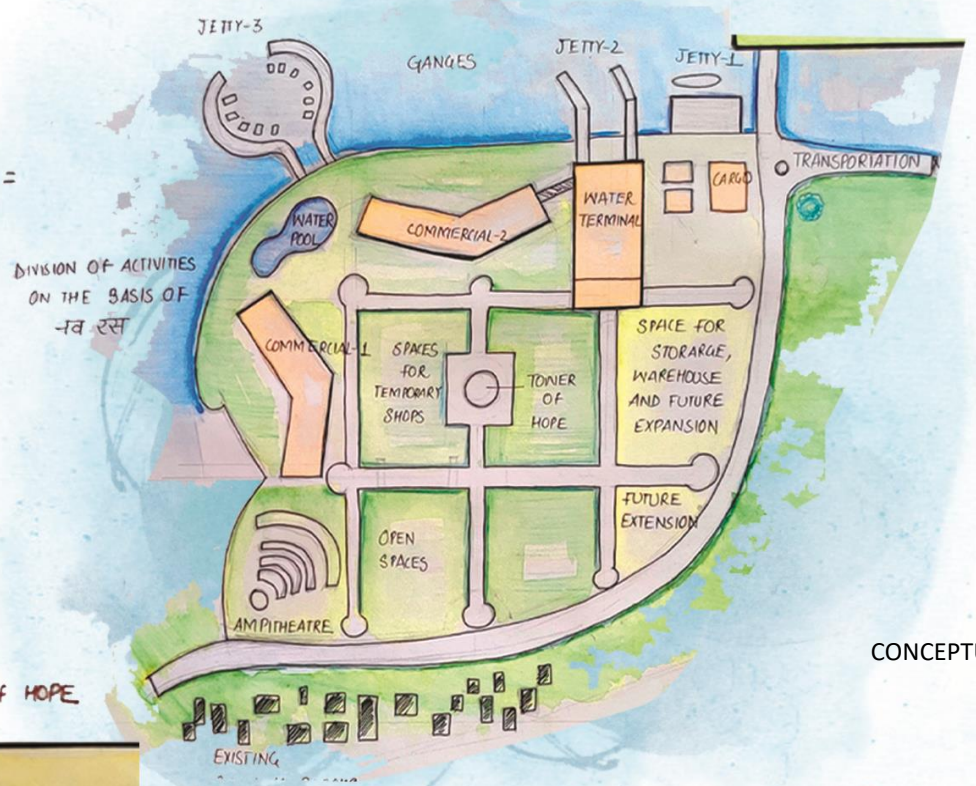
WALKWAY AT SITE
CONCEPTUAL

CARGO JETTY
CONCETUAL

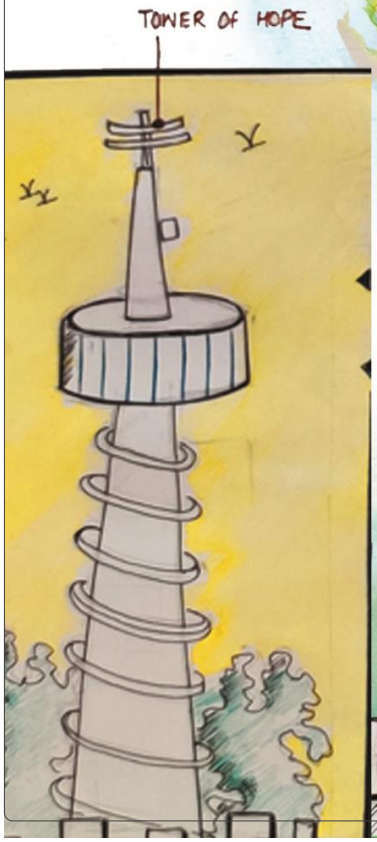
M: CONCEPT AND PROCESS



CONCEPTUAL COMERCIAL AND BOAT CLUB BLOCK

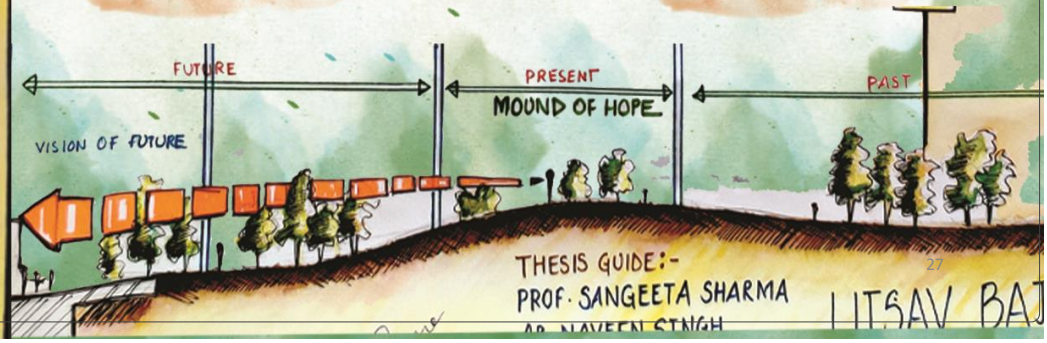


CONCEPTUAL ZONING



AESTHETIC FUNTION OF WATER TAKEN

FUNCTIONALC FUNTION OF WATER TAKEN

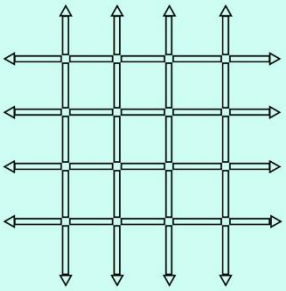


M: CONCEPT AND THOUGHT PROCESS

THE AMMALGAMATION OF ANCIENT TOWN PLANNING CONCEPT & MORDEN ARCHITECTURE APPROACH .

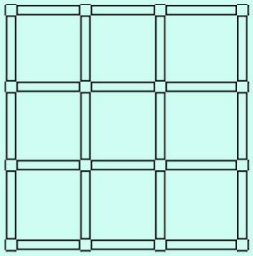
ANCIENT INDIAN TOWN PLANNING HAVE A GREAT IMPACT UPON THE DESIGN OF MORDRN TOWNS ,MANY OLD CITIES LIKE JAIPUR, AYODHAYA EVEN EXIST TODAY AND HAVE A GREAT IMPACT UPON OUR MANY DESIGNING FACTOR LIKE ORIENTATION , ZONING, ETC

DESIGN PROCESS



STEP 1

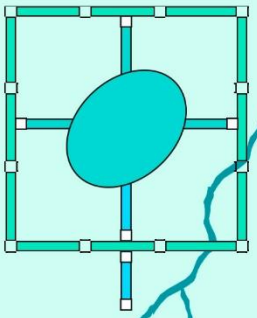
STREETS RUNNING IN NORTH SOUTH DIRECTION ,LIKE IN THE PADMAKA SHAPE OF ANCIENT TOWN PLANNING ie THE LOTUS FLOWER SHAPE



STEP 2

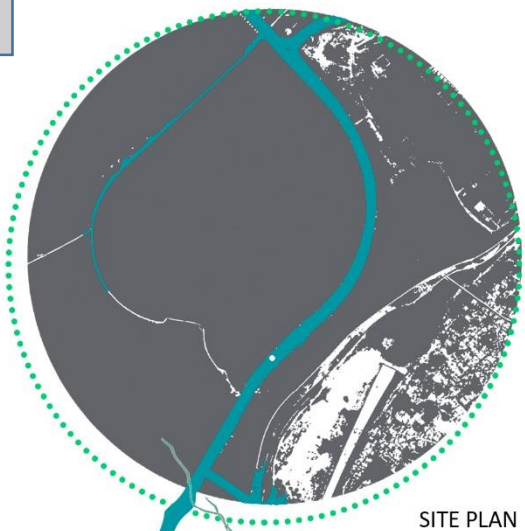
3 X3 GRID FOR THE DIVINDING THE VARIOUS ZONES. .

THIS IS OBTSINED FROM THE ANCIENT VASTU CONCEPT.

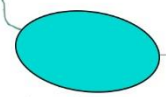


STEP 3

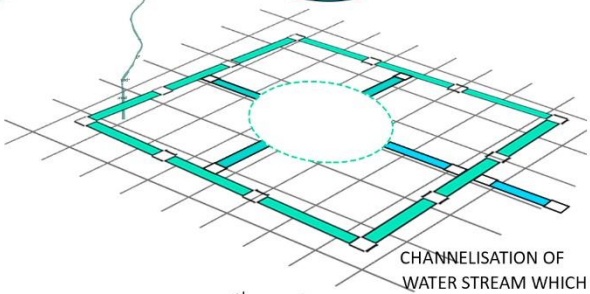
THE DEVELOPED SITE PLAN THE THE OPEN SPACE (BRAHMA) AT THE CENTER.



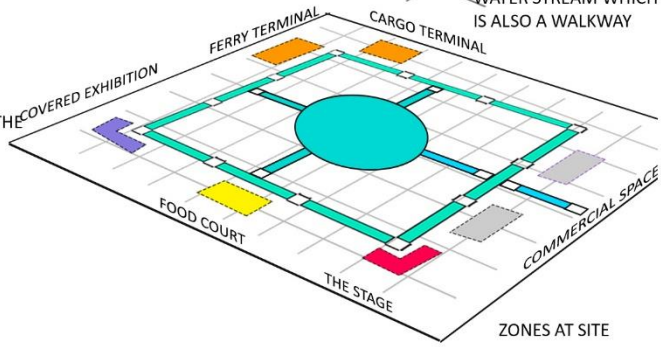
SITE PLAN



OPEN BRAHMA SPACE AT THE CENTER

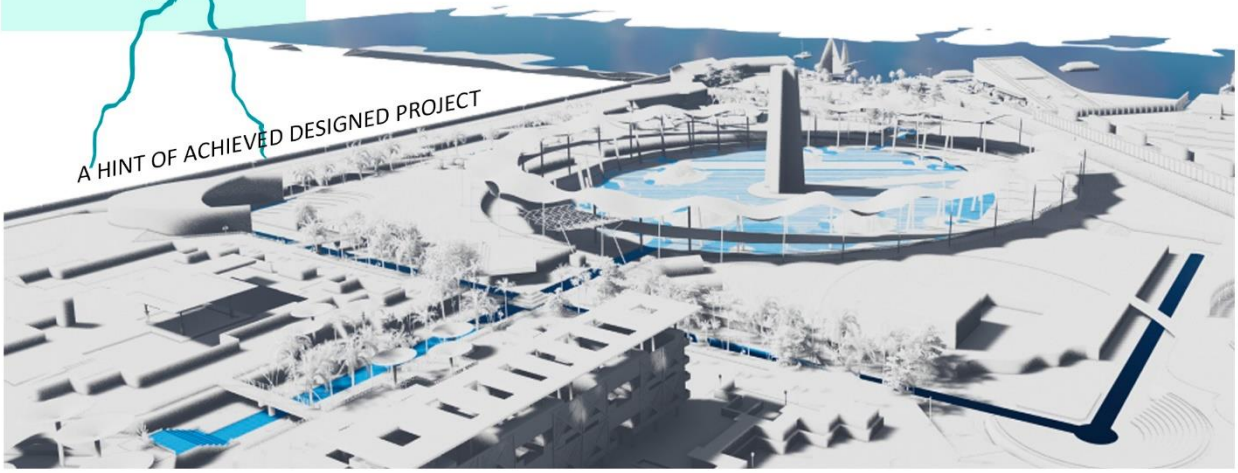


CHANNELISATION OF WATER STREAM WHICH IS ALSO A WALKWAY



ZONES AT SITE

A HINT OF ACHIEVED DESIGNED PROJECT



O:EXPLAINATION SHEETS

THOUGHT

THE PROJECT CONSIST OF THREE PARTS ie INLAND WATER TERMINAL , A FERRY TERMINAL & WATER FRONT FOR THE CITY OF KANPUR.

KANPUR S LOCATED IN UTTAR PRADESH ,INDIA .THIS IS AN INDUSTRIAL CITY WHICH HAS BEEN SHADOWED BY DEVELOPMENT ACTIVITIES ,HENCE RESIDENTD OF THE CITY FACE MANY PROBLEMS IN THEIR DAY TO DAY LIFE .

THIS PROJECT WILL IMPART THEM A MODE OF TRANSPORTATION (FERRY TERMINAL), A BACKBONE TO NDUSTRIAL HUB (INALND WATER TERMINAL) ,AND A OPEN RECREATION ZONE WHERE THE PEOPLE CAN ENJOY THEMSELFVES ON THE BANKS OF GANGES (WATERFRONT).

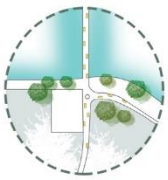
PROGRAM

WATERFRONT
BOAT CLUB
COMMERCIAL SHOPS
SPA LOUNGE
COVERED EXHIBITION
OPEN EXHIBITION
STAGE
OAT
HERITAGE WALKWAY
CYCYLE TRACK
CYCLE RACING PATH

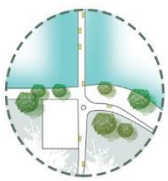
WATER TERMNAL (CARGO)
CARGO JETTY
ADMIN
OPEN STORAGE
COVERED STORAGE
CANTEEN
SUBSTATION
FUEL BERTH

FERRY TERMINAL
DEPARTURE LOUNGE
ARRIVAL LOUNGE
RESTRAUNT
PICKUP/DROP POINT
ADMIN
GANGWAY
JETTY

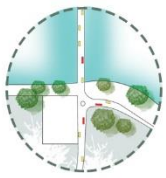
TRAFFIC MAPING



AT 7 AM



AT 2 PM

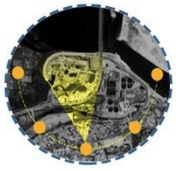


AT 7 PM

CLIMATE AND SURROUNDING

NOISE NODES

WIND MOVEMENT
SW- NE



SUN PATH

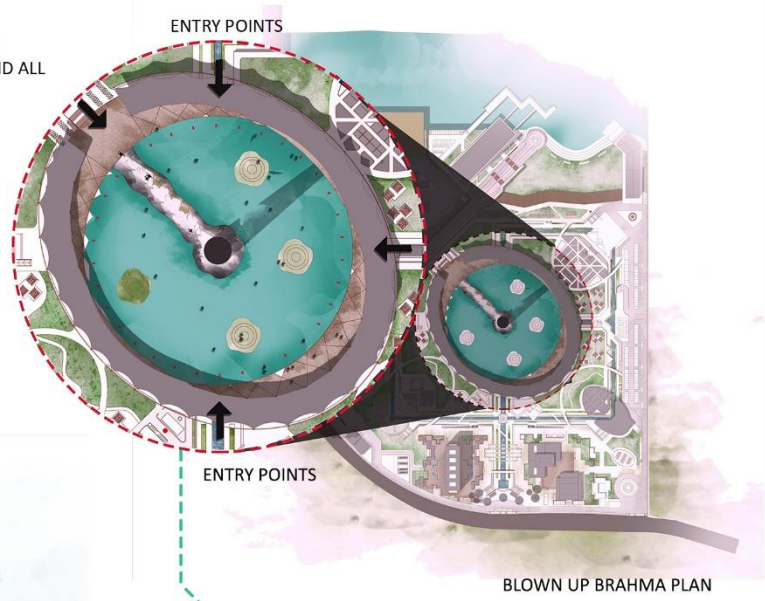
O:EXPLAINATION SHEETS

LANDMARK THE OPEN SPACE : BRAMHA & THE TOWER OF HOPE

ONE OF THE 5 ELEMENTS OF THE CITY ,LANDMARK SERVES AS THE LOCATION WHICH IS THE CENTRAL OR THE MAIN FOCUS POINT AND ALL THE DESIGN ELEMENTS REVOLVE AROUND THIS .

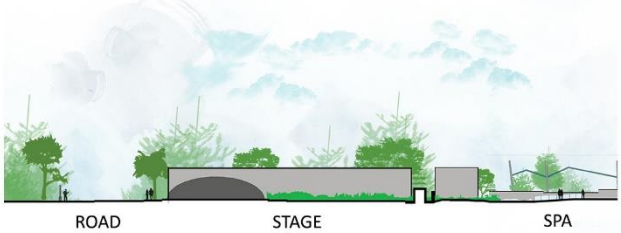
TAKING THE ABOVE CONCEPT THE TOWER OF HOPE SERVES AS THE LANDMARK FOR NOT ONLY THE SITE BUT ALSO THE NEIGHBOURING AREAS

THEREFORE LOCATED IN BRAHMA ZONE OF SITE (THE OPEN AREA) THIS TOWER OF HOPE SERVES AS FOCAL POINT AS WELL AS LIGHTHOUSE FOR PASSING SHIPS.

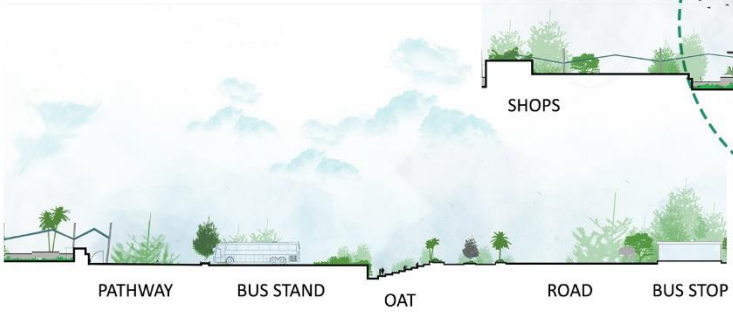


BLOWN UP BRAHMA PLAN

SITE SECTION AA'



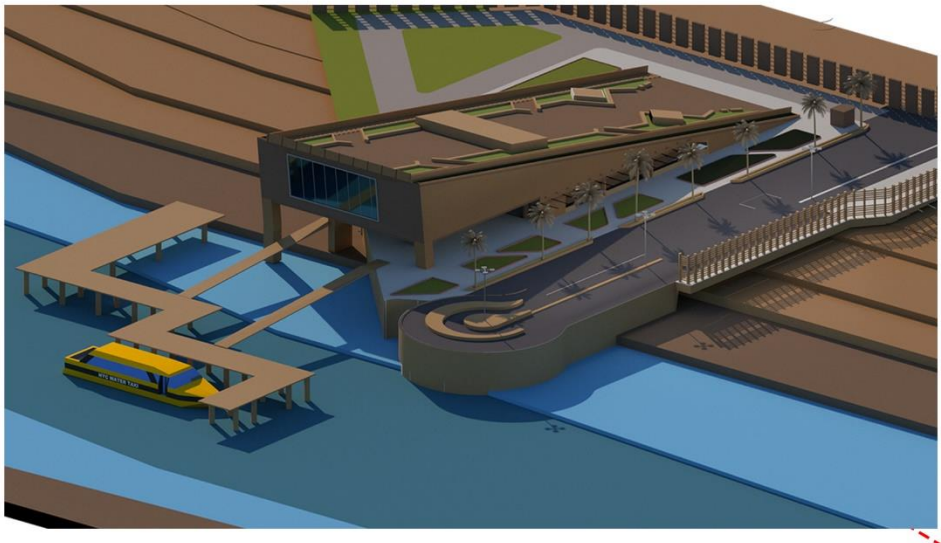
TOWER OF HOPE WITH WALKWAY



BRAMHA (THE OPEN SPACE)

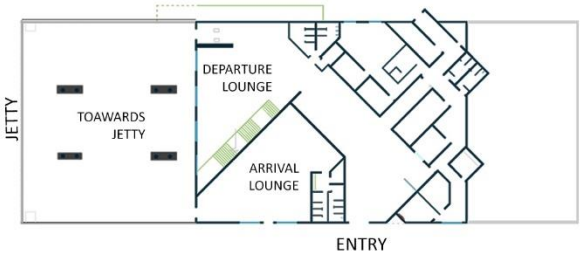
O:EXPLAINATION SHEETS

EDGE : FERRY TERMINAL

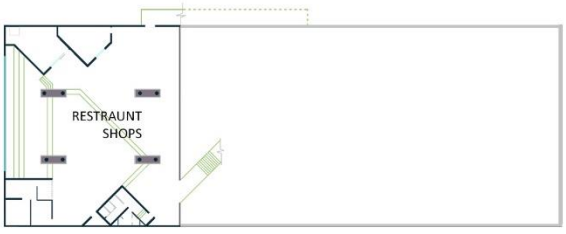


THE FERRY TERMINAL IS ONE OF THE MAJOR PART OF THIS PROJECT , THIS TERMINAL WILL PROVIDE ANOTHER MODE OF TRANSPORT TO THE PEOPLE OF THE CITY MOREOVER THE PRESSURE ON THE OTHER MODES OF TRANSPORT WILL REDUCE AND AND AT THE SAME TIME WATER TRANSPORTATION CAUSES MUCH LESS POLLUTION AS COMPARED TO THE OTHER MODES OF TRANSPORT .

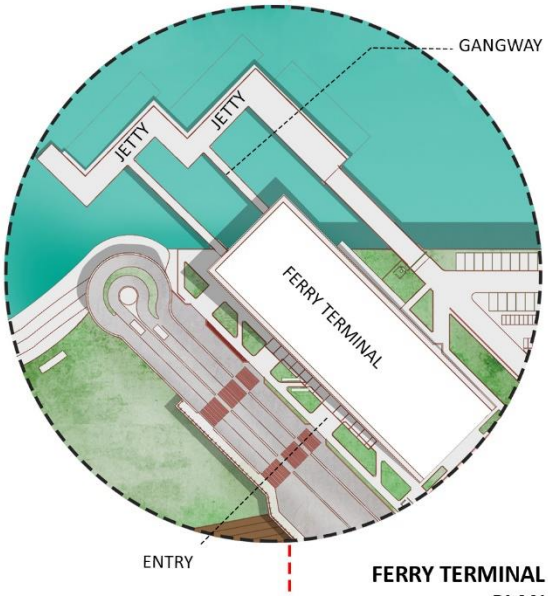
FERRY TERMINAL 3D RENDER



GROUND FLOOR PLAN



FIRST FLOOR PLAN



FERRY TERMINAL PLAN

FERRY TERMINAL WEST ELEVATION

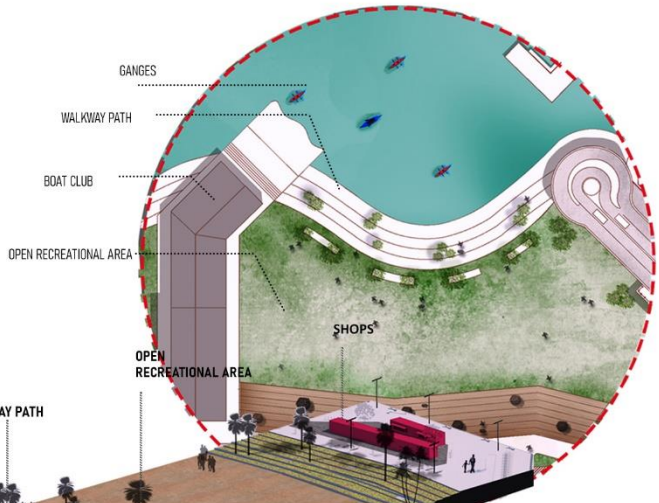
O:EXPLAINATION SHEETS

EDGE : WALKWAY & CARGO JETTY

ONE OF THE 5 ELEMENTS OF THE CITY ,EDGE SERVES AS THE LOCATION WHICH IS AT THE EDGE OR THE PRIPHERY OF THE DESIGN .

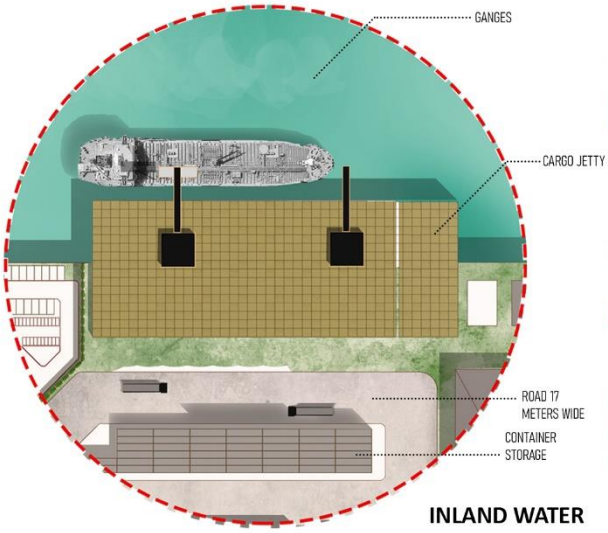
TAKING THE ABOVE CONCEPT THE RIVER LINE IS PERCIEVED AS THE LINEAR ELEMENT THAT FORBM BOUNDARIES BETWEEN AREAS AND IS BREAKING THE CONTINUITY .

THEREFORE THE WALKWAY AREA , FERRY TERMINAL AND THE CARGO JEETY FORMS THE EDGE OF THE DESIGN ie BREAKING



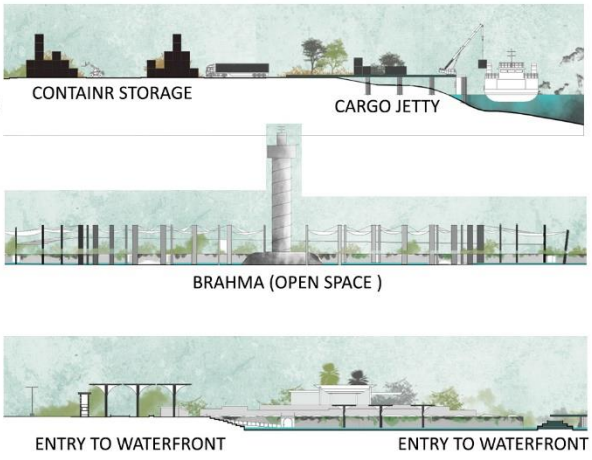
RIVERFRONT EDGE WALK PLAN

WALKWAY 3D SECTION



INLAND WATER TERMINAL PLAN

SECTION BB'



WALKWAY TO FERRY TERMINAL 3D RENDER

THE CARGO TERMINAL IS ONE OF THE MAJOR PART OF THIS PROJECT , THIS TERMINAL WILL PROVIDE ANOTHER MODE OF TRANSPORT TO THE LOGISTICS MOVEMENT OF THE CITY MOREOVER THE PRESSURE ON THE OTHER MODES OF TRANSPORT LIKE RAILWAYS WILL REDUCE AND AND THE SAME TIME WATER TRANSPORTATION CAUSES MUCH LESS POLLUTION AS COMPARED TO THE OTHER MODES OF TRANSPORT .

O:EXPLAINATION SHEETS

PATH & NODES

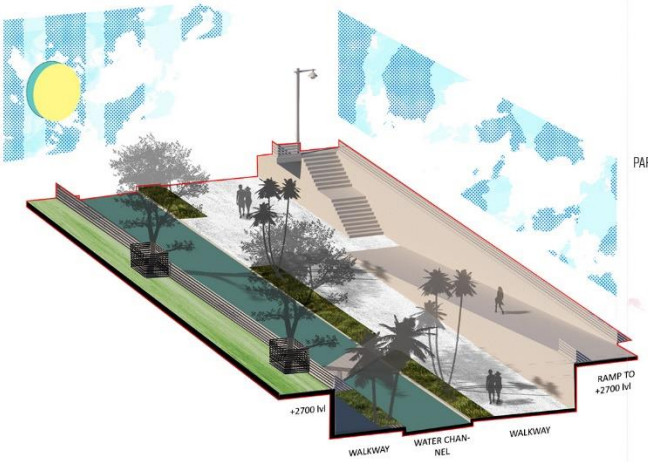
CYCLE CUM PEDESTRIAN TRACK ,WATER CHANNEL & EXHIBITION CENTER , OAT, THE STAGE

WALKWAY CUM CYCLE TRACK WITH RESTRAUNT ON RIGHT
3D RENDER

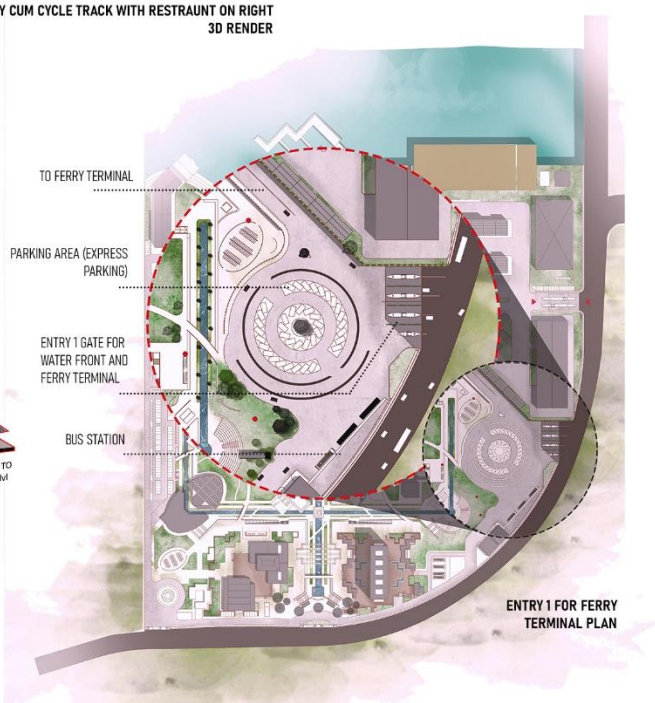
ONE OF THE 5 ELEMENTS OF THE CITY IS PATH . THESE ARE THE STREETS AND CANAL AND CYCLE TRACK IN THIS DESIGN IN WHICH PEOPLE TRAVEL.

TAKING THE ABOVE CONCEPT THE PATH COONECTS VARIOUS ZONES OF PARK TO EACH OTHER THESE CONTAIN PEDESTRIAN WALKWAY ,CYCLE TRACKS AND ROADS INSIDE THE SITE .

THE CHANELISATION OF WATER STREAM ALL ALONG THE WALKWAY CUM CYCLE TRACK FOLLOWS THE CONCEPT OF THE PATH .



WALKWAY CUM CYCLE TRACK 3D SECTION

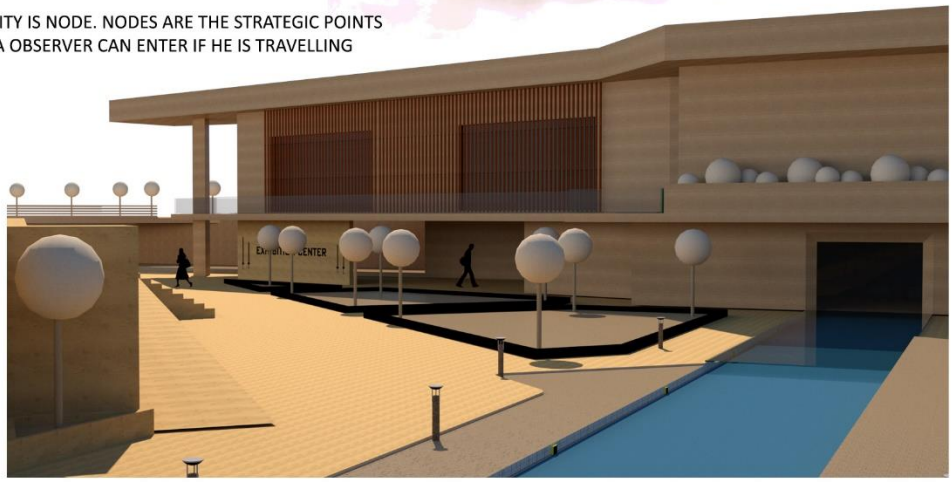


ENTRY 1 FOR FERRY TERMINAL PLAN

ONE OF THE 5 ELEMENTS OF THE CITY IS NODE. NODES ARE THE STRATEGIC POINTS IN A CITY OR A PLAN INTO WHICH A OBSERVER CAN ENTER IF HE IS TRAVELLING FROM THAT POINT .

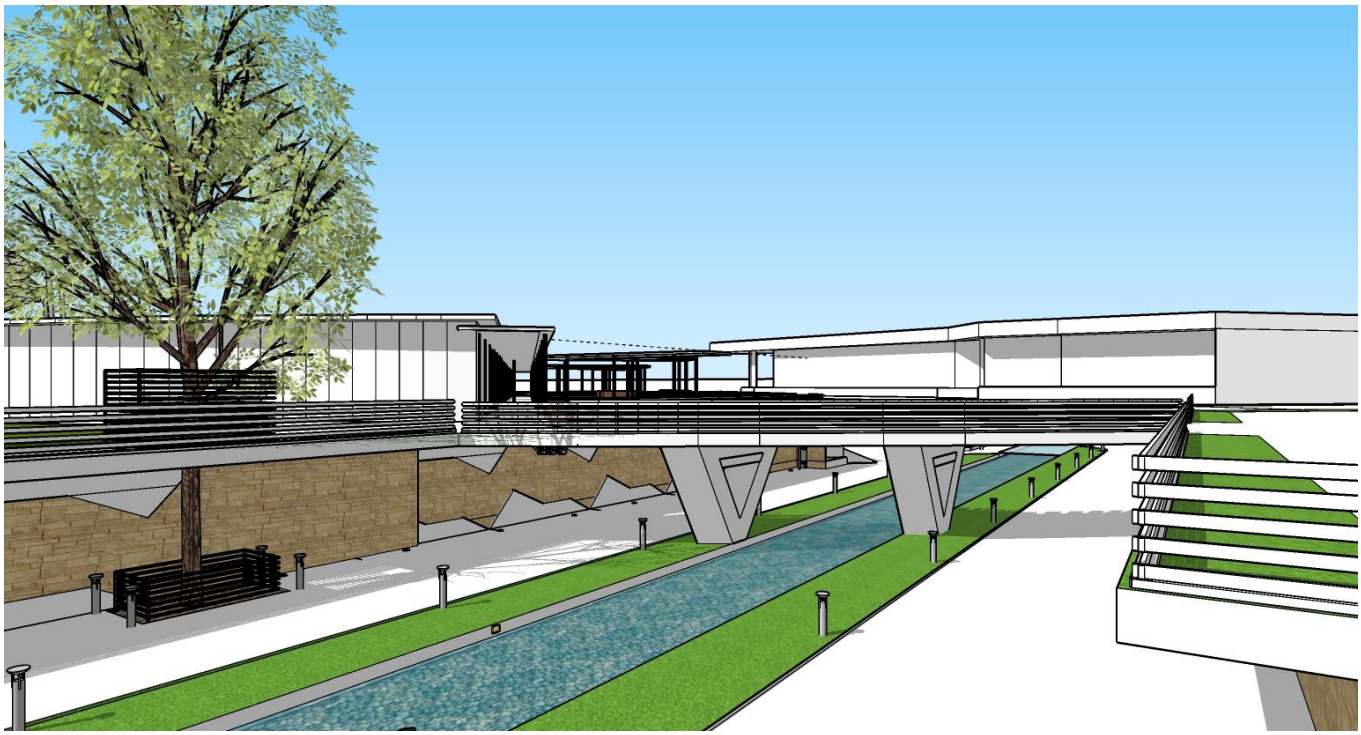
APART FROM THIS THE OTHER NODES IN THE DESIGN ARE A OAT , PUBLIC STAGE ,FOOD COURT ,CHILDREN PARK PEOPLE STAGE. TAKING THE ABOVE CONCEPT INTO THE DESIGN CONSIDERATION THE COVERED EXHIBITION CENTER ACT AS A NODE WHICH LIES AT PATH & A PERSON CAN ENTER THIS FOR A TIME BEING THIS ACT A A INTENSIVE FOCI .

AT THE SAME TIM IT LIES A JUCTION WHICH FULLFILL ALL THE ASPECTS OF THIS BEING NODE



3D RENDER OF EXHIBITION CENTER AS A NODE

P:VIEWS



WALKWAY LEADINH EXHIBITION CENTER

SHOPPING COMPLEX

GAZIBOS NEAR CANTEEN AREA

BRIDGE LEADING TO OPEN EXHIBITION AREA

P:VIEWS

WATERFRONT ENTRYWITH A GLIPSE OF TOWER OF HOPE

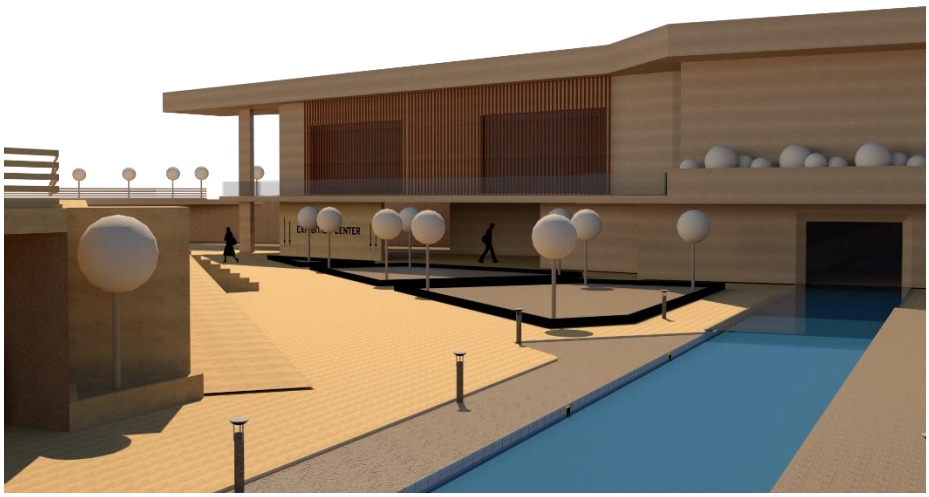
PEDISTRIAN CUM CYCLE TRACK WITH RIVER CHANNEL

P:VIEWS

FERRY TERMINAL ENTRY FROM THE 4 LANE ROAD

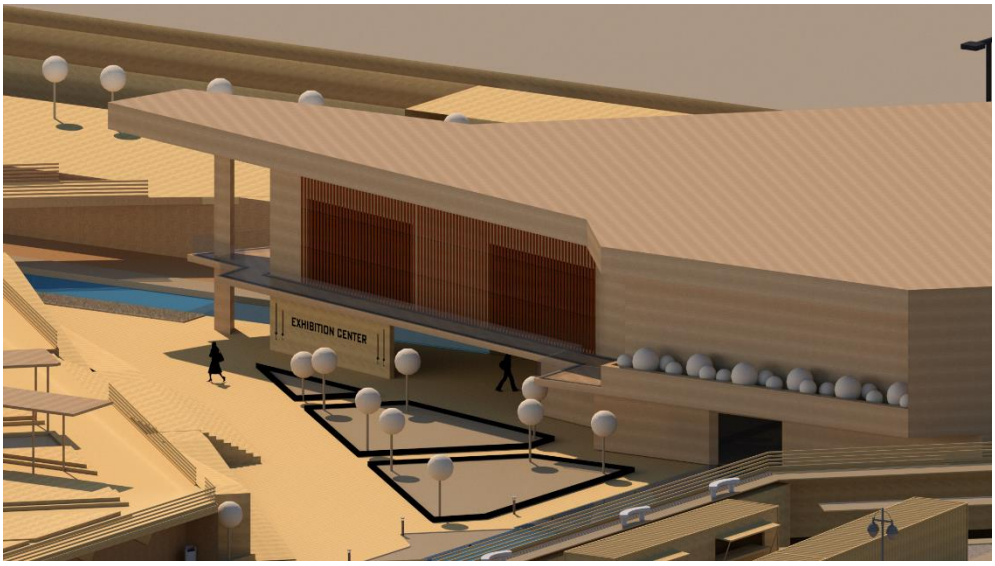
CARGO TERMINAL JETTY

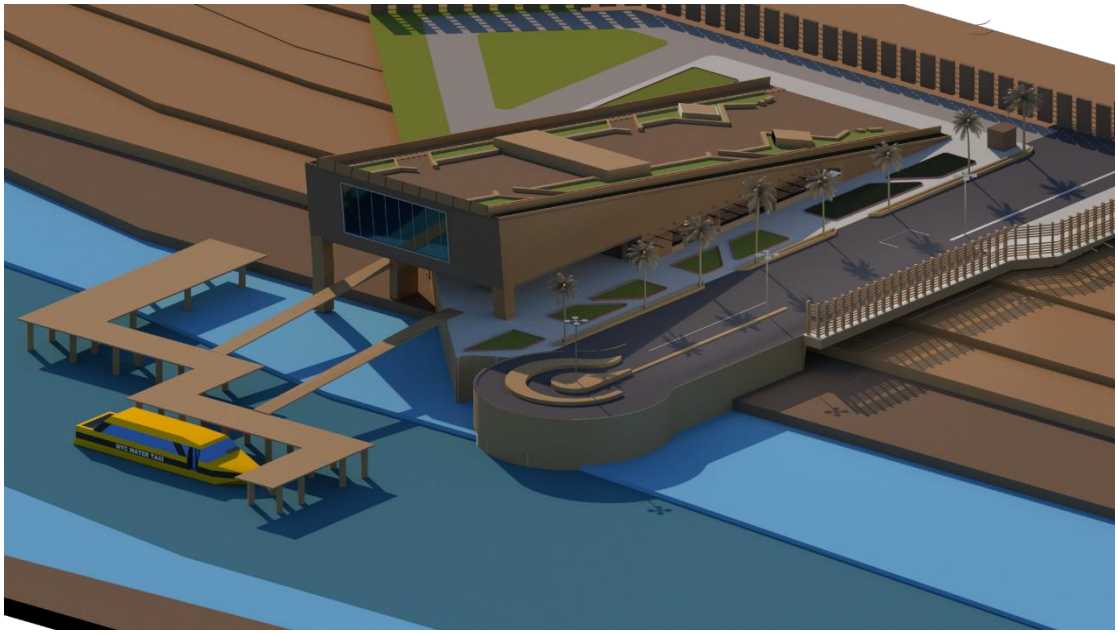
P:VIEWS



EXHIBITION CENTER ENTRY FROM THE RIVER CHANNEL

EXHIBITION CENTER MODEL BIRD EYE VIEW





FERRY TERMINAL BIRD EYE VIEW

Q: DRAWINGS

1. SITE PLAN AND SITE SECTION A2 SHEET
2. FERRY TERMINAL PLAN AND SECTION A2 SHEET
3. SHOPPING COMPLEX PLAN AND SECTION A2 SHEET
4. EXHIBITION HALL PLAN AND SECTION A2 SHEET
5. ADMIN BUILDING OF CARGO TERMNINAL A2 SHEET
6. BOAT CLUB RESTRAUNT A2 SHEET

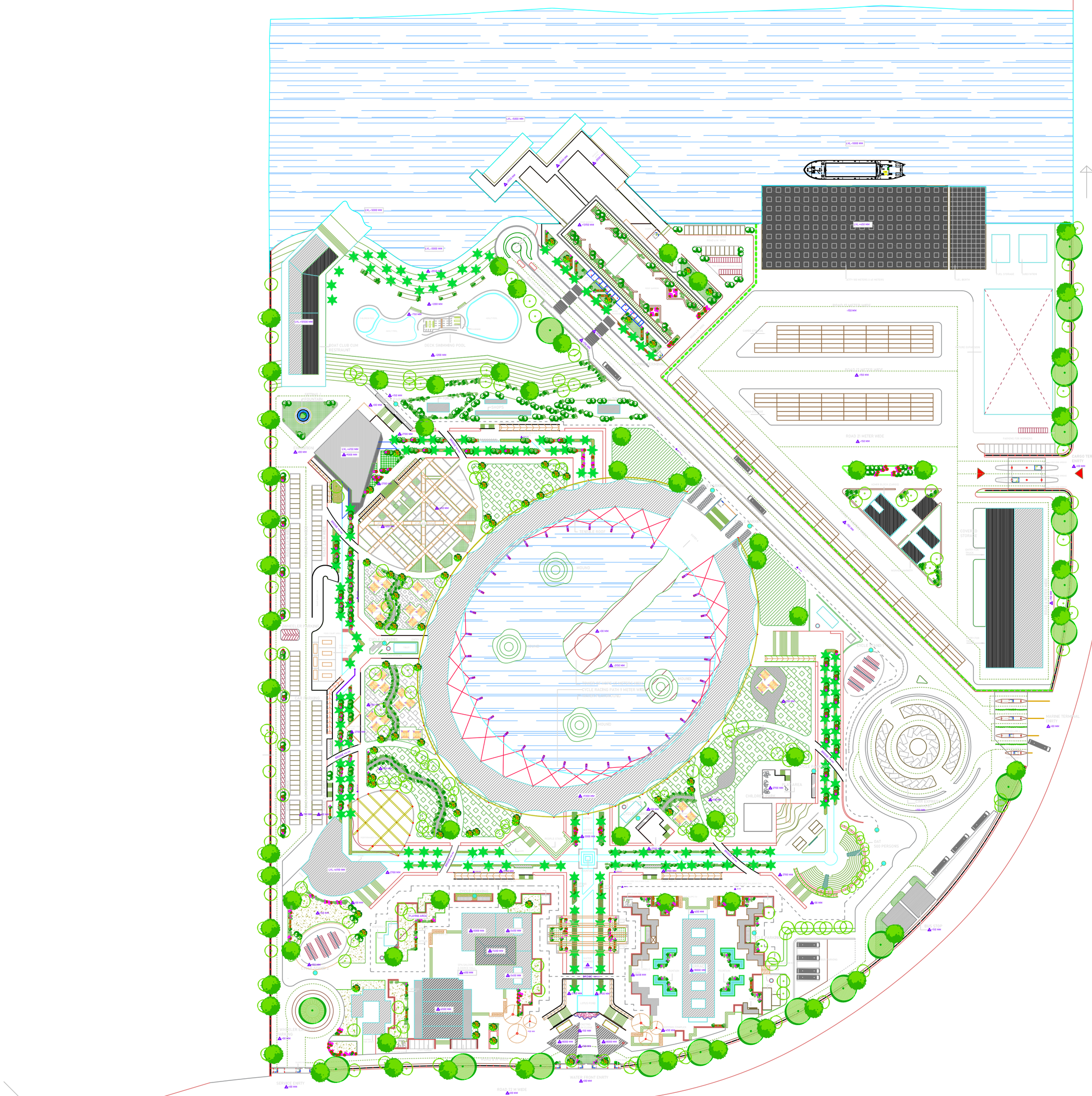
WATERFRONT

INLAND WATER TERMINAL

THE IMAGE OF THE CITY

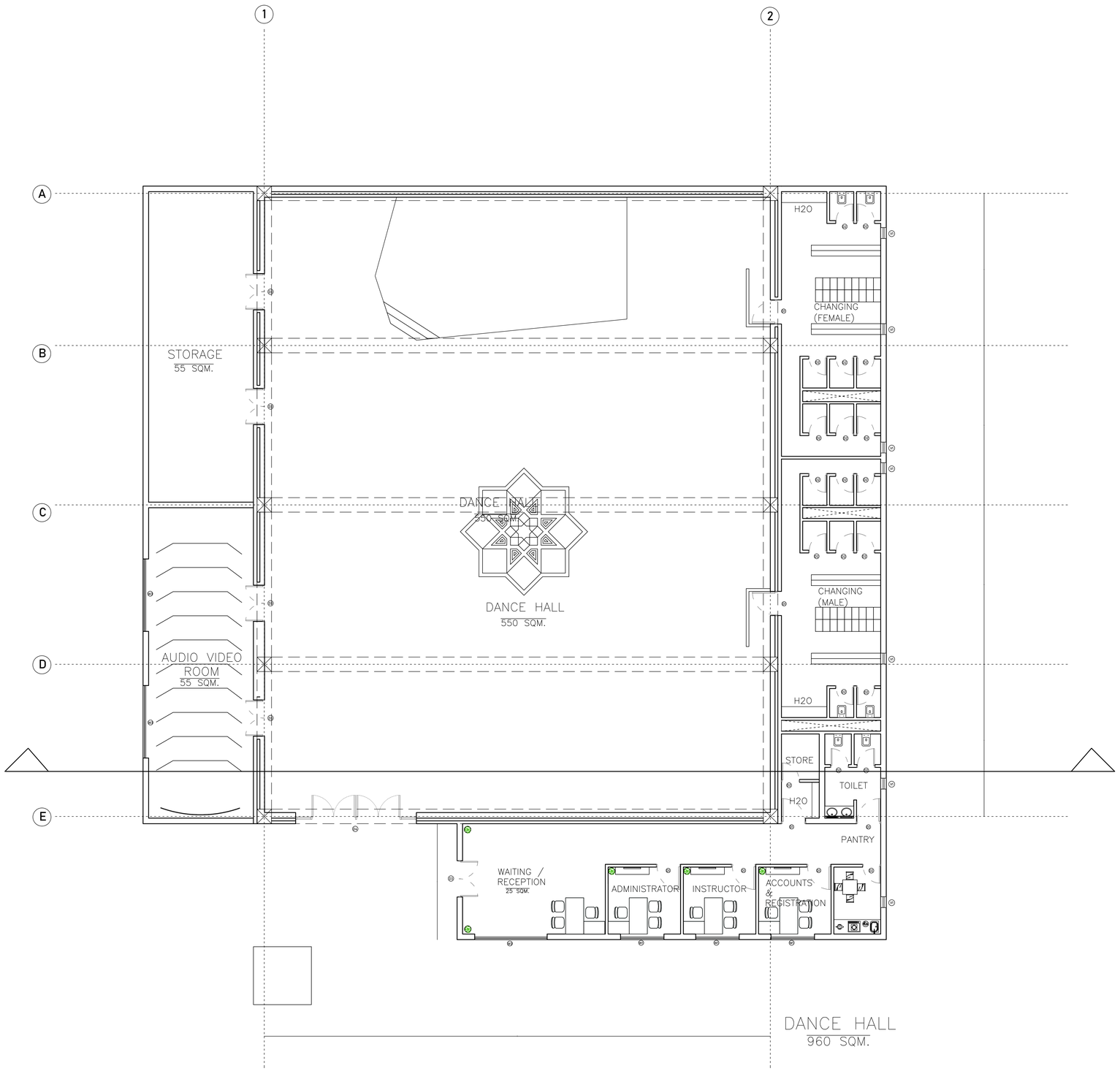
AT THE END I WOULD LIKE TO CONCLUDE BY SAYING IT WAS AN AMAZING AND NEW EXPIRIENCE FOR ME TO DO ALL THIS WORK AND SUBMISSION EVEN IN THIS COVID 19 PANDAMIC TIME .FROM MY EXPIERIENCE I HAVE LEARNT THAT EVERYTHING IS POSSIBLE IF ONE TRIES TO FIGHT THE ODDS AND TURN THE NEGATIVE MINDSET INTO POSITIVE ONE.
THESE TIMES HAVE CHANGED MANY NORMS AND REGULATION AND WE NEED TO ACCEPT AND LIVE IN THIS “NEW NORMAL“.
SO GOOD LUCK TO ALL MY JUNIORS HOPE YOU FIND THIS “IMAGE OF CITY” HELPFUL AND MOTIVATING.

THANKYOU



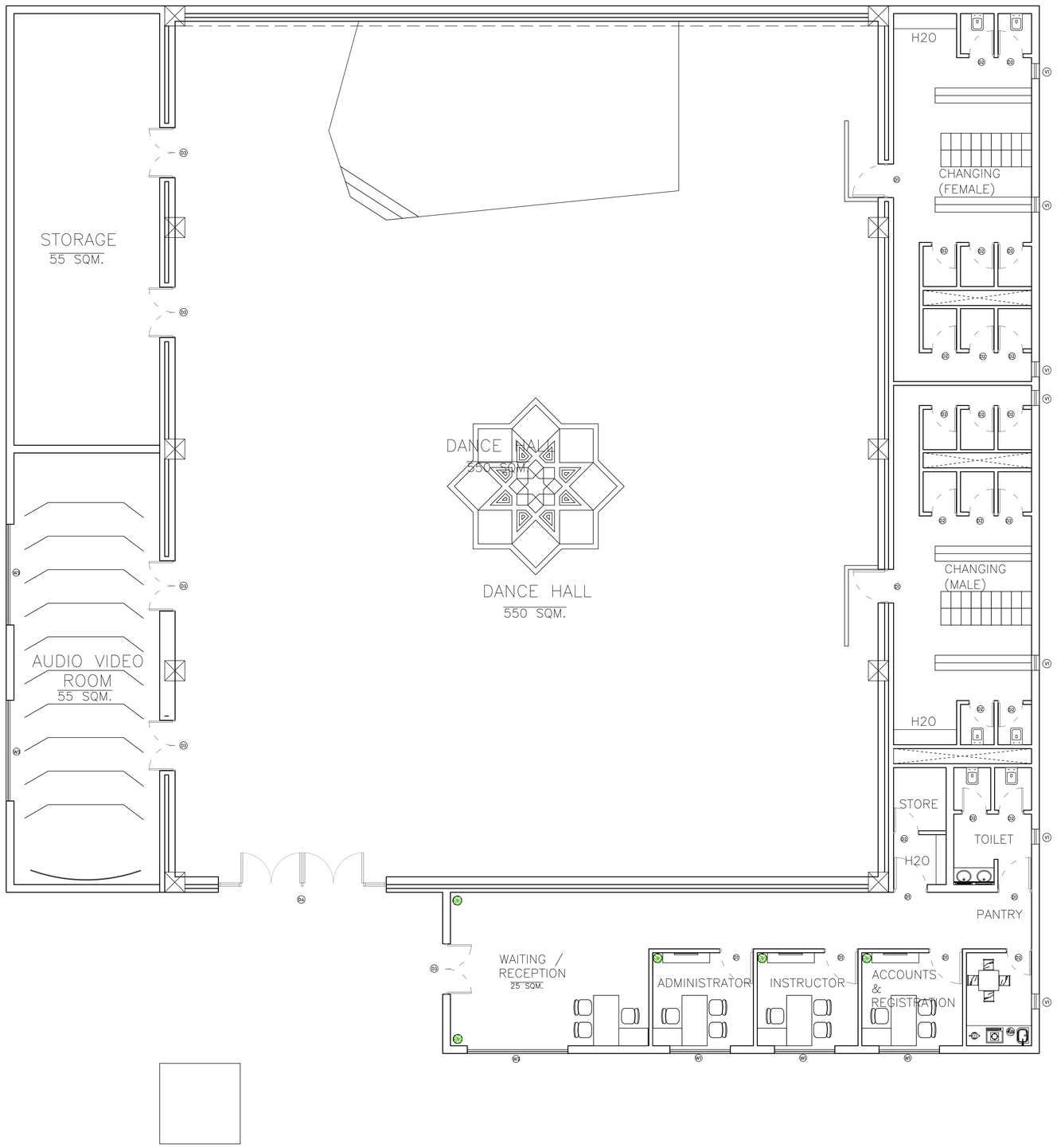
WATER TERMINAL CUM WATERFRONT

UTSAV BAJPAI
B. ARCH (AR)
5TH YEAR X SEM.
GUIDED BY–PROF. S.SHARMA
AR. NAVEEN SINGH



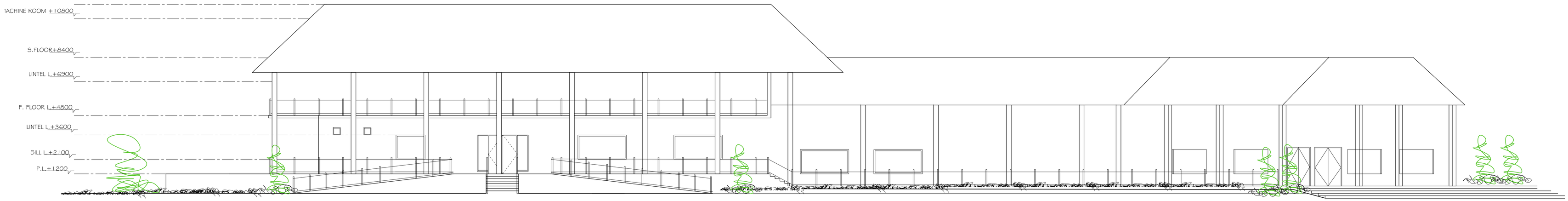
WATER TERMINAL CUM WATERFRONT

UTSAV BAJPAI
B. ARCH (AR)
5TH YEAR X SEM.
GUIDED BY–PROF. S.SHARMA
AR. NAVEEN SINGH



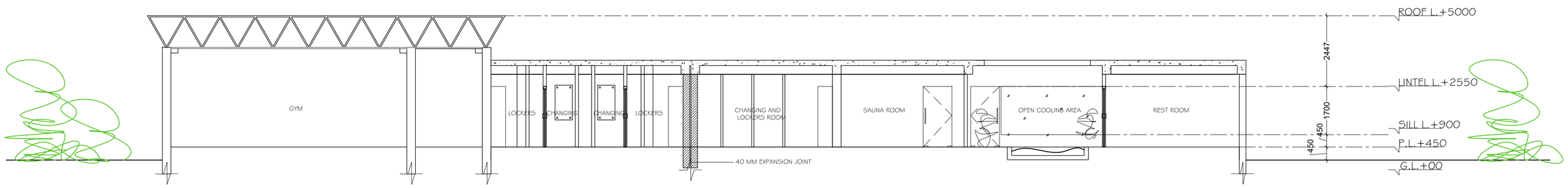
WATER TERMINAL CUM WATERFRONT

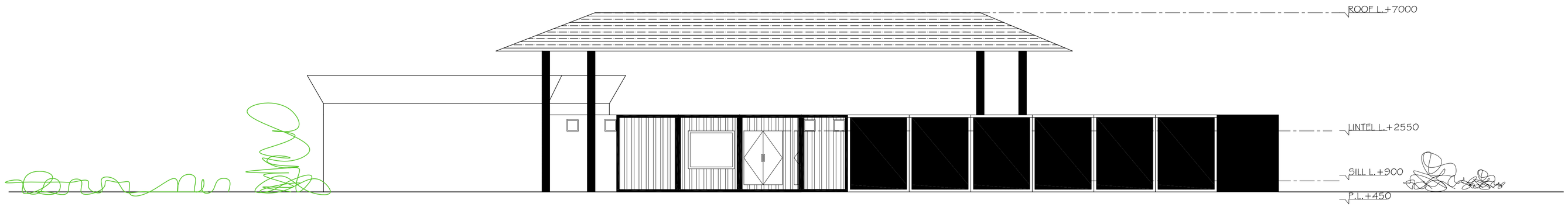
UTSAV BAJPAI
B. ARCH (AR)
5TH YEAR X SEM.
GUIDED BY–PROF. S.SHARMA
AR. NAVEEN SINGH

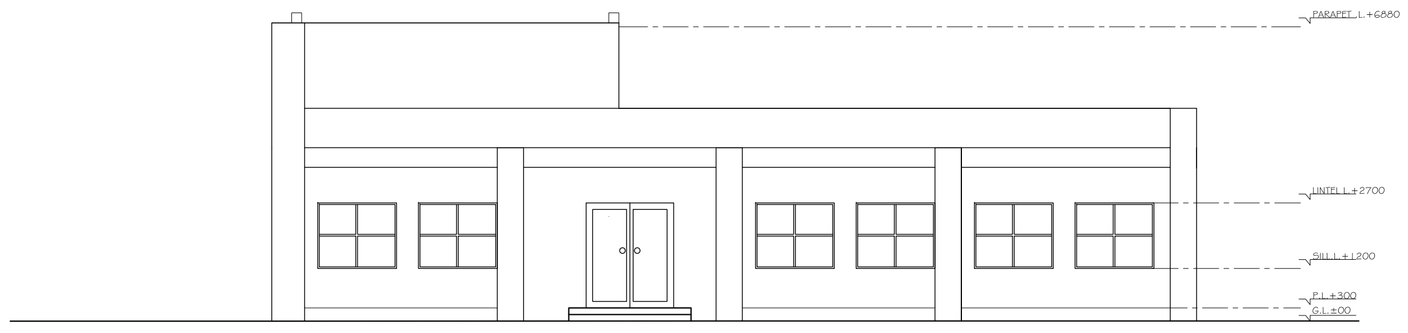


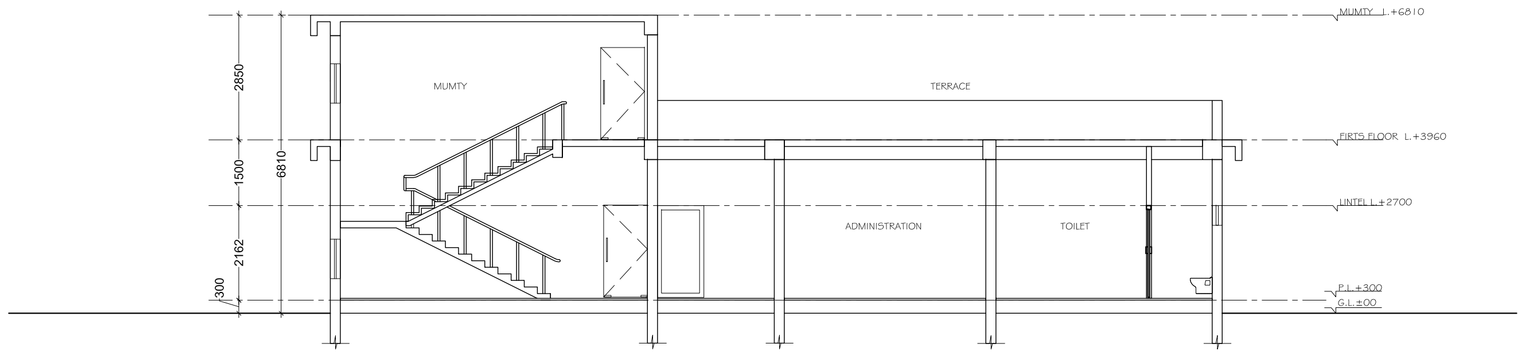
WATER TERMINAL CUM WATERFRONT

UTSAV BAJPAI
B. ARCH (AR)
5TH YEAR X SEM.
GUIDED BY–PROF. S.SHARMA
AR. NAVEEN SINGH



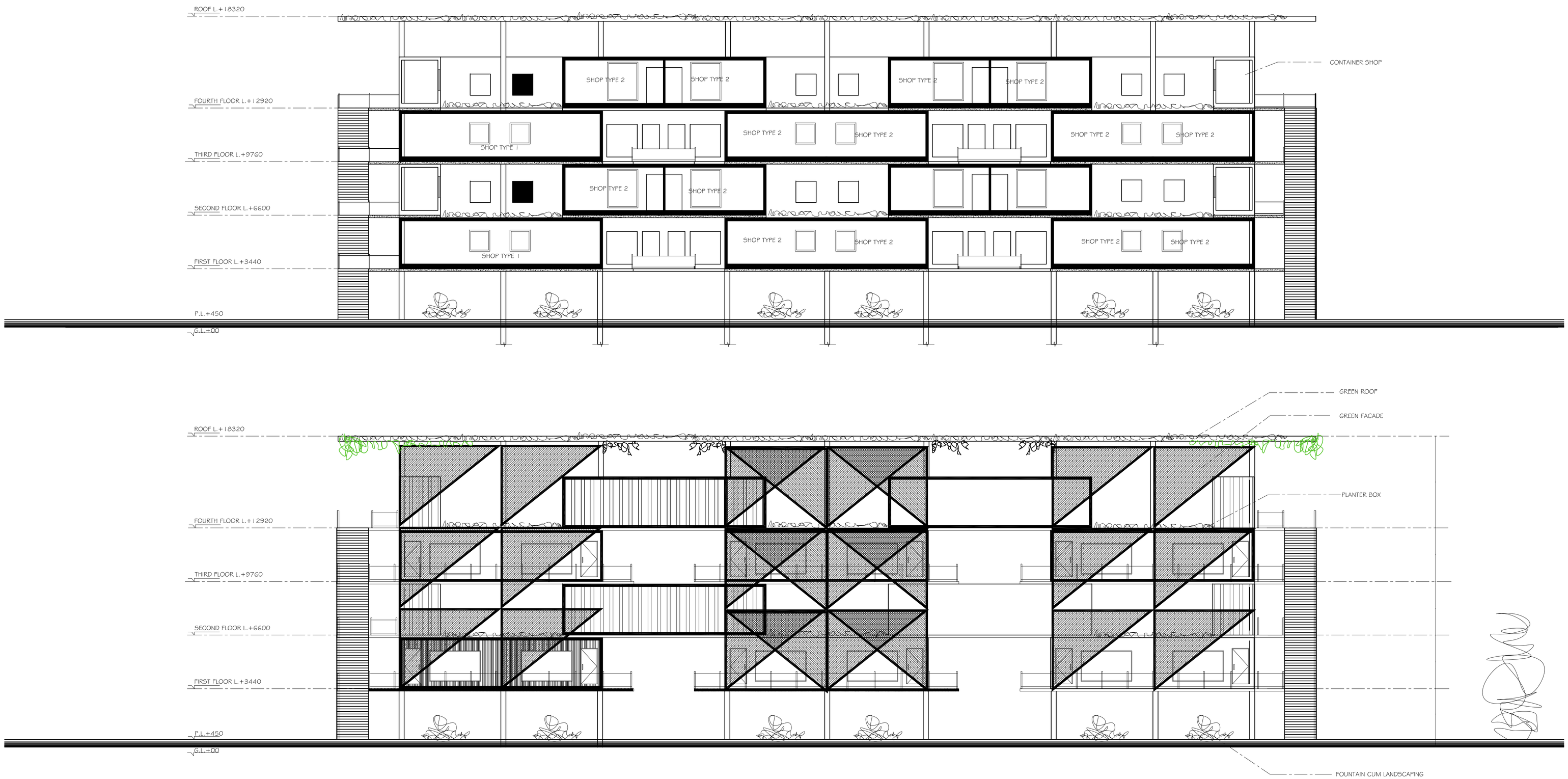






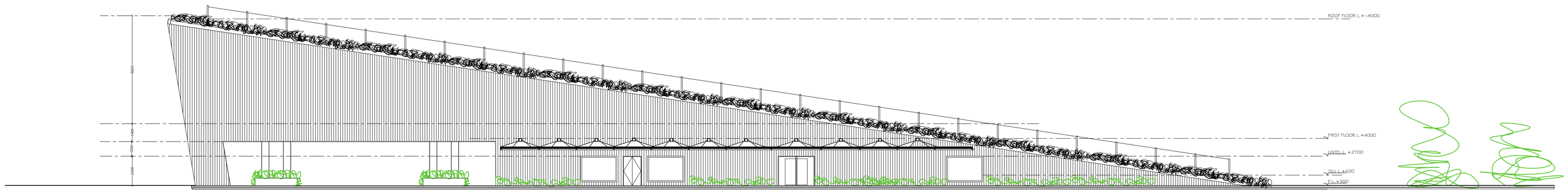
WATER TERMINAL CUM WATERFRONT

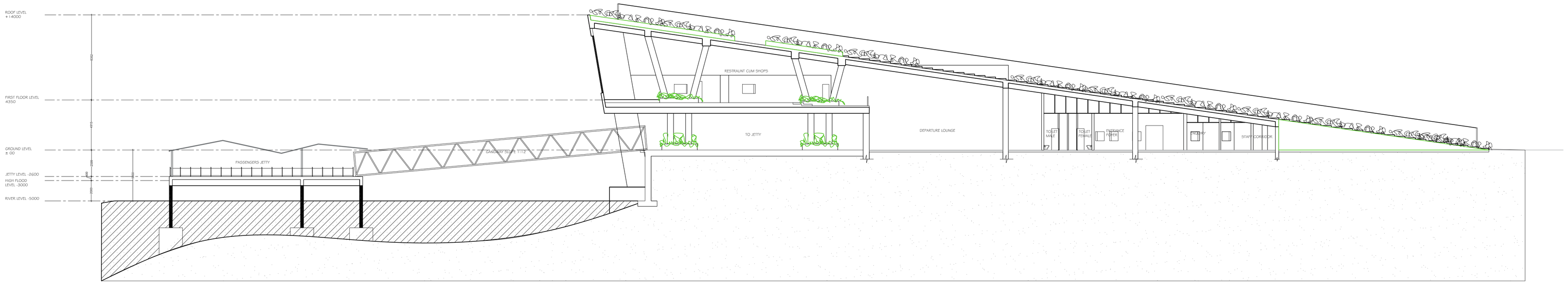
UTSAV BAJPAI
B. ARCH (AR)
5TH YEAR X SEM.
GUIDED BY–PROF. S.SHARMA
AR. NAVEEN SINGH



WATER TERMINAL CUM WATERFRONT

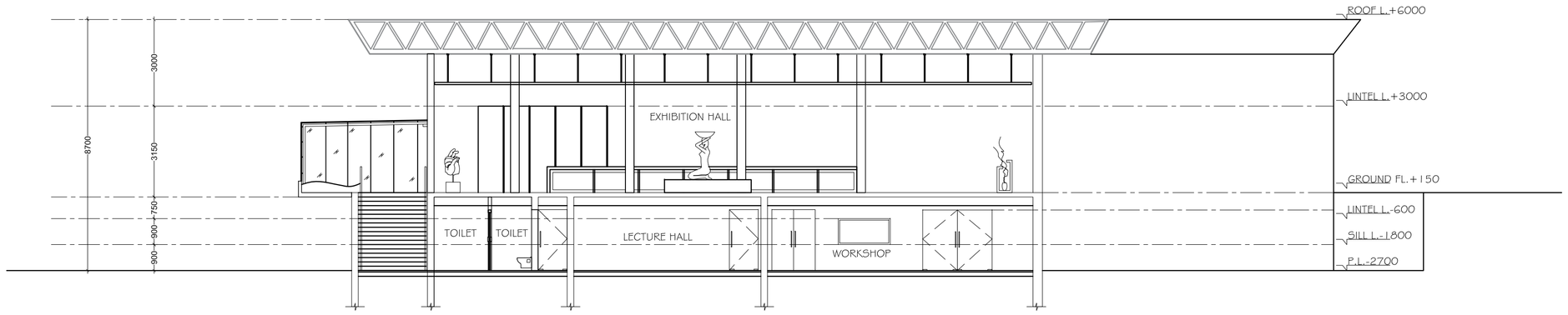
UTSAV BAJPAI
B. ARCH (AR)
5TH YEAR X SEM.
GUIDED BY–PROF. S.SHARMA
AR. NAVEEN SINGH

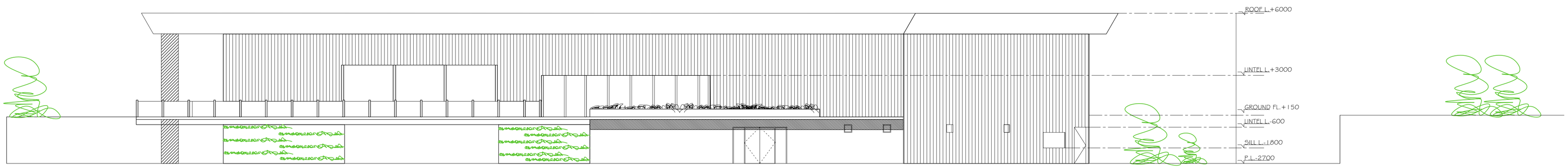




WATER TERMINAL CUM WATERFRONT

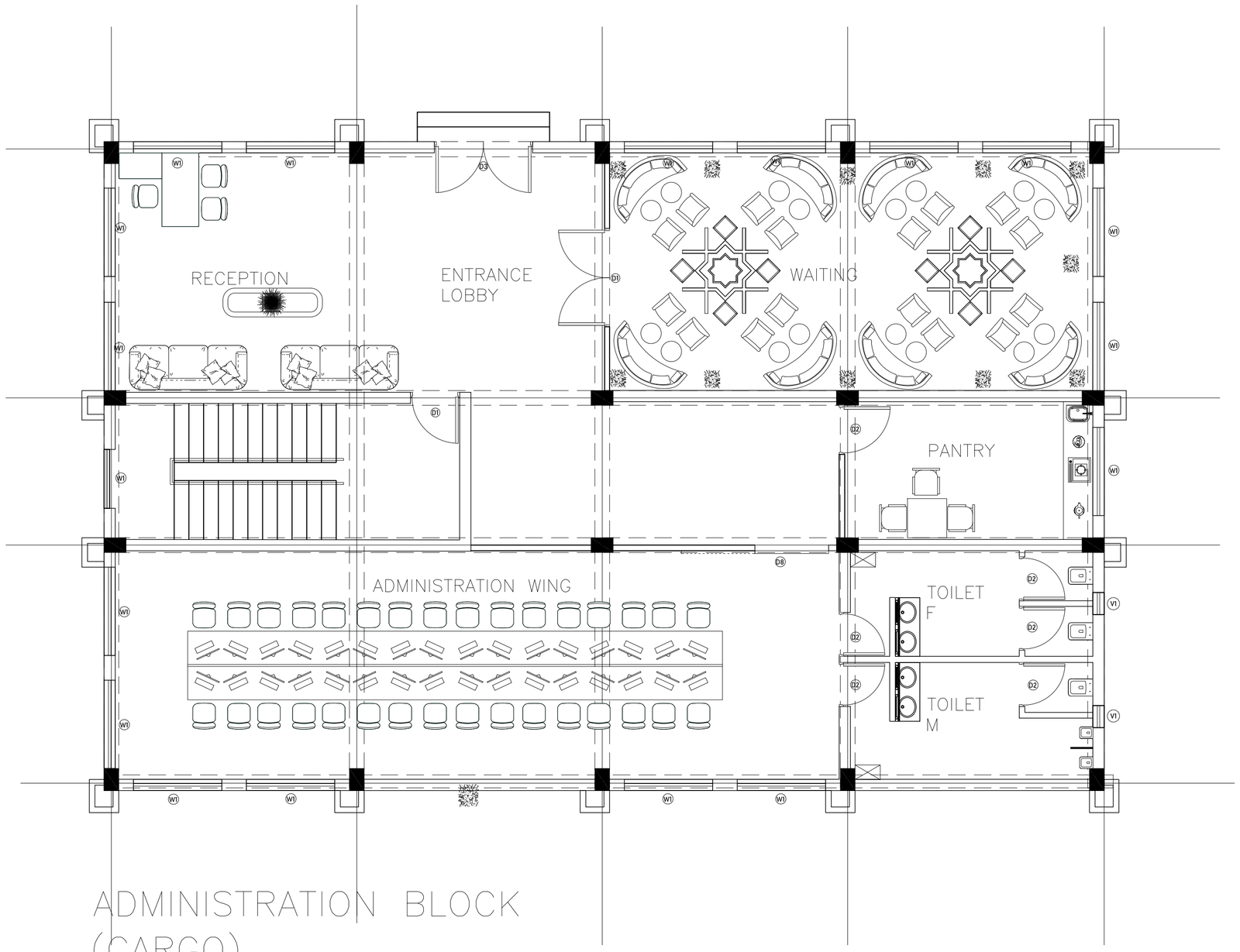
UTSAV BAJPAI
B. ARCH (AR)
5TH YEAR X SEM.
GUIDED BY–PROF. S.SHARMA
AR. NAVEEN SINGH





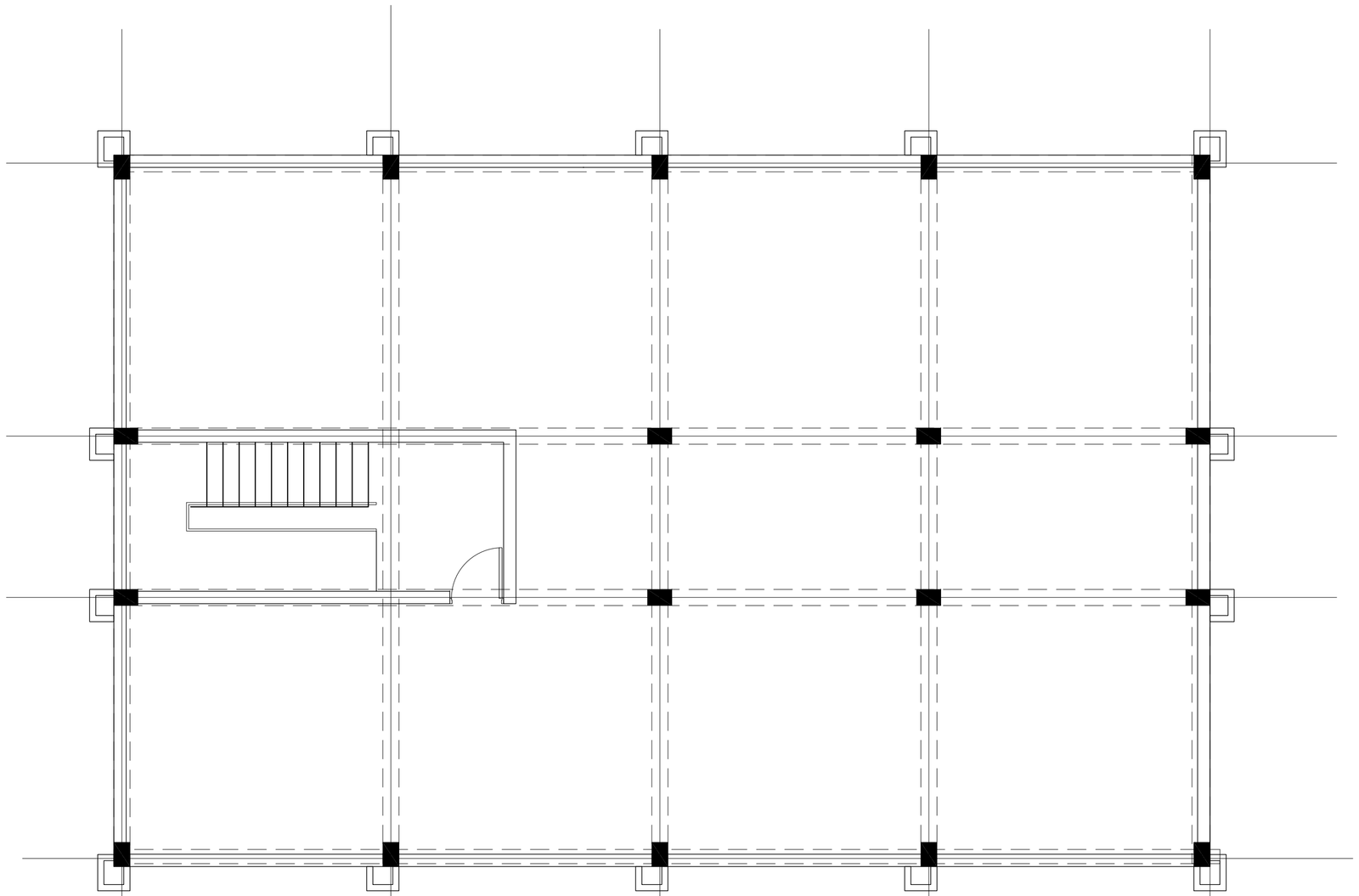
WATER TERMINAL CUM WATERFRONT

UTSAV BAJPAI
B. ARCH (AR)
5TH YEAR X SEM.
GUIDED BY–PROF. S.SHARMA
AR. NAVEEN SINGH



ADMINISTRATION BLOCK
(CARGO)

GROUND FLOOR

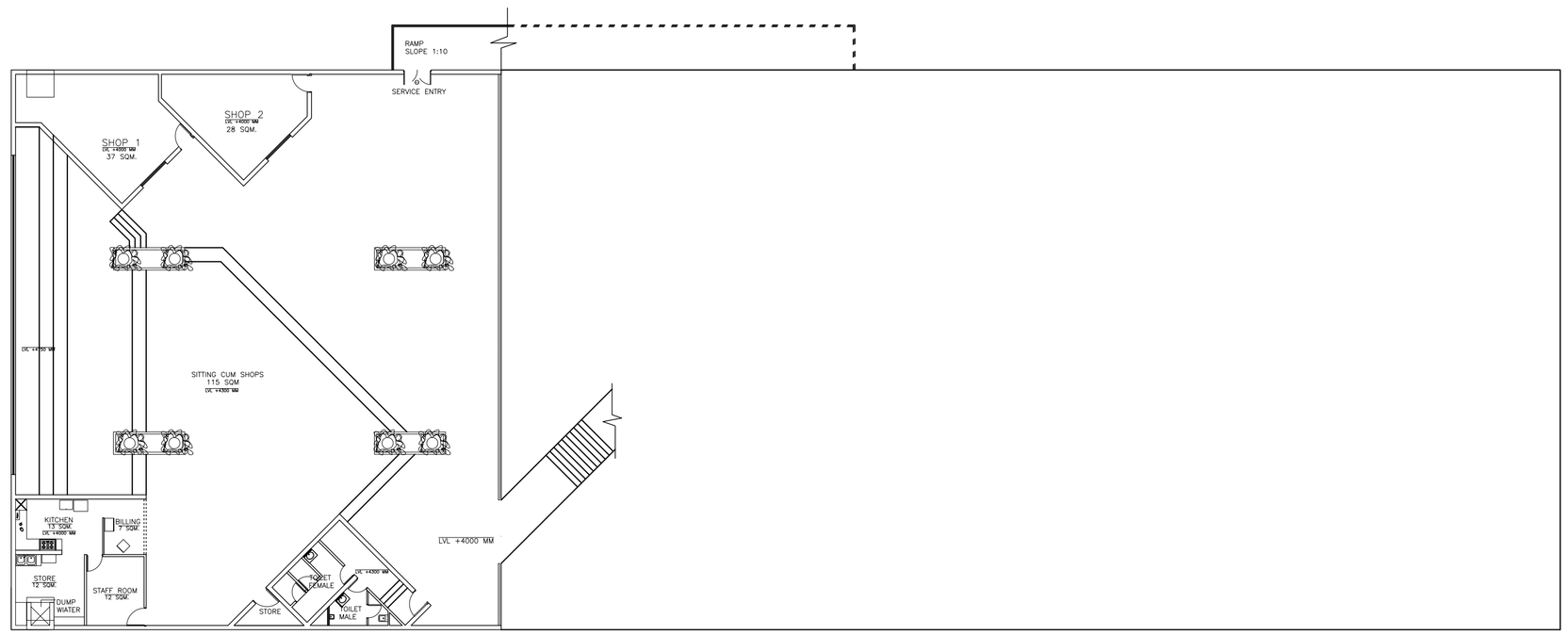


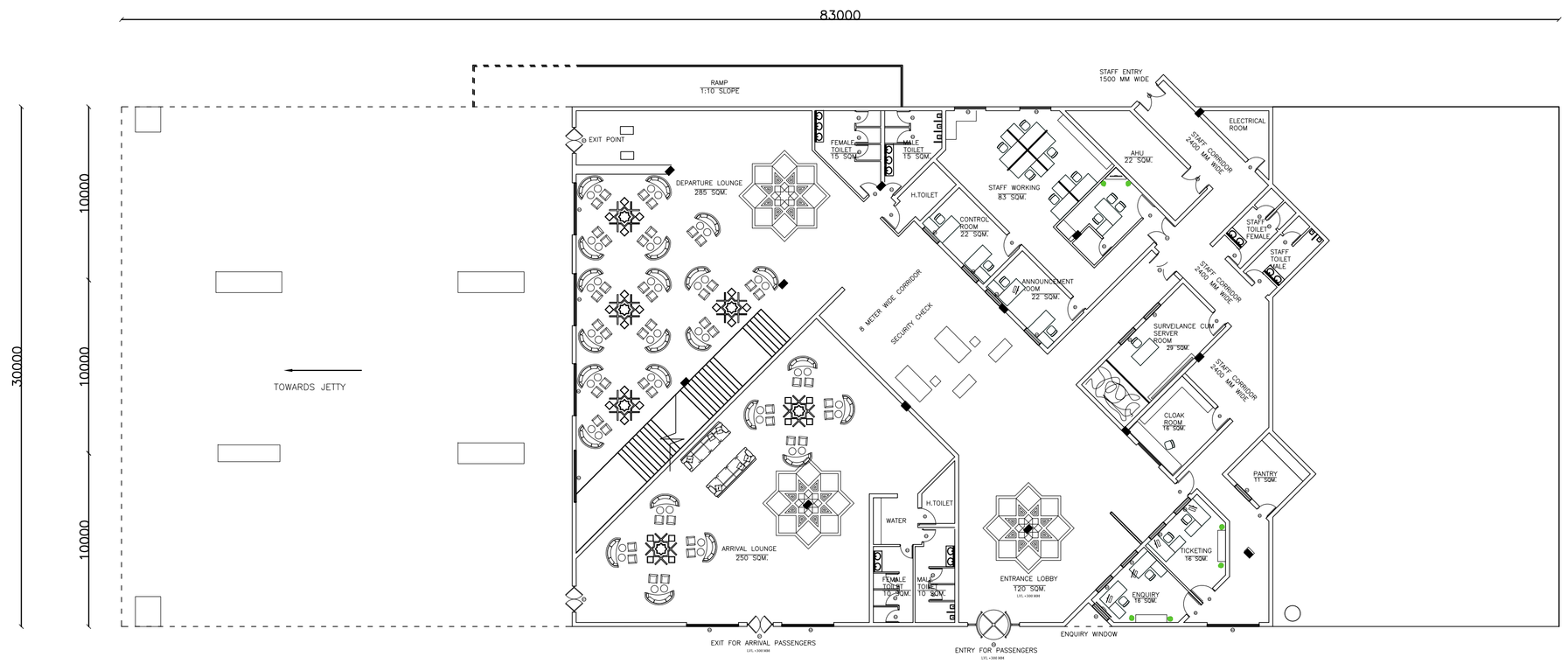
ADMINISTRATION BLOCK
(CARGO)

TERRACE FLOOR

WATER TERMINAL CUM WATERFRONT

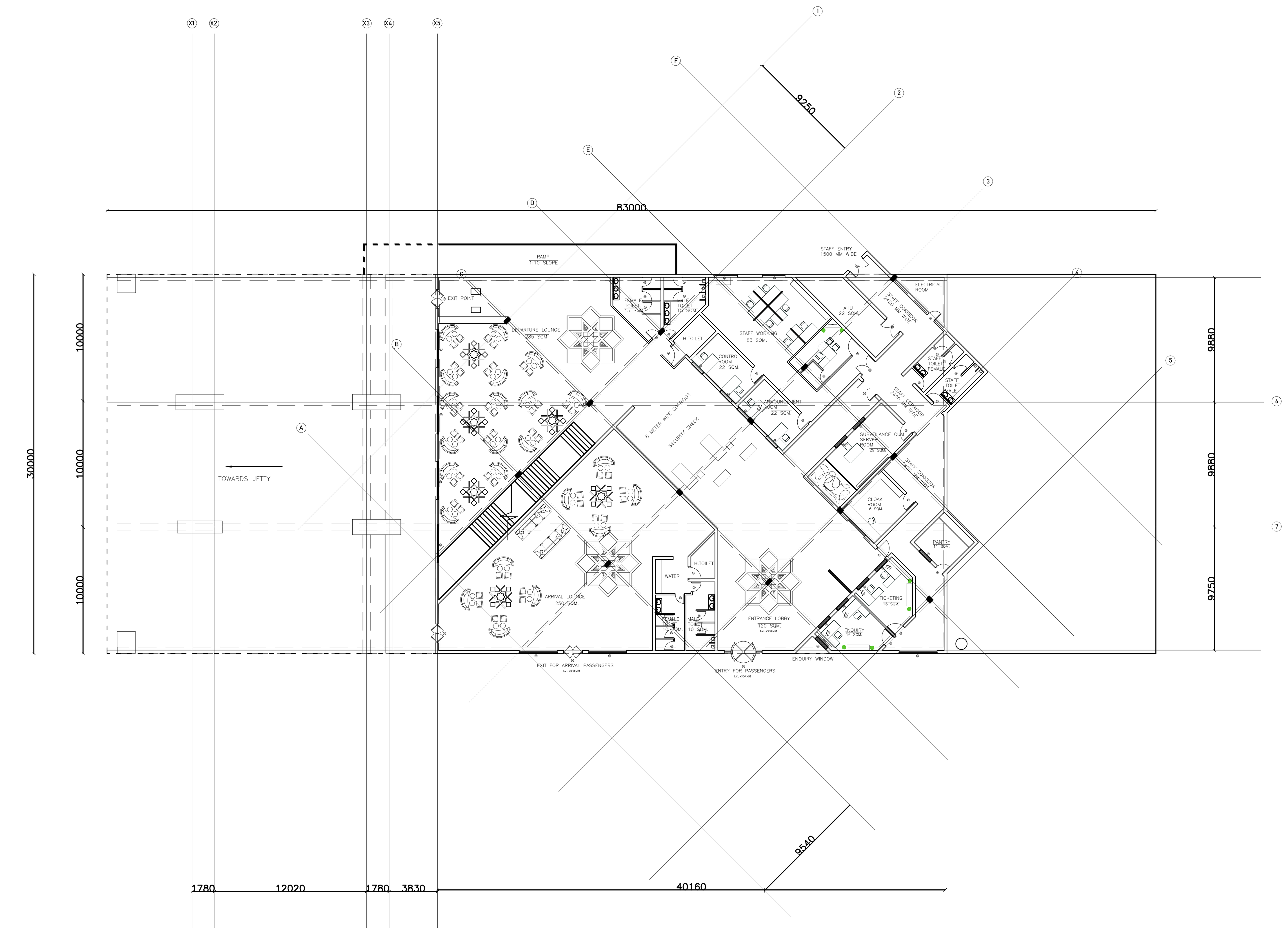
UTSAV BAJPAI
B. ARCH (AR)
5TH YEAR X SEM.
GUIDED BY–PROF. S.SHARMA
AR. NAVEEN SINGH

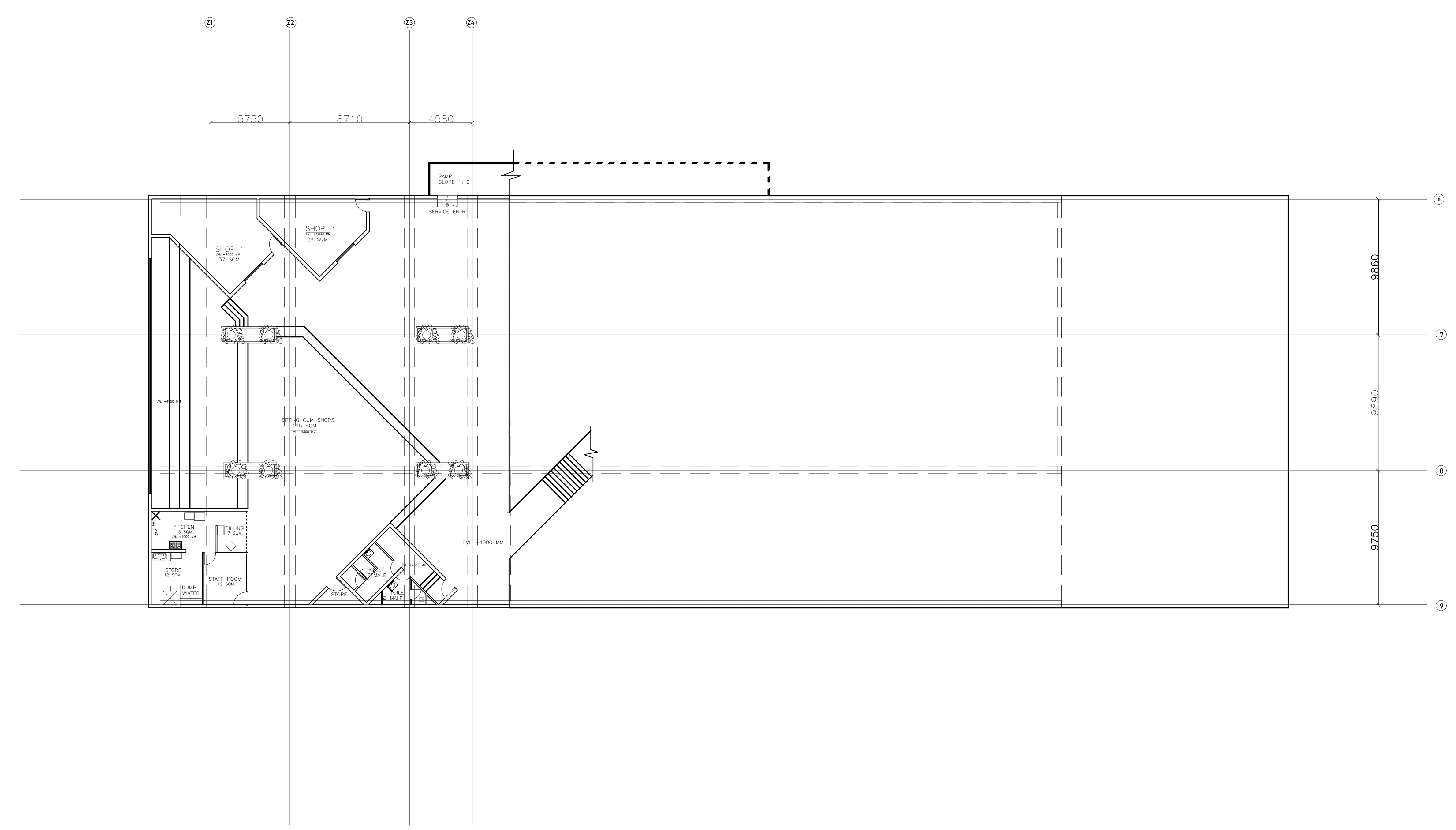




WATER TERMINAL CUM WATERFRONT

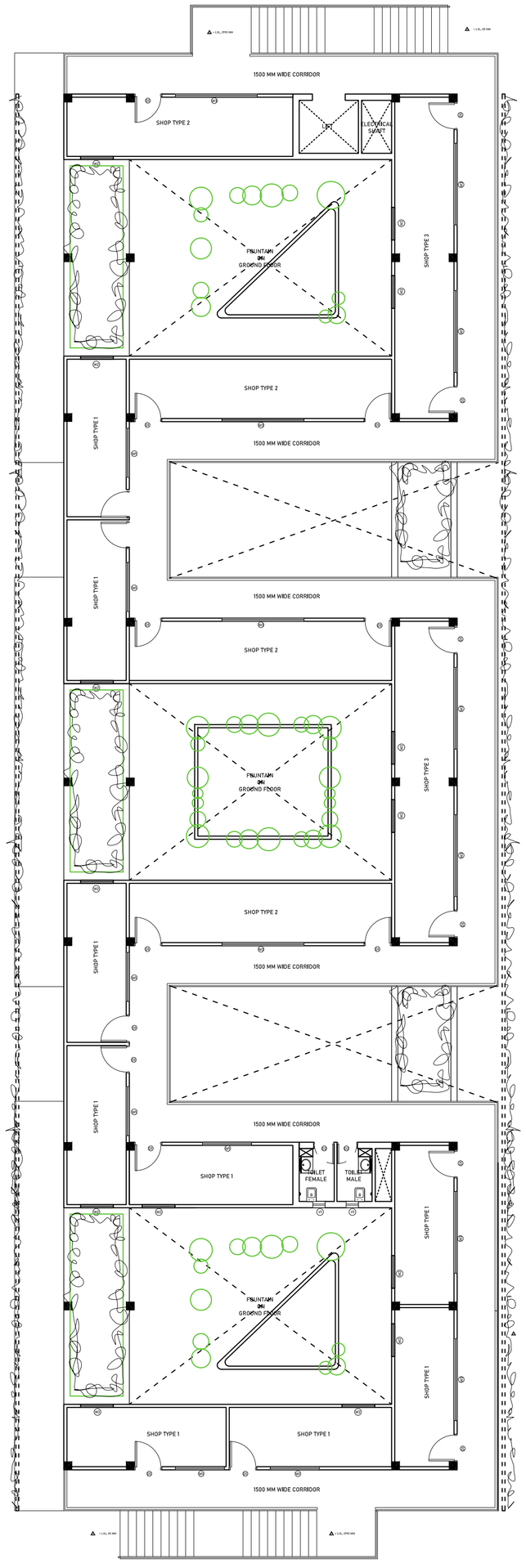
UTSAV BAJPAI
B. ARCH (AR)
5TH YEAR X SEM.
GUIDED BY–PROF. S.SHARMA
AR. NAVEEN SINGH

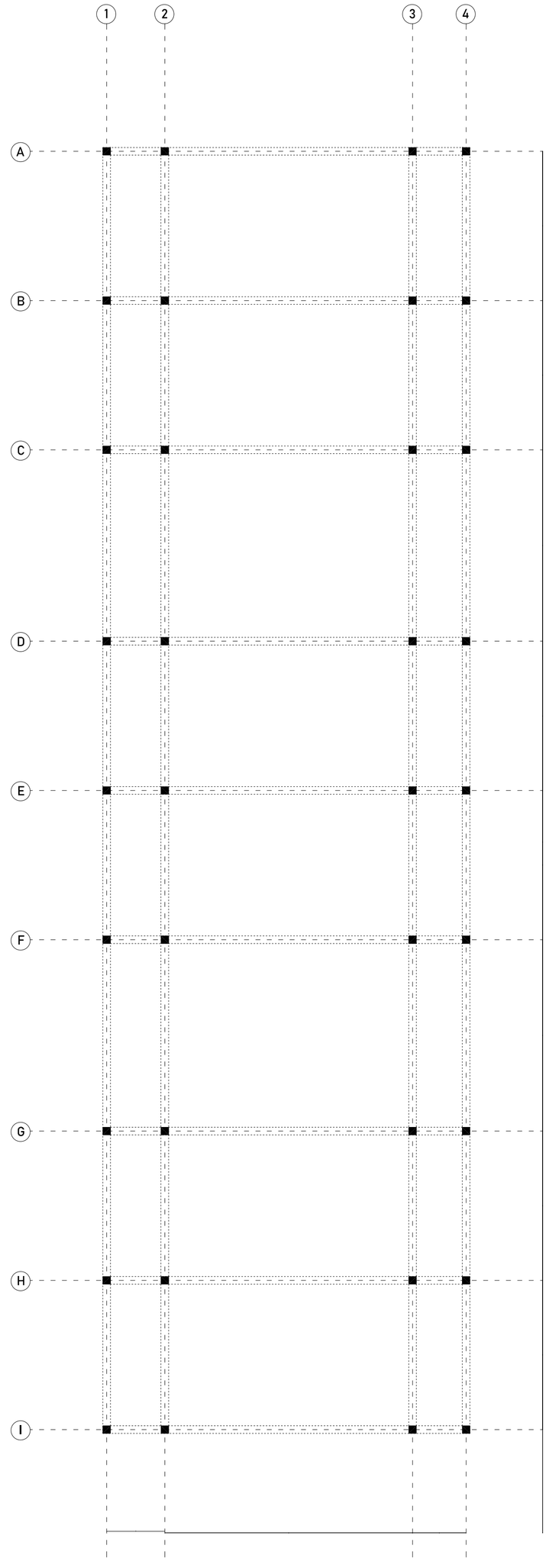


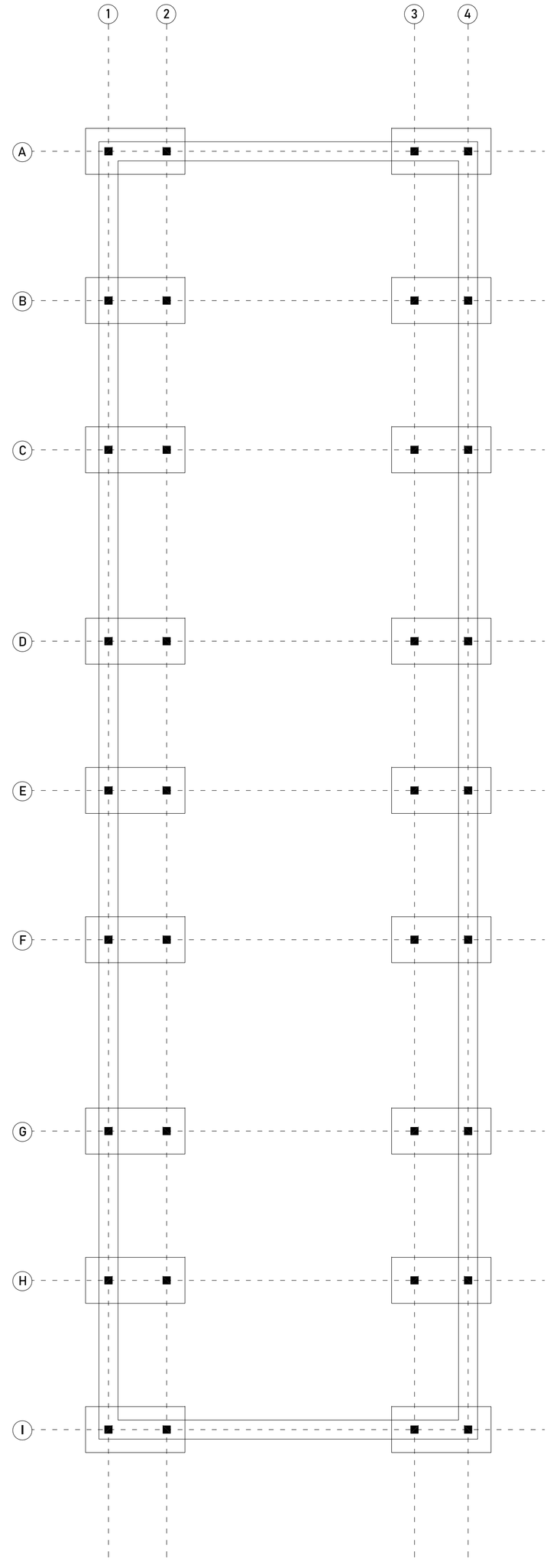


WATER TERMINAL CUM WATERFRONT

UTSAV BAJPAI
B. ARCH (AR)
5TH YEAR X SEM.
GUIDED BY-PROF. S.SHARMA
AR. NAVEEN SINGH

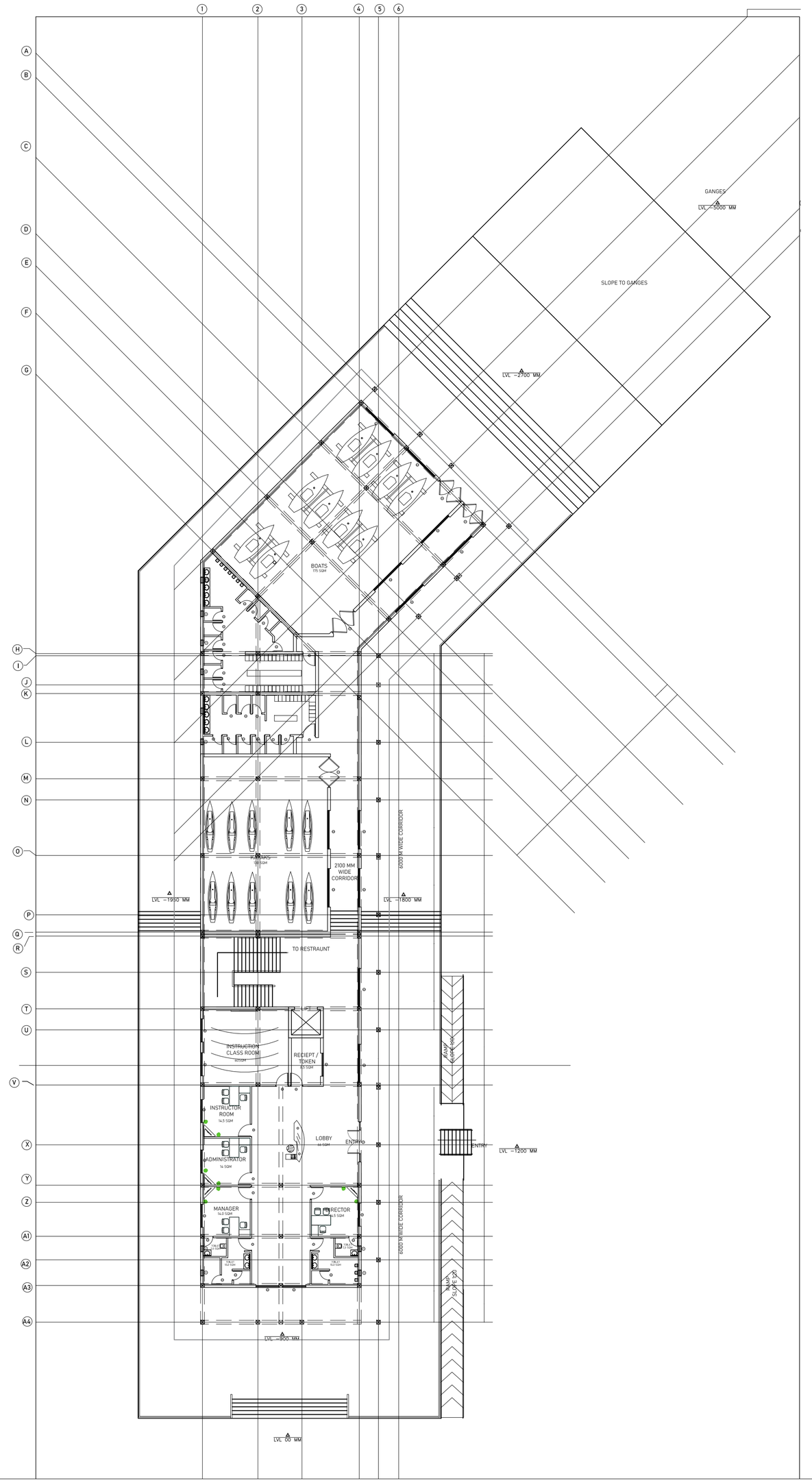






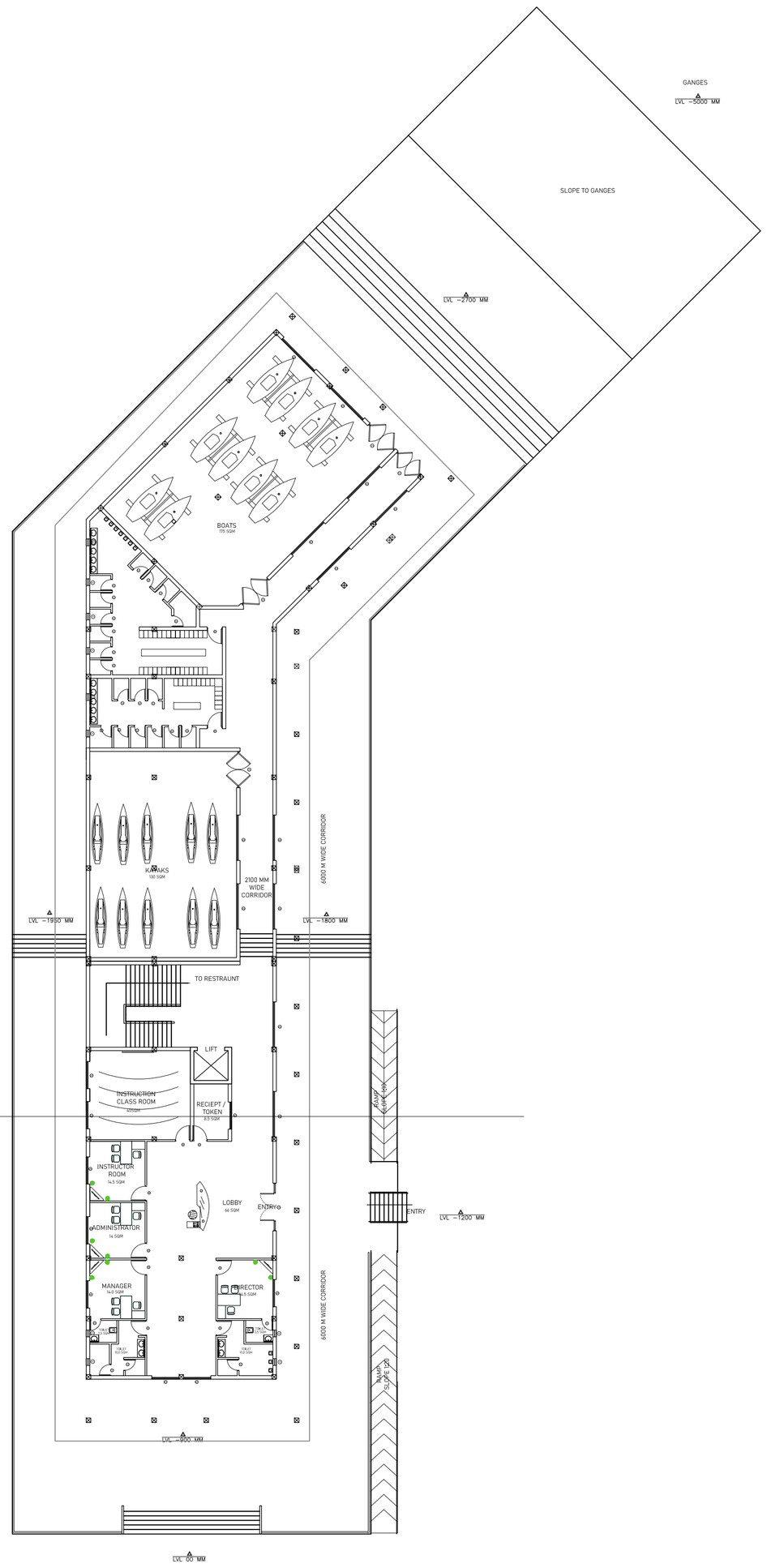
WATER TERMINAL CUM WATERFRONT

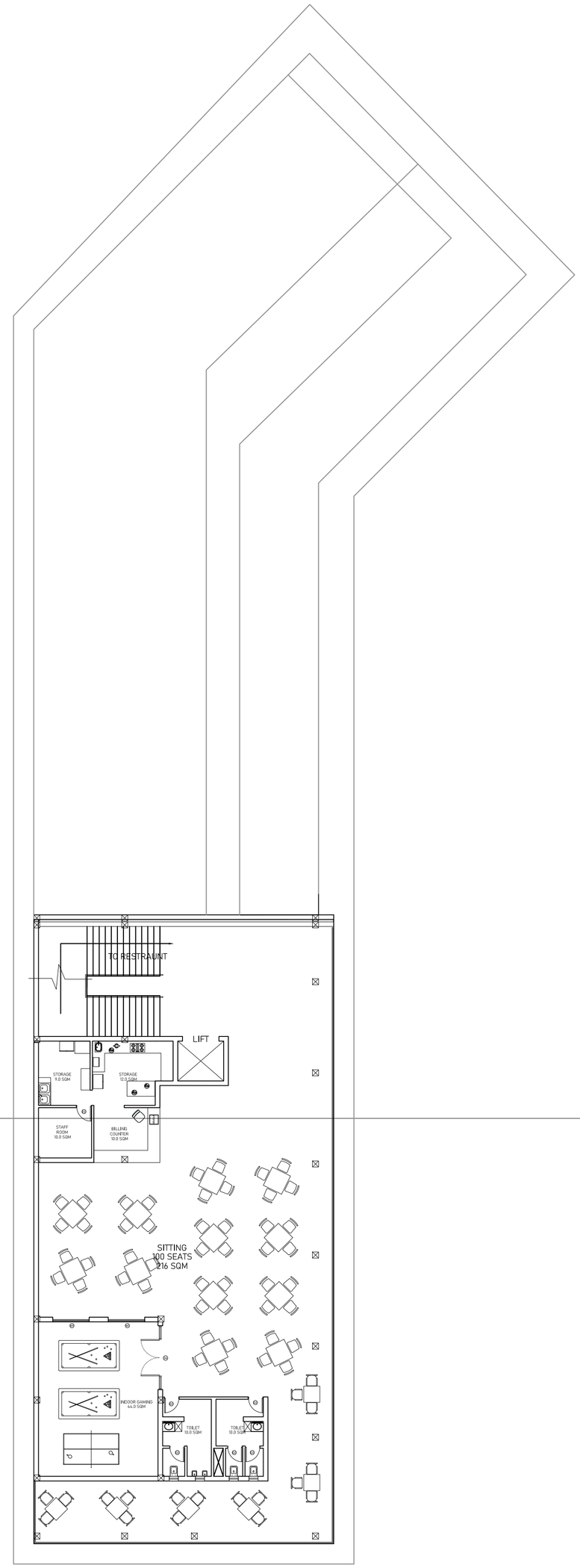
UTSAV BAJPAI
B. ARCH (AR)
5TH YEAR X SEM.
GUIDED BY–PROF. S.SHARMA
AR. NAVEEN SINGH



WATER TERMINAL CUM WATERFRONT

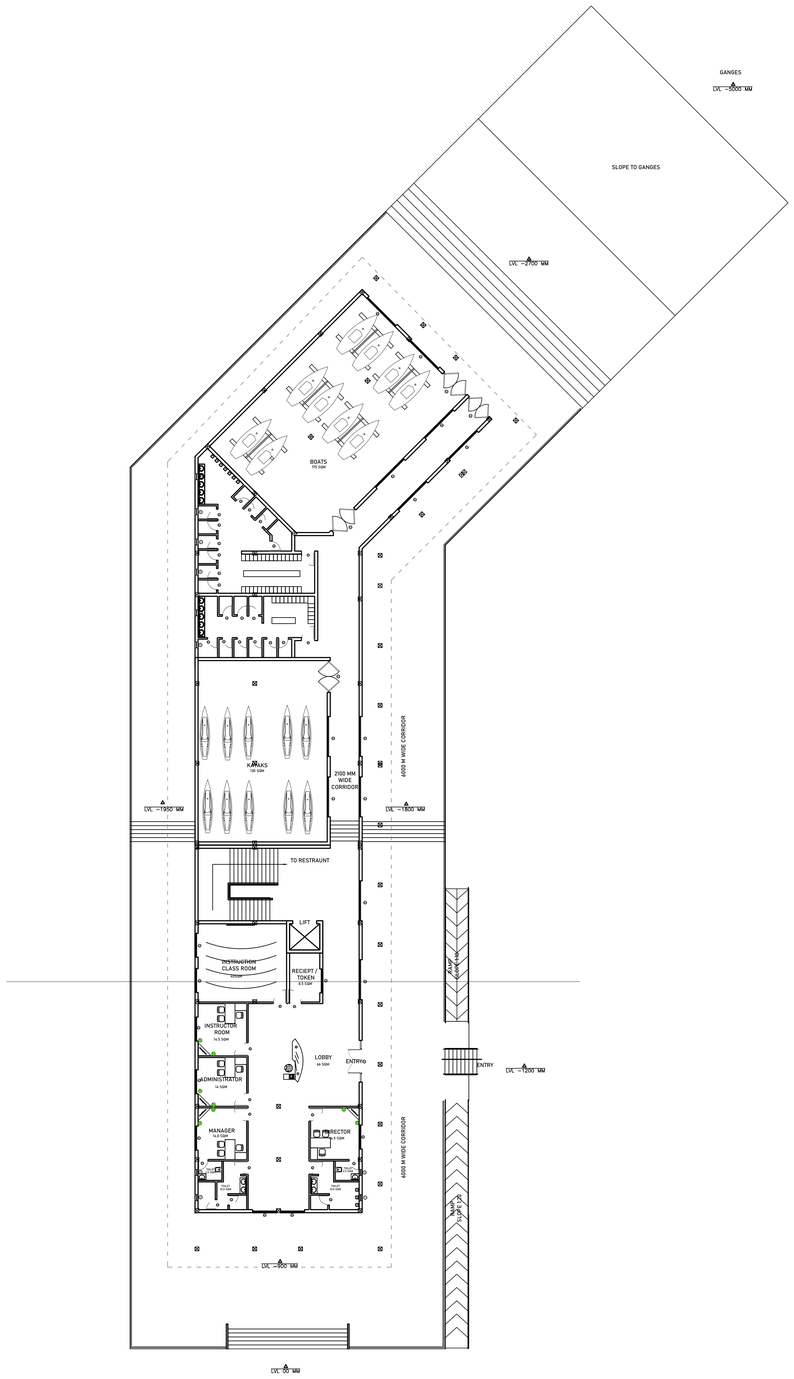
UTSAV BAJPAI
B. ARCH (AR)
5TH YEAR X SEM.
GUIDED BY–PROF. S.SHARMA
AR. NAVEEN SINGH

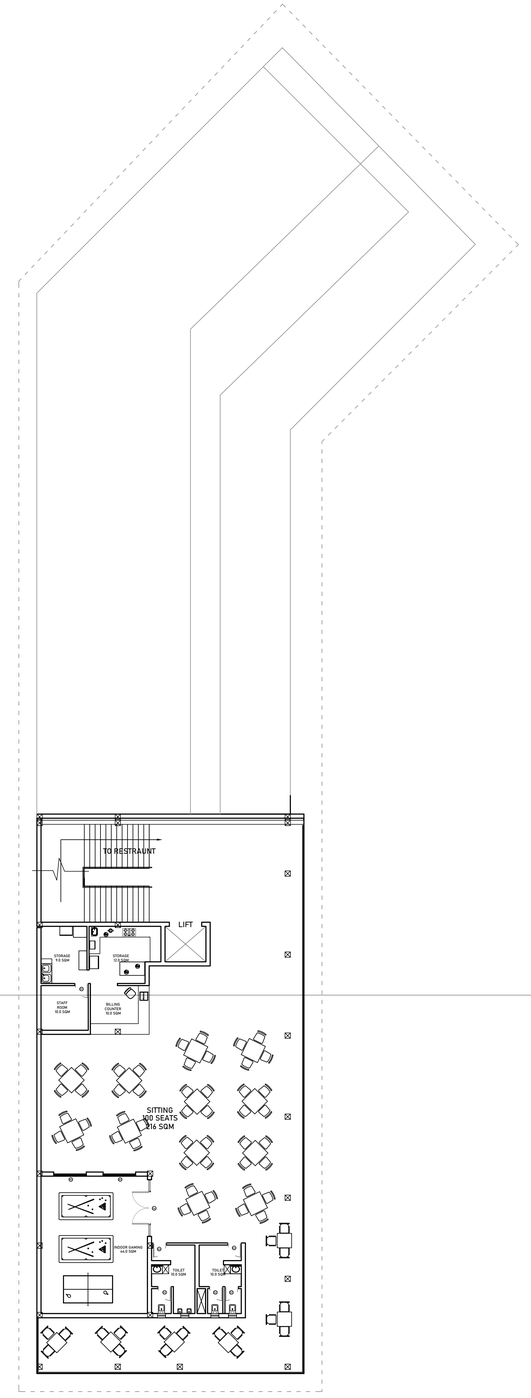




WATER TERMINAL CUM WATERFRONT

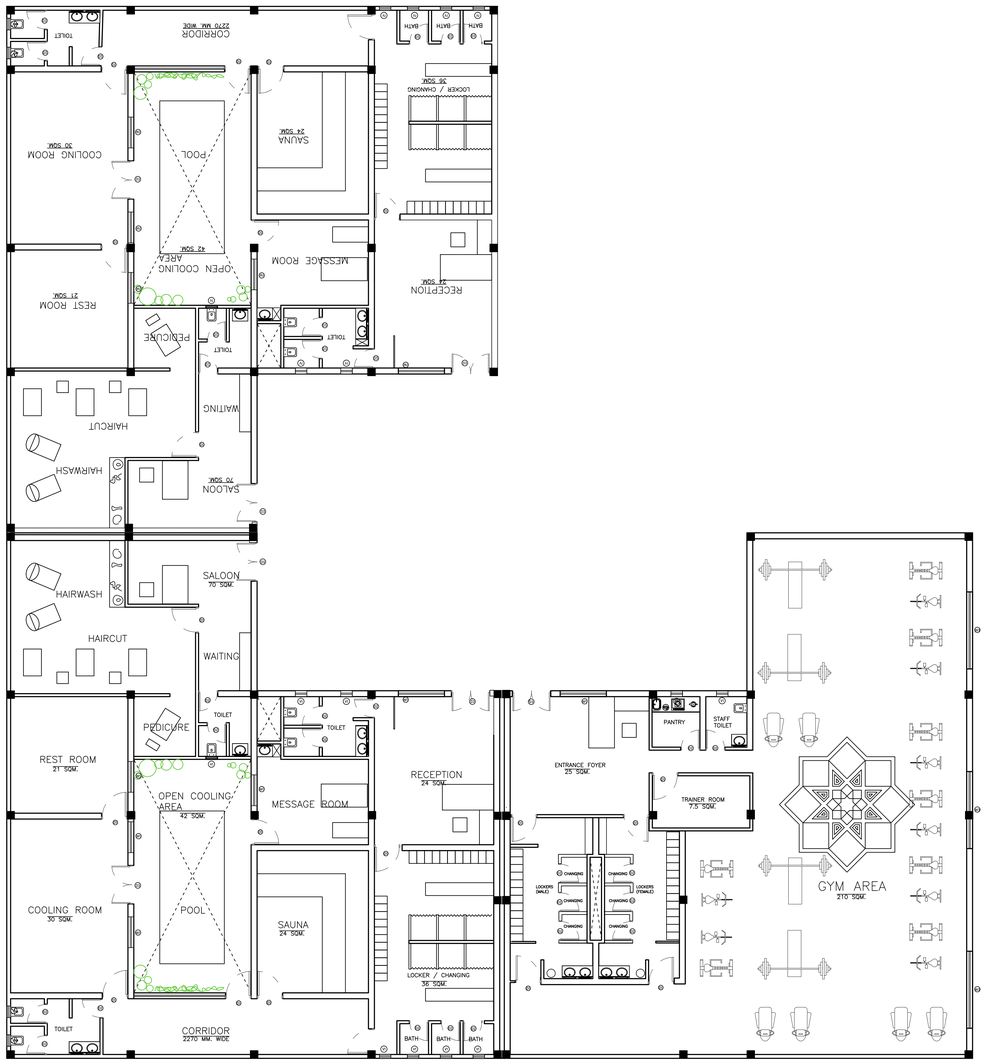
UTSAV BAJPAI
B. ARCH (AR)
5TH YEAR X SEM.
GUIDED BY–PROF. S.SHARMA
AR. NAVEEN SINGH

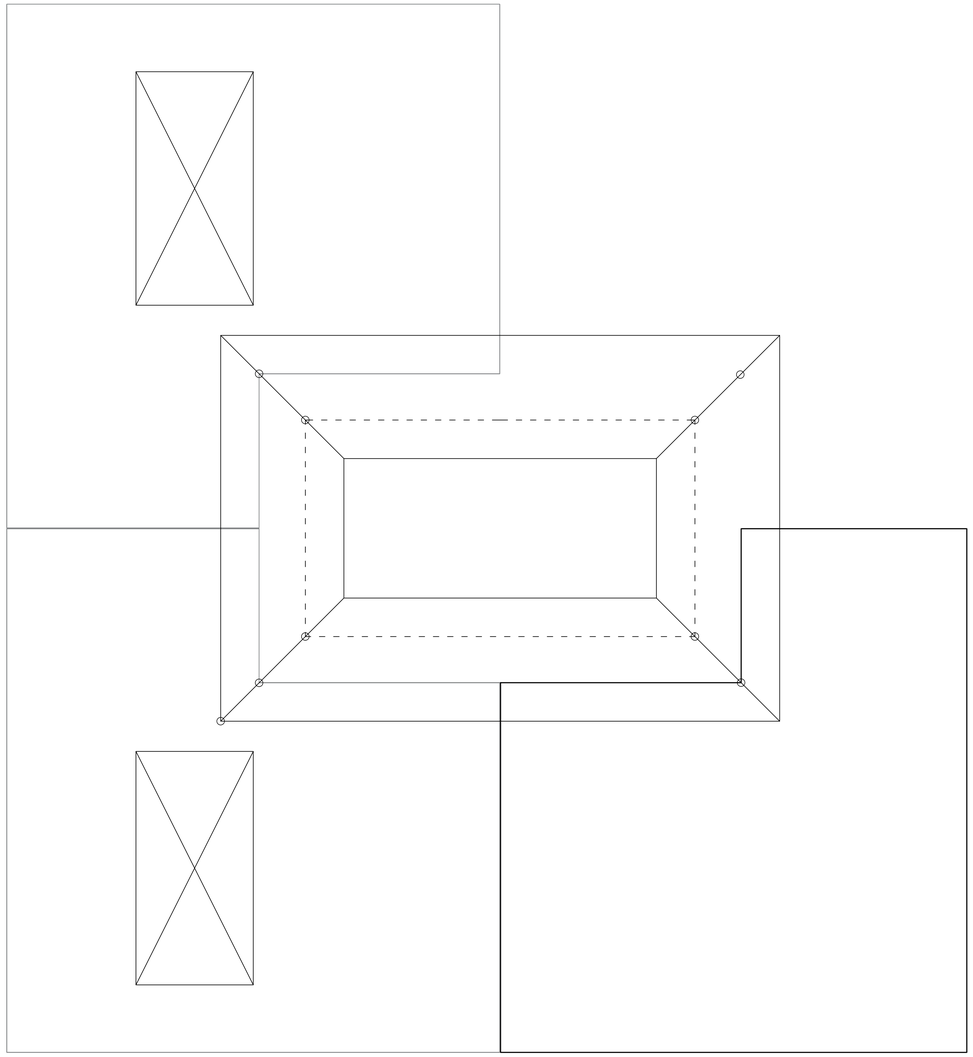




WATER TERMINAL CUM WATERFRONT

UTSAV BAJPAI
B. ARCH (AR)
5TH YEAR X SEM.
GUIDED BY–PROF. S.SHARMA
AR. NAVEEN SINGH





WATER TERMINAL CUM WATERFRONT

UTSAV BAJPAI
B. ARCH (AR)
5TH YEAR X SEM.
GUIDED BY–PROF. S.SHARMA
AR. NAVEEN SINGH

WATER TERMINAL CUM WATERFRONT

UTSAV BAJPAI
B. ARCH (AR)
5TH YEAR X SEM.
GUIDED BY–PROF. S.SHARMA
AR. NAVEEN SINGH

WATER TERMINAL CUM WATERFRONT

UTSAV BAJPAI
B. ARCH (AR)
5TH YEAR X SEM.
GUIDED BY–PROF. S.SHARMA
AR. NAVEEN SINGH