SYNOPSIS

FOR DESIGN THESIS

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

PROPOSAL

Topic: Eco Resort & Meditation Center

Submitted by:

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THESIS GUIDE:-

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Here by recommend that the thesis, entitled "Eco Resort & Meditation Center, kusinagar, U.P.", prepared by Vineet Gaur, roll no. 1150101084, Under by supervision, is the Bonafide work of the student and can be accepted					
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(Signatures of the supervisor)	Accented				
Recommendation:	Accepted Not accepted				
Examiner 1	Examiner 2				

ACKNOWLEDGEMENT

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 **Ar. Ankur saxena** for her 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**, & **Ar. Shailesh Yadav** 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.

Friends:- Ashish, Sonakshi, Aishwarya, Vishal, Utsav, Aditya, Anushka, Aditi, Sadeek Through words hardly express the true emotions, still I would like to thank all my near and ones who helped and guided me.

Vineet Kumar Gaur

TABLE OF CONTENT

1. INTRODUCTION OF PROJECT:

- Introduction
- Motivation
- Aims and Objectives
- Scope
- Requirement of project
- 2. SITE ANALYSIS
- 3. CLIMATE ANALYSIS
- 4. CASE STUDIES
 - Govardhan Eco Village ,Mumbai

•

5. LITERATURE STUDY/ STANDARDS

- Desert Resort Mandawa, Rajasthan
- Anant Resort, Udaipur
- 6. REQUIREMENTS
- 7. DESIGN CONCEPT
- 8. DRAWINGS

INTRODUCTION

ECO RESORT: our life has been envoloved and education has been flourished in recent centuries. although the stress has been increased on the individual making them need to entertain themselves.

the approach in this research is to design an environmentally friendly resort that wil serve the environment.

the resort is considered a place for relaxation, entertainment for the visitors and tourists and having the project in kushinagar will help to promote for such kind of tourism.

MOTIVATION

I was personally very intrigued by the vernacular architecture and how it impacts our sustainable environment hence forth I specifically choose to work towards organic structure.

AIMS AND OBJECTIVES

to design an eco-resort not only for leisure but will offer tourist a complete eco experience.

provide safety and comfort to the guest without compromising minimal impact on the environment.

the main objective of this proposel is:

Provide a recreational environment for verities of facilities and function.

comfortable design which portrays an environment of leisure and promote interaction with nature.

respond to climatic and energy consumption issues raised by present day architecture through sustainable design.

designing with the suitable perspective to the surrounding. Environment and without the environment disadvantage.

locating the building with public space and common facilities for encouraging social interaction .

cost effective and functional design.

Areas of concern:

- Site Surrounding.
- Space Study.
- Connectivity.
- Parking Space. Location of the project.
- Construction Style.
- Approach.

SCOPE:-
• the scope of project are the eco resort with recreational facilities. they intended to go some distance for from the city and temple so that they can enjoy the environment.
the project provides a lot of space for site planning and landscaping. the project provides an outlet to study the local architecture an exercise in the evolution of an architectural vocabulary which takes the inspiration from the local and architecture, keeping in mind of the climatic factors, behavioral pattern and the user attitude. it also provides the opportunity to study the local culture and heritage. a resort demand the formulation of an ambience which can provide people to relax and leisurely spend their time, or the same time satisfying all their functional needs. thus, the project gives the opportunity to deal with the visual, behavioral, technical, and functional
aspect of the design.

REQUIREMENTS OF THE PROJECT

ADMINISTRATION AND ENTRANCE LOBBY AREA,

RECEPTION AREA

WAITING AREA

CONFRENCE HALL

COMMON TOILET

MANAGER OFFICE

ACCOMODATION- COTTAGE/VILLA/SUITES,

BEDROOM

TOILETS

LIVING AREA

VIEWING DECK

SERVICE AREA,

KITCHEN

LAUNDRY

HOUSEKEEPING

TRANSFORMER ROOM

ELECTRIC SUBSTATION

WATER TANK & PUMP ROOM

RECREATION AREA,

POOL

CHANGING ROOM

DECK

SPA AND SONA

GAMING ZONE

YOGA AND MEDITATION

FUNCTIONAL AREA

AMPHITHEATER

BANQUET HALL

PARTY LAWN

RESTAURANT

BAR

PARKING

SITE ANALYSIS

CONTEXT

AREA 20230 SQMT.

LOCATION TAMKUHIRAJ (KUSHINAGAR)

ACCESSIBILITY 600 M FROM TAMKUHI BUS STOP

10 KM FROM TAMKUHI ROAD RAILWAY STATION

35 KM FROM KUSHINAGAR INTERNATIONAL AIR

PORT.

Dr. AJAY SINGH **OWNERSHIP**

NORTH - NATIONAL HIGHWAY, SURROUNDING:

> EAST - OWNER'S LAND WEST - FARMING LAND

SOUTH - FARMING LAND & RESIDENTIAL

¶SITE

TOPOGRAPHY SITE HAS NO CONTOUR, IT IS FLAT.

SITE WILL NOT HAVE ANY PROBLEM OF POWER &WATER :

WATER AND POWER AS ELECTRICAL POLE ON SIT

SEWAGE SEWER LINE EXIST ON ROAD SIDE.

SITE IS APPROCHABLE FROM SERVICE ROAD. CONNECTIVITY

ALLUVIAL SOIL. SOIL TYPE

SITE PLAN

THE LAND AROUND THE SITE IS MOSTLY AGRICUL LAND USE

TURE AND COMMERCIAL, RESIDENTIAL.

CLIMATE FAR 1.5

THE KUSHINAGAR LIES ON 79M ABOVE GROUND COVE. 55%

SEA LEVEL THE CLIMATE HERE IS MILD. AND GENERALLY WARM AND TEMPER-

ATE. IN WINTER, THERE IS MUCH LESS SET BACKS 6 MT

RAINFALL IN KUSHINAGAR THAN IN

SUMMER. THE TEMPERATURE HERE AV-BUILDING HEIGHT: 15 MT ERAGES 25.2 °C | 77.5 °F. IN A YEAR, THE

RAINFALL IS 1261 MM.

RAINFALL *TEMPERATURE

OF 31.4 °C | 88.5 °F, MAY IS THE HOTTEST MONTH OF THE YEAR. IN PRECIPITATION IS 366 MM | 14

JANUARY HAS THE LOWEST AV-ERAGE TEMPERATURE OF THE

YEAR. IT IS 16.3 °C | 61.3 °F

AT AN AVERAGE TEMPERATURE BETWEEN THE DRIEST AND WET-TEST MONTHS, THE DIFFERENCE INCH. DURING THE YEAR, THE AV-**ERAGE TEMPERATURES VARY BY**

15.1 °C | 59.2 °F



LAND USE

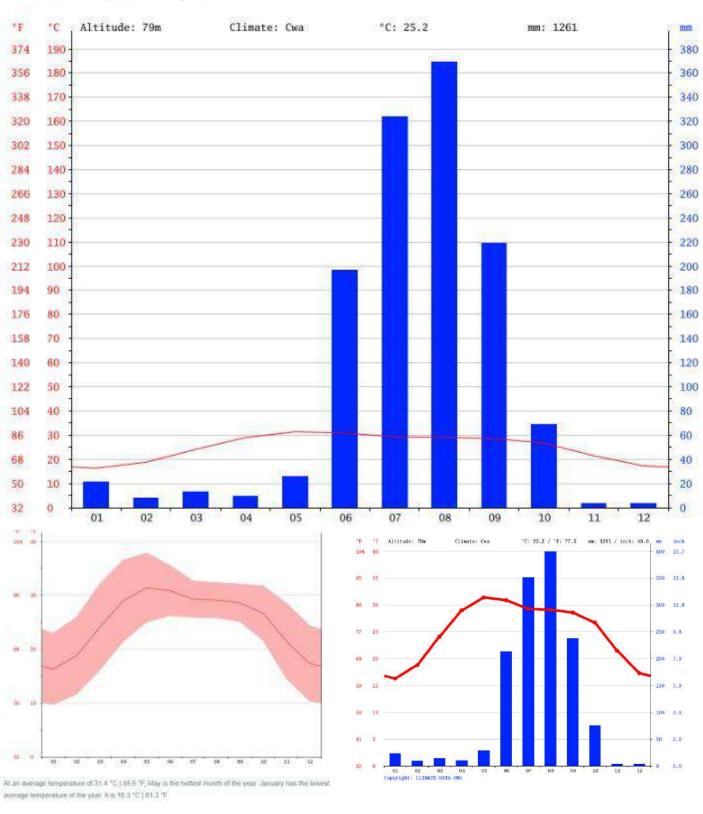


SITE PLAN



	duntary	February	March	April	May	June	duly	August	September	October	November	Decemb
Avg. Temperature (°C)	16.3	18.8	24.1	29	31.4	30.9	29.3	29.1	28.6	26:7	21.5	17.3
Min. Temperature (°C)	9.7	11.6	16.1	21.4	25	26.2	25.9	25.8	25.1	21.6	14.5	10.3
Max. Temperature (°C)	23	26	32.2	36.6	37.9	35.6	32.7	32.4	32.1	31.8	28.6	24.4
Avg. Temperature (°F)	61.3	65.8	75 4	84.2	88.5	87.6	84.7	84.4	83.5	80.1	70.7	63.1
Min. Temperature (°F)	49.5	52.9	61.0	70.5	77.0	79.2	78.6	78.4	77.2	70.9	58.1	50.5
Max. Temperature (°F)	73.4	78.8	90.0	97.9	100.2	96.1	90.9	90.3	89.8	89.2	83.5	75.9
Precipitation / Rainfall (mm)	21	8	13	9	26	197	324	369	219	69	3	3

Between the driest and wettest months, the difference in precipitation is 366 mm | 14 inch. During the year, the average temperatures vary by 15.1 °C | 59.2 °F.



TOPOGRAPHY—The site is flat and not having any contours. Site is about the road level.
SOIL CONDITION –Alluvial soil (indo –genetic plain) very fertile, bearing capacity –110 T/sq.m. VEGETATION -Tree are present all over the site. mango trees and shrubs are found around the site
WATER SUPPLY –ground water is used .
SEWER -Underground drainage line have been laid.
TRAFFICE -The traffic pattern is very light, sine the site is located in rural area.
ELECTRICITY -High tension wire pass through the road. Transformer is also present.
STREET LIGHT -Street light poles are present on the road.

CASE STUDY 1: Govardhan Eco Village, Wada, Mumbai -



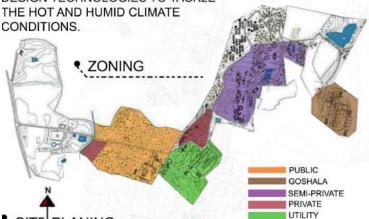
CLIMATE

WITH RESPECT TO THE LOCAL GALTARE EXPERIENCES A COMPOSITE CLIMATE WITH EXTREME SUMMER REACHING TO 45 DEGREES, RAINS OF 30000+ MM AND WINTER DIPPING TO 18 DEGREES.

R. AIM

TO STUDY THE DESIGN PROPOSAL THAT IN-CLUDES ECO-TOURISM AND HOW ITS PRES-ENCE HAS IMPACTED ON ITS SURROUNDING VILLAGES. ALSO HOW THE ARCHITECTS HAS DEVELOPED THE COMMUNITY AND TOURIST SPACES, THEIR SCALE,

PROPORTIONS AND DIFFERENT DESIGN TECHNOLOGIES TO TACKLE THE HOT AND HUMID CLIMATE



THE PROJECT KEEPS IN MIND THENEEDS OF THE COMMU-NITY AND THE REDUCTION OF ECOLOGICAL FOOTPRINTS IN A COST-EFFECTIVE MANNER. THE CONSTRUCTION OF THE PROJECT WAS RATHER TIME-BOUND AND HENCE-STANDARDIZATION OF ELEMENT HAS BEEN DONE INOR-DER TO REDUCE THE TIME REQUIRED FOR EXECUTION.

INTRODUCTION



SITE PLANING

THE FACILITY IS SURROUNDED BY AGRICUL-TURAL FIELDS ON ALL SIDES AND THEREFORE STRUCTURE THAT WELCOMES THE THE FOOD AND OTHER EMPLOYMENT OF THE PEOPLE OF ECO-VILLAGE IS TAKEN CARE BY THOSE ORGANIC FARM.

- THE SITE IS OPEN FROM ALL SIDES DUE TO FIELDS. IT IS ENCLOSED BY BARBED WIRE ON FEW SIDES, BUT THE TOURIST CAN ENTER ONLY THROUGH ONE ENTRANCE
- THE ENTRANCE TO THE SITE IS FROM THE PUBLIC ZONED AREA.
- •UTILITIES LOCATION: PUBLIC AREA CONSISTS COTTAGES OF COTTAGES DINING ETC. AND PRIVATE AREATHE BUILDINGS ARE BUILT ON HIGH CONSIST OF COTTAGES, THEREFORE UTILI-TIES OF SEWAGE TREATMENT PLANT, BIO-MASS GASIFIER ETC. ARE ZONED BETWEEN THESE TWO AREA IN ORDER TO REDUCE THE TRANSPORTATION OF WASTE.
- PRIVATE AREAS ARE DISTRIBUTED INTO 2 PARTS, TOWARDS LEFT- ACCOMMODATION FOR THE PRIESTS AND PERMANENT RESI-DENTS, AND CENTRALY- COTTAGES FOR TOURISTS.
- SEMI PRIVATE AREA IS LOCATED FAR FROM THE ENTRANCE AND ALSO DISTANT FROM **AMENITIES**

ARCHITECTURAL VALUE

COMMUNITY HALL

THE COMMON HALL IS A SPACIOUS AUDIO VISUAL ROOM WITH VARIOUS MATERIALS USED FOR ITS CONSTRUCTION. SUSTAINABILI-TY STRATEGIES USED FOR BUILDINGS ARE: -ARRANGING WINDOWS ACCORDING TO WIND DIRECTION AND ONLY ALLOWING DIFFUSED LIGHT IN THE ROOM.

STACKING ROOF IN A WAY THAT IT ALLOWS LIGHT.

THICK WALLS AND SMALL OPENINGS TO PRE-VENT HEAT GAIN INSIDE.

MECHANICAL VENTILATION USING FANS IS RE-QUIRED DURING SUMMERS.

HALL HAS A LARGE VOLUME, WITH TALL TAPER-ING ROOF WITH SOME PART OF THE ROOF SHIFTED ABOVE IN ORDER TO ALLOW NATURAL LIGHT FROM THOSE AREAS. THE HUGE VOLUME OF THE STRUCTURE MAKES THE SPACE TO SEEM LARGER

THE RECEPTION AREA IS THE EARLIEST TOURISTS VISITING THE FACILITY OF GEV.

RECEPTION ALSO HOLDS ALSO LARGE VOLUME, WITH ROOF TAPERING AT THE TOP.

THERE ARE MULTIPLE ROOFS COVERING THE STRUCTURE, HELPS IN ALLOWING NATURAL LIGHT.

THE DESIGN IS POROUS IN ITS NATURE WITH MULTIPLE OPENING,

GROUND WHERE THEY RECEIVE BETTER BREEZE ARE DESIGNED TO BE ONLY ONE BAY DEEP TO ALLOW FOR CROSS VENTI-LATION.

LARGE SEMI-COVERED SPACES PROVIDE FOR COMFORTABLE DAYTIME USE. REDUCING ENERGY CONSUMPTION WHILE MAINTAINING OCCUPANT COM-FORT:

 FOR ACHIEVING VISUAL COMFORT: A) OPTIMUM WINDOW OPENINGS. B) LIGHT FLOOR FOR LIGHT DIFFUSION. C) SOFT LANDSCAPE OUTSIDE GIVING NO REFLECTED GLARE

•FOR ACHIEVING THERMAL COMFORT: A) DOUBLE TILE ROOFING FOR ROOFS. B) SHADED WALLS AND OPENINGS.

GOSHALA
IN THE VILLAGE GOSHALA IS AN INTE-GRAL PART OF ITS EXISTENCE BE-CAUSE COW DUNG IS USED AS MANURE IN FARMING, PLASTERING MA-TERIAL OF GREEN BUILDINGS, RAW MA-TERIAL TO PRODUCE BIO-GAS AND PAT-TIES FOR COOKING.

THE DESIGN IS ANIMAL FRIENDLY AS IT IS VERY OPEN AND POROUS IN NATURE, YET COVERS THE ANIMAL FROM HARSH AFTERNOON SUN. IT IS A LATERAL STRUCTURE WHICH WAS 24M IN LENGTH.

IT IS DIVIDED BY AN ALLEY IN BETWEEN FOR WALKING WITH 1.5M HIGH PARAPET WALL ON EITHER SIDES

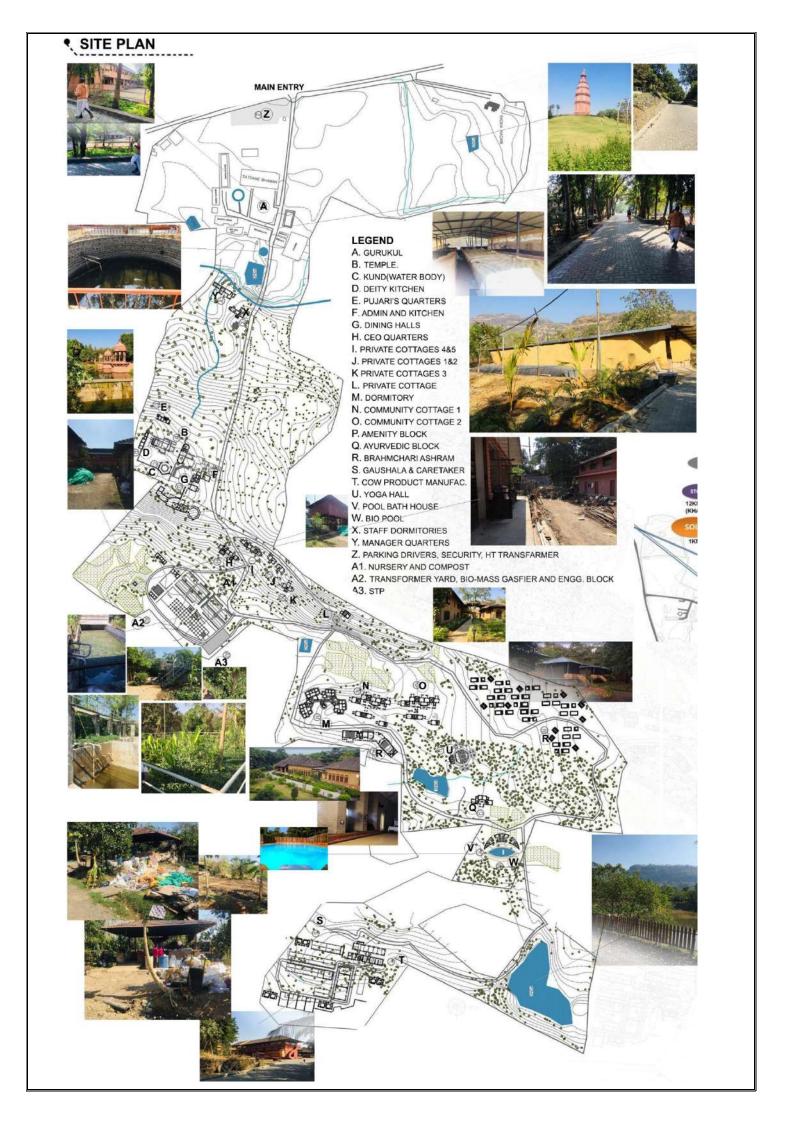








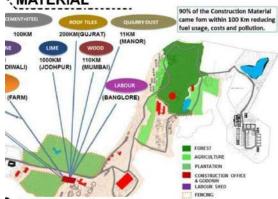




DESIGN OBSERVATION

- THE PROJECT PLAN IS TO PROVIDE ACCOM-MODATION, ALLIED CONFERENCE AND AUDI-TORIUM SERVICES, ADMIN FACILITIES AND COWSHEDS.
- THE PROJECT KEEPS IN MIND THE NEEDS OF THE COMMUNITY AND THE REDUCTION OF ECOLOGICAL FOOTPRINT IN A COST-EFFEC-TIVE MANNER.
- THE DESIGN STRATEGY ALSO TAKES INTO ACCOUNT CLIMATE RESPONSIVENESS, SO AS TO FACILITATE INTERNAL COMFORT AS WELL AS RAINFALL AND EARTHQUAKE-PROOFING.
- OPENING AND OTHER CONSTRUCTION DE-TAILS ARE GIVEN DUE TO IMPORTANCE SO AS TO RESIST HEAVY RAINFALL AND SEISMIC AC-TIVITY.
- THE MANGALORE TILES CLADDED DOUBLE ROOFING ENSURES BETTER INDOOR COM-FORT DUE TO THE PRESENCE OF AN INSULA-TION CAVITY.
- ALTERNATIVE TECHNOLOGIES AND BUILDING MATERIALS ARE DEVELOPED IN THE PROJECT WHICH RESPOND SPECIFICALLY TO THE SITE CONDITIONS, AND THE EMBODIED AND OPER-ATIONAL ENERGY OF THE BUILDING IS RE-DUCED CONSIDERABLY.

MATERIAL



SUSTAINABLE MATERIAL

MUD WAS THE KEY CONSTITUENT OF THE CONSTRUCTION MATERIALS.

FOUNDATION:

P.C.C. WITH STABILIZED MUD.

STONE MASONRY WITH STABILIZED MUD MORTAR.



MADE WITH STABILIZED MUD BLOCK INSTEAD OF THE CONVENTIONAL BURNT CLAY BRICKS. THE CONSTITUENT OF MUD BLOCKS ARE AS FOLLOWS:



DOOR WINDOW:

THE DOOR AND WIN-DOWS ARE MADE OF RE-CYCLED WOOD. SILLS AND LINTELS WITH U-BLOCKS ARE USED WHICH REDUCES NEED OF CONCRETE.



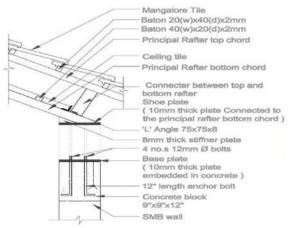
PLASTER
IN TOILETS-CEMENT
PLASTER
REST-MUD PLASTER

Comparative Energy Consumption for making Brick & Mud Walls

Brick & Mud Walls

Brick & Double | Consumption | Con

ARCH PANELS WITH MUD TILES, USE OF PRE-CAST ARCH PANELS FOR ROOFS, USE OF STA-BILIZED SOIL CEMENT BLOCKS ON WALLS AND MAINTAINING THE SAME UNPLASTERED. INTERMEDIATE ROOFS OF BUILDING EXCEPT FOR TOILETS ARE MADE OF ARCH PANELS MADE OF STABILIZED MUD BLOCKS AND PRE-CAST CONCRETE BEAMS ARE USED.



SECTION OF ROOF

ARCH PANELS WITH MUD TILES, USE OF PRE-CAST ARCH PANELS FOR ROOFS, USE OF STA-BILIZED SOIL CEMENT BLOCKS ON WALLS AND MAINTAINING THE SAME UNPLASTERED. INTERMEDIATE ROOFS OF BUILDING EXCEPT FOR TOILETS ARE MADE OF ARCH PANELS MADE OF STABILIZED MUD BLOCKS AND PRE-CAST CONCRETE BEAMS ARE USED.







MATERIAL CONCLUSION

- •THE BUILDING IS DESIGNED AS LOAD-BEARING STRUCTURES, WHILE ARCHES HAVE BEEN USED TO . AND CONSERVATION REDUCE THE RCC ELEMENTS, GIVING THE ARCHITEC- SINCE WATER PLAYS A MAJOR TURE A DEFINITE SENSE OF AESTHETIC APPEAL.
- COMPOSITE PCC CONSISTING OF AGGREGATES. SOIL, QUARRY DUST, FLY ASH, CEMENT AND LIME SLURRY IS USED TO REDUCE THE CEMENT CONTENT IN THE CONCRETE.
- BEING LOCATED IN SEISMIC ZONE, THE ENTIRE STRUCTURE IS TIED AT THE PLINTH, SILL, LINTEL AND SLAB LEVELS.
- ARCHES IN THE DESIGN REDUCED THE NEED FOR RCC LINTELS WHICH ARE REPLACED BY THIN RCC TIE TURBING THE EXISTING ECOLO
- ARCH PANELS MADE OUT OF MUD BLOCKS ARE USED BILITY IN MIND. FOR SLAB, INSTEAD OF RCC SLABS, THE RCC BED BLOCKS PLACED BELOW THE RAFTERS OF THE ROOF-ING DISTRIBUTE LOAD EVENLY ON WALLS.





THE GOAL WAS TO CREATE A SYSTEM WHICH HELPS US ATTAIN OUR GOAL WITHOUT DIS GY AND KEEPING COST FEASI-

RAIN WATER HARVESTING



 NEW WELLS AND **BOREWELLS**

RECHARGE MEASURES







SUSTAIABILITY FEATURE GREEN BUILDING TECHNOLOGY.

GOVARDHAN ECO VILLAGE (GEV) IS A HUMBLE AT-TEMPT TO HIGHLIGHT THE IMPORTANCE OF LIVING IN HARMONY WITH NATURE AND USING THE GIFTS THAT NATURE AND GOD HAVE BESTOWED UPON US TO SERVE THE SOCIETY BY SETTING UP A MODEL FARM COMMUNITY. THEIR AIM IS TO CREATE AESTHETICAL AND COMFORTABLE STRUCTURES FOR THE RESI-DENTS AND GUESTS, WHILE NOT BREAKING THE HAR-MONY WITH NATURE AND OUR IMMEDIATE SUR-ROUNDINGS. IT WILL OBSERVE IN THE PROCESS HOW GEV HAS TAKEN INITIATIVE TO UPHOLD THE BALANCE ED TANKS ARE USED TO FACILITATE THE ANAERO-OF SUSTAINABILITY CONCEPT AND COMMUNITY

CIVIL FACILITIES WERE REQUIRED TO HOUSE THE COMMUNITY AND SEVERAL FACILITIES. WE HAD TO MINIMIZE -

- 1. RESOURCE CONSUMPTION
- 2. WASTE GENERATION

NEEDS.

3. OVERALL ADVERSE ECOLOGICAL IMPACT

THEY ACHIEVED IT BY IMPLEMENTING THE FIVE R PHI-LOSOPHY





ALTERNATIVE ENERGY **BIO GAS ENERGY -**

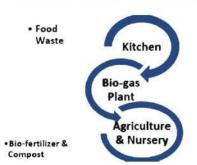
BIOMASS IS A RENEWABLE ENERGY RESOURCE DERIVED FROM THE CARBONACEOUS WASTE OF VARIOUS HUMAN AND NATURAL ACTIVITIES. BIO-MASS DOES NOT ADD CARBON DIOXIDE TO THE AT-MOSPHERE AS IT ABSORBS THE SAME AMOUNT OF CARBON IN GROWING AS IT RELEASES WHEN CON-SUMED AS A FUEL.

IN PRACTICE, SPECIALLY DESIGNED AND INSULAT-BIC

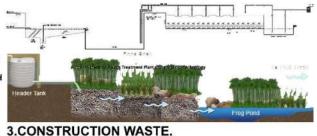
UNDER A CONTROLLED ATMOSPHERE. THESE TANKS ARE KNOWN AS BIO DIGESTERS



Plant setup						
Plant	Source of biomass	Capacity				
Floating dome type	Cow dung from Cow Shed	30 cu.m				
Fixed dome	Food waste from FFL	6 cu.m				



- Goes to Bio-gas plant as Organic Waste
- · Bio-gas is generated and given to Kitchen



SOLAR ENERGY -

Capacity of our Solar Plant

during daytime (9am-5pm)

Capacity of our Solar Plant at

Output of Solar Water

Feature

night

Heaters

Battery Backup

GEV HAS EXPOSURE TO SUNLIGHT FOR MOST PART OF THE YEAR AND MANAGEMENT IDENTIFIED CERTAIN UNUSABLE OPEN AREAS TO INSTALL PANELS TO HARNESS SOLAR ENERGY.



THE BROKEN RED BRICKS ARE BEING USED IN WATER PROOFING THE ROOFS IN OTHER CON-STRUCTIONS

-CONSTRUCTION WASTE LIKE BROKEN CEMENT POLES AND BRICKS ARE UTILIZED IN MAKING PER-

-THE ENTIRE BOUNDARY IS MADE BY CONSTRUC-

MANENT RAISED BEDS FOR FARMING.



30 KW during Day. All the

Power 7.2KAH

3KW, 8 hours

500 ltr at 60-70C

energy requirements of the farm are met through Solar



TION WASTE.



CARD BOARD AND CLOTH

WASTE CARD BOARD CARTONS AND CLOTH ARE USED AS MULCH IN THE AGRICULTURE FIELD. BY USING THIS SIMPLE TECHNIQUE ONE CAN AVOID THE LABOR INTENSIVE TASK OF REMOVING WEEDS OR USAGE OF ANY CHEMICAL WEEDICIDES.



ANIMAL DRIVEN PRIME MOVER -

BULLS NOT ONLY CONTRIBUTE IN PLOUGHING THE FARMLAND, BUT ALSO HELP SUBSTITUTE POWER REQUIREMENT FOR COUPLE OF PROCESSES, WHICH WE SHALL STUDY FURTHER.

ONE OF THE 5 HP SUBMERSIBLE PUMPS HAS BEEN REPLACED BY BULL DRIVEN **BOREHOLE LINE- SHAFT** PUMP. THIS PUMP IS A POSITIVE DISPLACEMENT SCREW PUMP THAT IS DRIVEN BY TWO BULLS



CONNECTED TO THE PUMP ROTOR THROUGH A GEAR AND CHAIN AND PULLEY ARRANGEMENT. THIS ARRANGEMENT MULTIPLIES THE ROTATION OF THE BULLS FROM 2 RPM TO ABOUT 1400 RPM. SOME OF OUR FLOOD IRRIGATION AND SPRINKLER IRRIGA-TION AREAS ARE BEING IRRIGATED THROUGH THIS SYSTEM, WHICH OPERATES FOR ABOUT 3 HOURS IN LIKE KUSHA - WHOSE ROOTS CAN BE EASILY EX-THE MORNING AND EVENING RESPECTIVELY

WASTE MANAGEMENT

GOVARDHAN ECO VILLAGE IS AN INTEGRATION OF VARIOUS INDIVIDUAL SYSTEM COMPRISING OF OR-GANIC FARMING, GOSHALA, BIO GAS PLANT, AND GREEN CONSTRUCTIONS WHICH FACILITATE RECY-CLING OR REUSING OF WASTE FROM ONE SYSTEM INTO OTHER.

1. BIO-GAS PLANT

- -CATTLE WASTE IS CONVERTED INTO BIOGAS, TO BE USED AS A FUEL FOR COOKING.
- -IT ALSO TAKES KITCHEN WASTE
- -THE SLURRY PRODUCED AFTER EXTRACTION OF GAS IS UTILIZED AS A NATURAL FERTILIZER IN OR-GANIC FARMING.

2.SOIL BIOTECHNOLOGY (SBT)

-A SYSTEM THAT USES WATER AS A MEDIUM FOR WASTE COLLECTION AND SOIL AS A MEDIUM FOR WASTE TREATMENT.

PLASTIC BAGS

CEMENT BAGS AND OTHER PLASTIC BAGS ARE UTI-LIZED TO STORE MUD AND COMPOST. IT IS ALSO USED TO GROW PLANTS, ESP. GRASSES TRACTED BY CUTTING THE BAG OPEN, ALSO CEMENT BAGS ARE USED FOR STORING FOOD WASTES TO CONVERT THEM INTO MANURE.





WOOD DUST

IT FORMS AN INGREDIENT ALONG WITH COW DUNG. IN MAKING OF DHOOP STICKS OR CHEMICAL FREE INCENSE STICKS.

NOT ONLY ARE THESE DHOOP STICKS FRAGRANT, BUT ALSO HAVE THE UTILITY OF BEING A CHEMICAL FREE MOSQUITO REPELLENT.

LITERATURE STUDY 1: Desert Resort, Mandawa, Rajasthan -



SITE APPROACH

LOCATION: MUKANDGARH ROAD, MANDAWA

BIKANER HIGHWAY, RAJASTHAN.

DISTANCE FROM DELHI AIRPORT: 245 KM DISTANCE FROM JAIPUR AIRPORT: 180 KM. DISTANCE FROM JAIPUR RAILWAY ST: 196KM DISTANCE FROM MUKUNDGARH RAILWAY

STATION: 16 KM.

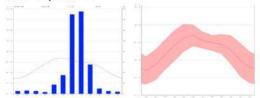
DISTANCE FROM MANDAWA: 1.4 KM

CLIMATE

THE MANDAWA LIES ON 334M ABOVE SEA LEVEL MANDAWA IS INFLUENCED BY THE LOCAL STEPPE CLIMATE. DURING THE YEAR THERE IS LITTLE RAINFALL. THIS CLIMATE IS CONSIDERED TO BE BSH ACCORDING TO THE KÖPPEN-GEIGER CLIMATE CLASSIFICATION. IN MANDAWA, THE AVERAGE ANNUAL TEMPERATURE IS 25.1 °C | 77.1 °F. PRECIPITATION HERE IS ABOUT 450 MM | 17.7 INCH PER YEAR.

THE DRIEST MONTH IS APRIL, WITH 3 MM | 0.1 INCH OF RAINFALL. MOST OF THE PRE-CIPITATION HERE FALLS IN AUGUST, AVERAG-ING 155 MM | 6.1 INCH.

THE WARMEST MONTH OF THE YEAR IS JUNE, WITH AN AVERAGE TEMPERATURE OF 34.0 °C | 93.2 °F. JANUARY IS THE COLDEST MONTH, WITH TEMPERATURES AVERAGING 14.1 °C | 57.4 °F.



THE DESERT RESORT

THE DESERT RESORT AT MANDAWA IS BUILT A TOP A MAGNIFICENT SAND DUNE FLANK-ING THE ACRES OF DESERT LANDSCAPE. THE DESERT RESORT, A UNIQUE AND CHARMING RETREAT, IS A VERDANT OASISIN THE MIDST OF STARK DESERT TERRAIN THAT OFFERS PANORAMIC VIEWS OF ALL AROUND.



*DESIGN PHILOSOPHY

THIS RESORT INDICATES THAT IT IS WITHIN THE REALMS OF POSSIBILITY TO EFFECTIVE-LY COMBINE MODERN CREATURE COMFORT WITH THE VERY BASIC RURAL DWELL-INGS. THE SUITS ARE DESIGNED IN A CLUSTER OF BUILDINGS THAT CONSTITUTE ONE HOUSE AND ARE GROUPED AROUND A COURTYARD.



MATERIALS

LOCALLY AVAILABLE MATERIALS ARE USED FOR CONSTRUCTION.

THE SUN DRIED MUD BRICKS FOR THE WALLS WERE MADE ON SITE.

LOCAL SANDSTONE WAS USED FOR DOOR AND WINDOW FRAME AS WELL AS BRACKETS.

LINTEL, AND ROOF SLAB.

CONCENTRIC CIRCLE WITH BAMBOO STRIPS HOLDING THE STRAW TOGETHER.

TIMBER.

THATCHED ROOF.

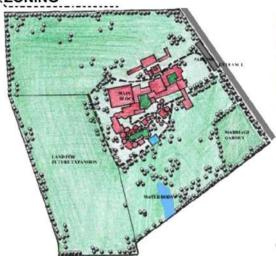
STONE SLAB POLISHED AND PAINT. WOODEN DOOR AND WINDOWS.

THE INDIGENOUS COOLING SYSTEM KHAS TATI WINDOW UNIT SYSTEM.





ZONING





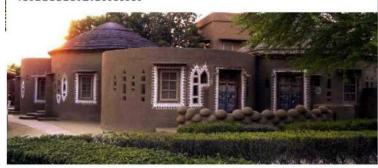


1. BRITEANCE
2. BECEPTION
3. LOUNGE
4. MILLS
6. DEBENG BOOM
6. DEBENG BOOM
7. POOL MORE POOL
8. SANGER
10. LAW
11. SUPPET
12. SOURCE POOL
11. SUPPET
12. TOOL
15. PARTORN FOR
16. LAW
11. SUPPET
17. SUPPET
18. WITHOUT
18. WITHOUT
19. SUPPET
19. TOOL
19. TOO

₹DESIGN CONCEPT

IN THIS PROJECT, MUD WAS MAILY USED. MUD WAS NOT ONLY CHEAPER BUT ALSO THE MOST APPROPRIATE-BOTH CLIMATICALLY AND AESTHETICALLY. LOCALLY AVAILABLE MATERIALS WERE USED FOR CONSTRUCTION. THE SUN DRIED BRICKS CAME FROM THE BED OF A DRIED OUT TANK, ADJACENT TO THE HILLOCK. THE THATCH CAME FROM THE GRASS GROWING ON THE SITE ITSELF, THE STONE FOR THE FOUNDATIONS SILLS, LINTELS BRACKETS AND ROOFING SLABS AND OTHER BUILT IN FURNITURE CAME FROM RAGHUNATHGARH(25 KM AWAY). THE WOODEN LATHE WORKERS FROM LAXMANGARH WERE TO MAKE A PEG AND OTHER SMALL FIXTURES.

COTTAGES

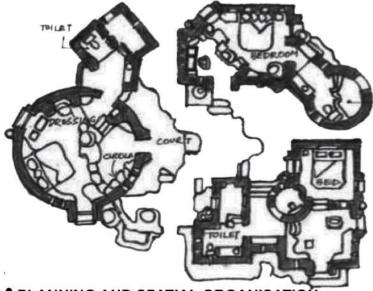




ALL THE PATHWAYS ARE PAVED IN BRICKS AND FLANKED BY HEDGES 1M HEIGHT ON EACH SIDE. NO BIG TREES ARE SEEN IN THE RESORT DUE TO POOR SOIL CONDITIONS. ONLY OLD TREES ARE PRESENT WHICH GIVE A FEELING OF BEING SCULPTED. AN OPEN DINING AREA PRESENTS A MAGNIFICENT VIEW OF THE LANDSCAPE STRETCHING AHEAD FOR MILES. LIGHT FIXTURES ARE PLACED IN THE GARDEN &COURTYARD TO SIT AND ENJOY IN NIGHT.









THE ENTRY TO THE COMPLEX IS THROUGH A GATEWAY SORT OF CUT-OUT FROM WHERE ONE CAN SEE THE CLUSTER OF MUD HUTS IN THE FRAMEWORK OF A TYPICAL SHEKHAWATI STYLE GATEWAY. THE 3 M WIDE PATHWAY LEADS TO THE HUTS. AFTER ONE ENTER THE ENTRANCE LOBBY, THE RECEPTION AND OFFICE IS JUST ADJACENT TO THE MAIN ENTRY FROM WHERE VISITORS CAN EASILY ACCESS THE RESTAURANT, BAR AND HUTS







LITERATURE STUDY 2: Anannt Resort, Udaipur

¶ SITE APPROACH

SITE PLAN

- •LOCATION: VILLAGE -BUJHDA, TEHSIL- GIRWA, KODI-YAT ROAD, UDAIPUR, RAJASTHAN.
- DISTANCE FROM MAHARANA PRATAP AITPORT: 35 KM
- DISTANCE FROM UDAIPUR RAILWAY ST.: 10 KM.
- DISTANCE FROM UDAIPUR CITY: 7KM.



ABOUT ANANT RESORT

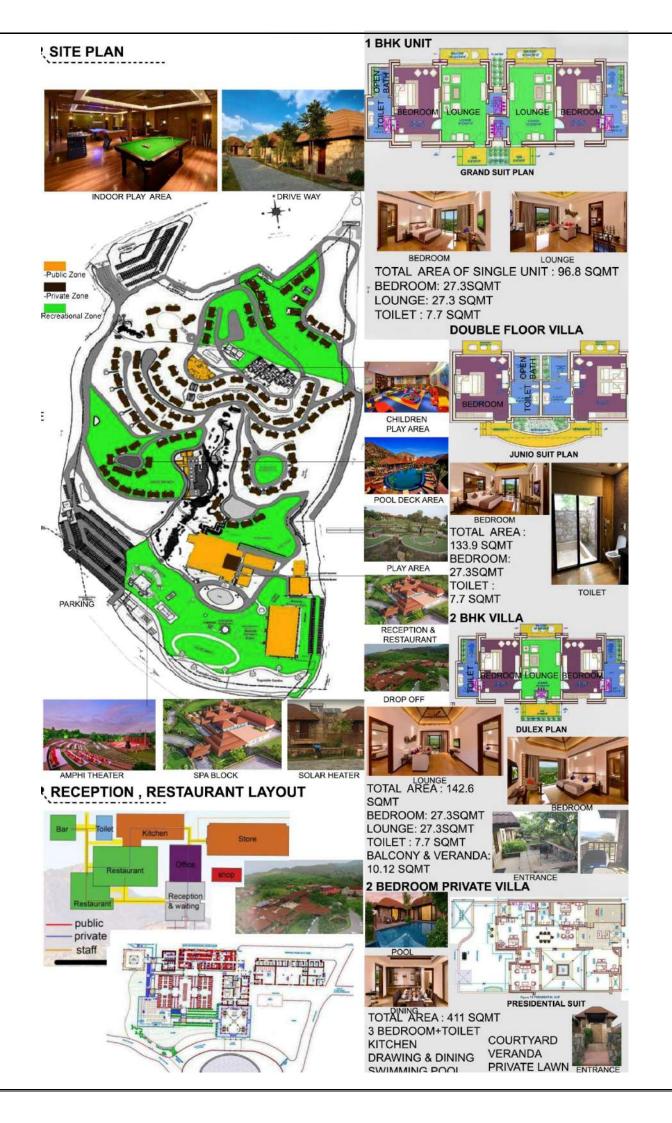
- SPREAD ACROSS 75 ACRES OF LUSH GREENERY THE RESORT ENCOMPASSES.
- 182 CONTEMPORARY VILLAS.
- ITS PREMIUM GATEWAY RESORT SURROUNDED BY THE ARAVALLIS.
- ANANTA UDAIPUR HAS INTERNATIONAL STANDARD SPA NATUROPATHY, SWEDISH SPA THERAPLES, ORIENTAL SPA YOGA, MEDITATION ETC.
- TWO ECLECTIC DINING OUTLETS.
- SPECIAL KID'S ACTIVITY AREA.
- OUTDOOR POOL.
- SPA AND FITNESS CENTER.
- LARGEST DIVISIBLE BANQUET HALLS IN RAJASTHAN.

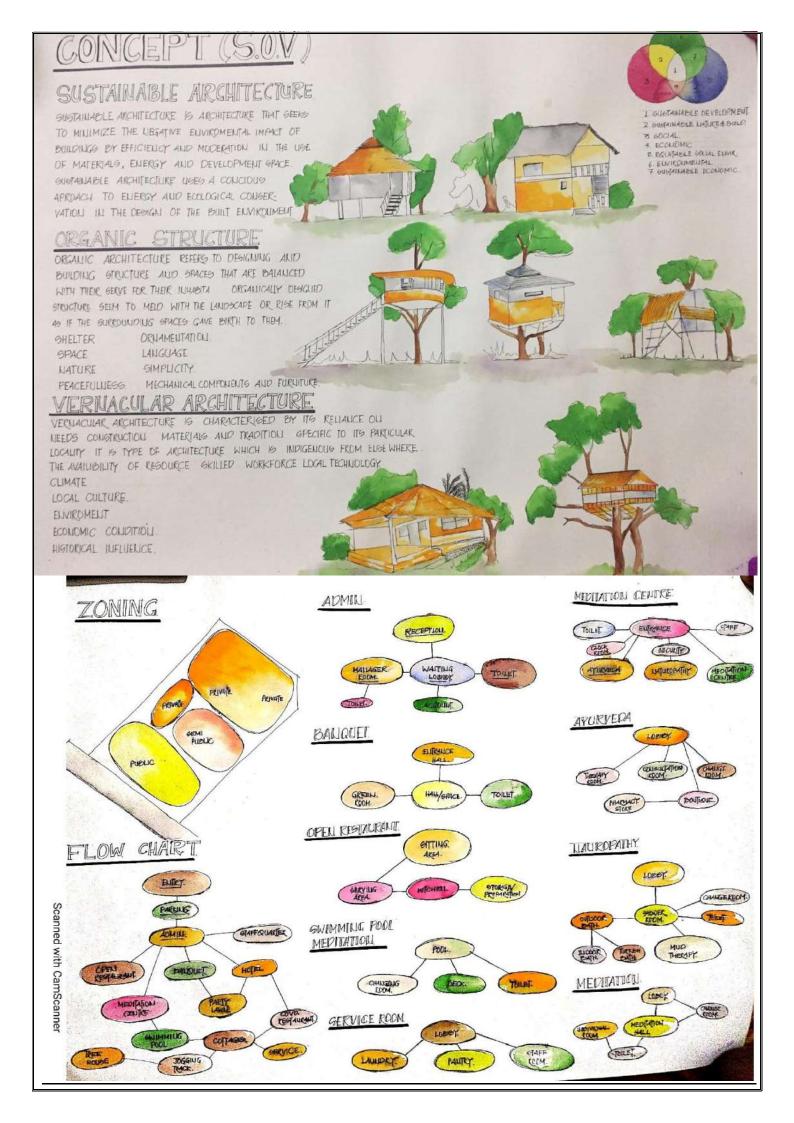


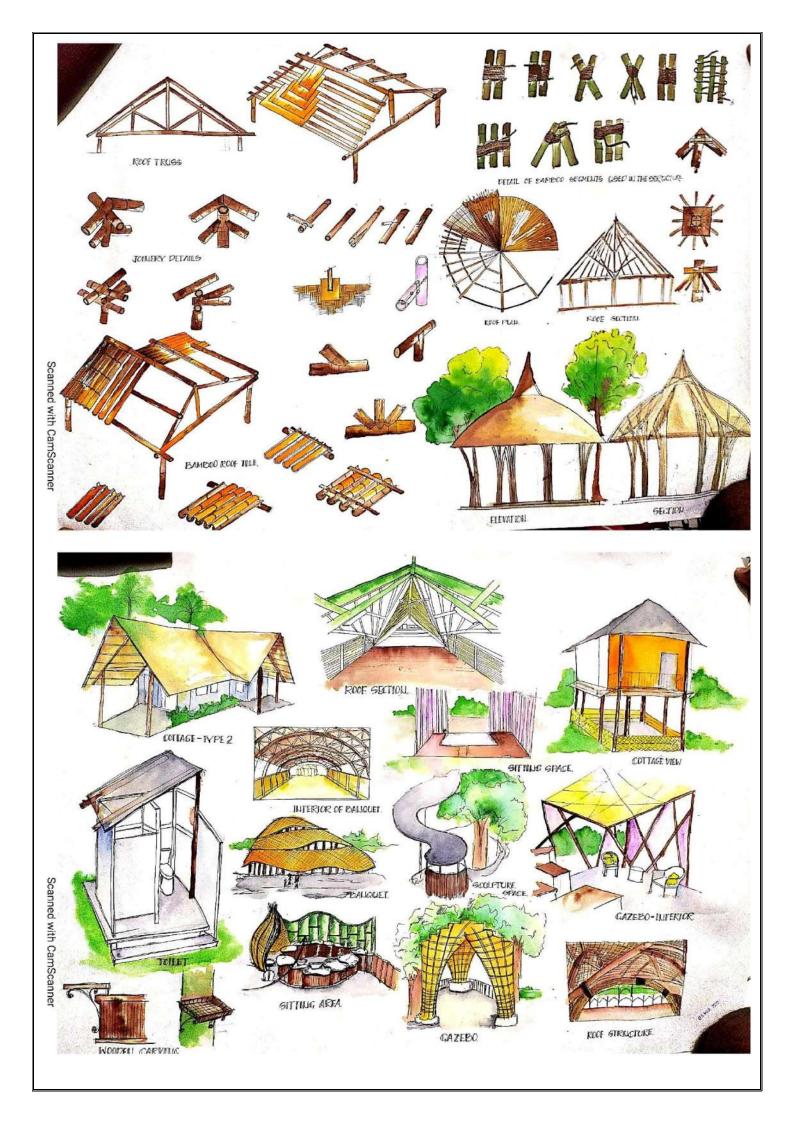


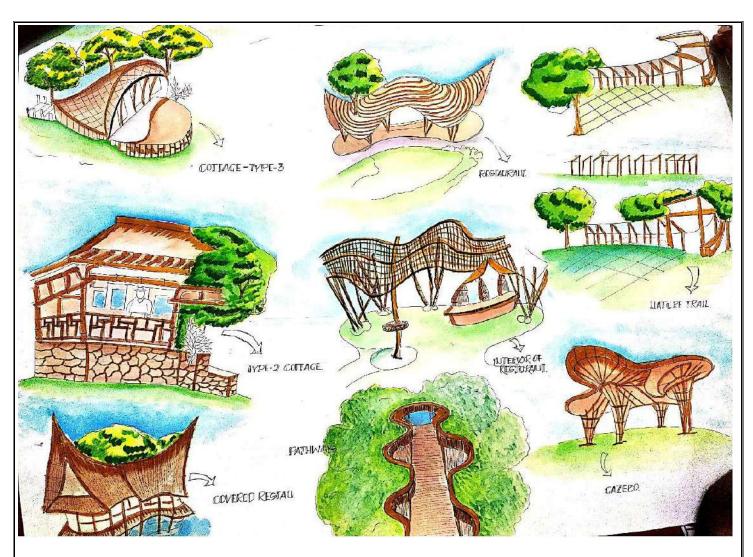






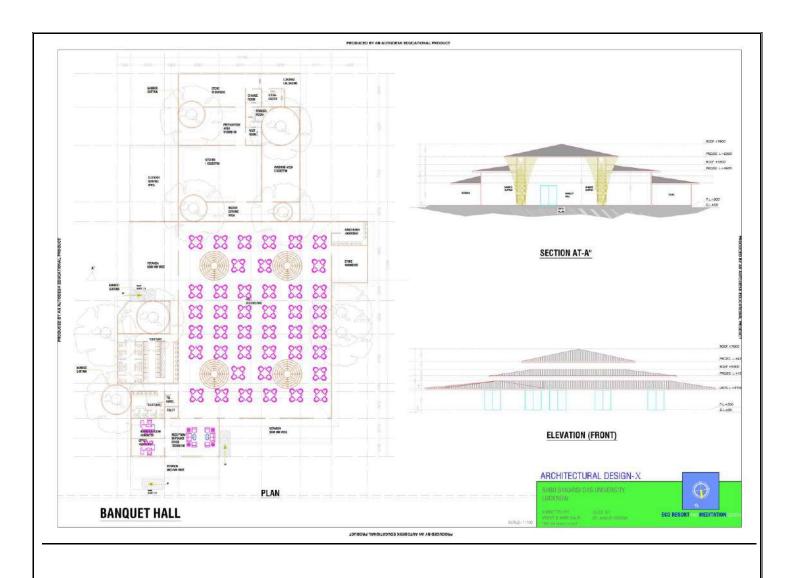


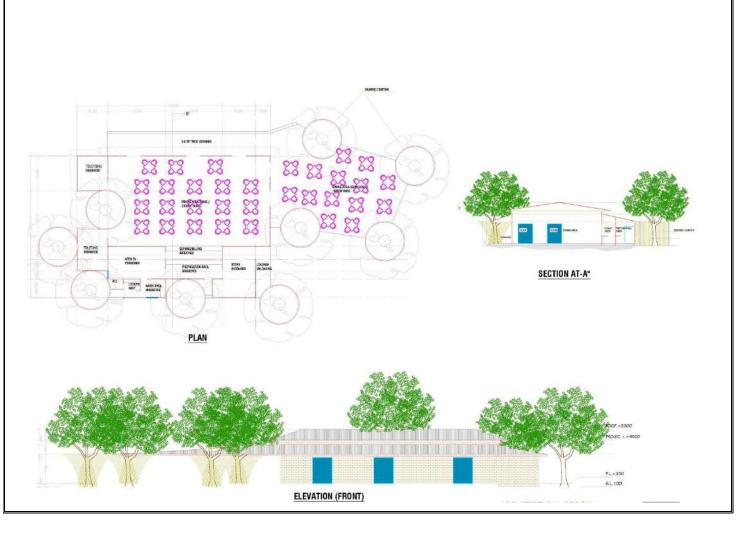


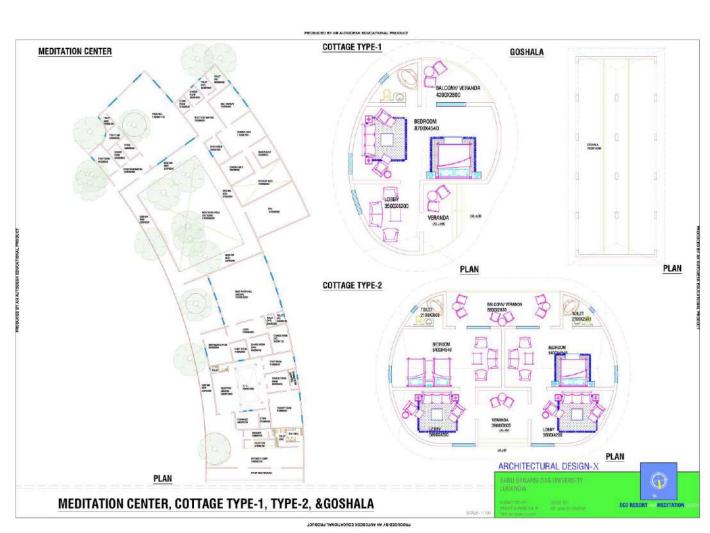


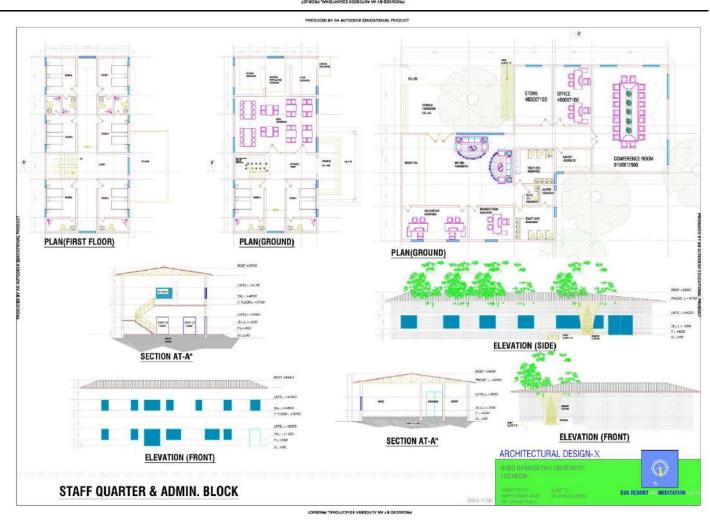












ELECTIVE -1(LANDSCAPE)

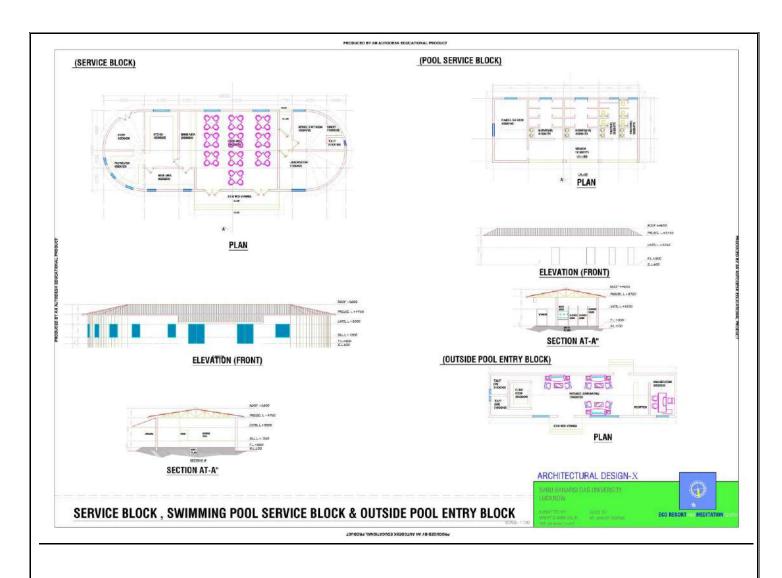
BABU BANARSI DAS UNIVERSITY LUCKNOW

SUBMITTED BY VINEET KUMAR GALIR

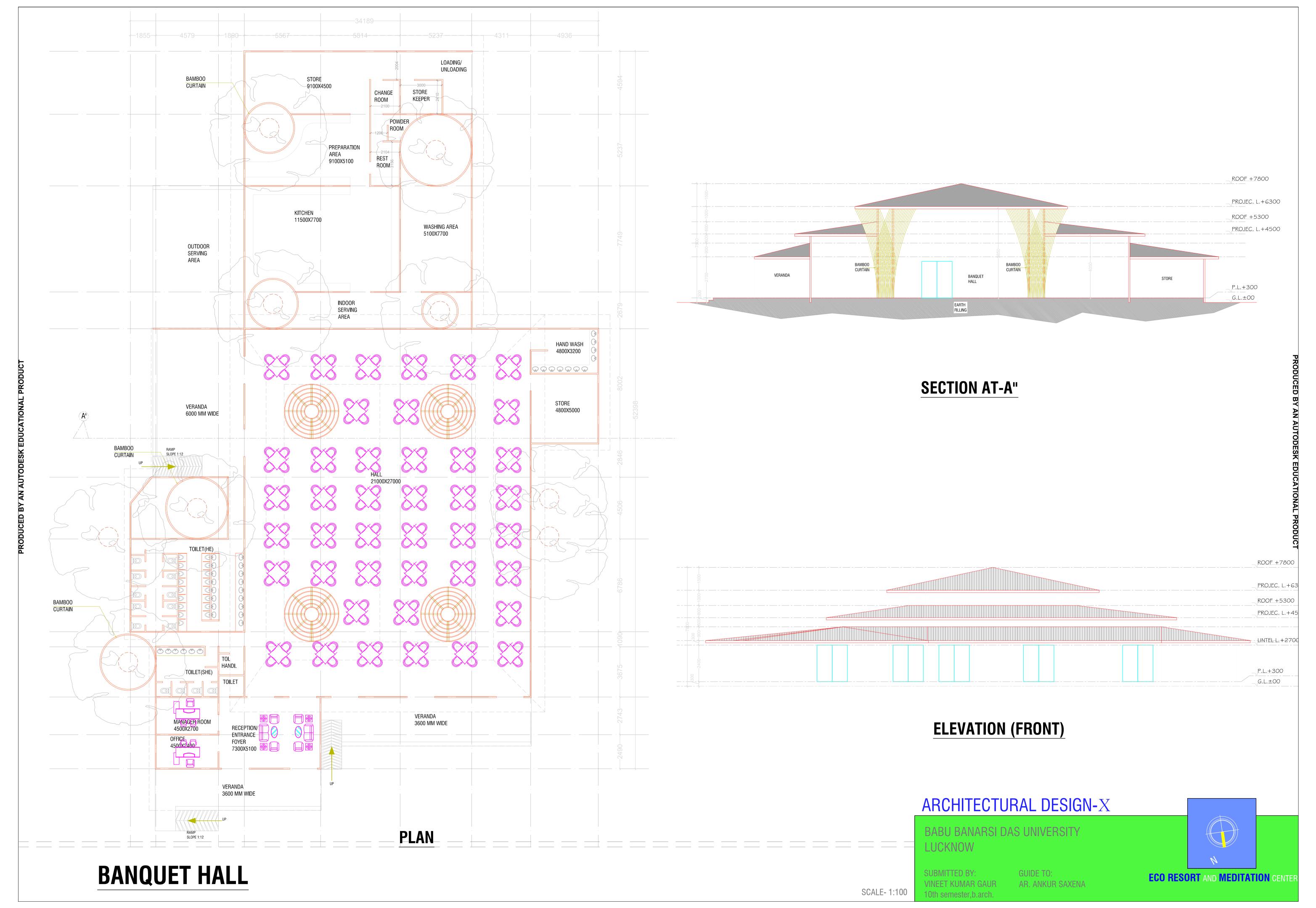
GUIDE TO: AR: ANXIUR SAXENA

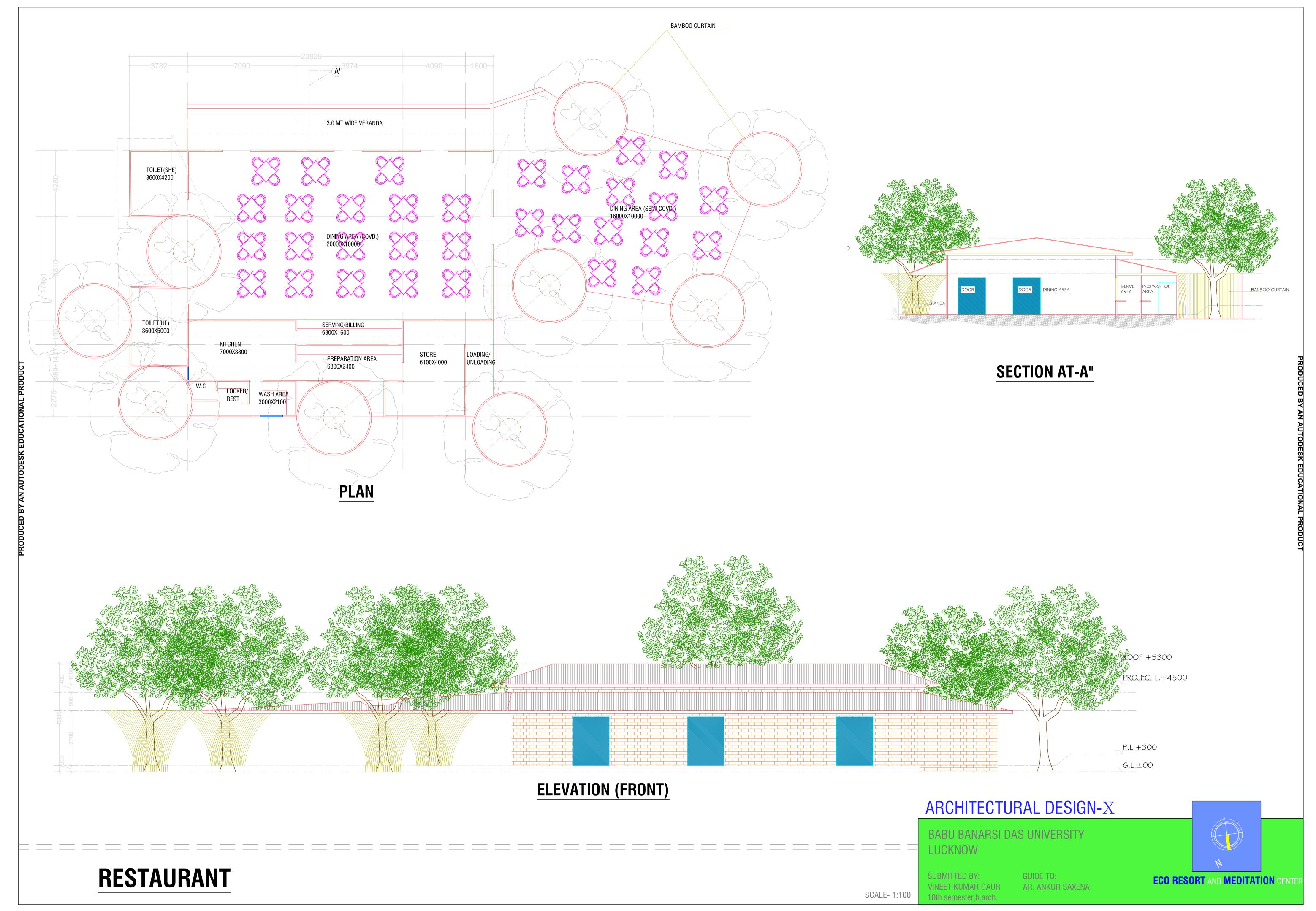


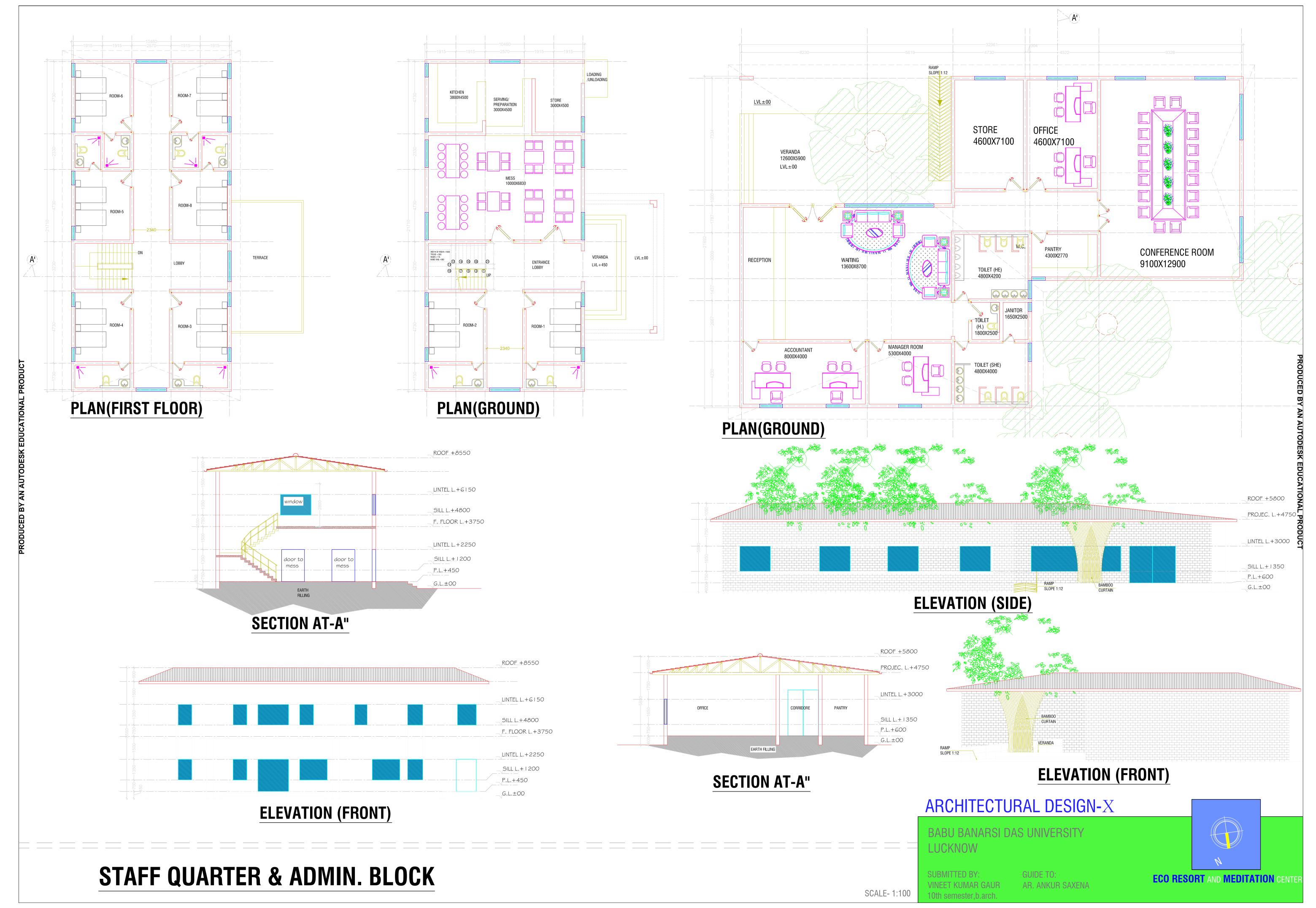
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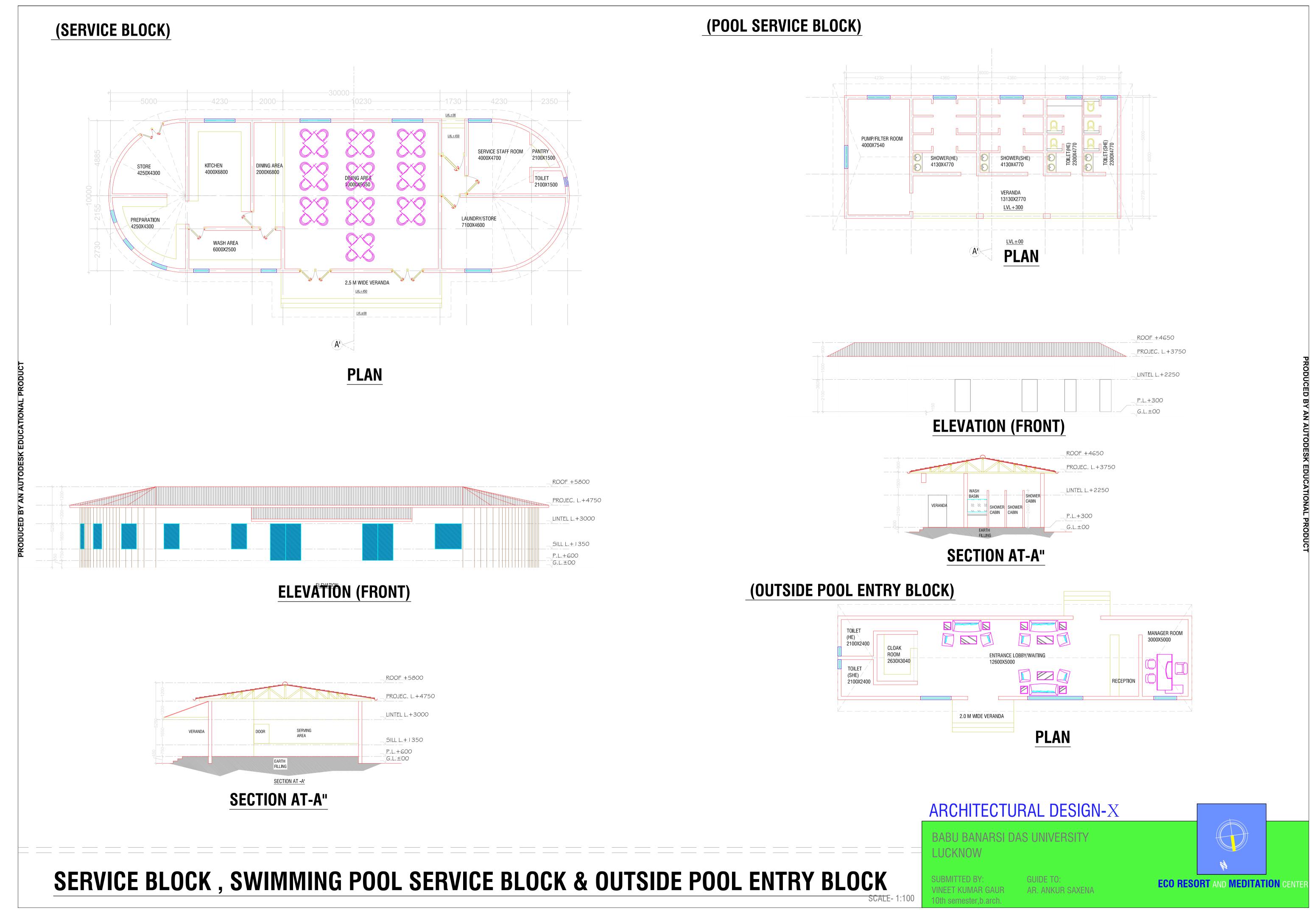


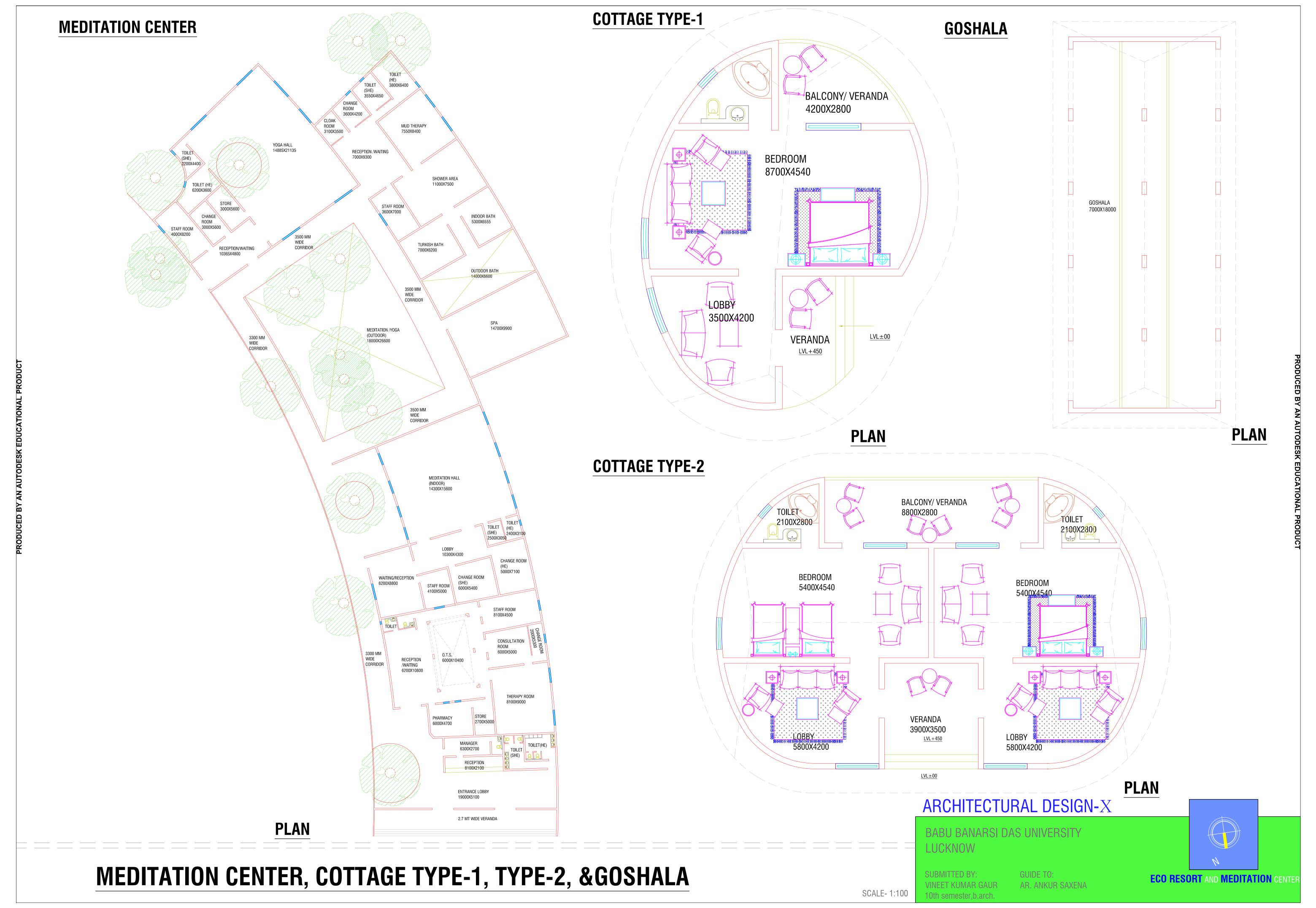
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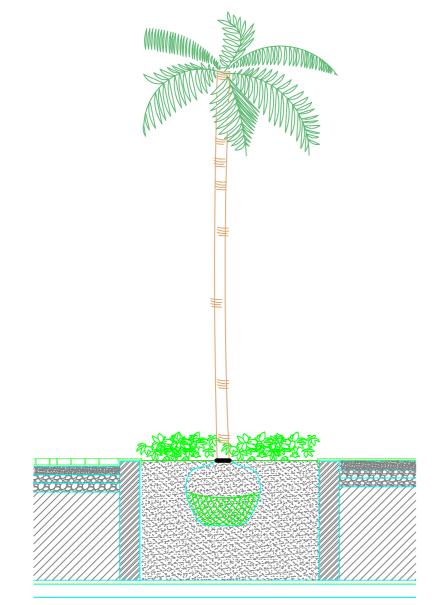




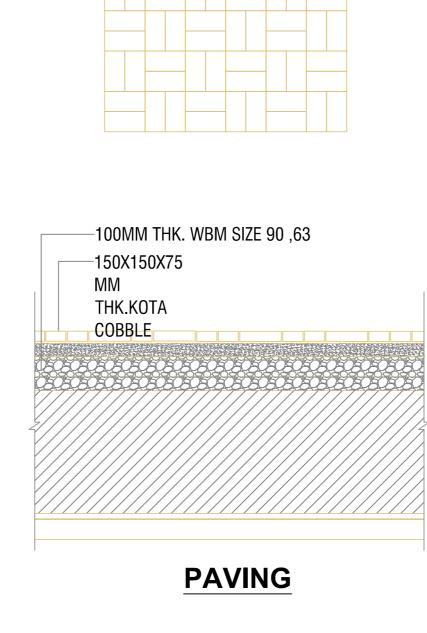


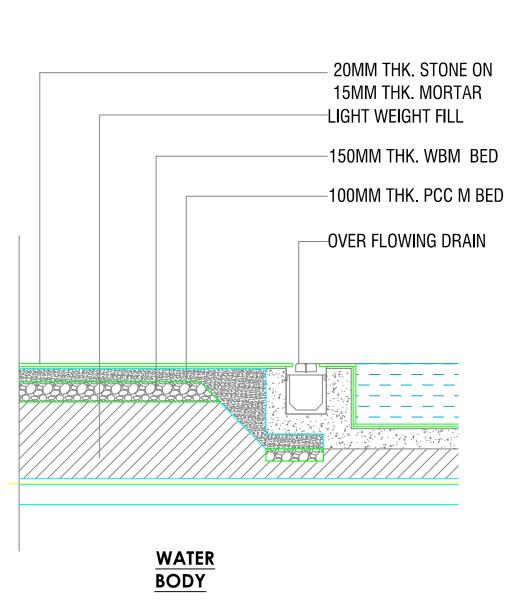






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ARCHITECTURAL DESIGN-X BABU BANARSI DAS UNIVERSITY LUCKNOW GUIDE TO: SUBMITTED BY: AR. ANKUR SAXENA

