



THESIS REPORT ON  
**“CREMATORIUM WITH THE MEMORY BUILDING, NOIDA”**

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE  
DEGREE OF:

**BACHELOR OF ARCHITECTURE**  
BY

**MUSKAN GUPTA**

**1180101033**

THESIS GUIDE

**AR. ANSHU RASTOGI**

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**TO THE**

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**LUCKNOW.**

**SCHOOL OF ARCHITECTURE AND PLANNING**

**BABU BANARASI DAS UNIVERSITY, LUCKNOW (U.P.).**

**CERTIFICATE**

I hereby recommend that the thesis entitled “Crematorium with The Memory Building, Noida”, under the supervision, is the bonafide work of the students and can be accepted as partial fulfillment of the requirement for the degree of Bachelor’s degree in architecture, school of Architecture and Planning, BBDU, Lucknow.

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Prof. Mohit Kumar  
Agarwal  
Dean of Department

---

Prof. Sangeeta Sharma  
Head of Department

Recommendation      Accepted  
   Not Accepted

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External Examiner

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External Examiner

**BABU BANARASI DAS UNIVERSITY, LUCKNOW (U.P.).**

**Certificate of thesis submission for evaluation**

1. **Name** : Muskan Gupta
2. **Roll No.** : 1180101033
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.....  
**(Signature(s) of the supervisor)**  
**Name:**

.....  
**(Signature of the Candidate)**  
**Name:** Muskan Gupta  
**Roll No.:** 1180101033

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THANKING YOU: MUSKAN GUPTA

ENROLLMENT NO.: 1180101033

B.B.D. UNIVERSITY, LUCKNOW

**IN LOVING MEMORY OF MY CHILDHOOD FRIEND**  
**WHOM WE LOST SO EARLY...**

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## **INTRODUCTION**

The crematorium is a very personal environment of mourning as well as celebrating the lived life of the deceased and is therefore responsible for a strong emotional connection between the living and the departed. It is a place where architecture can act as a medium to allow function and emotions to seamlessly merge and give an unobtrusive and organized environment.

Crematoriums are important places because everyone must deal with death during their life. A death of loved ones can have a high impact on someone's life, and the surroundings of these moments should support people during difficult times. Cremation sites are interesting from designer's perspective, because you must take both physical and emotional demands into account which requires understanding and empathy from the designer.

“Death is an abstract, philosophical subject to study, which is lacked from a speculative point of view, and to which no immediate efficacy is attributed”- Gian Giuseppe Filippie

Death is unknown and its final. It is a sort of alchemy in that it changes us in an instant into something completely new. Spirit, soul, and mind flash away, and what was once a living body becomes a new creation.

“The corpse represents, among other things, a threat to social order, an economic burden to the family, an offense to site and smell, and an affront to hopes of eternal life.” – Stephen Prothero. Purified by fire- A history of cremation in America

Everyone is touched by death in some way; either directly or indirectly and in any case “ Everybody in one way or another, is afraid of death”.- Fiefel & Branscomb, 1973

In India, a land of deeply held beliefs and long followed religious and ritualistic practices, death is given a lot of importance. It has been arranged that in hindu mythology, “ Death isnt opposed to life as it is commonly held in the west.”- Davis, Richard (1988) “Cremation and Liberation: Ther revision of a Hindu Ritual” , but is only an entrance to another cycle of life.

This very belief makes the ritual related to death, both critical and natural. Death is therefore natural part of life, an entry into something important according to hindu mythology. However in the contemporary scenario, these spaces have become blind spots in the Urban context, lacking an identity, even though the continuous loop of birth and death makes them heavily used. Perhaps, this is because the dead are cremated, and there never really has existed a tradition of explicit ‘monuments’ and grand architecture for that very purpose.

The architectural expression of cremation grounds in the urban scenario, therefore is an intriguing question which may force us to go back and investigate traditional spaces of cremation without any distinguished boundaries like the GHATS (a flight of steps leading down to holy water).

And often in the contemporary spaces of cremation, there is a critique that the act of cremation is reduced to a mere set of ‘tasks’ to be performed in a certain ritualistic order and offer no relevance to the living accompanying the dead. Arguably there exists a certain gap between the deep rooted myths and beliefs that lie behind the rituals of death and the spaces of cremation.

“Often remarked as the great equalizer , yet experiences of death are quite different and quiet unique to the historical moment in which we live. In other words despite the fact that mortality is common to all, the death that you and I experience is particularly modern” – Lindsey Anne Hall- death, power and the body, Virginia University Publications.

The modern which can be argued to be a more “western” idea of dealing with death therefore is significantly different from the Indian way of looking at these spaces. This is because, while in the west the immaterial or the mythical forces(spirits, gods, demons) have faded away to the current “rational” modern outlook, in India they co-exist.

## **ABOUT PROJECT**

- The site is in Sector-123 of Noida. According to the Master Plan 2031 the area is dedicated to facilities/ utilities.

- The project is approached through this Master Plan 2031 to design the project hypothetically.

### **NEED OF STUDY**

- Due to the western culture, there is a disconnection towards death.
- Architecture has an ability to fulfil functional requirements along with becoming a medium of expression. Hence, it serves both utilitarian and aesthetic purpose.
- User group and their requirements are one of the key factors to be kept in mind while designing a structure.
- The person accompanied with the corpse should achieve a psychological comfort in order to bear the loss of their beloved.
- The architectural interventions of such spaces have the power to communicate a man's temporal, short and fragile existence on this earth.
- These spaces act as a place that reflects the designer's attitude towards death. Thus, architecture here becomes a medium to understand architect's ideology formulated for the journey from life to death.

### **SCOPE & LIMITATIONS**

- To provide an opportunity to the users to stay connected to their religion while simultaneously coming to a platform that allows user a secular modern-day pilgrimage focused on tranquility, opportunity, and memories.
- By creating a space of self-reflection and contemplation.
- To concentrate on incorporating the life of a person through promenade and procession in order to allow the user a sense of reflection and contemplation through architecture, by taking examples within typologies of death to inspire further thought and development.

### **AIMS & OBJECTIVES**

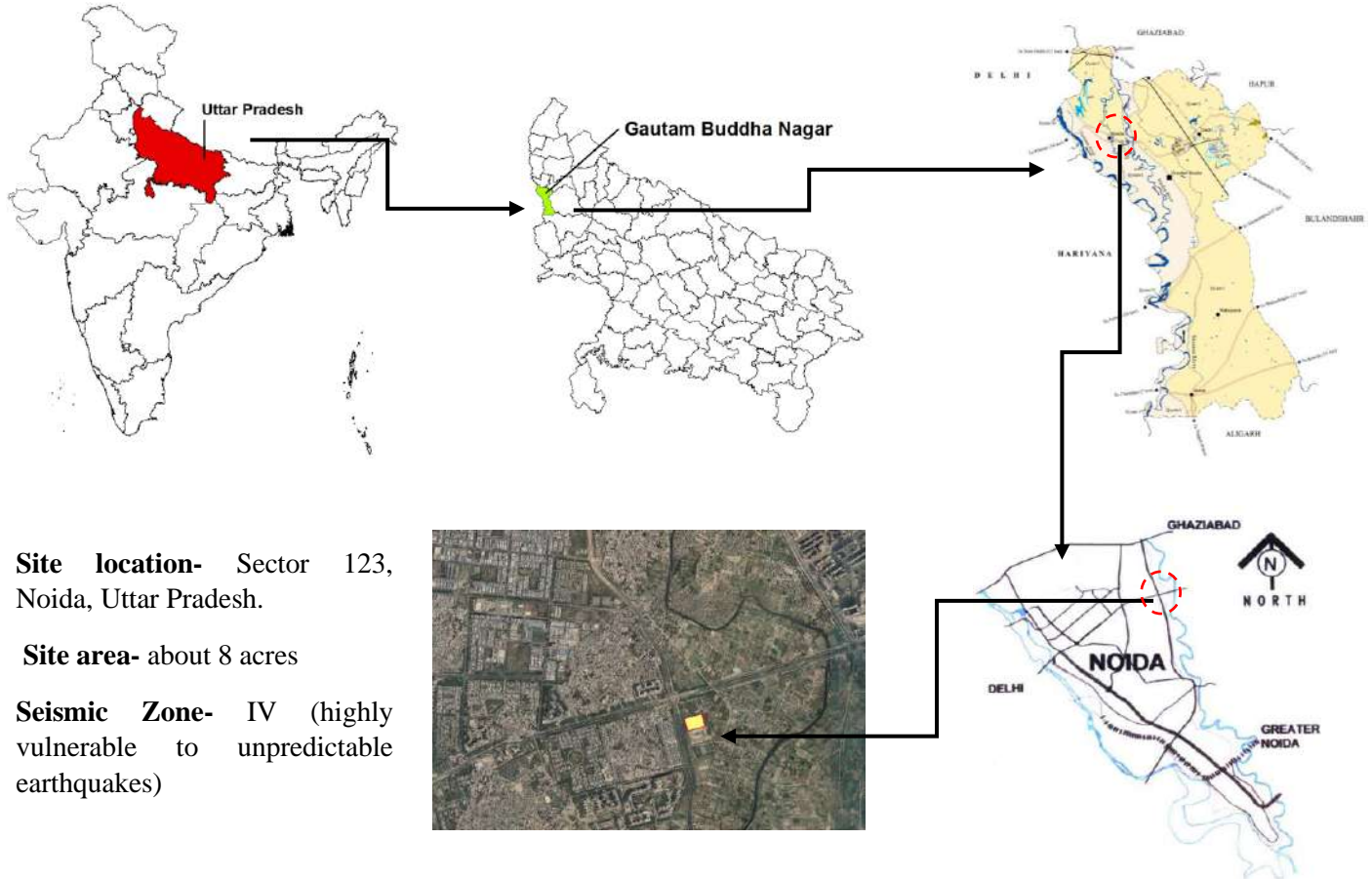
- Reinterpreting crematoriums in context of future.
- To change the age-old perceptions about crematoriums by understanding the concept of death in the context of myths, rituals, and beliefs related to death.
- To design a space in which multi-religions can perform their funeral process in same complex
- To make people accept death and cremation by removing negative thoughts about death and cremation spaces from people's mind by using architectural solutions.
- To provide a new secular space to grieve.



## SITE ANALYSIS

“A space has the power to dignify the feeling of losing a loved one and to give the friends and family the strength to heal from within. A crematorium is a space that encounters death and its effect on the living where there is a two-way conversation between the physical and the mental well-being of a person.”

### SITE INFORMATION



**Site location-** Sector 123, Noida, Uttar Pradesh.

**Site area-** about 8 acres

**Seismic Zone-** IV (highly vulnerable to unpredictable earthquakes)

**Soil type-** Geologically, Noida is underlain by a thick pile of Quaternary sediments categorized as Older Alluvium (Middle-Late Pleistocene) and Newer Alluvium (Holocene) groups. The soil type in Sector-123 is found to be Newer Alluvium, which consists of grey sand, silt, and clay.

**Topography-** Minimum elevation of Noida- 190m Maximum elevation of Noida- 314m Average elevation of Noida- 217m Sector-123 lies at an elevation of 202m.

**Demography-** The current estimate population of Noida city in 2023 is 877,000. The last census was conducted in 2011 and the schedule census for Noida city in 2021 was postponed due to Covid. The current estimates of Noida city are based on past growth rate.

### SITE CONNECTIVITY

**Nearest railway station-** Ghaziabad junction railway station-13 km

**Nearest government health service-** DGD KONDLI- 12.5, Malik Hospital- 12.5

**National highway reachable-** NH 24 & NH 28

**Airport-** Indira Gandhi International Airport- 39 km

**Nearest Police Station-** Cleo County Police Station- about 2 km

**Nearest Police Chowki-** Parthala Police Chowki- about 2 km

**Landmark-** Indraprastha Gas Limited CNG Station- about 2 km, Parthala Police Chowki- about 2 km

## GEOGRAPHY

- The town of Noida is situated in the Yamuna basin in the area between Yamuna and Hindon. The terrain of the area is generally plain with a gradual slope varying between 0.2-0.1 per cent from north-east to south-west.
- The maximum altitude is 204 meters above MSL near Parthala Khanjarpur village in the northeast and the minimum elevation is 195 meters above MSL near Garhi village in the southwestern part of the area. Most part of Noida area is below 200 meters mean sea level.

## FLORA & FAUNA

- The important types of trees which are found to exist interspersed with vast agricultural fields are Shishum, Mango, Jamun, Imlu and Babul. The ornamental trees found in the area are mostly the Gulmohar, Ashok, Eucalyptus and Chameli. The scrubs and bushes found in the area are Arua, Hina, Panwar, Madar, Karauda and Mako.
- Regarding the fauna, it is noticed that the wild animals are rare in this area. The most common animals found in the area are the monkey and pig. The birds which are generally seen in the area, particularly near the protected vegetate area are peacock, duck, partridge, and snipe

## CLIMATE

- Noida region belongs to the composite climate.
- Climatologically, Noida resembles the central part of India and, therefore, experiences two extreme types of climates.
- The summer season stretches from March to June with the maximum temperature shooting up to about 45 degrees Celsius.
- During the winter period, which extends from October to February, the minimum temperature falls to about 4 degrees Celsius.
- The monsoon season starts from the first week of July and continues till the end of September.

### Average day and night temperature-

The mean minimum and maximum temperatures over the year.



### Average wind speed-

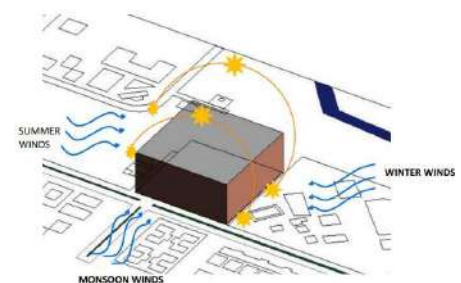
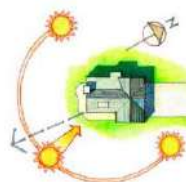
The mean monthly wind speed over the year (in meters per second).



## SUN MOVEMENT

Summer - SUN moves from NEE to NWW

Winter - SUN moves from SEE to SWW



**BYE-LAWS**

Site Area- 8 acres = 32375 sqm.

Maximum Ground Coverage- 30% = 9712.5 sqm.

F.A.R.- 1

Built-up Area (Max.) = 32375 sqm

Built-up Area (Min.)- 30% = 9712.5 sqm.

Set back- 15m front, 9m other three sides

**SITE PARAMETERS**

- Can be accessed by 12m road in front.
- Dense vegetation on both sides of road.
- Site is relatively flat with no rocks.
- Site slope is towards the road.

**SITE IMAGES****SWOT ANALYSIS**

<b>Strength</b>	<ul style="list-style-type: none"> <li>• More greenery and open spaces around the site.</li> <li>• Site area is enough to accommodate the program.</li> </ul>
<b>Weakness</b>	<ul style="list-style-type: none"> <li>• Road access on the shorter side of the road.</li> <li>• Few residential areas and few institutional areas are around the site.</li> <li>• No access to river.</li> </ul>
<b>Opportunities</b>	<ul style="list-style-type: none"> <li>• Use the greenery as a method of natural healing.</li> <li>• Using greenery and providing more of that to create a barrier from the nearby residential and institutional areas</li> </ul>
<b>Threats</b>	<ul style="list-style-type: none"> <li>• As the project will be a mix of crematorium and another building, so it must be a place detached from the nearby residential and institutional areas and on the other hand it must be a place, attached to the public.</li> </ul>



# LITERATURE STUDY

## MAHAPRASTHANAM CREMATORIUM, HYDERABAD

**Name-** Vaikunta Mahaprasthanam

“The Vaikunta Mahaprasthanam is a place designed keeping in mind the wave of emotions people goes through during this tumultuous time. It is a manifestation of the deepest respects, remembrance of fondest memories and of those moments cherished with the departed.”

**Religious:** Hindu

**Location:** Hyderabad, Telangana

**Site area:** 3.7 acres

**Architectural firm:** D A Studios

**Architects:** Chaitanya, Kasi, Pradeepthi

**Client:** Phoenix Foundation in collaboration with Greater Hyderabad Municipal

**Climate:** Hyderabad city has a moderate climate throughout the year. It has a unique combination of tropical wet & dry climate that borders on a hot & dry climate. The climate is pleasant between October and February. March to May months can be uncomfortable due to heavy heat.

### CONCEPT

#### **Eternal Embrace**

This is the procession for the lost involving closest friends and family carrying the body to the cremation site. Hence, a form that embraces and reminds the living of truth behind life & death, and thereby creating a passage of self-realization eternally supporting the bereaved. A structure which acknowledges the pain and sadness illustrates this in the area.



#### **Ultimate Honor**



A disoriented moment in one's life where time is frozen and the weight full of memories, sinks on the living. A surreal monument which stretches and bends, to support and shelter the memories, creating a form that respectfully bows.

#### **Furthest Farewell**

A stage where purification of the cremation ground and laying pyre is conducted. The moment of cremation is one of pure liberation felt both by the lost and the loved for each other. An instant of strengthening and brittling felt by the living in finality as the spirit of the dead leaves the house; from whence a form monumentally stands reaching out symbolically, is the farthest-reaching farewell.



#### **“Green, Clean and Serene”**

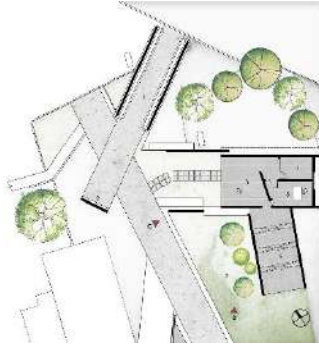
- Nature can comprehend human emotions and can play a significant role in expressing the space. The design and architecture of Vaikunta Mahaprasthanam has embodied nature to provide a calm and serene ambience. The entire crematorium has been planted with trees and with a dedicated team for its upkeep.
- Apart from this, designers have modernized the concept - ‘Go Green, Go Green’, to make the crematorium eco-friendly in every way!





**Office block-**

OFFICE / LOCKER



OFFICE / LOCKER



**Funeral pyre & waiting hall-**

FUNERAL PYRE & WAITING HALL

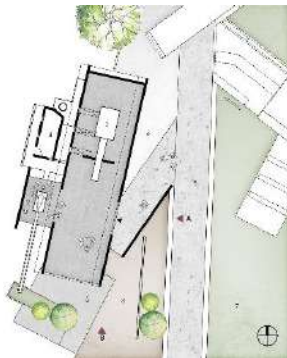


FUNERAL PYRE & WAITING HALL



**Electrical Crematorium-**

ELECTRICAL CREMATORIUM



ELECTRICAL CREMATORIUM

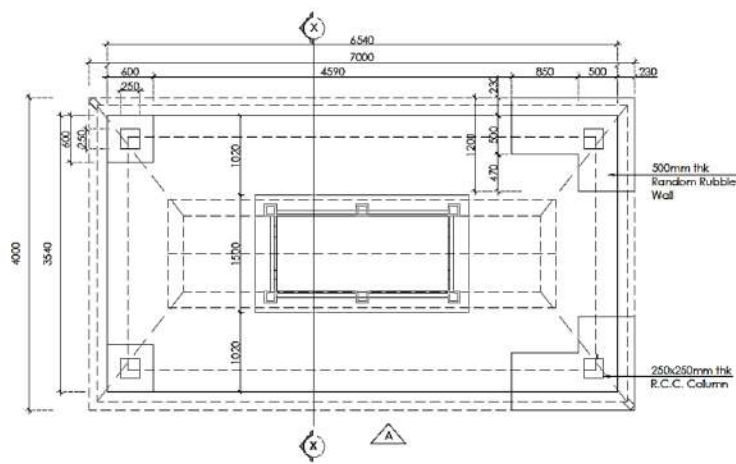


**Conventional crematoria:**

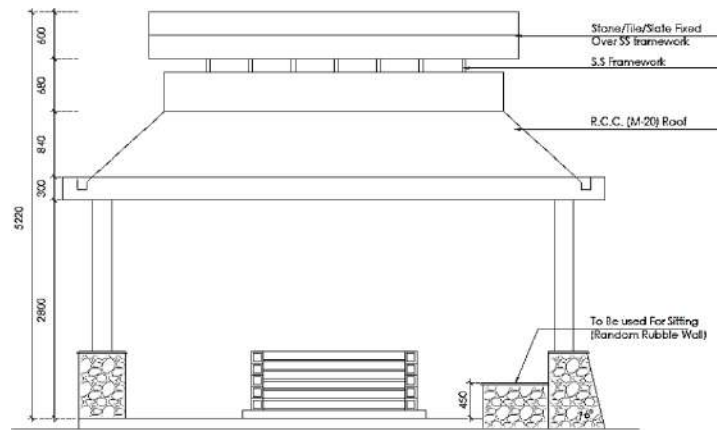
**A. Stand-alone crematoria-**

<b>Towns/semi-urban areas</b> (For one pyre only)
MS Pyre with tray
Circumambulation platform with sandstone flooring and sitting
Cremation shed in R.C.C. with SS framework
1 No. Hand pump
<u>Area of Cremation shed:</u> 26 Square meters for single pyre shed.
Suitable for locations where number of cremations are less per day (say 2 to 3 cremations per day).

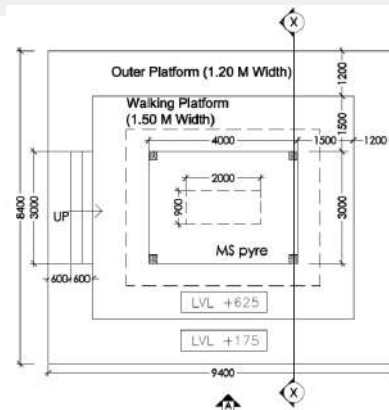
<b>Rural areas</b> (For one pyre only)
MS Pyre with tray
Circumambulation platform
Cremation shed with metal sheet roofing
1 No. Hand-pump
<u>Area of Cremation shed:</u> 22 Square meters for single pyre shed.
Suitable for locations with very few cremations per day (say less than 2 cremations per day).



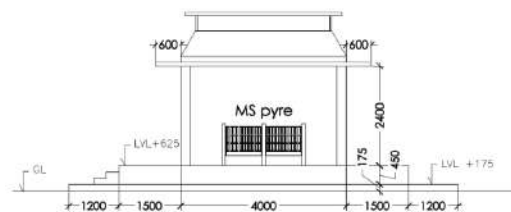
Plan



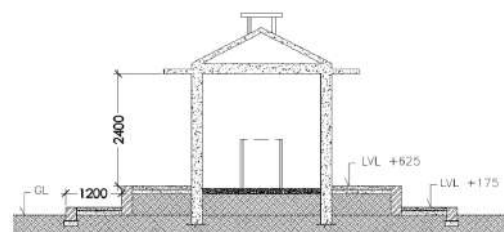
Elevation A



Plan



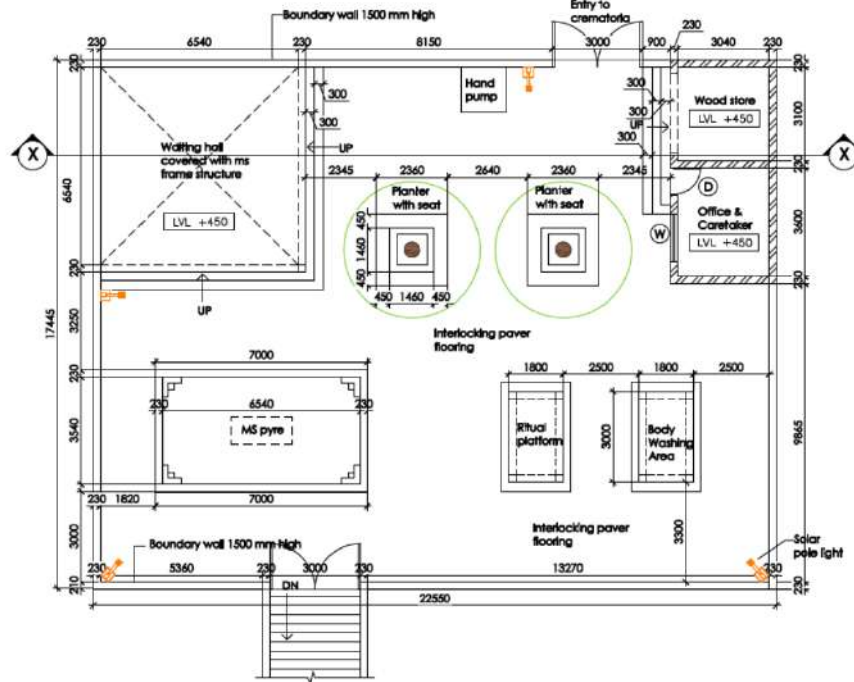
Elevation A



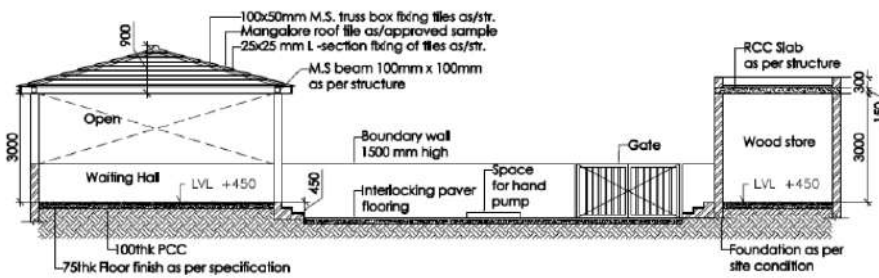
Section X-X



**B. Basic crematorium complex-**



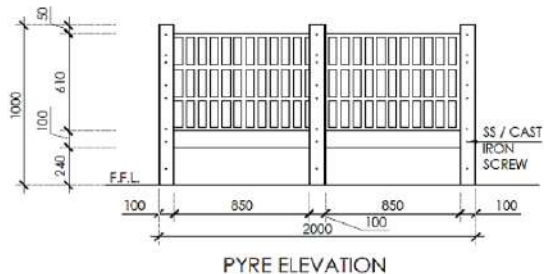
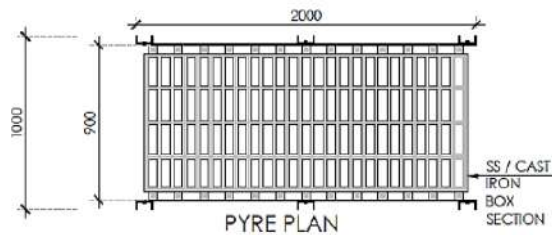
Plan



Sectional Elevation X-X

**Pyre details-**

- Made of cast iron like a mesh with a tray underneath.



**Comparative statement for crematoria design:**

Components	Conventional Crematoria		
	Stand-alone Crematoria		Basic Crematorium Complex for urban areas
	a) Model for Rural areas	b) Model for small towns/semi-urban areas	
Pyre Type	MS pyre with tray	MS pyre with tray	MS pyre with tray
Area (For single pyre)	22 sq m	26 sq m	400 sq m for single pyre complex
Waiting/Prayer Hall	Only cremation shed with metal sheet roofing	Only cremation shed with complete RCC structure	Yes (42 sq m)
Ritual Platform			Yes
Body washing area			Yes
Ash storage			No
Office & Caretaker room			Yes (11 sq m)
Wood store			Yes (9.5 sq m)
Sitting			2 nos. Chabutra
Lighting	No	No	4 no. solar light poles
Toilet	No	No	No
Hand wash	1 no. Hand pump	No	1 no. Hand pump
Boundary wall	No	No	1.5 meter high wall
Entry gate	No	No	1 no. simple gate
Time period for provision of operator	NA	NA	NA
Public education and awareness	No	No	No



## CASE STUDY-1

### SAHARA BAIKUNTH DHAM, LUCKNOW

**Name:** Baikunth Dham

**Funeral per day:** 6-8

**Religious:** Hindu

**Systems for cremation:** Electrical and Wooden

**Location:** Nahariya, Alambagh, Lucknow

**Operational hours:** opens 24 hrs.

**Site area:** 1.5 acres (approx.)

**Client:** Sahara Welfare Foundation in collaboration with Lucknow Municipal Corporation.

**Climate:** Lucknow has a humid subtropical climate with cool & dry winters from mid-November to February and hot & dry summers with sunshine from march to mid-May. The rainy season is from mid-June to mid-September, when Lucknow gets an average of 1010mm mostly from south-west monsoon winds.

### SERVICES & FACILITIES

- 24\*7 assistance in end-to-end cremation
- Wood Pyre and Electric Cremation available
- Dead body transportation in Lucknow by hearse, ambulance, mortuary van
- Freezer Box on Hire in Lucknow
- Arrangement of Antim Sanskar Samagri and Nanami (bier)
- Experienced Pandit and Purohit Services
- Bookings of Prayer Hall in Lucknow for Prarthana Sabha
- Organizing Post cremation rituals such as Baithna Sabha and Shradh
- Assistance in ash immersion known as Asthi Visarjan
- Last Journey supervisors and staff for assistance
- Broadcasting of Prayer Meet Via Zoom
- Assistance in obtaining Death Certificate
- A Funeral Manager for Supervision
- Two Staff Members for Constant Help and Support



### FEATURES

- Administration area with huge shiva statue
- Cremation and funeral ceremony area
- Vehicle service
- Shanti Path Sthal
- Wooden cremation area
- Samadhi Sthal
- Electric crematorium
- Bhairav temple
- Peepal tree (Ficus religiosa)
- Drinking water facility & Anurakshan kaksha (maintenance room)
- Dead body resting platform-Toilet facilities & Office for paper work
- Shiva statue with artificial water body
- Sabha sthal
- Accommodation





## CASE STUDY-2

### BAIKUNTH DHAM, LUCKNOW

**Name:** Baikunth Dham

**Religious:** Hindu and Muslim

**Location:** Puraniya, Sitapur Road, Lucknow

**Site area:** 2.3 acres (approx.)

**Climate:** Lucknow has a humid subtropical climate with cool & dry winters from mid-November to February and hot & dry summers with sunshine from march to mid-May. The rainy season is from mid-June to mid-September, when Lucknow gets an average of 1010mm mostly from south-west monsoon winds.

**Funeral per day:** 4-6

**Systems for cremation:** Burial and Wooden

**Operational hours:** opens 24 hrs.

#### Near entrance-

- Tap is provided near entrance to wash feet, hands and face before cremation or burial ceremony.
- And by the side of that there is small room for paper work of the dead.

#### Cremation platform-

- Can hold only two cremations at a time.

#### Small Shiva temple in front of the entrance-



## COMPARATIVE ANALYSIS OF STUDIES

### Baikunth Dham, Puraniya, Lucknow:

<b>Materiality:</b>	<b>Light quality:</b>
Locally available materials are used.	Use of natural light during day and after sun goes down artificial lighting is used.
<b>Form:</b>	<b>Scale and proportion:</b>
There is no built form except the office room. And there is small hut made of bamboo for the Pandits live over their. Also there is a natural water body on the site.	The site is divided into three parts- <ul style="list-style-type: none"> <li>• One includes the water body;</li> <li>• Another one is the burial place; and</li> <li>• The other is the cremation place.</li> </ul>

### Material

Mahaprasthanam crematorium, Hyderabad	Baikunth Dham, Alambagh, Lucknow
<ul style="list-style-type: none"> <li>• The site is located on rocky terrain and to respond to the context, light colored material such as precast concrete, stones and pavers were used. The brown color is used to highlight the contrast between built and natural environment.</li> </ul>	<ul style="list-style-type: none"> <li>• Locally available materials are used.</li> <li>• Indigo color is used to highlight the contrast between build and natural environment; also to indicate the client brand sign.</li> </ul>

### Form

Mahaprasthanam crematorium, Hyderabad	Baikunth Dham, Alambagh, Lucknow
<ul style="list-style-type: none"> <li>• The aim was to materialize a space to accommodate cremation rituals for Hindus, culturally and contextually.</li> <li>• The structures have been segregated over the site and the forms have been derived from the metaphorical reference of Hindu beliefs of antiesthi and moksha.</li> </ul>	<ul style="list-style-type: none"> <li>• The site creates a peaceful environment by cutting off from urban chaos, this allows the user to perceive his own healing space in emotional mourning.</li> <li>• The structures have been segregated, and the forms are derived according to the use and activities.</li> </ul>

### Light quality

Mahaprasthanam crematorium, Hyderabad	Baikunth Dham, Alambagh, Lucknow
<ul style="list-style-type: none"> <li>• The amount of light entering the space is determined by the various types of opening according to the space and natural light is used to direct along the path and to create the dramatic progression for the journey of the users.</li> <li>• By connecting open spaces, play of light act as a transitioning element and enhances spatial experiences.</li> </ul>	<ul style="list-style-type: none"> <li>• Use of natural light during day and after sun goes down artificial lighting is used.</li> </ul>

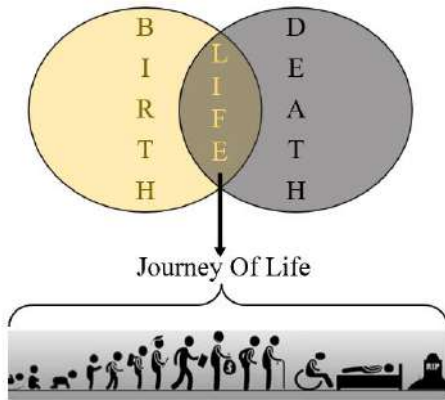
### Scale and proportion

Mahaprasthanam crematorium, Hyderabad	Baikunth Dham, Alambagh, Lucknow
<ul style="list-style-type: none"> <li>• The scale, proportion and volumes continuously changes in various zones, as the crematorium is spread throughout the site by maintaining the natural hierarchy of the site.</li> </ul>	<ul style="list-style-type: none"> <li>• The site is divided into two parts through a road passing in between, dividing the activities with change in scale, proportion and volumes accordingly.</li> </ul>



# CONCEPT

## CONCEPT- "Human Lifecycle"



A bud of a flower nurtures and then blooms into a beautiful flower, likewise, the egg cells nurtures in a mothers' womb and comes to the world as a beautiful life.

### Formulation in Design:

The Lotus water body at entrance depicting the life in mothers' womb



When a baby is born it has a positive aura around him/her as everyone is in joy and happiness and celebrating the New Life. Same way beautiful surroundings spread positive aura around.



### Formulation in Design:

The fountain here depicts the birth, as in the water splashing out is compared to the life.

Giving 5 fountains depicting 5 phases of life.

### 5 Phases Of Life:

- Childhood
- Teenage
- Adulthood
- Manhood
- Old age

Our memories plays a very important role through out our journey of life. With every stage of our life, with every emotion of our life, our mind have created different layers of our memories.

(There are 8 types of memory layers inside of us.)



### Formulation in Design:

Meditation and Yoga is the best way to control and getting aware of your body and layers of your memories. So, a hall with facility and guidance to meditation and yoga and guidance to know about different layers of your memories.

And as it is said that books are best friends of humans. Hence, given a library with spiritual and motivational books and our Hindu sacred scriptures.

In addition to this, Memory Niche is provided in memory of the lost ones, where people can store things related to there loved ones who are not with them anymore.

Death is just "gone from our sight but never from our heart. So, death is the most difficult part of anyone's life but acceptance makes it easier and better. Memories remains after death helps the moaners to deal with their loss. Death is the end of journey of a persons life but in Hinduism it's the body that dies, never the soul. Believing in this, makes both the person as well as the people related would remove the fear of death.

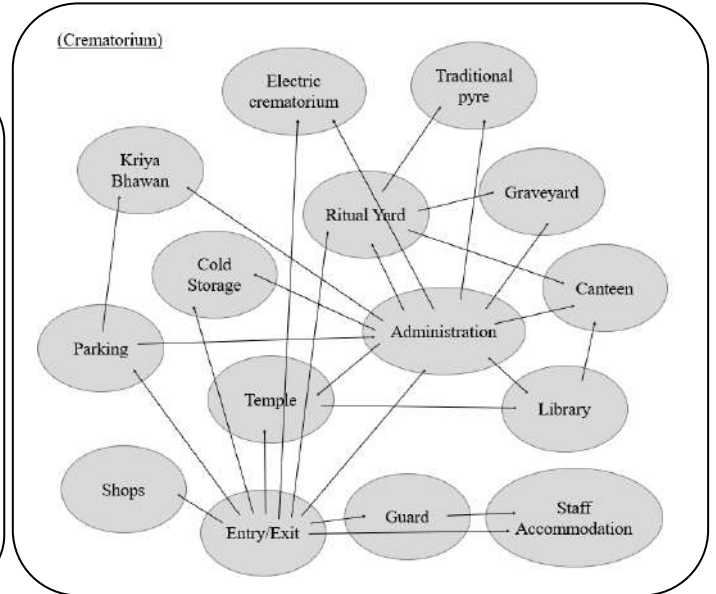
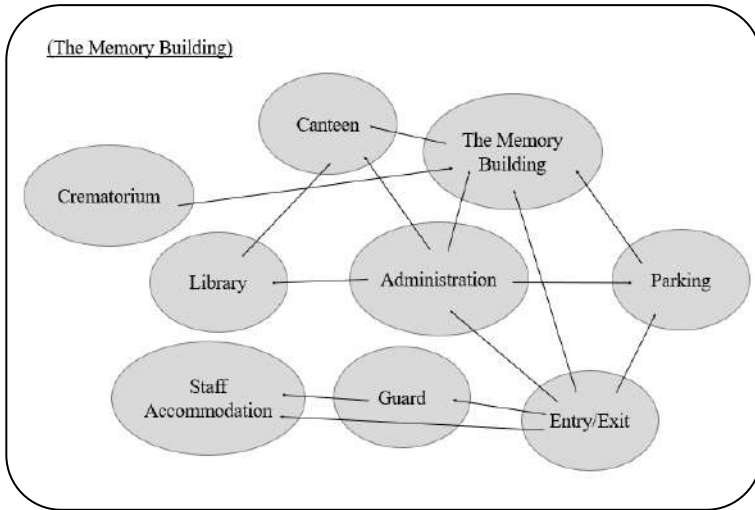
### Formulation in Design:

The crematorium is designed with a healing environment and all the facilities needed. The landscaping around will help the family and the relatives of the deceased to attain mental piece and gives the time for acceptance.

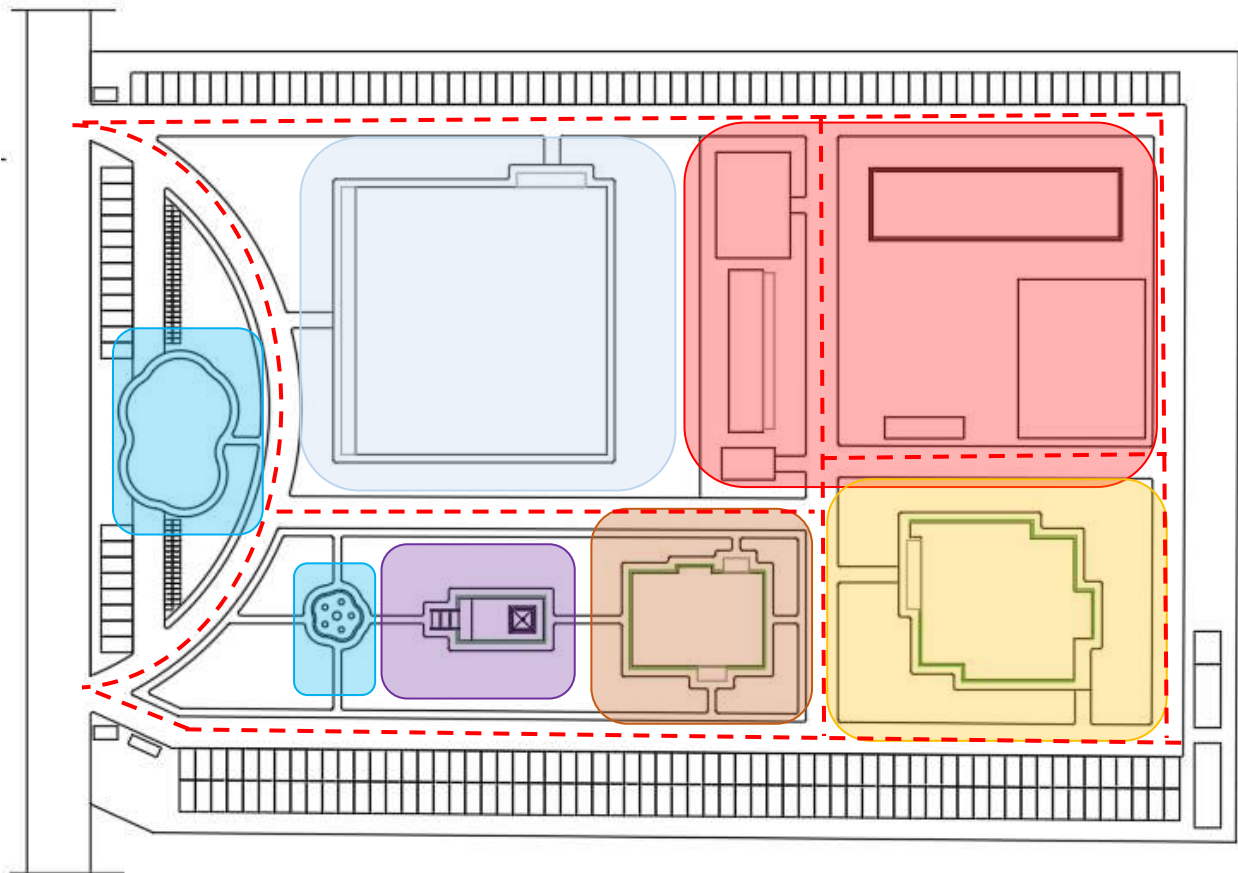


# ZONING, BUBBLE DIAGRAM

## BUBBLE DIAGRAM



## ZONING



- Water bodies
  - Religious zone (temple)
  - Admin block
  - Rituals after cremation
  - Cremation and related services
  - Memory building
  - Circulation
- \* Rest spaces are parking and landscaping

## **AREA ANALYSIS**

### **The Memory Building**

<b>S. No.</b>	<b>Spaces</b>	<b>Areas (In sqm)</b>
1.	Reception	72
2.	Memory Hall	1152
3.	Library	420
4.	Cafeteria	238
5.	Toilet	32.24
6.	Record/control room	25.2
7.	Manager office	16
8.	Memory niche (G+1)	670
	<b>Total building area</b>	<b>2395</b>

### **Kriya Bhawan block**

<b>S. No.</b>	<b>Spaces</b>	<b>Areas (In sqm)</b>
1.	Halls with kitchen (4 Nos.)	480
2.	Store (2 Nos.)	6
3.	Toilet (2 Nos.)	52.1
	<b>Total building area</b>	<b>846</b>

**Temple-** 128 sqm

**Cold Storage-** 60 sqm

**Electric Crematorium-** 280 sqm

**Shops (2 Nos.)-** 24 sqm

**Guard room (2 Nos.)-** 22.6 sqm

**Wood storage-** 720 sqm

**Electrical room-** 80 sqm

**Staff accommodation-** 91 sqm

**Admin block**

S. No.	Spaces	Areas (In sqm)
1.	Reception	34.16
2.	Toilet	20.8
3.	Manager room	15.6
4.	Locker	21.6
5.	Staff room	12
6.	Control room	16
7.	Record room	18
8.	Pantry/ store	11.4
9.	Toilet	22.1
10.	Counselling room (room no. 1 & 3)	24
11.	Counselling room (room no. 2)	13.2
12.	Psychiatric counselor	10.2
	<b>Total area of the building</b>	<b>446</b>



# LANDSCAPING ELEMENTS

## TREES

### Eucalyptus



- Eucalyptus trees have a great carbon sequestration value. Being a carbon sink means that eucalyptus trees take greenhouse gasses out of the atmosphere, helping to **mitigate the climate crisis**. It looks attractive and provides a neat 'finishing touch' to garden beds. It can prevent water loss and moderate soil temperatures.
- Also helps absorb sound of urban life.

### Pipal (Sacred Fig)

Scientific name- Ficus Religiosa

Height- up to 30 m.

Circumference- diameter up to 3 m.

- The leaves are long and broad. The fruits are green and turns purple-black on maturing.
- In Hindu tradition, the sacred fig is treasured as a representation of the infinite expanse of the universe. Likewise, it is known as the Tree of Life for the same reason.
- For many, the Peepal tree represents enlightenment and calm.
- Ecologically, Peepal Tree provides ample Oxygen, purifies the surrounding, kills harmful bacteria, control soil erosion, improve soil structure and its fertility, it is also dust and sound absorbent.



### Neem



- The small, white flowers are borne in axillary clusters.

Scientific name- Azadirachta indica

Height- up to 30 m.

Circumference- up to 20 m. rounded crown is formed.

- The compound leaves have toothed leaflets and are typically evergreen but do drop during periods of extreme drought.
- The fruit is a smooth, ellipsoidal drupe, up to almost 2 cm long. When ripe, it is yellow or greenish yellow and comprises a sweet pulp enclosing a seed.



- Neem trees act as very efficient, natural air filters trapping dust particles, absorbing gaseous pollutants. The planting of Neem trees helps reduce greenhouse gases through photosynthesis absorbing large quantities of CO<sub>2</sub> and producing oxygen. Besides neem has remarkable ability to withstand air and water pollution, as well as heat. Neem also restores and maintains soil fertility.

### **Banyan**

Scientific name- Ficus benghalensis

Height- up to 30 m.

Circumference- can form a rounded crown as large as 200 m. in dia.



- The leaves of the banyan tree are large, leathery, glossy, green, and elliptical. Like most figs, the leaf bud is covered by two large scales. Young leaves have an attractive reddish tinge.
- Its flowers lie inside the fruit. When cutting open a banyan fruit, you can see many pink bits growing inside. These are its flowers.
- Banyan trees can be used as pollution controlling agents, which makes it good agent for maintaining the quality of air. And is sound controlling agent to avoid urban noises.



### **Ashoka tree**



Scientific name- Saraca asoca

Height- 20 m.

- The Leaves are large and pinnately compo
- evergreen tree with beautiful flowers that are native to India.
- The glossy, green leaves of this rainforest tree are coppery-red at first, then become green and eventually deep green as they mature.
- Orange-yellow, scented flowers on this magnificent tree progressively turn crimson after getting drooping.
- Although blossoms may be seen all year round, the greatest blossoming season is from February through April.

- Ashoka tree, one of India's sacred plants, is known as the "grief-less tree" because it is believed to lessen all sorrow and provide good fortune to its owner.
- Low maintenance
- The leaves and branches of Ashoka trees can absorb sound waves due to their unique morphology and composition. The leaves have a large surface area, which increases their ability to trap sound waves. Additionally, the rough texture of the bark and leaves helps to diffuse and scatter sound waves, reducing their intensity and volume.
- Ashoka trees can also act as sound barriers, blocking noise from reaching certain areas. When planted strategically, they can help to shield buildings, homes, and other sensitive areas from external noise sources such as traffic, construction, and industrial activities.
- By reducing noise pollution, Ashoka trees can help to improve the acoustic environment of surrounding areas. This can have numerous benefits, including increased quality of life, better mental health, and improved productivity.
- act as pollution barriers and as a sink to control air pollution and should be planted more to mitigate air pollution menace.

## WATER BODIES

### Lotus pond



- Here, according to the concept, lotus water body is representing a life in mother's womb.
- On the other hand, it makes a beautiful landscaping element.
- It energizes its surround and environment with positive vibrations.
- It helps purifies the water and its surroundings, also resists pollutants to enter the its surroundings.
- creates a healthy environment for the bacteria that help in breaking down nitrogen, etc.



Using natural stones for lotus pond.



- Such as Metamorphic rocks like- limestones, which turns into marble.
- Jade rocks, beautiful and green metamorphic rock, can be used as large boulders or filler rocks.
- Siltstone boulders, pebbles, and aggregates can stop the land erosion when appropriately laid in the landscape designing in small to big projects. The construction of rip rap at the seashore, riverbanks, sides of flowing streams, and lakes are using Siltstone due to its low permeability and cost-effective availability.



### Plants surrounding the pond

Random placement of plants with varying textures and colors creates more interest than using plants that have all the same growth habit or leaf shape. The options are almost endless and helps to recreate water garden into something new different hardy plants.

A soft, calming space is created by using different textures and shades of green foliage. The combination is effective on its own and mimics the style of a Japanese Zen Garden where texture takes precedence over an array of color





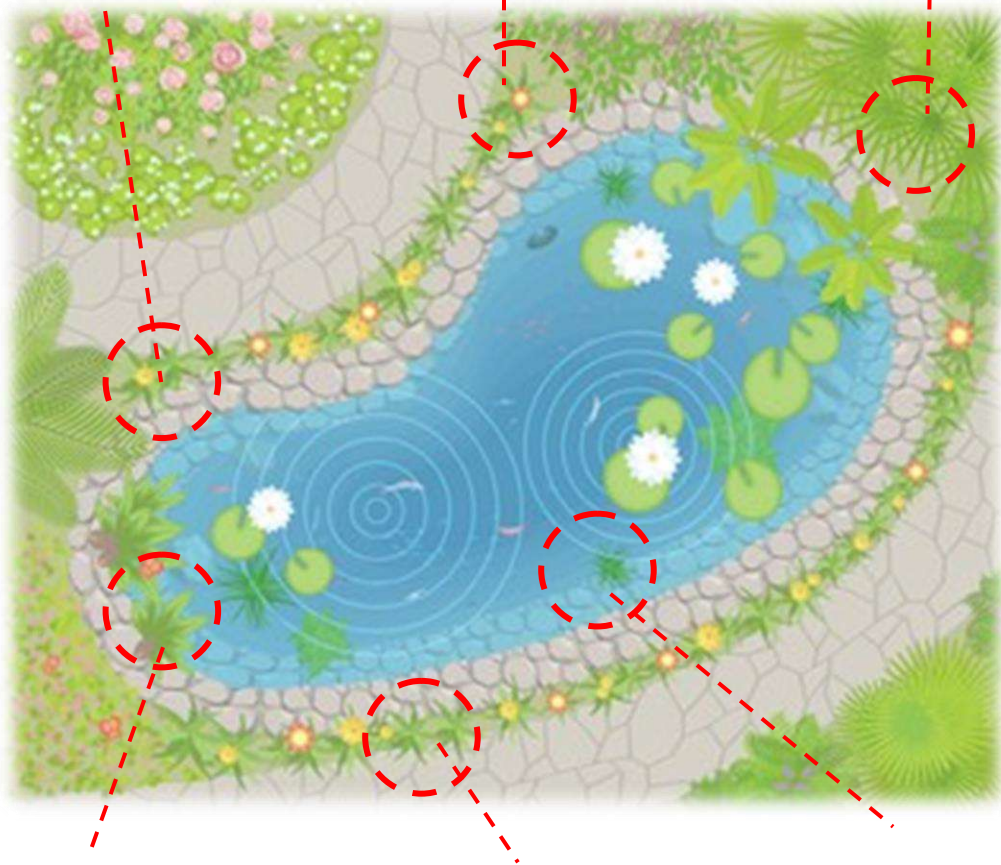
Marsh marigold



Cardinal flower



Dwarf cattail



Pickerel plant



Yellow- eyed grass



Lizard tail plant

## Water Fountain

According to the concept, the fountains used are depicting the phases of a human life.

Also, used as landscaping element to enhance the beauty and flowing nature of a space.



- Surrounding placing the fountains around a SHIVA statue in his meditation state, representing, it indicates that our lives are full of pairs of opposites: life and death, joy and sorrow, honor and dishonor, success, and failure. We should be able to bear these opposites with calmness of mind and not let them destroy our mental equipoise.
- And the multi-tiered fountain represents the different stages in our different phases of life.
- Together the all represent, how to stay calm in every situation, every stage, every phase of our life, like how SHIVA taught us.

## CONCLUSION

Every design should connect us to all the aspects of our life and tell us real meaning of our life.

A space has the power to dignify the feeling of losing a loved one and to give the friends and family the strength to heal from within. A crematorium is a space that encounters death and its effect on the living where there is a two-way conversation between the physical and the mental well-being of a person.

The crematoriums have always been a case of neglected spaces and given the last preferred location, as due to the involvement of death, these spaces tend to give an impression of gloominess and sadness in the society, which may be one of the reasons which forced the urban planners to place them away from the residential neighborhoods and provide a buffer between these spaces of cremation and the city in the form of a green cover.

Death has become a private affair and the spaces of death have evolved accordingly. If it has become a more private affair, one should not try making death a public affair, rather these spaces of death should be planned in such a way that these spaces do not affect the city but are still a very vital part of life.

The way forward is to look at all the inadequacies in the present-day crematoriums on all fronts be it physical, metaphysical, emotional, and spiritual. Also, learning and adapting the old Hindu rituals and translating the same in the modern-day context and providing befitting spaces/ places for the final goodbye to the departed soul.

In this thesis, I have tried to connect life and death to make people accept it as a part of our life cycle. This thesis not only understand the true meaning of this life form through death, but also help us heal ourselves from all the negativity.

As said, "Architecture is a Feeling." Architecture of crematoriums are best example for proving this phrase true and meaningful.

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URDPFI guidelines

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Modern building BYE-LAWS

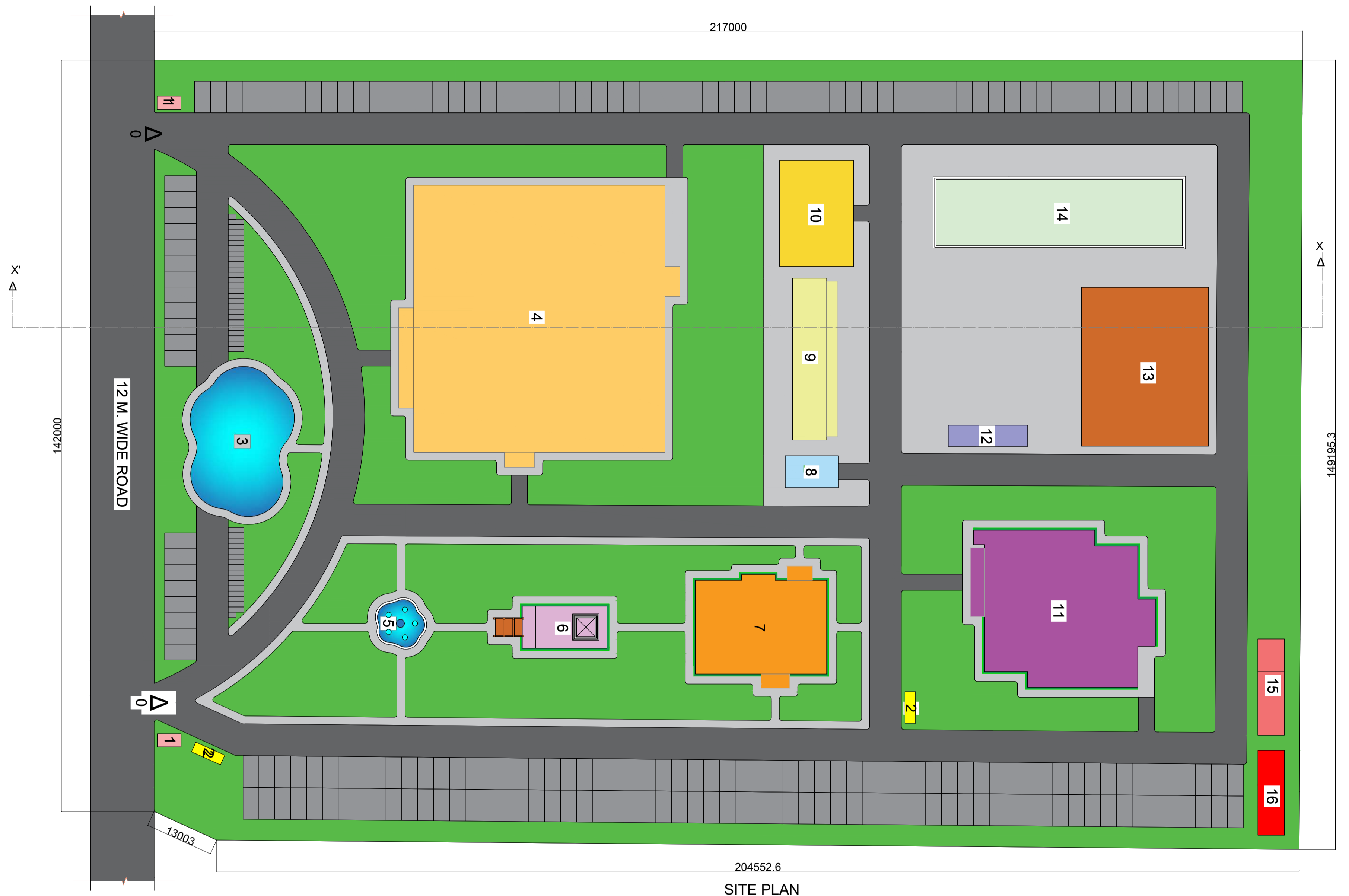
Noida BYE-LAWS



0- ENTRY/EXIT	
1- GUARD ROOM	22.6 SQ. M.
2- SHOPS	24 SQ. M.
3- LOTUS POND (WATER BODY)	--
4- THE MEMORY BUILDING	2395 SQ. M.
5- FOUNTAIN WITH LORD SHIVA STATUE IN BETWEEN	--
6- TEMPLE	128 SQ. M.
7- ADMIN BLOCK	446 SQ. M.
8- COLD STORAGE	60 SQ. M.
9- WAITING HALL	228.5 SQ. M.
10- ELECTRIC CREMATORIUM	280 SQ. M.
11- KRIYA BHAWAN	846 SQ. M.
12- BODY RESTING PLATFORM	60 SQ. M.
13- WOOD STORAGE	720 SQ. M.
14- CREMATION PLATFORM	581.3 SQ. M.
15- STAFF ACCOMMODATION	91 SQ. M.
16- ELECTRICAL ROOM	80 SQ. M.

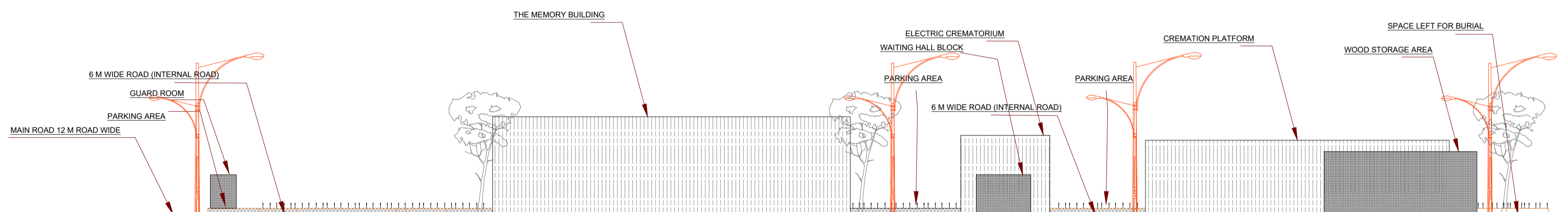
INTERNAL ROADS OF THE SITE	6 M. WIDE ROADS
ROADS CONNECTING THE INTERNAL ROADS OF THE SITE TO THE BUILDING	3 M. WIDE ROADS
WALKWAYS IN THE GREEN AREAS OF THE SITE	1.5 M. WIDE WALKWAYS

SITE AREA	32375 SQ.M.
BUILT-UP AREA	6021 SQ.M.
GROUND COVERAGE	5281 SQ.M.
TOTAL NUMBER OF PARKING PROVIDED	
FOR CARS	212 NOs.
FOR BIKES	84 NOs.



SITE PLAN

0- ENTRY/EXIT
1- GUARD ROOM
2- SHOPS
3- LOTUS POND (WATER BODY)
4- THE MEMORY BUILDING
5- FOUNTAIN WITH LORD SHIVA STATUE IN BETWEEN
6- TEMPLE
7- ADMIN BLOCK
8- COLD STORAGE
9- WAITING HALL
10- ELECTRIC CREMATORIUM
11- KRIYA BHAWAN
12- BODY RESTING PLATFORM
13- WOOD STORAGE
14- CREMATION PLATFORM
15- STAFF ACCOMMODATION
16- ELECTRICAL ROOM



SECTIONAL ELEVATION OF SITE

ARCHITECTURAL THESIS- AR 1001

# PROJECT- CREMATORIUM WITH THE MEMORY BUILDING

PROJECT LOCATION- SECTOR 123, NOIDA, UTTAR PRADESH

FOLLOWING SHEET CONTAIN DETAILS OF:

SITE PLAN	
DIRECTION:	SCALE:
	1:500

DRAWINGS:

- SITE PLAN
- DETAILS
- SITE SECTION

DRAWINGS BY:

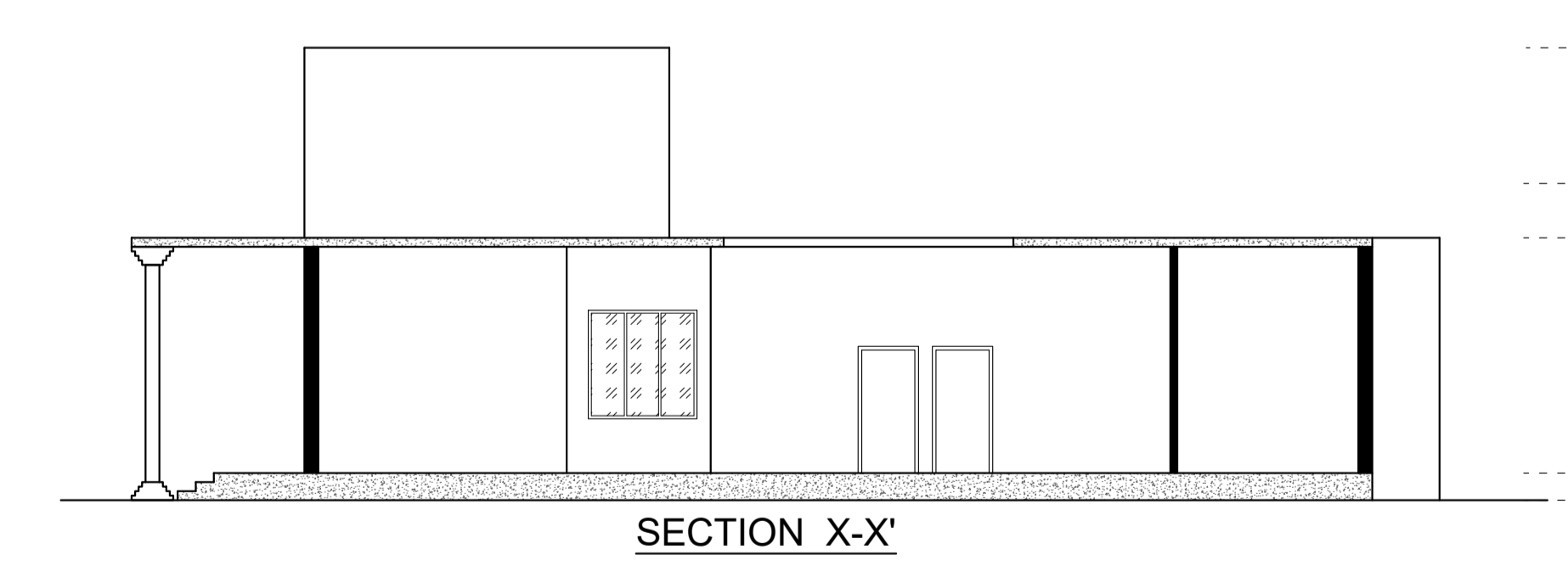
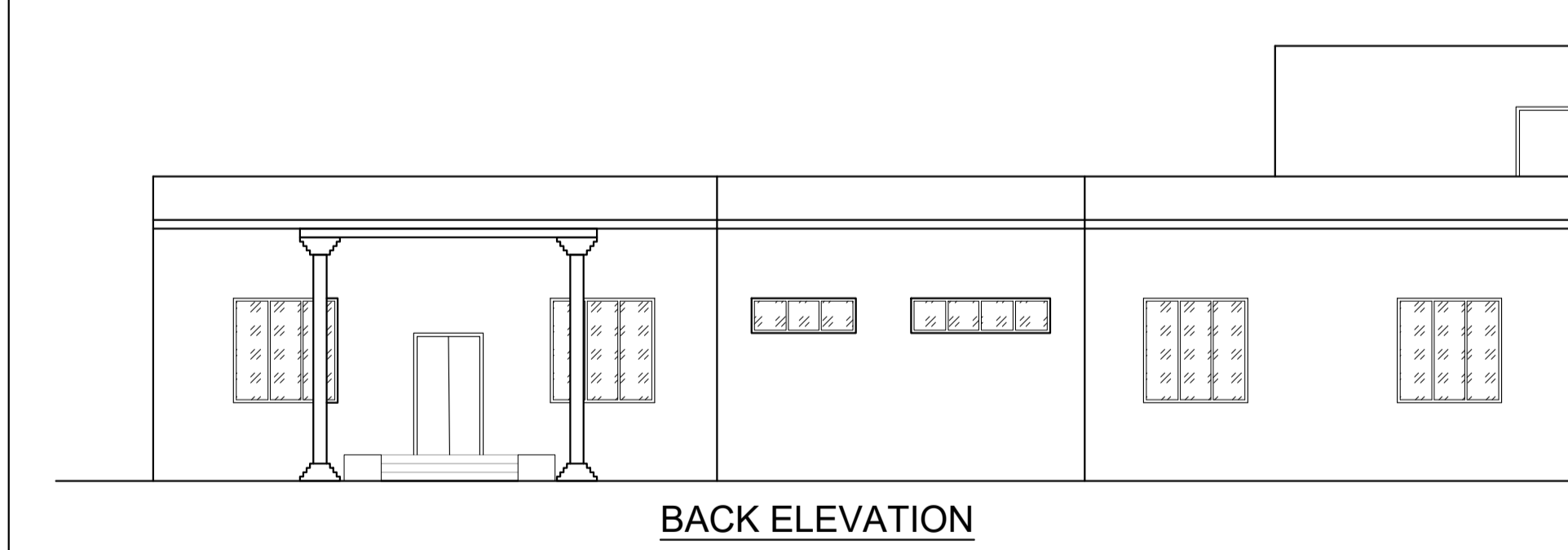
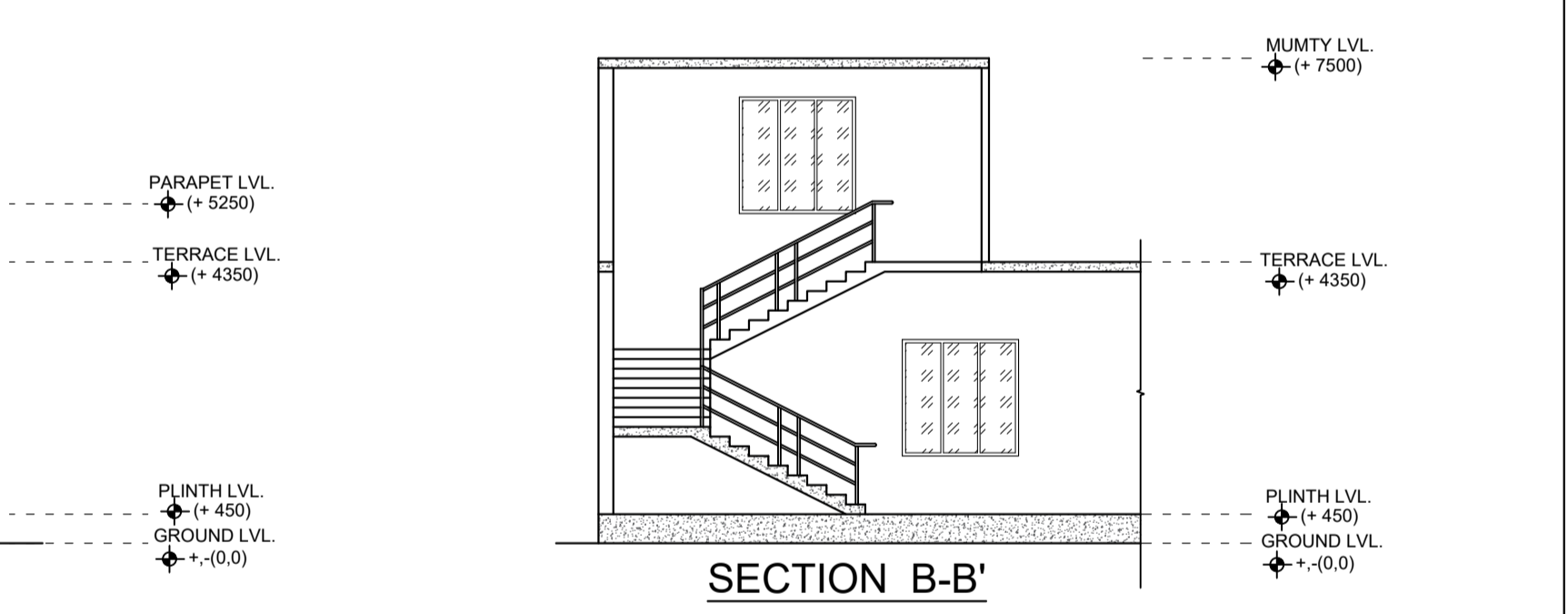
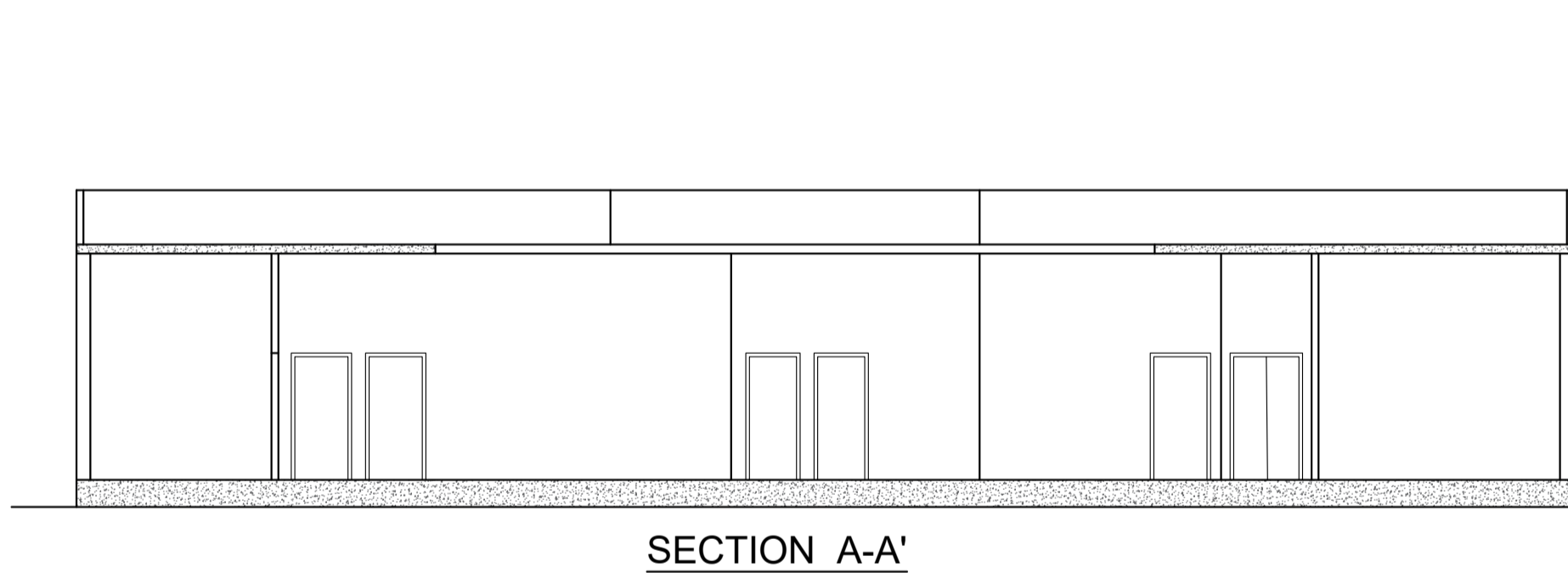
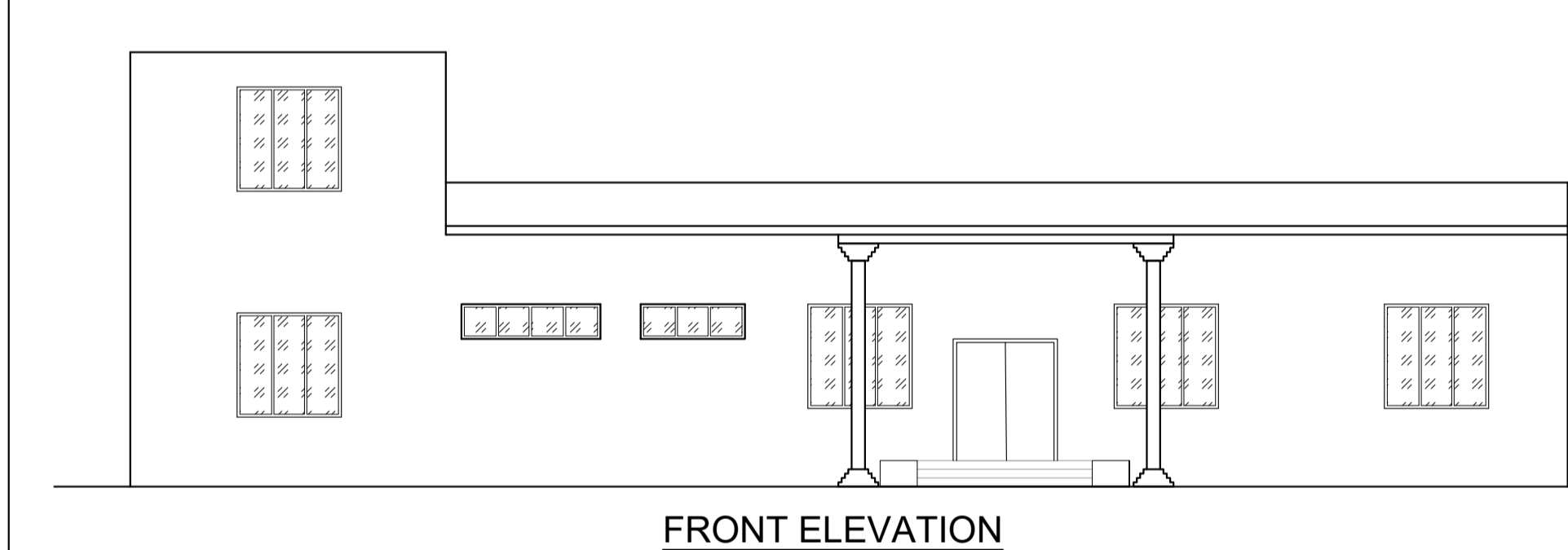
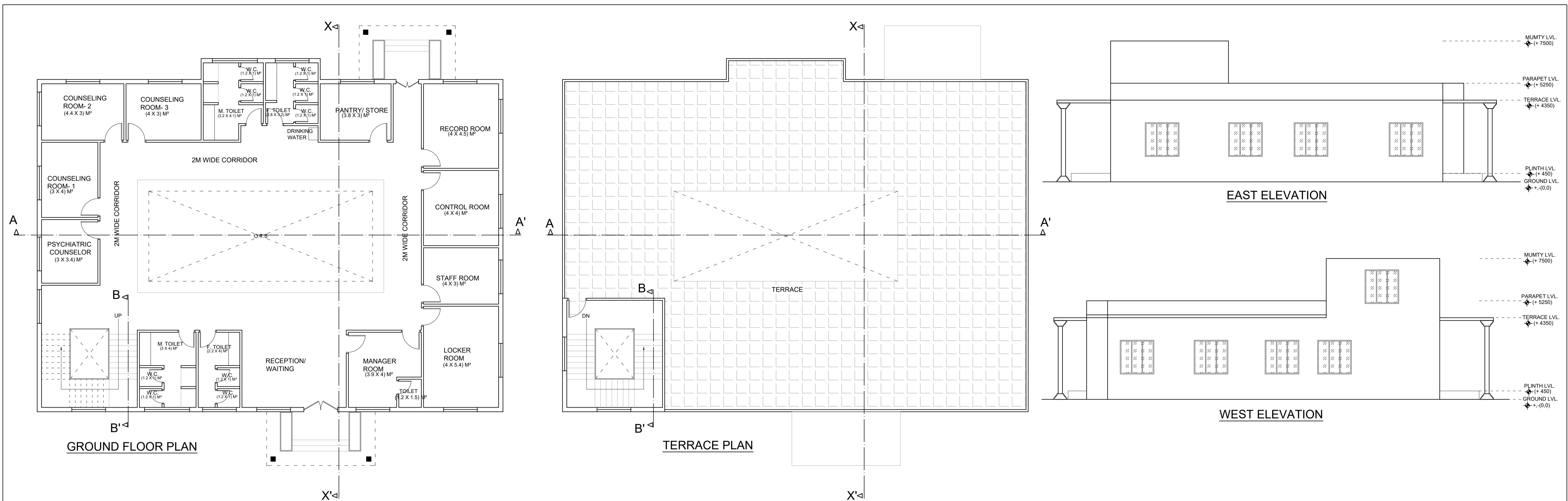
MUSKAN GUPTA  
B.ARCH- 5TH YEAR  
1180101033

UNIVERSITY:  
BABU BANARASI  
DAS UNIVERSITY,  
LUCKNOW

THESIS GUIDE:

AR. ANSHU RASTOGI

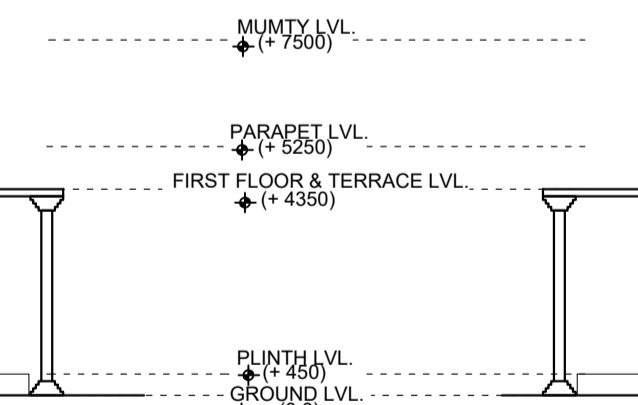
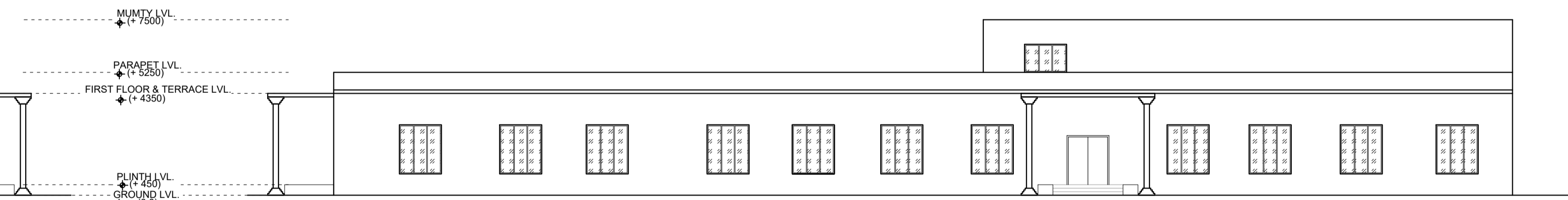
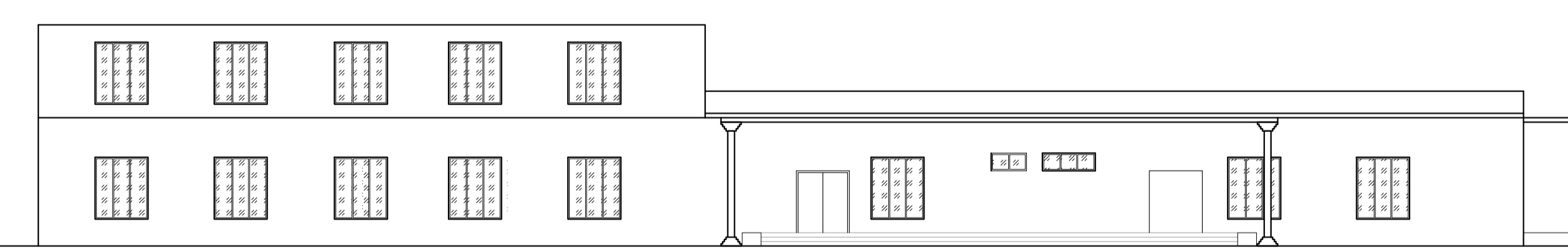
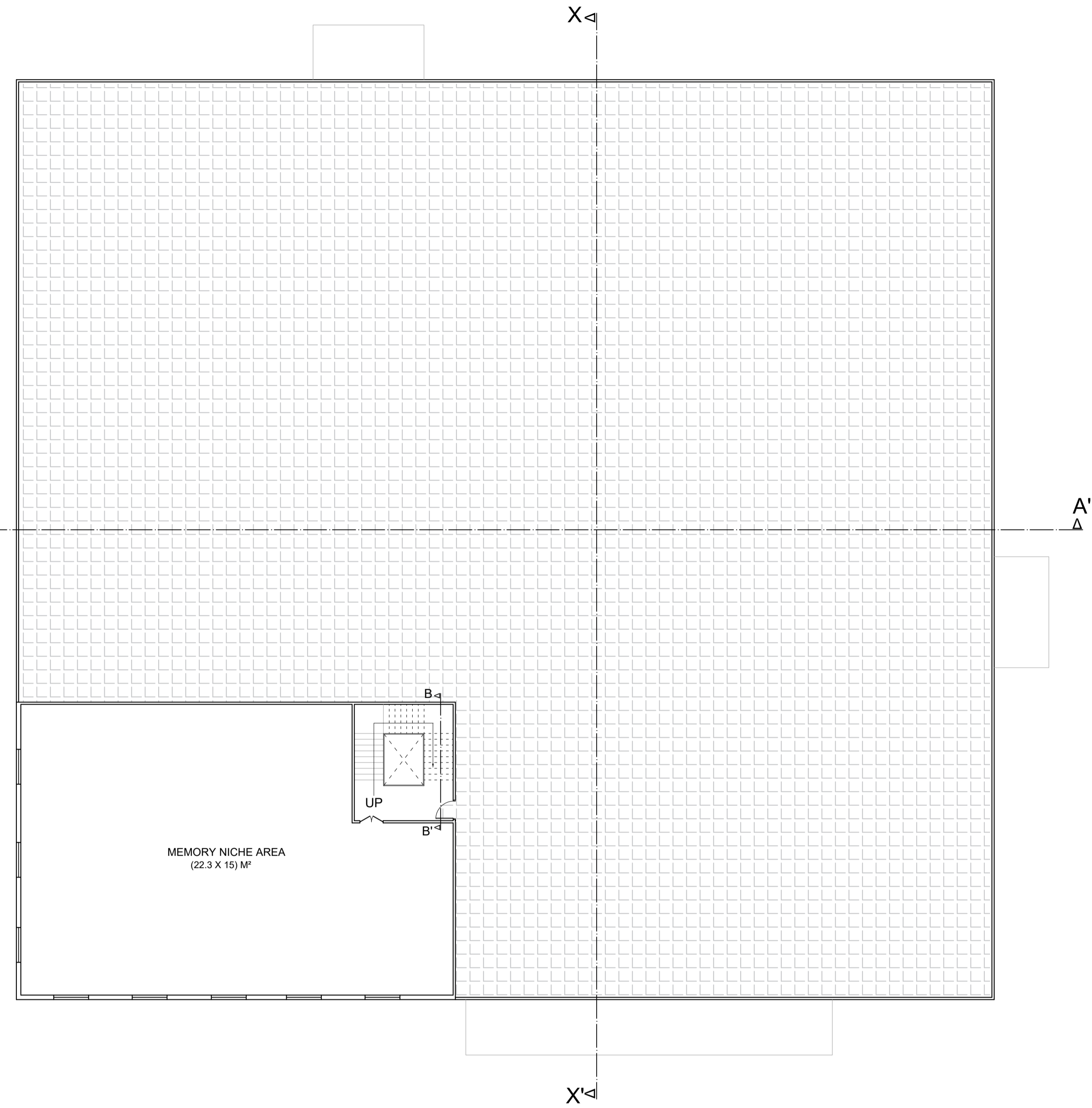
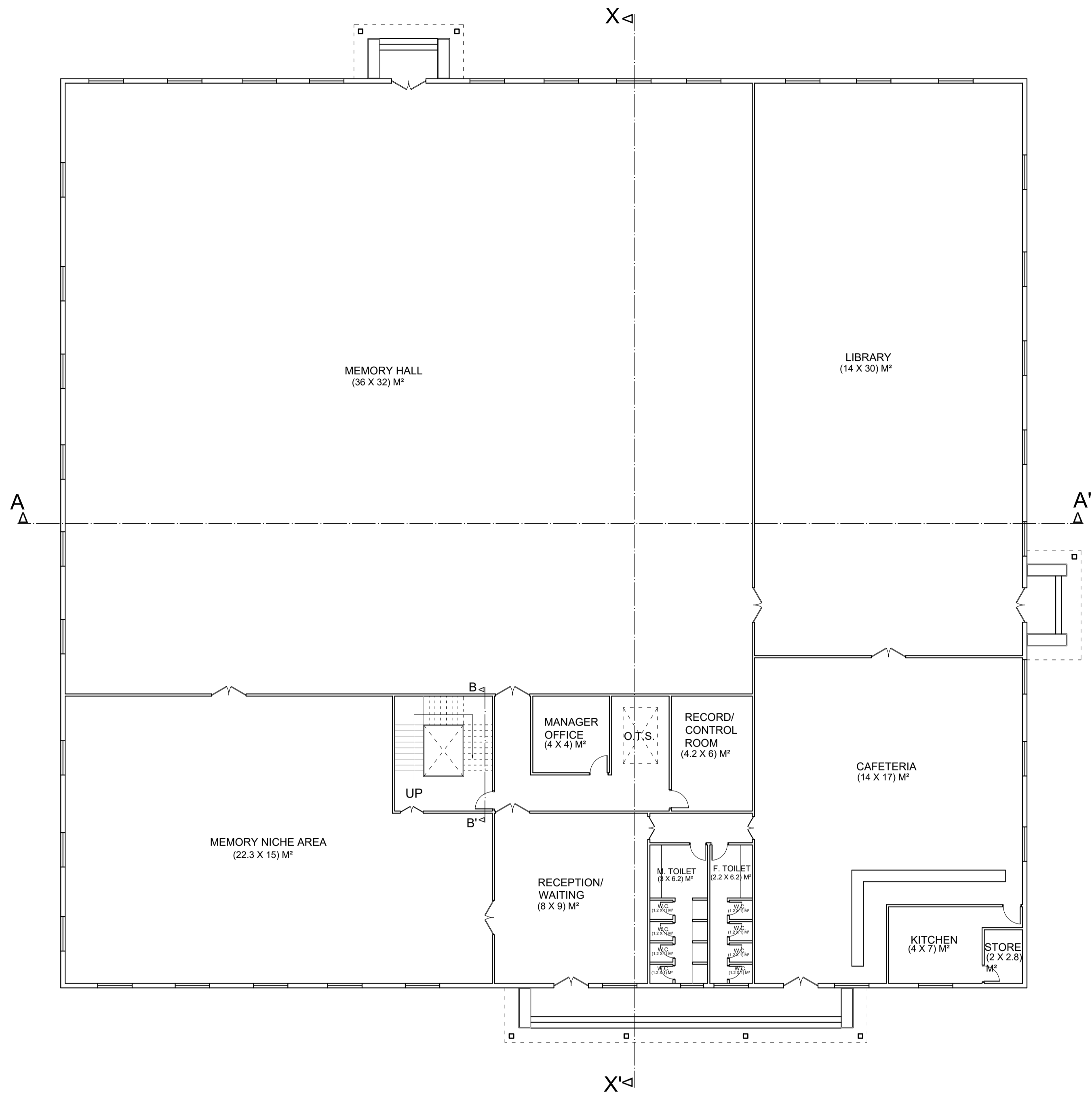
SIGNATURE & REMARK:



FLOOR TO FLOOR HEIGHT	3900 MM.
NO. OF STEPS	26
TREAD/ RISER	300/ 150
BUILT-UP AREA	479 SQ.M.
GROUND COVERAGE	1.4%
UNIT OF LEVEL DIMENSIONS	MM.

<b>ARCHITECTURAL THESIS- AR 1001</b>  <b>PROJECT- CREMATORIUM WITH THE MEMORY BUILDING</b> <b>PROJECT LOCATION- SECTOR 123, NOIDA, UTTAR PRADESH</b>	<b>FOLLOWING SHEET CONTAIN DETAILS OF:</b> ADMIN BLOCK	<b>DRAWINGS:</b> • GROUND FLOOR PLAN • TERRACE PLAN • ELEVATIONS • SECTIONS	<b>DRAWINGS BY:</b> MUSKAN GUPTA B.ARCH- 5TH YEAR 1180101033  <b>UNIVERSITY:</b> BABU BANARASI DAS UNIVERSITY, LUCKNOW	<b>THESIS GUIDE:</b> AR. ANSHU RASTOGI
	<b>DIRECTION:</b> 			<b>SCALE:</b> 1:100





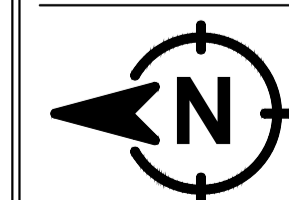
ARCHITECTURAL THESIS- AR 1001

**PROJECT- CREMATORIUM WITH THE MEMORY BUILDING**  
**PROJECT LOCATION- SECTOR 123, NOIDA, UTTAR PRADESH**

**FOLLOWING SHEET CONTAIN DETAILS OF:**

THE MEMORY BUILDING

**DIRECTION:**



**SCALE:**

1:100

**DRAWINGS:**

- GROUND FLOOR PLAN
- TERRACE PLAN
- ELEVATIONS

**DRAWINGS BY:**

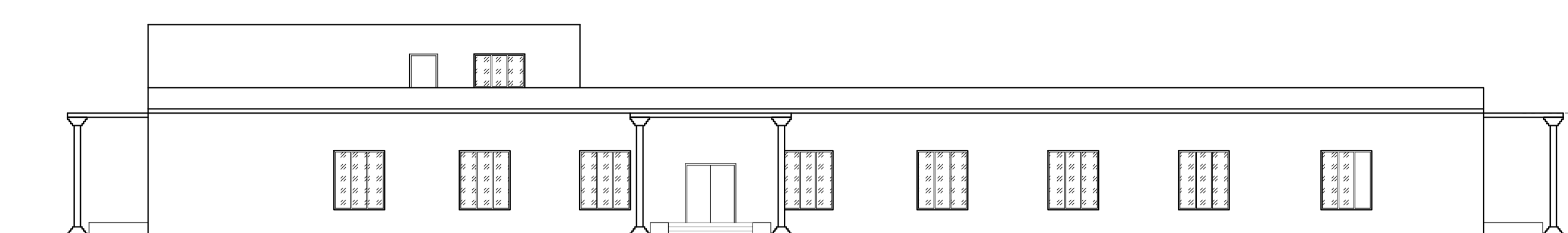
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 B.ARCH- 5TH YEAR  
 1180101033

**UNIVERSITY:**  
 BABU BANARASI DAS  
 UNIVERSITY, LUCKNOW

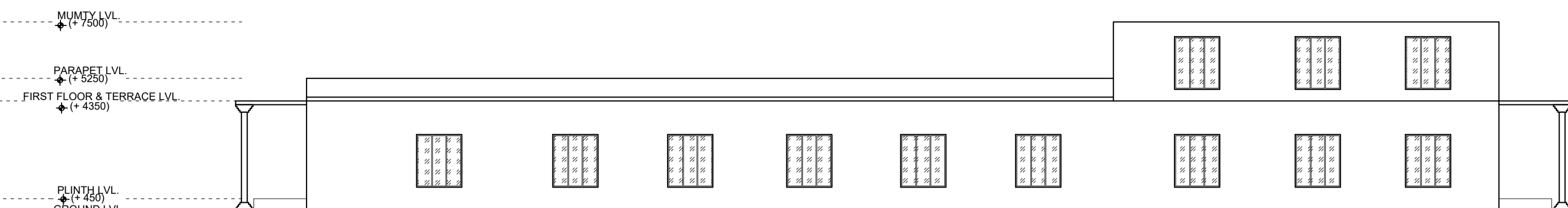
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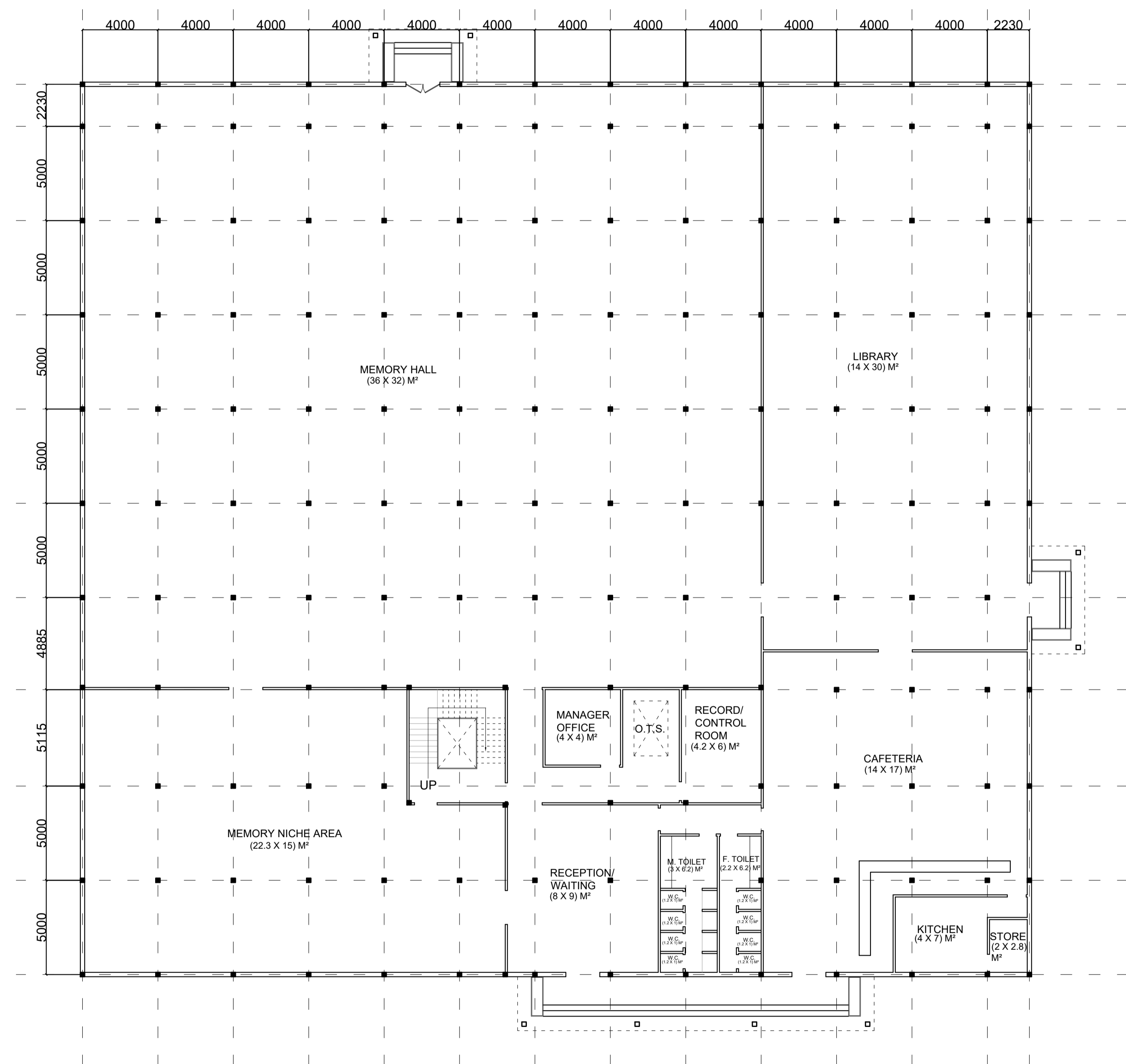
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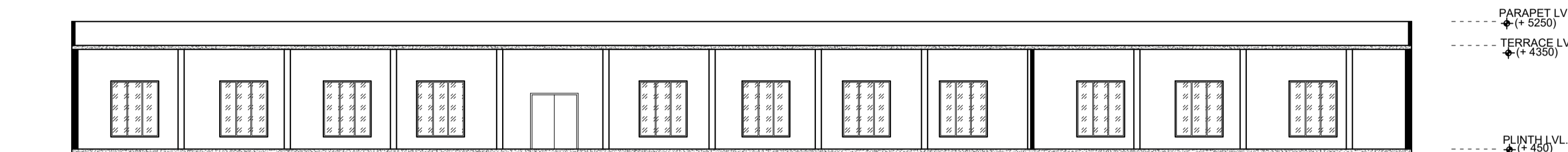
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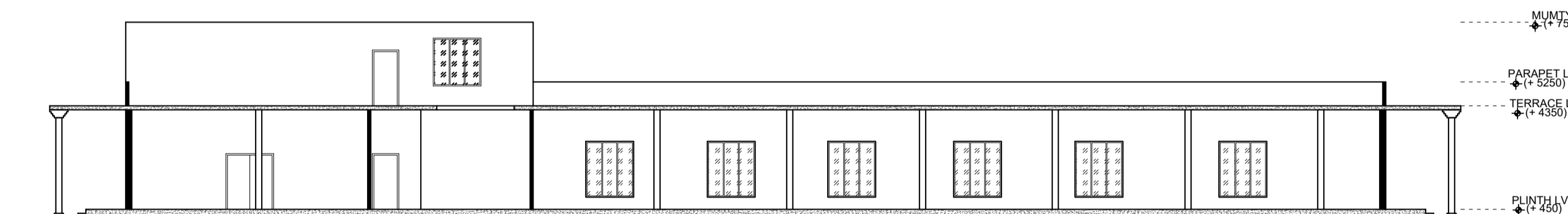
**NORTH ELEVATION**



**CENTRE LINE PLAN**



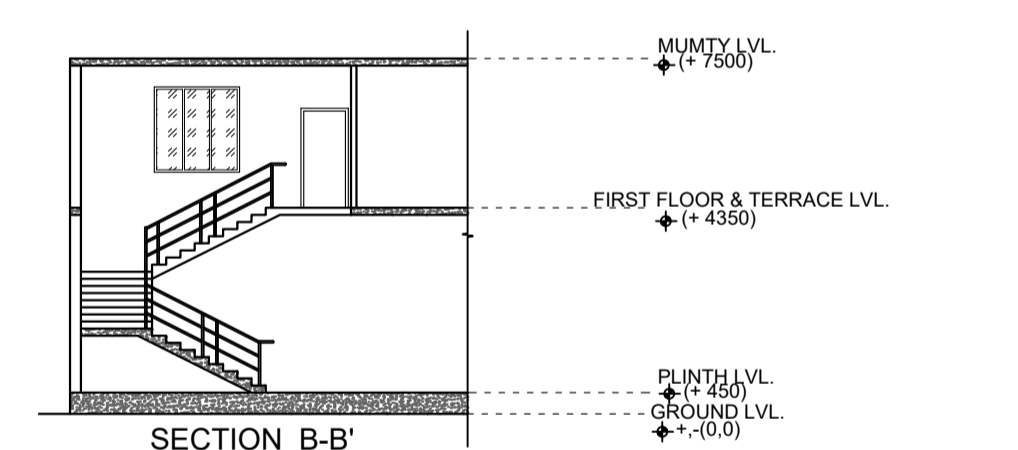
**SECTION A-A'**



**SECTION X-X'**

**DOOR WINDOW SCHEDULE**

NAME	MATERIAL
WALL	BRICKS, CEMENT MORTAR
WINDOW/ VENTILATOR	FRAME- WOODEN (TIMBER) GLASS- TEMPERED GLASS
DOOR	FRAME- WOODEN (TIMBER) DOOR- WOODEN (PLYWOOD & PLYBOARD)



**SECTION B-B'**

FLOOR TO FLOOR HEIGHT	3900 MM.
NO. OF STEPS	26
TREAD/ RISER	300/150
BUILT-UP AREA	2428.2 SQ.M.
GROUND COVERAGE	7.5%
UNIT OF LEVEL DIMENSIONS	MM.

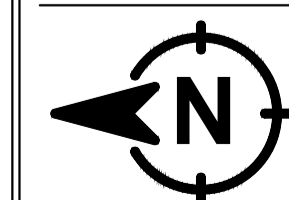
ARCHITECTURAL THESIS- AR 1001

**PROJECT- CREMATORIUM WITH THE MEMORY BUILDING**  
**PROJECT LOCATION- SECTOR 123, NOIDA, UTTAR PRADESH**

**FOLLOWING SHEET CONTAIN DETAILS OF:**

THE MEMORY BUILDING

**DIRECTION:** **SCALE:**



1:100

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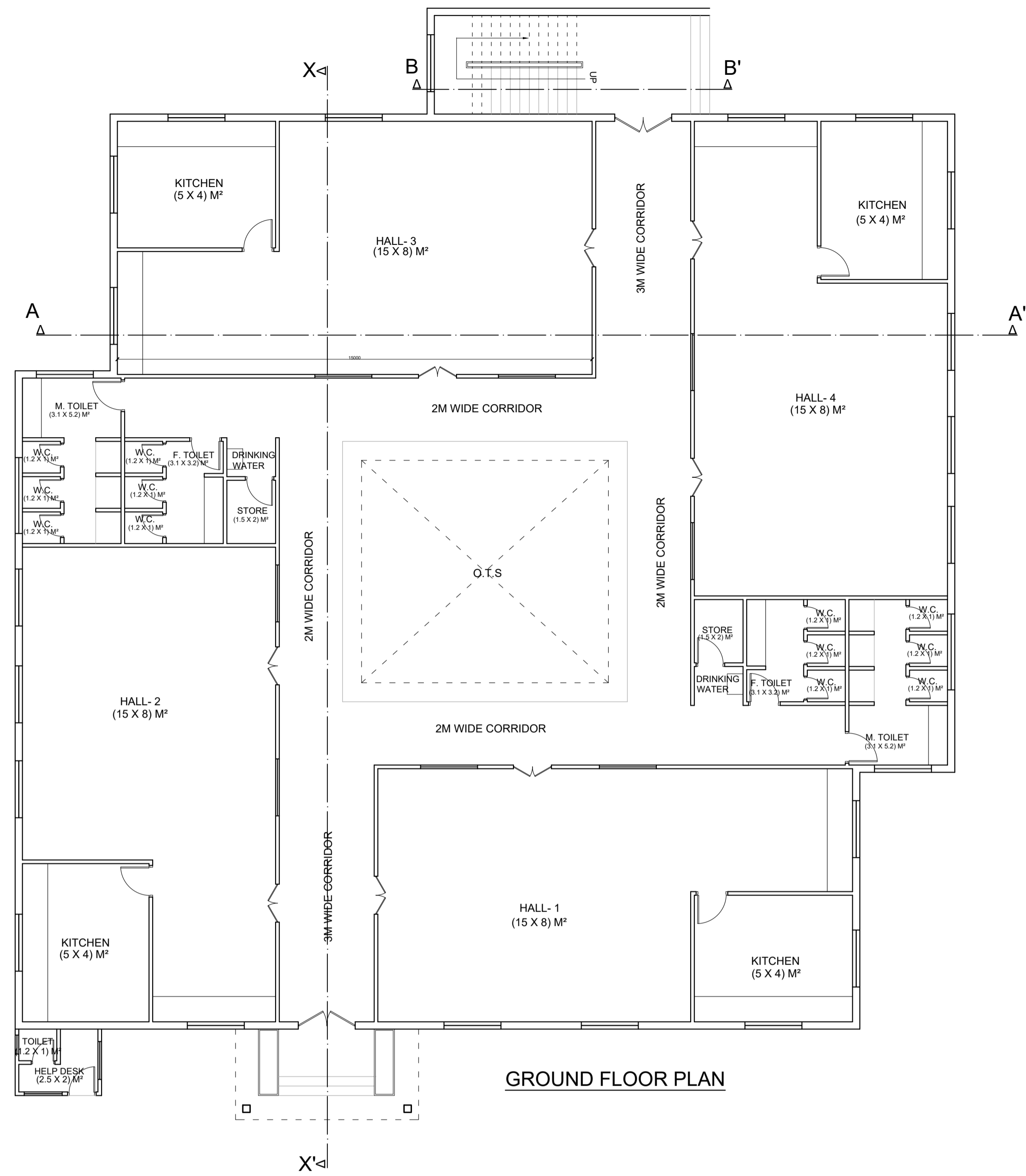
ELEVATIONS  
 SECTIONS  
 CENTER LINE PLAN  
 DOOR-WINDOW SCHEDULE

**DRAWINGS BY:**  
 MUSKAN GUPTA  
 B.ARCH- 5TH YEAR  
 1180101033

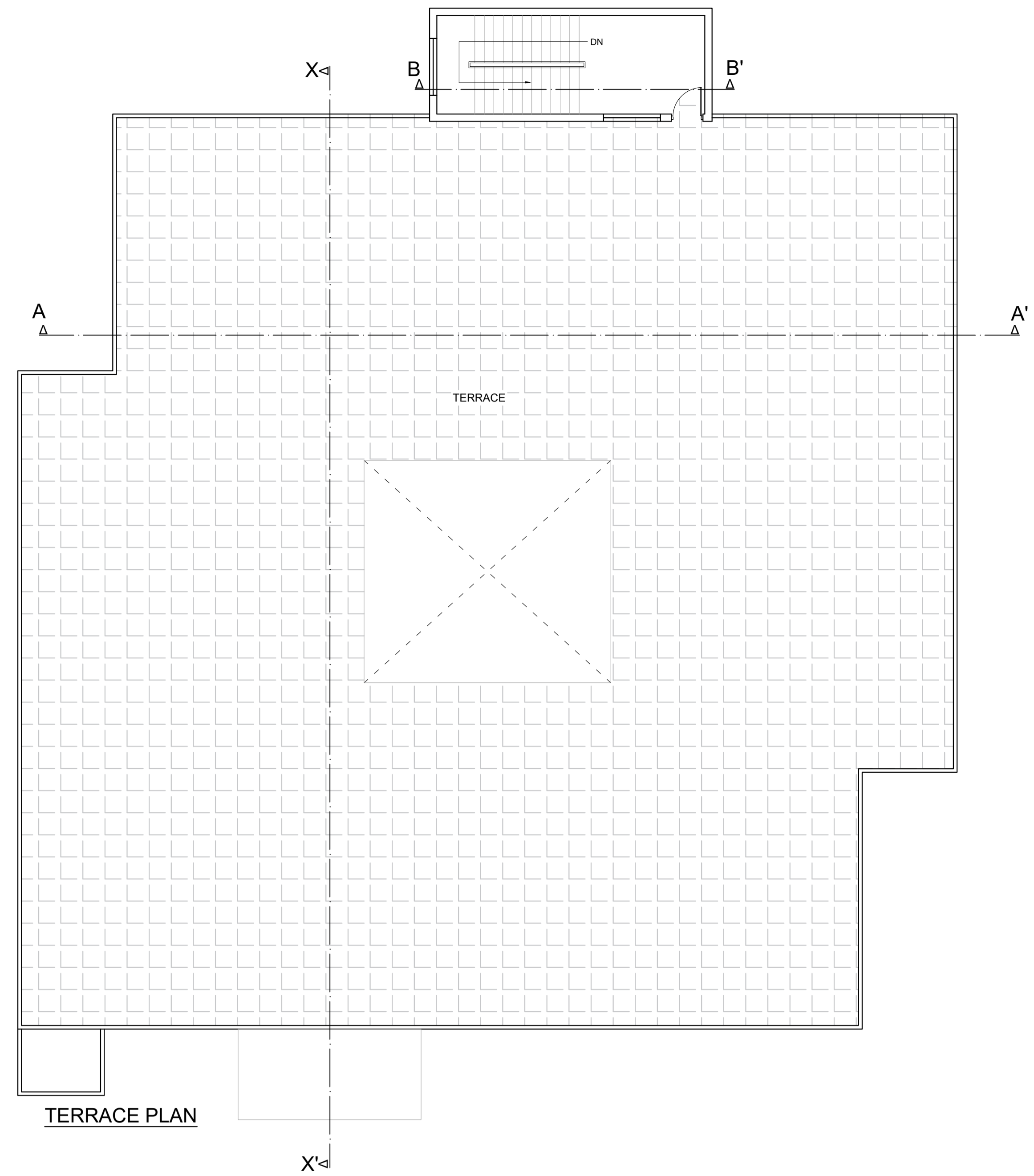
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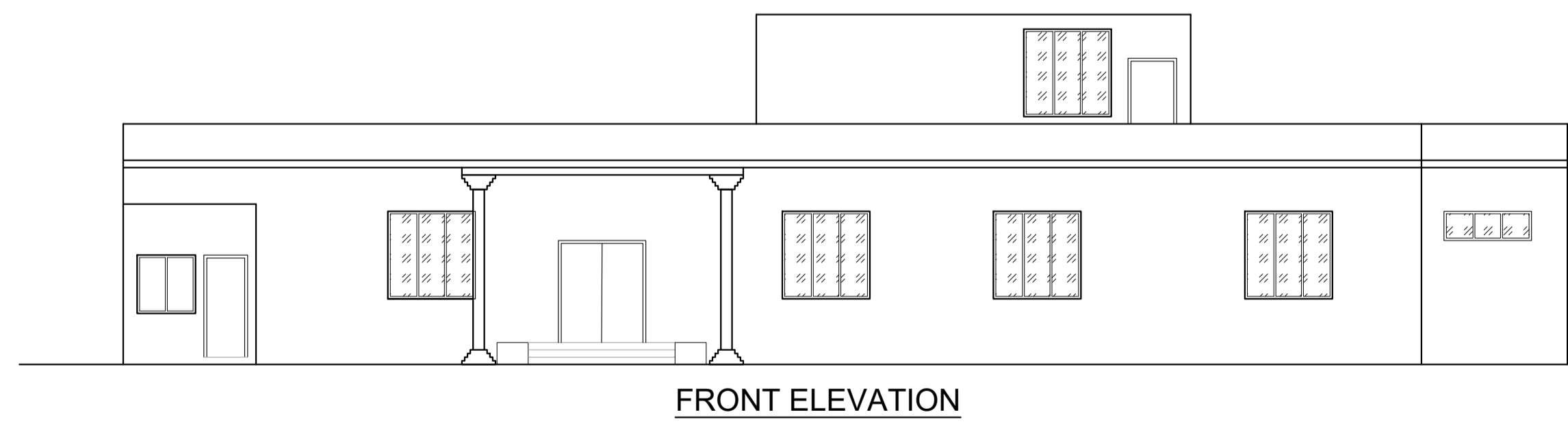
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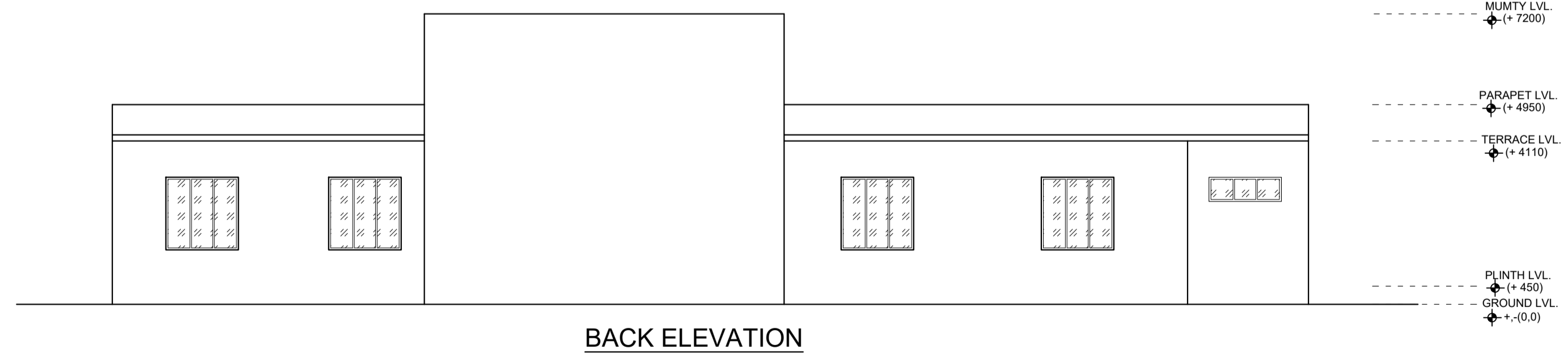
GROUND FLOOR PLAN



TERRACE PLAN




FRONT ELEVATION



BACK ELEVATION

ARCHITECTURAL THESIS- AR 1001

**PROJECT- CREMATORIUM WITH THE MEMORY BUILDING**  
 PROJECT LOCATION- SECTOR 123, NOIDA, UTTAR PRADESH

**FOLLOWING SHEET CONTAIN DETAILS OF:**  
 KRIYA BHAWAN BLOCK  
**DIRECTION:**   
**SCALE:** 1:100

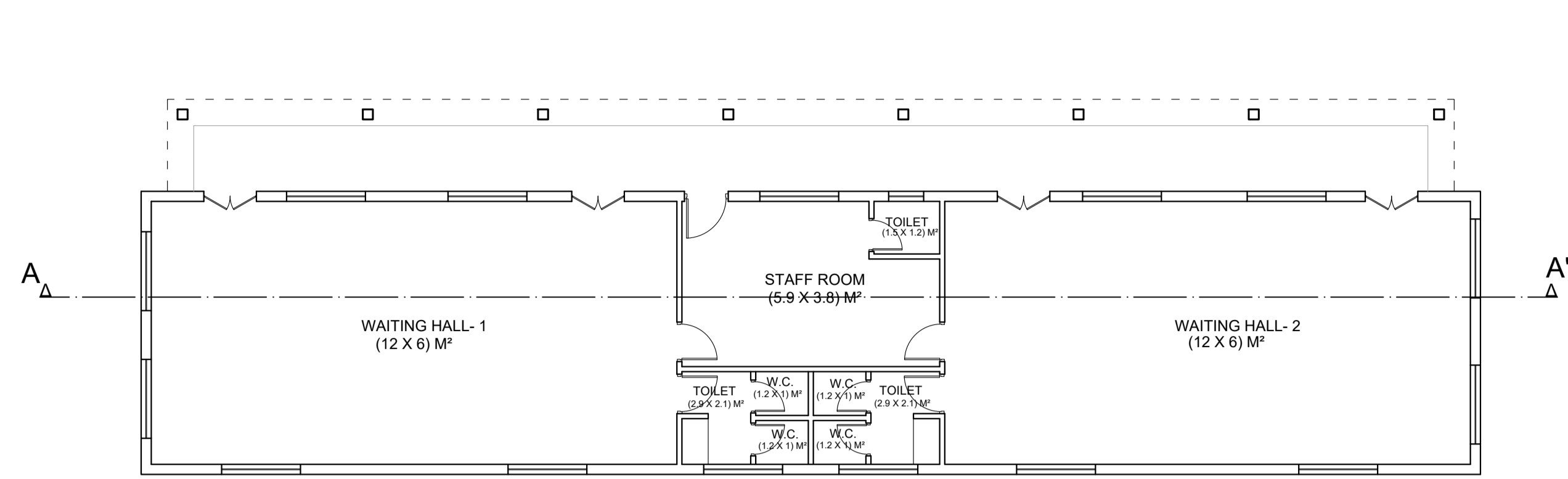
**DRAWINGS:**  
 • GROUND FLOOR PLAN  
 • TERRACE PLAN  
 • ELEVATIONS

**DRAWINGS BY:**  
 MUSKAN GUPTA  
 B.ARCH- 5TH YEAR  
 1180101033  
**UNIVERSITY:**  
 BABU BANARASI DAS  
 UNIVERSITY, LUCKNOW

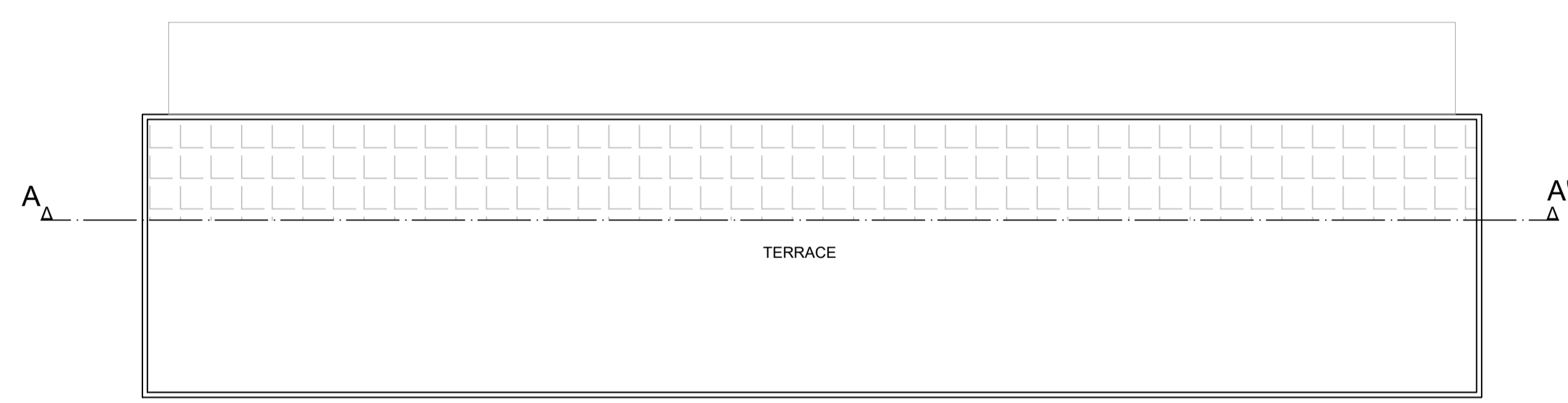
**THESIS GUIDE:**  
 AR. ANSHU RASTOGI  
**SIGNATURE & REMARK:**



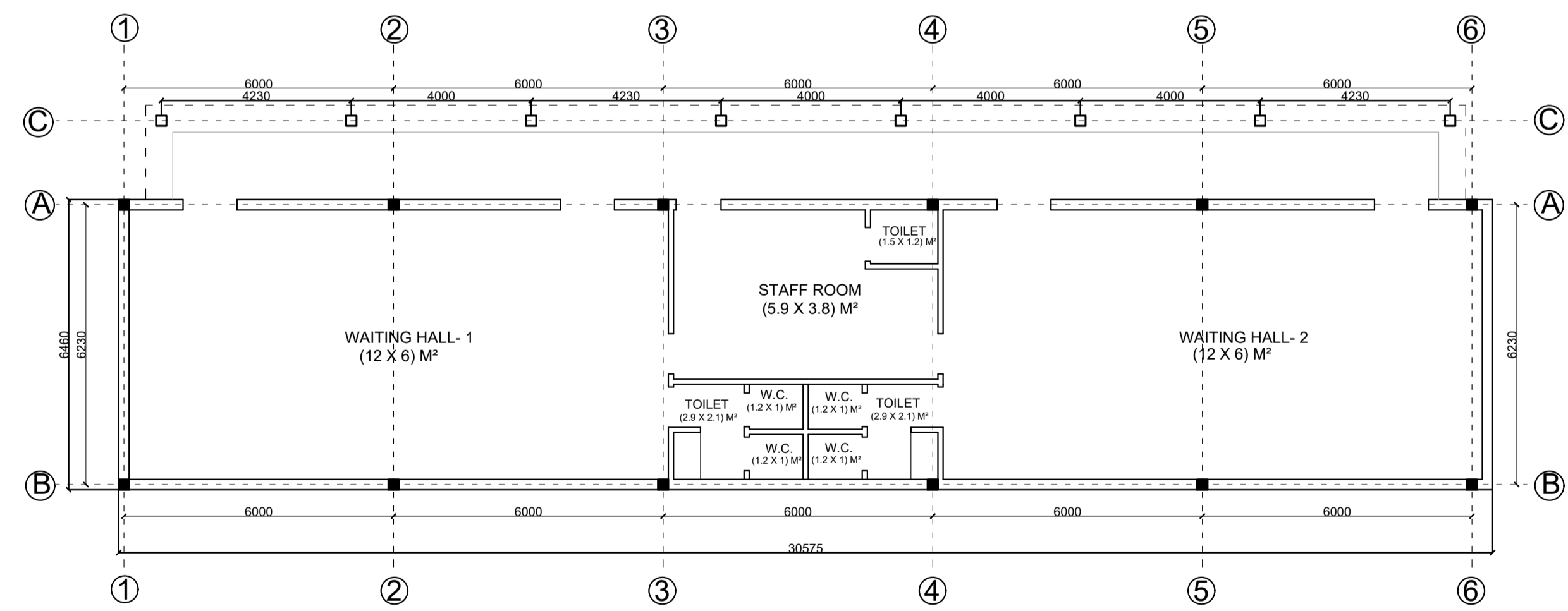




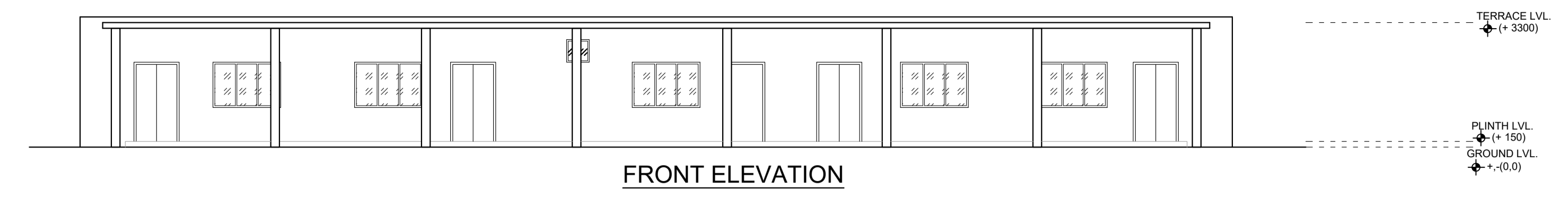
GROUND FLOOR PLAN



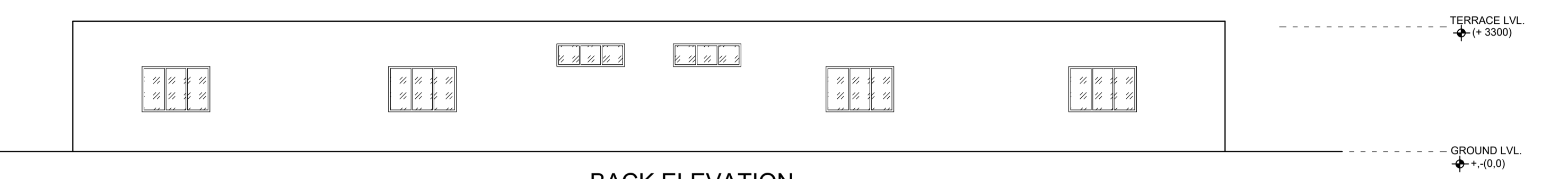
TERRACE PLAN



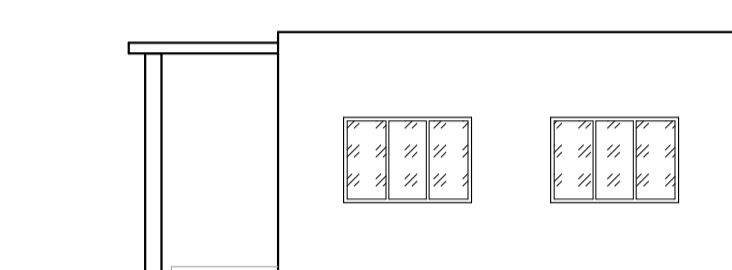
CENTER LINE PLAN



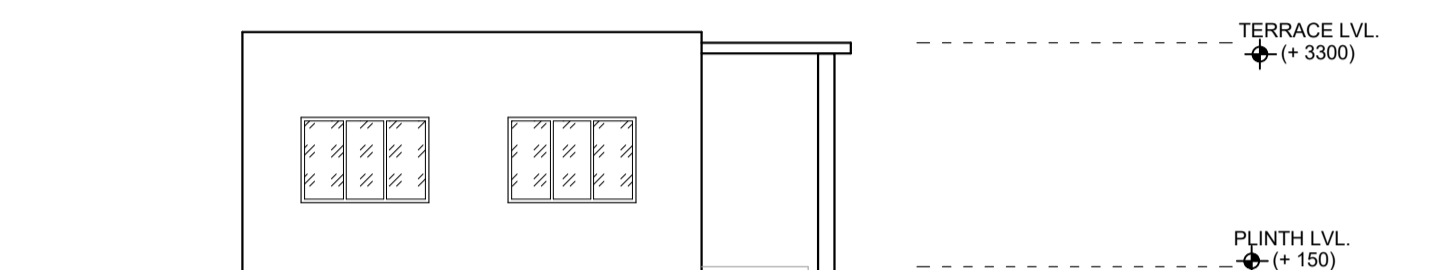
FRONT ELEVATION



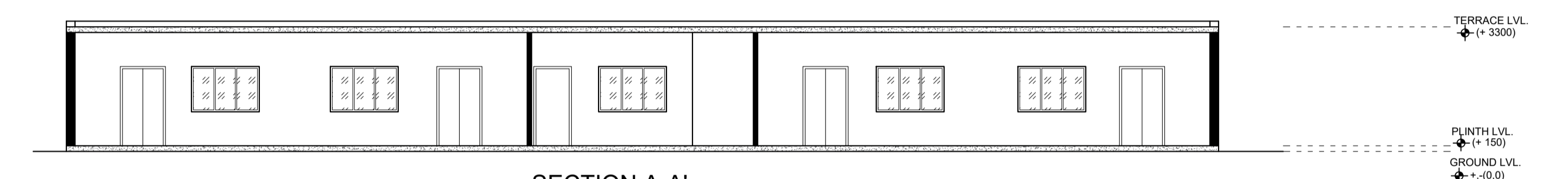
BACK ELEVATION



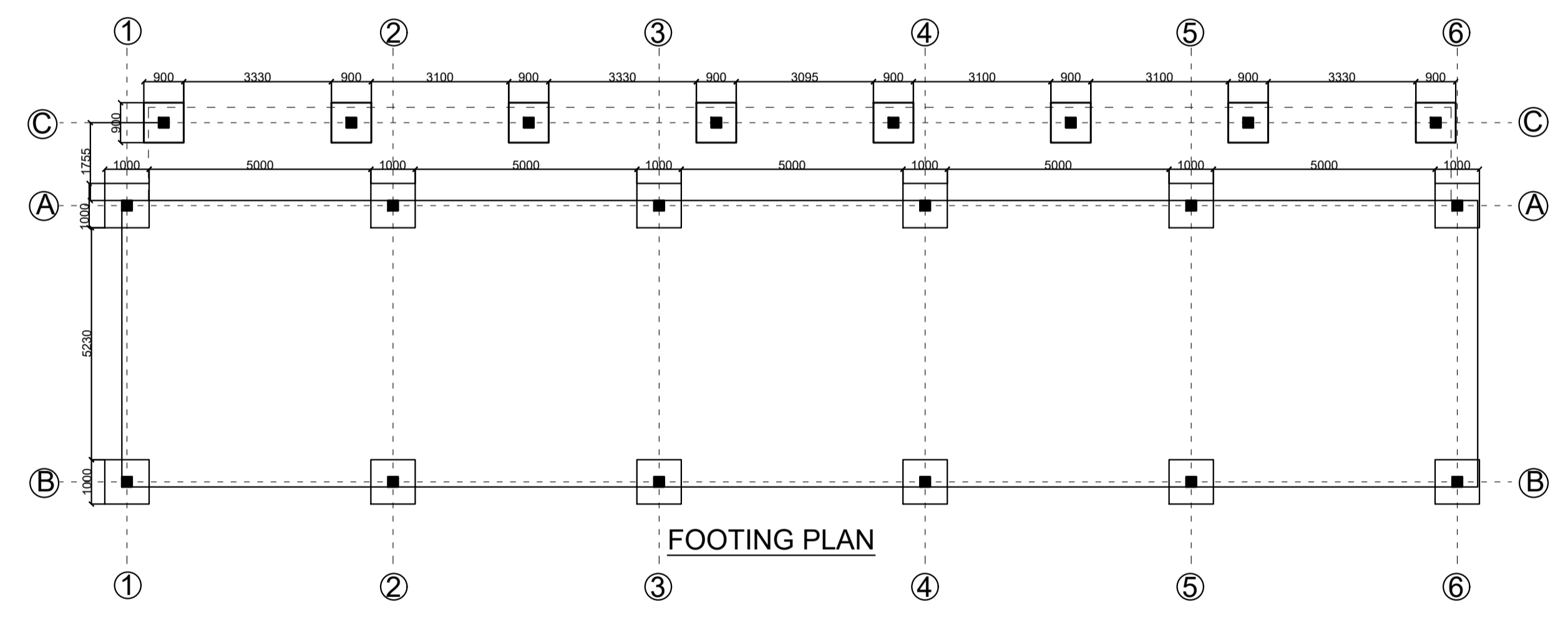
NORTH ELEVATION



SOUTH ELEVATION

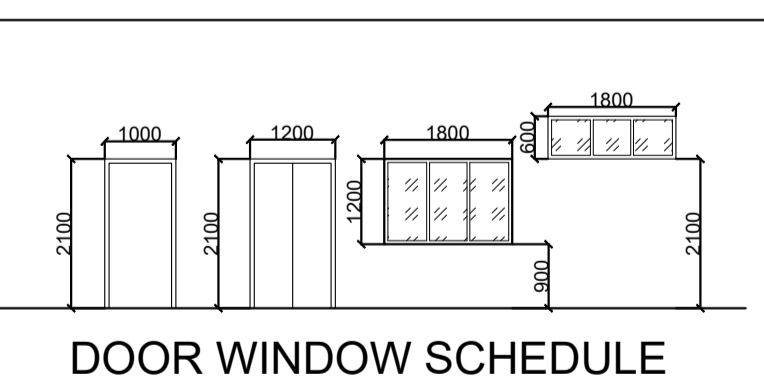


SECTION A-A'



FOOTING PLAN

MATERIAL DETAILS	
NAME	MATERIAL
WALL	BRICKS, CEMENT MORTAR
WINDOW/ VENTILATOR	FRAME- WOODEN (TIMBER) GLASS- TEMPERED GLASS
DOOR	FRAME- WOODEN (TIMBER) DOOR- WOODEN (PLYWOOD & PLYBOARD)



DOOR WINDOW SCHEDULE

FLOOR TO FLOOR HEIGHT	3150 MM.
NO. OF STEPS	-
TREAD/ RISER	-
BUILT-UP AREA	228.5 SQ.M.
GROUND COVERAGE	0.71 %
UNIT OF LEVEL DIMENSIONS	MM.

ARCHITECTURAL THESIS- AR 1001

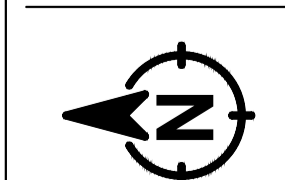
# PROJECT- CREMATORIUM WITH THE MEMORY BUILDING

PROJECT LOCATION- SECTOR 123, NOIDA, UTTAR PRADESH

**FOLLOWING SHEET  
CONTAIN DETAILS OF:**

ADMIN BLOCK

**DIRECTION:**



**SCALE:**

1:100

**DRAWINGS:**

- GROUND FLOOR PLAN
- TERRACE PLAN
- ELEVATIONS
- SECTIONS
- CENTER LINE PLAN
- FOOTING PLAN
- DOOR-WINDOW SCHEDULE

**DRAWINGS BY:**

MUSKAN GUPTA  
B.ARCH- 5TH YEAR  
1180101033

**UNIVERSITY:**  
BABU BANARASI DAS  
UNIVERSITY, LUCKNOW

**THESIS GUIDE:**

AR. ANSHU RASTOGI

**SIGNATURE & REMARK:**