

NEWA BHOYE CHHEN

at Madhyapur Thimi

By:

RACHANA PRAJAPATI

750132

**A thesis submitted in partial fulfillment
of the requirements for the
Degree of Bachelor of Architecture**



Purbanchal University

**KHWOPA ENGINEERING COLLEGE
DEPARTMENT OF ARCHITECTURE**

Lihali, Bhaktapur, Nepal

August, 2024

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ABSTRACT

The Newa Bhoye Chhen, emblematic of Newar culture in the Kathmandu Valley, is a nexus of culinary mastery, community bonding, and spiritual reverence. These architectural gems have stood for centuries, serving as focal points for communal feasts, social gatherings, and religious ceremonies. Rooted deeply in the rich legacy of the Newar people, these structures embody the fusion of craftsmanship, social customs, and gastronomic excellence that define Newari culture.

Central to the Newa Bhoye Chhen experience are traditional Newari feasts, renowned for their elaborate culinary offerings and ritualistic significance. These feasts serve as occasions for celebrating milestones, fostering unity, and honoring cultural traditions. Through sharing meals, engaging in rituals, and participating in cultural activities, participants forge connections, transcend social barriers, and uphold the values of hospitality and cultural preservation that are intrinsic to Newari society.

Beyond being dining establishments, Newa Bhoye Chhen establishments are cultural sanctuaries where visitors can immerse themselves in the vibrant tapestry of Newari traditions. Offering interactive exhibits, cultural performances, and culinary workshops, these spaces promote understanding and appreciation for Newari culture while safeguarding its heritage for future generations.

DECLARATION

I hereby declare that this thesis, titled "NEWA BHOYE CHHEN AT MADHYAPUR THIMI," has not been previously accepted for any degree and is not being submitted concurrently for any degree. I confirm that this dissertation is the result of my own independent research and investigation, except where explicitly stated otherwise. I give my consent for this dissertation, if accepted, to be made available for photocopying, with the understanding that any references to or quotations from this thesis will be properly acknowledged.



Rachana Prajapati (750132)

August 2024

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Chapter 1 Introduction

1.1 Introduction

The Newar people, indigenous to the Kathmandu Valley of Nepal, boast a culture steeped in antiquity and rich in diversity. Their history traces back to the ancient kingdoms of Licchavi and Malla, and they are recognized for their distinctive language, Nepal Bhasa, and intricate cultural traditions. Newar society is structured into various social and occupational groups, each with its own customs and roles, contributing to the vibrant tapestry of the community.

Central to Newar culture are their religious practices, which blend elements of Hinduism and Buddhism into a unique syncretic tradition. Festivals like Indra Jatra and Biska Jatra display this fusion, with elaborate rituals and celebrations. The architectural prowess of the Newar people is evident in the stunning temples, pagodas, and traditional houses that adorn the Kathmandu Valley, adorned with intricate carvings and designs that reflect their craftsmanship and artistic sensibilities. Additionally, Newar cuisine offers a tantalizing array of flavors, drawing from Nepali and Tibetan influences, with dishes like Newari choila and yomari delighting the palate.

1.2 Introduction of Madhyapur Thimi

Madhyapur Thimi, nestled amidst the Kathmandu Valley, is a living testament to the rich tapestry of Newari culture, tradition, art, and architecture. Legend has it that the people of Thimi earned the title "Chhemi," meaning "Capable people," for their unwavering support in defending Bhaktapur. Despite being situated in the Bhaktapur district, Thimi stands as a distinct cultural hub, boasting a heritage that spans over 3000 years.

Despite its modest size of 11.47 square kilometers, Thimi encompasses several sub-villages, each contributing to its cultural mosaic. The town is adorned with temples dedicated to various deities, including Balkumari, Lokeshwar, Bhairab, Ganesh, and Siddhi Kali. These temples serve as focal points for religious rituals and festivals, which form an integral part of Thimi's identity.

1.3 Project Brief

The Newa Bhoye Chhen stands as a vibrant symbol of Newar culture, embodying centuries-old traditions of culinary mastery, community cohesion, and spiritual reverence. More than just architectural marvels, these structures serve as lively hubs where familial ties are reinforced, friendships are cultivated, and cultural rites are celebrated. Within their walls, successive generations come together to relish exquisite cuisines and commemorate significant milestones in life's journey.

With deep roots in the Kathmandu Valley's cultural heritage, the Newa Bhoye Chhen holds profound historical significance both locally and beyond. Emerging from the rich legacy of the Newar people, who have inhabited the valley for generations, these Chhen epitomize a blend of craftsmanship, social customs, and gastronomic excellence. Dating back to medieval times, these architectural gems played pivotal roles as centers for communal feasts, religious observances, and social gatherings, leaving an indelible mark on the cultural fabric of Nepal.

1.4 Project Justification

The choice to prioritize the revitalization of Newa Bhoye Chhen for this project stems from its profound cultural significance and architectural grandeur within Nepali society. As poignant symbols of Newar heritage, these structures encapsulate centuries-old traditions and communal practices, serving as vital repositories of our cultural legacy. In the face of Nepal's rapid urbanization, it has become increasingly imperative to document, preserve, and rejuvenate Newa Bhoye Chhen to ensure their continued relevance and survival for future generations.

Through this project, we aim to address the challenges faced by the tradition of Newari feasting, which has seen a decline in practice due to modern lifestyle changes and the scarcity of suitable venues. While smaller gatherings can still be accommodated within homes or courtyards, larger feasts accommodating hundreds of guests pose logistical challenges. Our research, conducted through a small survey, has highlighted the prevalent familiarity with Newari traditional feasts and the preference for venues like Newa Bhoye Chhen if available.

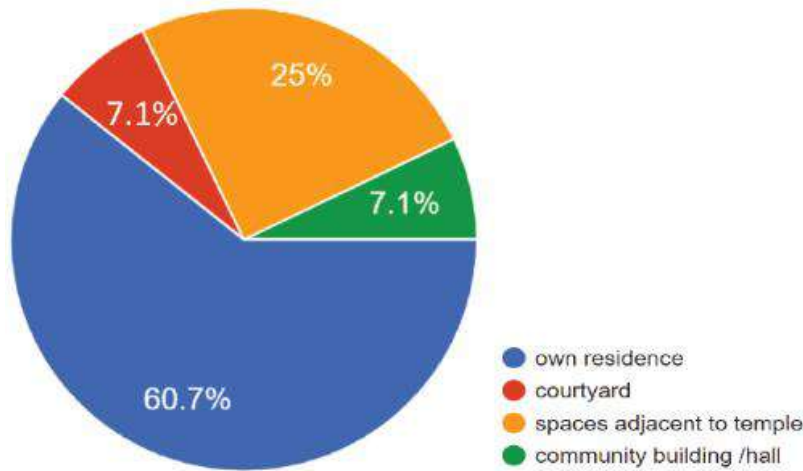


Figure 1. 1 Chart showing the percentage of hosting small feast

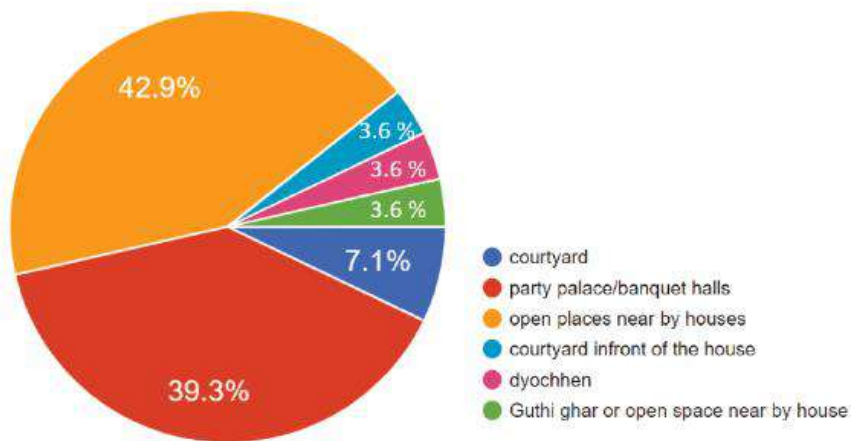


Figure 1. 2 Chart showing the percentage of hosting big feast

In response to these findings, our project seeks to revitalize Newa Bhoje Chhen, not only to safeguard our cultural heritage but also to meet the practical needs of the community in hosting traditional feasts. By providing suitable spaces for gatherings and festivals, we aim to foster community pride, promote sustainable tourism, and enhance social interactions among residents. Additionally, the revitalization of Newa Bhoje Chhen will facilitate cross-cultural exchange, bridging divides and nurturing unity across diverse communities, thereby enriching the social fabric of our society for generations to come.

1.5 Project Objectives

- Preserve Newari architectural heritage by incorporating traditional elements into the design and displaying their cultural significance.
- Foster community cohesion by creating spaces that encourage social interaction and communal gatherings.
- Ensure functionality by designing adaptable spaces capable of hosting various cultural events and activities.
- Reflect Newar cultural identity through architectural aesthetics and spatial layout.
- Encourage cultural exchange by welcoming visitors and facilitating opportunities for cross-cultural interaction.
- Innovate respectfully by blending modern features with traditional architectural elements, maintaining cultural integrity.
- Collaborate closely with the local Newar community to incorporate their traditions, preferences, and needs into the design process.
- Promote local lifestyle, culture, and tradition through food, focusing on Newa cuisine and farming practices.

1.6 Scope and Limitation

The project scope entails a thorough examination of Newa Bhoje Chhen's architectural, cultural, and societal dimensions, encompassing architectural analysis, cultural significance, community engagement, sustainable design, modern adaptation, and tourism impact. Beyond research, the project will involve developing design proposals aimed at revitalizing and conserving Bhoje Chhen. This includes considerations for functional layouts, spatial organization, and feasible implementation strategies.

Acknowledging the breadth of Newari culture, the project will primarily focus on aspects related to food and festivals to allow for a more comprehensive exploration within manageable constraints. While recognizing the existence of other facets of Newari culture, the project's limitations prevent a full exploration of these areas. Therefore, the project will prioritize in-depth examination and intervention in food and festival-related aspects of Newa Bhoje Chhen's preservation and revitalization.

1.7 Methodology

The proposal was oriented towards addressing the current issues that the local people of Madhyapur Thimi were facing. Based on basic knowledge about the community's challenges, the topic for the thesis study was selected. Then, the following methodologies were adopted for the study.

I. Literature Review:

Data and information relevant to the project were collected through a literature review, including references from various library and internet sources. Interviews were conducted with various personnel relevant to the project. The literature related to Newa food cuisine, the socio-cultural lifestyle of Newars, traditional Nepalese architecture, and the interrelationship between food and heritage was studied.

II. Case Studies:

Detailed case studies were conducted through internet research and field visits. This involved analyzing existing cultural centers and similar projects, studying their functional interrelationships, built spaces, and environments. Interviews were conducted with relevant personnel during field studies.

Chapter 2 Literature Review

"A literature review is a written summary of journal articles, books, and other documents that describes the past and current state of information, organizes the literature into topics and documents a need for a proposed study" (Creswell & Creswell, 2020)

A literature review is a systematic examination and synthesis of existing scholarly research on a particular topic or question.

2.1 Newari Culture and Significance of Traditional Feast

Newari culture, indigenous to the Kathmandu Valley of Nepal, is a vibrant tapestry of traditions, festivals, and culinary delights. Renowned for their craftsmanship and artistic legacy, the Newar people have upheld their cultural identity through generations, enriching the cultural landscape of Nepal.

Central to Newari culture are traditional feasts, known as "Bhoye," which serve as focal points for social gatherings, religious observances, and community celebrations. These feasts are elaborate culinary experiences featuring a diverse array of iconic dishes, including savory lentil patties, rice crepes, aromatic curries, and pickled vegetables, showcasing the region's rich culinary heritage.

Beyond their culinary offerings, traditional Newari feasts are steeped in ritualistic significance, often accompanied by religious ceremonies and cultural performances. These rituals honor deities, ancestors, and cultural traditions, reinforcing the spiritual and communal bonds that define Newari society.

Moreover, the act of sharing a meal at a traditional Newari feast fosters a sense of unity and camaraderie among participants, transcending social barriers and fostering community pride. Whether marking weddings, religious festivals, or cultural events, the traditional Newari feast embodies the values of hospitality, generosity, and cultural preservation that lie at the heart of Newari culture.

2.2 Concept of Newa Bhoye Chhen as Culinary and Cultural Space

The concept of Newa Bhoye Chhen revolves around creating a unique culinary and cultural space that celebrates the rich heritage of the Newari community. It serves as a fusion hub where traditional Newari cuisine intertwines with immersive cultural experiences, offering visitors a glimpse into the vibrant tapestry of Newari traditions.

At its core, Newa Bhoye Chhen is designed to be more than just a dining establishment; it's a cultural sanctuary where every aspect, from the architecture to the menu, reflects the artistic legacy of the Newari people. Communal dining spaces echo the warmth of traditional Newari courtyards, inviting guests to come together, share meals, and forge connections.

In addition to savoring iconic Newari dishes and traditional curries, visitors can engage in traditional rituals, witness cultural performances, and explore interactive exhibits displaying the history and craftsmanship of the Newar community. Through workshops, cooking classes, and cultural events, Newa Bhoye Chhen serves as a dynamic center for cultural exchange and learning, promoting understanding and appreciation for Newari traditions while safeguarding their heritage for generations to come.

2.3 Madhyapur Thimi

2.3.1 Introduction

Inscriptions from 484 AD discovered during the excavation of a house foundation in Deupatan mention places named Themring grama, Bosing grama, and Dayitapalli pradesha, with scholars suggesting a correspondence to present-day Thimi and Bode. Additional Licchavi period inscriptions in Thimi hint at ancient settlements. Historical records indicate that during Bhojadeva's reign in 1011 AD, people from Visalanagara migrated and settled east of the Manohara River, potentially contributing to Thimi's establishment by 1350, documented in the Gopalarajavamsavali. By 1224 and 1333, neighboring areas Nagadesha and Bode were also recognized. Early inscriptions refer to Thimi as "Them," while later ones use the Sanskrit name "Madhyapura." Land documents from the early 16th century further affirm Thimi's historical significance (Pant, 2019).

Situated centrally in the Kathmandu Valley between Patan, Kathmandu, and Bhaktapur, Madhyapur Thimi acted as a vital buffer during the late Malla period, marked by frequent conflicts among the valley's kingdoms. Legends suggest the name "Thimi" evolved from the praise "Chhemi" bestowed by Bhaktapur's kings for Thimi's adept defense. Despite its rich cultural heritage, replete with temples and monuments, Thimi struggles to garner tourism attention, earning the lamentable title of "The Forgotten Heritage Town in Kathmandu Valley." Neglected temples and festivals underscore the urgent need for greater recognition and preservation efforts.

2.3.2 Settlement Pattern of Madhyapur Thimi

Thimi nestled within the Kathmandu Valley, stands as a testament to Nepal's rich heritage, with its history tracing back to the medieval era and beyond. Positioned southeast of the Manohara River, Thimi's strategic location places it eight kilometers east of Kathmandu and four kilometers west of Bhaktapur, a historical capital. Once known as Madhyapura, Thimi's central positioning between Kathmandu and Patan further underscores its significance. Designated as Madhyapura municipality since 1997, Thimi is part of the valley's ensemble of settlements, alongside Nagadesa and Bode to the north, contributing to the region's cultural tapestry.

The town's geographical layout reflects the typical characteristics of Kathmandu Valley settlements, with Thimi, Nagadesa, and Bode situated on elevated plateaus south of the Manohara River. Thimi's elevation, approximately 30 meters higher than the valley floor, affords it a commanding position. Its main thoroughfare, serving as the town's central artery, links various settlements to the north and south, fostering connectivity and cultural exchange. Thimi stands as a testament to Nepal's enduring legacy, blending tradition with modernity amidst its scenic surroundings in the heart of the Kathmandu Valley (Pant, 2019).

Thimi, also known as Thimi-Madhyasthana, meaning "Thimi-the central place," has held a significant presence in the Kathmandu Valley's landscape. While "Thimi" was commonly used in everyday language, "Madhyapura" featured in formal documents. This dual nomenclature is a common feature across the valley's towns. Presently, "Thimi" typically denotes the traditional core of the town, while "Madhyapura" encompasses the broader region, including surrounding areas like Bode and Nagadesh.

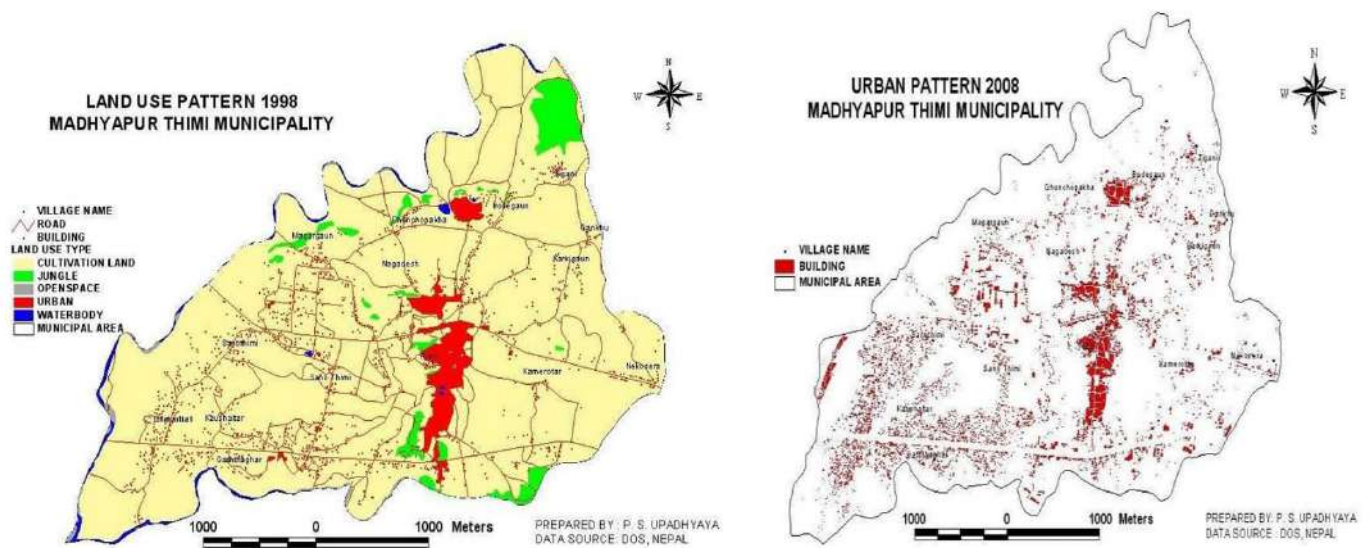


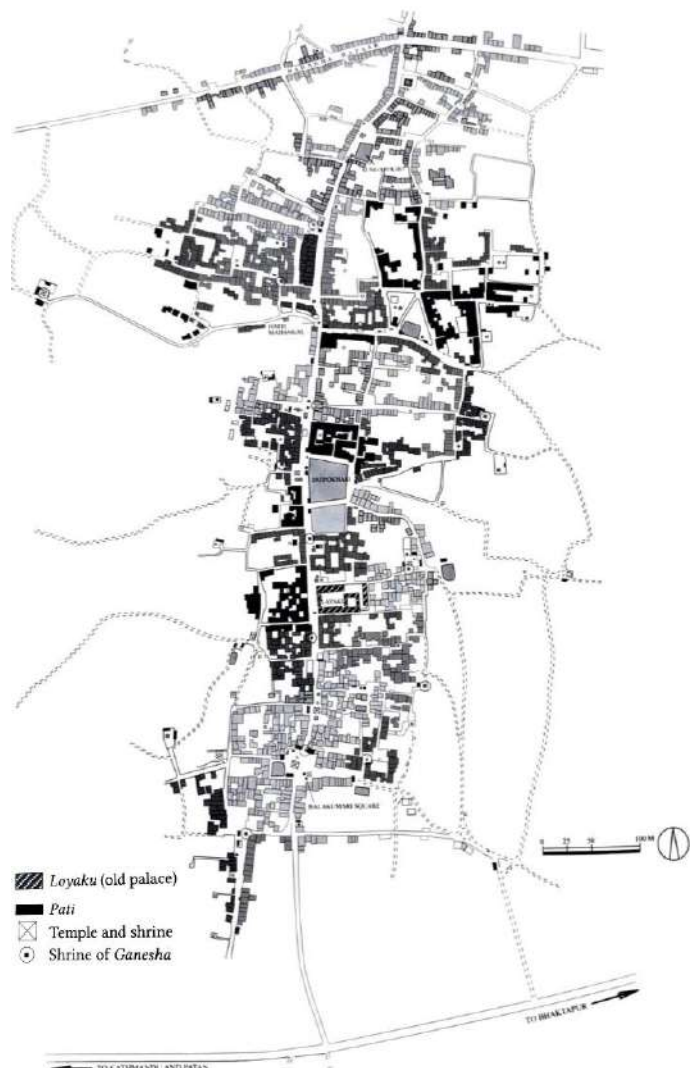
Figure 2. 1 Land use pattern and Urban pattern 1998

Following the division of Nepal Mandala in the 15th century into three principalities, Thimi and its surrounding regions fell within the territory of Bhaktapur. Historical accounts indicate that during Bhuvan Malla's reign (1505-1519), Thimi was situated in the western region of Bhaktapur and remained a contested area among the valley's warring principalities.

Documented in Thyasaphu records from this period, Thimi was noted as the largest settlement within Bhaktapur's territory, further emphasizing its strategic and historical significance (Pant, 2019).

Figure 2. 2 Town of Thimi

Source: Mohan Pant, 2019



2.3.3 Community Structure of Thimi

Thimi's community structure comprises 14 distinct communities, each with its own customary professions and ceremonial customs, as evidenced by historical documents from the Shah era and the Malla period. These communities also provided specific functional services to the town society. The Shrestha and Prajapati communities, constituting 85% of the population, dominate Thimi, a demographic pattern consistent with surveys conducted in 1995 and 1977. Additionally, the Bajracharya and Manandhar communities, each comprising roughly 3% of the population, have also played significant historical roles in Thimi (Pant, 2019).

Table 1 Distribution of Maximal Communities, Thimi

Maximal community	Dwelling units (%)	Population (%)
Shrestha	53.71	52.60
Prajapati	32.65	36.11
Manandhar	4.18	2.13
Bajracharya	3.53	2.13
Khadgi	1.10	2.13
Karanjit	0.85	0.84
Kusle	0.70	1.12
Chitrakar	0.65	0.62
Ranjitkar	0.65	0.28
Napit	0.60	0.68
Nakarmi	0.60	1.12
Karmacharya	0.60	-
Jha	0.10	0.06
Rajopadhya	-	0.12
Sharma	0.10	0.06

Note: The total number of dwelling units surveyed within the study area, spanning from Bahakha bazaar in the north to Tachu tole in the south, is 2009 (November, 1994). The population data corresponds to Muller's investigation conducted in September 1977.

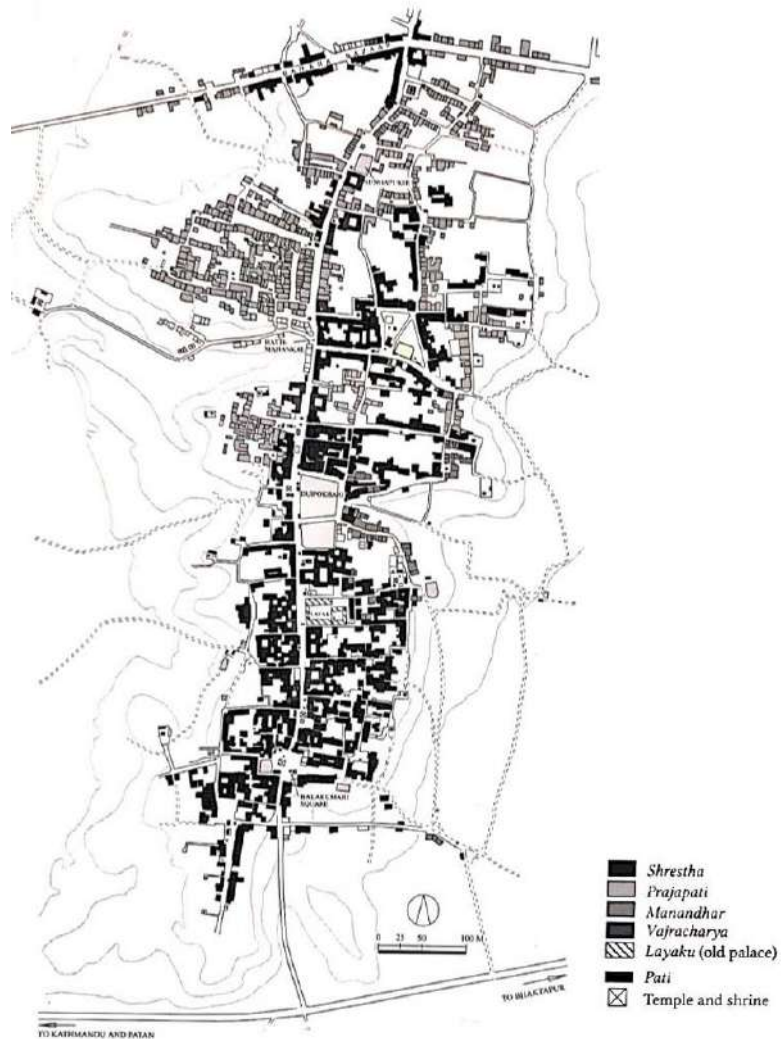


Figure 2.3 Spatial Distribution of Maximal Community of Settlement

Source: Mohan Pant, 2019

2.3.4 Socio-Cultural Structure of Thimi

Thimi's socio-cultural structure is closely linked to its tangible and intangible heritage, shaping its spatial organization. Festivals and socio-cultural activities of the Newari community are particularly influential, impacting the town's development. Cultural characteristics are pivotal in shaping traditional cities in the Kathmandu Valley, with Thimi's urban planning and expansion significantly influenced by its diverse festivals and jatras, showcasing the community's rich cultural heritage.

Table 2 Different festivals celebrated in Thimi

S.N	Festival	Month
1	Biska jatra	Chaitra-Bhaisakh
2	Buddha Jayanti	Bhaisakh
3	Digu puja	Bhaisakh/Jestha
4	Gathamuga chahare	Asar/Shrawan
5	Panchadaan chahare	Asar/Shrawan
6	Sithnakha	Asar/Shrawan
7	Goonlah parva	Shrawan-Bhadra
8	Guhnipuni-saaparu (Gaijatra)	Bhadra
9	Yanyapuni (Indrajatra)	Bhadra
10	Jibro chedne jatra	Bhadra
11	Krishna aastami	Bhadra
12	Cha Thaaa: (Ganesh Chaturdashi)	Bhadra/Asoj
13	Dashain (Mohani)	Asoj-Kartik
14	Tihar	Kartik
15	Bala chahre (Bala Chaturdashi)	Mangsir
16	Sakimapunhi	Mangsir
17	Yomari punhi	Poush
18	Navadurga dance	Poush
19	Maghi sangranti (Gheu Chaaku Sanhu)	Magh
20	Swasthani Bakha Kanegu	Magh-Falgun
21	Shree Panchami	Falgun
22	Holi Purnima	Falgun/Chaitra
23	Silachahare (Shiva Ratri)	Falgun

2.3.4.1 Life-Cycle Ceremonies (Rituals)

Life-cycle ceremonies, or rituals, hold significant importance in Newari culture, encompassing various stages from birth to death. In Thimi, the Newar community observes several traditional ceremonies that reflect their cultural heritage:

1. Pre-Natal
2. Birth
3. Macha-Jankwo
4. Busankha (Boys)
5. Kayatapuja (Bartabandhan) (Boys)
6. Ihi (Belbibaha) (Girls)
7. Bahra (Girls)
8. Ihipa (Marriage)
9. Jyah Janko
10. Sithan (Funeral)

These rituals mark key milestones in individuals' lives, emphasizing the importance of cultural continuity and community bonds within the Newar community of Thimi.

2.3.4.2 Newari Cuisine

Food holds immense social, cultural, and ritual significance in Newari culture, evident in various aspects of daily life and festivities. Greeting rituals, such as asking if someone has completed their rice, reflect the central role of food in social interactions, with feasting being a common practice among Newars, whether in picnics or elaborate street feasts. Additionally, the Nepali proverb comparing Parbatya and Newar attitudes toward excess—where Parbatyas may prioritize acquiring additional spouses while Newars indulge in extravagant feasting—further emphasizes the cultural importance placed on food within the community.

Moreover, food is deeply intertwined with Newari rituals and religious ceremonies, marking important transitions and propitiating deities for prosperity and health. Rituals like choyala bhu, characterized by roasted meat and flattened rice, initiate significant periods of worship and festivities, with accompanying purifying acts symbolizing a shift from mundane to sacred activities. Calendrical feasts named after specific foods, such as Ghyöcaku sanlu and Yomari punhi, serve various purposes—from seasonal

celebrations to religious observances—underscoring food's symbolic and ritualistic importance in Newari culture.

The sanctity of the Newar kitchen, referred to idiomatically as "bhutu," further illustrates the centrality of food within the household and community. Census activities and societal obligations are often tied to the concept of the hearth, with households measured by their kitchen units. Obligations to guthi societies and specialists are framed in terms of the hearth, highlighting the communal and symbolic significance of food preparation and consumption in Newar society (unknown, 2015).

Types of Meals:

I. Daily Meals (Breakfast and Dinner):

- Jā (boiled rice)

Meat Dishes:

- Choila (ground buffalo meat)
- Pālulā (buffalo meat and ginger curry)
- Senlāmu (raw ground buffalo liver seasoned with spices)
- Vegetable Dishes:

Tarkāri (vegetable curry)

- Wāunchā (green vegetables)
- Tukan:chā
- Palācha
- Shākechā
- Chōlechā



Figure 2. 4 Newa cuisine

Soups:

- Ken (lentil soup)
- Simi (beans)
- Mi (fenugreek)
- Aai ka (leftover rice after preparing rice beer)

- Choochon (tama in Nepali) (bamboo shoot)

II. Lunch:

- Baji (beaten rice)
- Chatānmari (rice flour crepe)
- Chhusyā (parched wheat)
- Gophuki (puffed rice)
- Gwaramari (deep-fried dough)
- Hājā (steamed rice)
- Jākimari (rice flour pancake)
- Kani (popcorn)
- Kheyn wo (fried egg)
- Musyā (roasted soybean)
- Sukulā (dried meat)
- Wo (fried lentil cake)

III. Festival Food/Samay Baji:

Traditional dish, passed down through generations, holds significant cultural value and is highly cherished by the community. While there are no specific seasons for serving Samay Baji, it is predominantly enjoyed during auspicious occasions, family gatherings, and Newa festivals, often served as a starter (Pradhananga, 2023). Samay Baji comprises a variety of items served on a single plate, including:

- Chatamari
- Beaten rice (Chyura)
- Wa (small pancake made from black gram paste or mung beans paste)
- Barbecued and marinated buffalo meat (Chhwela)
- Fried boiled egg, black soybeans (Bhatamaas)
- Spicy potato salad (Aalu-Wala)
- Finely cut ginger and garlic (known as "Palu, Laba")
- Boiled beans mixed with spices (Bodi ko Achar)
- Green leaves (Saag)

- Kunyā (smoked fish)
- Hāku Musyā (roasted black soybean mixed with oil and salt)
- Lābhā (chopped garlic greens mixed with spices)
- Pālu (diced raw ginger)
- Ayla (an alcohol specific to the Newa Community)

Additionally, Samay Baji is often accompanied by Achar, a tangy and spicy medley of vegetables such as radish, carrot, onion, potatoes, and peas, fused with a unique Nepalese berry called lapsi. Recipes for Achar vary across households, incorporating ingredients like asafetida, Szechuan pepper, black salt, Himalayan pink salt, mustard, mustard oil, and a blend of fenugreek seeds with turmeric powder (Bauddhacharya, 2023).

IV. Feast food

Jho Bhoye, a hallmark of Newa cuisine, is a lavish spread of delectable dishes enjoyed during special occasions and celebrations. This culinary extravaganza boasts a wide array of meat, vegetable, soup, salad, dessert, and drink options, reflecting the rich culinary heritage of the Newar community (Wikipedia, n.d.). Some highlights from the Jho Bhoye menu include:

Meat Dishes:

- Sapu mhichā (leaf tripe bag stuffed with bone marrow)
- Lapte bhowe (Newa cuisine)
- Dāyekālā (buffalo meat curry)
- Dugulā (goat meat curry)
- Heynlā (duck curry)
- Bandella (wild boar meat)
- Changrala (mountain goat meat)
- Khasilā (gelded goat meat)
- Nyā (fish curry)
- Sanya (small fish)
- Chohi (steamed buffalo blood)
- Janlā (marinated diced with skin raw meat)

- Kachilā (marinated raw minced buffalo meat)
- Khāyālā (chicken curry)
- Me (buffalo tongue boiled, sliced, and fried)
- Pangra
- Nhyapu (brains boiled, sliced, and fried)
- Nyāpukā (fried fish)
- Pukālā (fried meat intestine, e.g., liver, heart, etc.)
- Sanyā-khunā (spicy jellied fish soup)
- Swan pukā (goat lungs filled with batter and boiled, sliced, and fried)
- Takhā (jellied buffalo meat curry)

Vegetable Dishes:

- Buba kwā (beans curry)
- Chhon kwā (curry of bamboo shoots and potato)
- Kwāti (soup made of nine types of sprouted beans)
- Mee kwā (curry of fenugreek seeds)
- Pancha kwā (mixed vegetable curry of bamboo shoots, potato, dried mushroom, dried radish, and black-eyed pea)

Soups:

- Bullā or ka kwā (soup made of the dregs of rice beer, diced spleen, and other meats, bone marrow, and bone)
- Chhyālā (soup made of shredded pickled radish and diced variety meats)
- Pāun kwā (sour soup of Himalayan hog plum)

Salads:

- Kaywu (soaked field pea and garden pea)
- Lain (sliced radish)
- Tusi (sliced cucumber)
- Laaie (sliced radish)

Desserts:

- Dhau (yogurt)
- Juju Dhau (yogurt/curd originated from Bhaktapur)
- Marichari (may include anything sweet from soft milk-based pastries to fried bread dipped in caramel)
- Laakhamari (made from flour and sugar, cooked in hot oil)
- Guulmari (made from flour and sugar, cooked in hot oil)
- Baalbara
- Yomari (made from chaku and flour and steamed like momo)
- Anarsha
- Ainthe-Mari
- Khajuri
- Roowth
- Fini
- Nimki
- Swaari
- Malpha
- Jeeri
- Gud-Paak
- Chimti
- Aiti Mar

Drinks:

- Aylā (liquor)
- Arak (rice beer)
- Kaar-Thwon (brown beer)
- Hyam-Thwon (red beer)

2.3.4.3 Utensils

Newars exhibit a rich tradition of cooking, storing, and serving food and beverages using a diverse range of containers and utensils crafted from various materials, including gold, silver, copper, brass, iron, and clay pottery (Bauddhacharya, 2023). Additionally, they utilize natural materials such as dried rice stalks, corn leaves, and leaves of certain trees, which are sewn together with toothpicks to create plates and bowls (Wikipedia, n.d.). Some of the ancient utensils used for cooking and storing food include:

- Anti (alcohol jar)
- Bātā (basin)
- Chupi (knife)
- Ghampa (water pot)
- Hāsā (round winnowing tray)
- Ari (clay pot to keep snacks)
- Karuwā (water jug)
- Kholā (bowl)
- Sali (small clay bowl)
- Somā (earthen wine pitcher)
- Duna
- Tapari
- Laptye
- Dala (grain storage basket made up of bamboo)
- Dwah (clay or iron plate for cooking)
- Gulu (clay pot to hold wind while distilling)
- Phoshi (copper pot)
- Hansshi (clay pot)
- Dhala (spirituous liquor holding pitchers)
- Chilan (clay pot to smoke tobacco)
- Korin (small clay pot to spoon beer from big vessels)
- Sonthya (a bamboo hubble bubble to smoke tobacco)
- Sali (clay bowl to drink liquor)
- Lhoma macha (stone for grinding)

- Mhe (a shack made from a vegetation to carry grains)
- Dhakhi (a paddy straw rope to bind loose paddy)
- Dhakicha (basket made from bamboo)
- Picha (basket to keep beaten rice)
- Uga (a strong wooden log to beat the beaten rice)
- Lusi (wooden pestle to beat beaten rice)
- Twana (a strong wooden log to chop meat)
- Bhajan (pot to fry grains and beans)
- Ampa (clay pot with small tap to drink water)
- Pecha (a ring from paddy straw used as base for clay vessels)
- Tepa (huge clay vessel)
- Marikasi (clay vessel to keep bread)
- Kasi (clay pot to cook potato and rice)
- Bhaga (a clay pot used to keep food stuff)
- Dolakhamoo (a basket to carry paddy and wheat)
- Kapan (clay lid to cover vessels while cooking)
- Lwahanah (legumes and grains grinding machine of stone)
- Bhakhari (a wicker contraption for storing dry grains)

2.3.4.4 Etiquette and Table Manners of Newa Cuisine

The dining customs and table manners of the Newa community reflect deep-rooted traditions that have endured through generations. While modern influences have impacted daily meal practices in many households, traditional etiquette remains steadfastly preserved, particularly during festivals and significant occasions. Before and after meals, the ritual of handwashing is observed, underscoring the reverence for cleanliness. When dining, the use of bare hands is customary, and meals are served on brass or steel plates, symbolizing the community's commitment to shared experiences and familial bonds.

During festivities like Samaibaji, each family member receives individual servings on taparis, emphasizing the importance of hierarchy within the household. Family members gather on the floor to partake in the communal feast, fostering a sense of unity and togetherness. Similarly, the tradition of Jho Bhoje brings together family, relatives, and neighbors in a communal setting, where they sit on straw mats according to age hierarchy. Here, a variety of Newa delicacies are savored, showcasing the community's rich culinary heritage and the significance of shared meals in fostering social cohesion.



Figure 2. 5 Dining Etiquette & Table Manners of Newa people during fest

The Newa dining experience extends beyond mere sustenance, embodying cultural values of respect, unity, and tradition. Whether commemorating once-in-a-lifetime events or observing annual rituals, the dining table serves as a sacred space for bonding and celebration. Guided by age-old customs and a deep sense of reverence for tradition, Newa table manners continue to uphold the rich heritage and communal spirit of the community, ensuring that every meal is a cherished experience filled with warmth and connection. The food is separately divided into four phases. They are as follows:

- a. 1st phase (नहार्पिगु सारा)
Bitten rice, Radish Pickle (especially), Meat (1-2 pieces), Green garlic, etc.
- b. 2nd phase (ढनसरा)
Dyakala (Sub item of meat which contains Gravy), Legumes, Cauliflower, Potato, etc.
- c. 3rd phase (स्वसरा)
Legumes, Mushrooms, Methi soup, Pankua, Radish, Chana, etc.
- d. 4th phase (ढलपिगुसरा)
Bhutan, Curd, Small peas, Radishes, Carrots, Cucumber, Fruits, Sweets, etc.

2.4 Traditional Newa Kitchen and Communal Dining Practice

In traditional Newa culture, the kitchen holds a significant place, often referred to as the heart of the home. Newa kitchens are typically separate from the dining area, emphasizing the importance of food preparation and culinary rituals. These kitchens are equipped with various utensils and cooking implements made from materials such as clay, copper, brass, and iron. The layout and design of the kitchen are practical, with ample space for cooking, storage, and food preparation activities. Additionally, traditional Newa kitchens often feature open hearths or stoves, where meals are cooked using traditional methods and recipes passed down through generations.

When it comes to enjoying feasts in Newa culture, there are specific places and settings that hold significance. One such place is the communal dining area, often located in the courtyard or open spaces of traditional Newa homes. Here, large straw mats called "sukuls" are spread out, and guests are seated in rows according to age or social hierarchy. The feast is served on leaf plates or taparis, and everyone gathers together to enjoy the sumptuous spread of traditional Newa dishes.

In addition to home-based feasting, there are also communal feast venues known as "Bhoje chhen" or "bhoj patis" in Newa culture. These are communal spaces dedicated to hosting feasts and gatherings for various occasions, including festivals, weddings, and religious ceremonies. Bhoj chhen often feature large dining halls or courtyards where people can come together to share meals and celebrate important milestones. These venues play a vital role in fostering community and strengthening social ties within the Newa community.

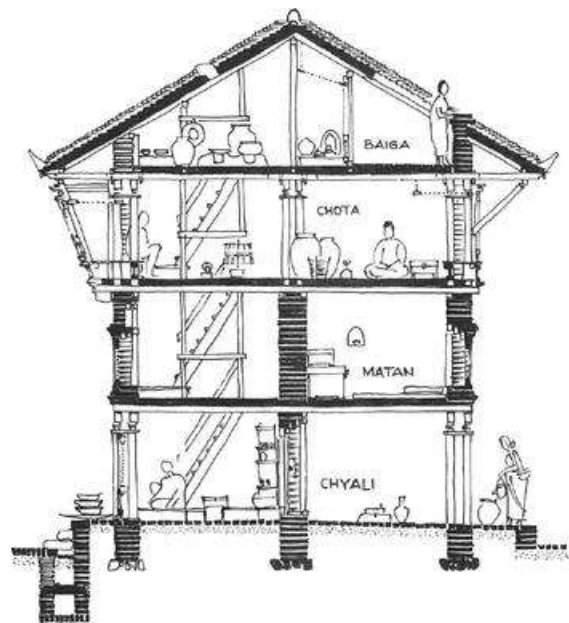


Figure 2. 6 Typical cross section of a multiple-story Newari building

2.5 Literature Study

2.5.1 Restaurant

A restaurant is an establishment where food and beverages are prepared and served to customers. While many people dine in at the restaurant, there are also options for take-out and food delivery services. Restaurants come in diverse forms, offering a wide range of cuisines and service styles. These can include fast-food joints and cafeterias for quick and affordable meals, family restaurants with mid-range pricing, and upscale luxury establishments known for their high-quality dining experience.

Spaces required

Kitchen

The kitchen area comprises two main sections: the pre-preparation area and the final preparation area for hot food. The pre-preparation area is where food is processed, mixed, combined, held, cleaned, or otherwise prepared for final cooking, as depicted in the figure. This stage usually occurs before the meal is served and requires seamless connectivity to both the storage area and the final preparation zone. On the other hand, the final preparation area is designated for frying, steaming, boiling, grilling, and other heating processes applied to the food. This section typically operates simultaneously with meal service, ensuring that dishes are promptly prepared and served.

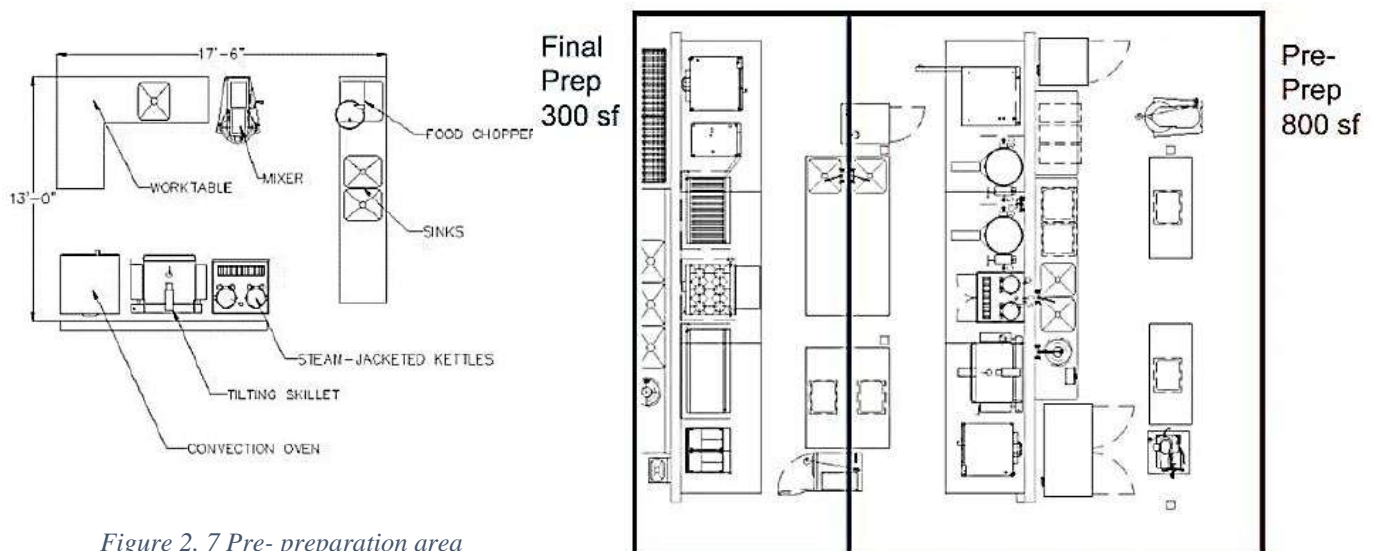


Figure 2. 7 Pre- preparation area and Preparation area

TABLE 1 Square Feet per Seat Used for Various Types of Food Operations

Type of operation	Square feet per seat
Cafeteria, commercial	16-18
Cafeteria, college and industrial	12-15
Cafeteria, school lunchroom	9-12
College residence, table service	12-15
Counter service	18-20
Table service, hotel, club restaurant	15-18
Table service, minimum eating	11-14
Banquet, minimum	10-11

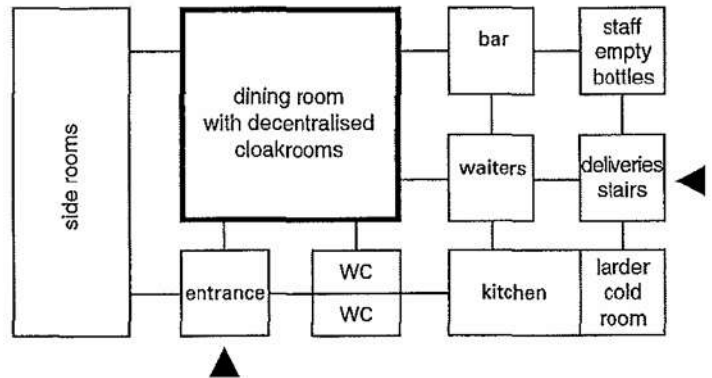


Figure 2. 8 Functional scheme of a small restaurant

Source: (Neufert, 2012)

Receiving area

The receiving area serves as a space for the delivery and inspection of goods, as depicted in the figure. It is strategically positioned to facilitate easy access for vehicles, connection to the storage area, and proximity to the preparation zone. With an approximate area of 64 square feet, the receiving area is equipped with all the necessary amenities and is sufficient for a small restaurant. In larger facilities, this area may feature an extended receiving table and additional space for staging products during inspection.

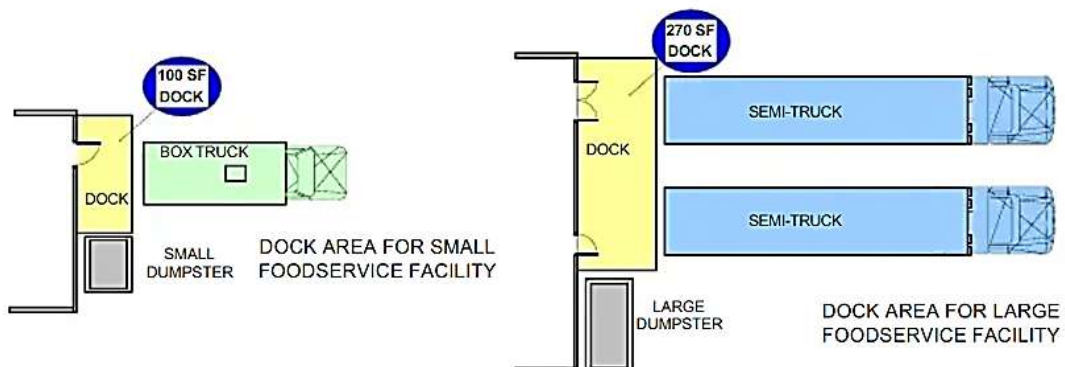


Figure 2. 9 Dock area

Storage area

The storage area includes spaces for dry goods, utensils, cleaning equipment, and refrigerated items, all strategically linked to the preparation and receiving areas for efficient workflow.

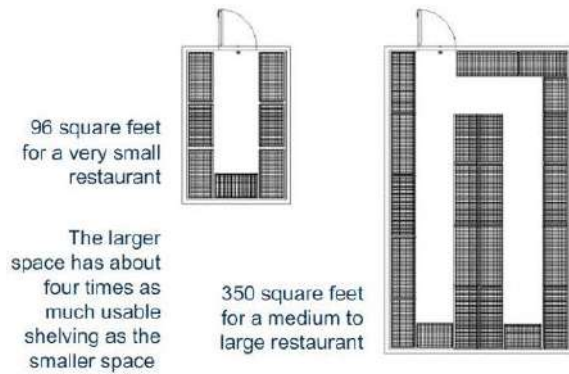


Figure 2. 10 Storage area

Source: (Neufert, 2012)

Employee locker area

An employee locker room provides secure storage for personal belongings, ensuring a comfortable work environment for staff.

Dining area

The space required for dining areas depends on the square footage per person seated and the number of persons seated at one time. Factors like patron size and service level influence this requirement. Comfort is key, with overcrowding avoided to ensure a pleasant dining experience. Typically, adults need around 12 square feet per person seated, while children may require less. Adequate elbow room and space for place settings are essential for customer satisfaction.

Factors affecting space requirement for production:

- Type of preparation and service
- Amount of the total production done in the unit
- Volume in terms of the number of meals served
- Variety of foods offered in the menu
- Elaborateness of preparation and service
- Amount of individual service given, as in a hospital tray service
- Seating and service plan, whether on one floor or many.

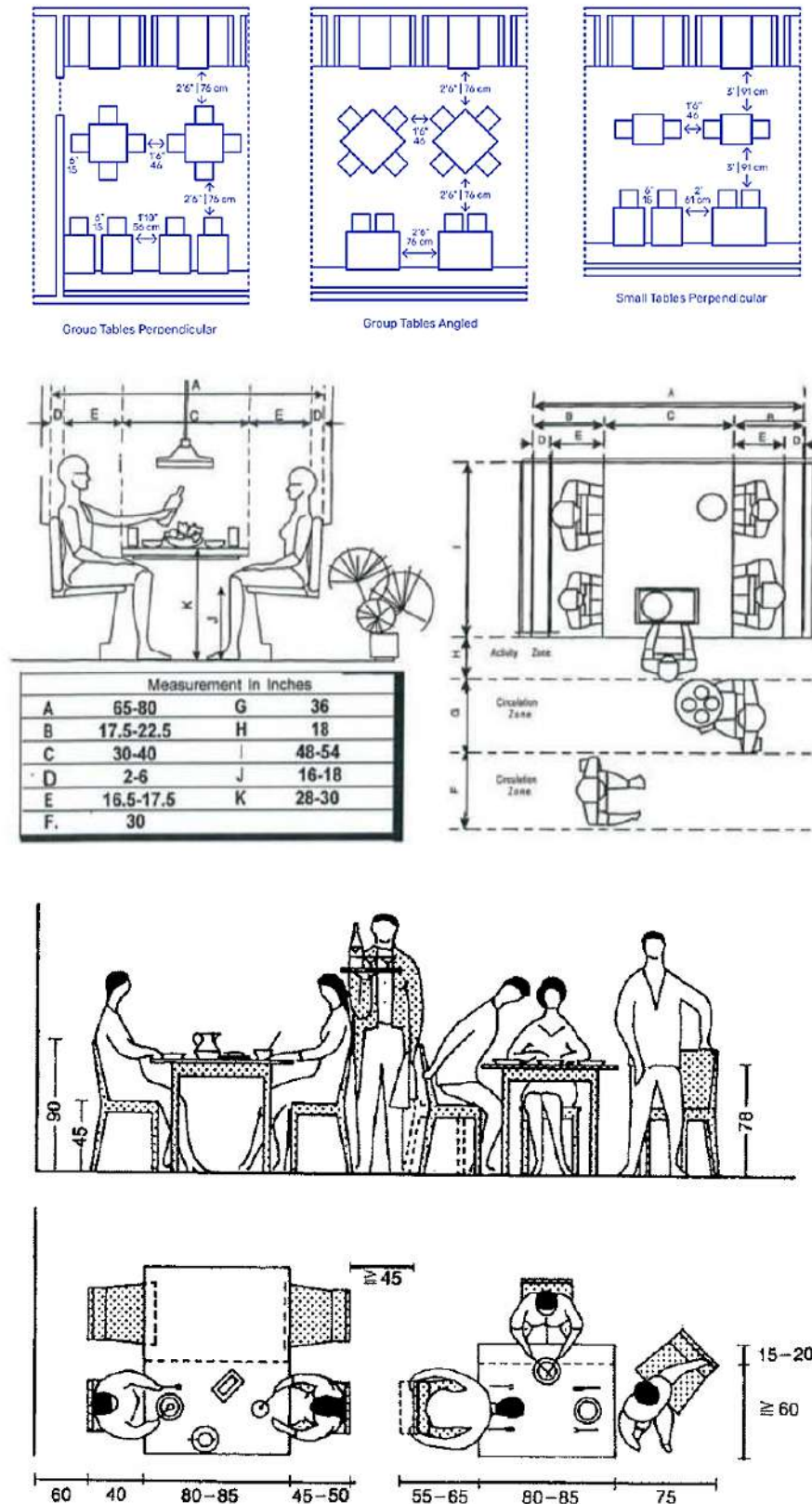


Figure 2. 11 Dining layout for Restaurant

Source: (Neufert, 2012)

2.5.2 Large Kitchen

For large catering establishments accommodating 800-1000 people, the layout emphasizes efficiency and accessibility. The central waiters' walkway facilitates seamless service, with provisions for additional service areas as needed. The kitchen adopts a cell system layout, with large appliances strategically positioned for optimal workflow. This setup caters to restaurants with extensive event facilities or catering services for external businesses. The waiters' passageway is tangential, featuring a prominent food buffet area and providing convenient access to both kitchen and dining areas. With a linear kitchen arrangement, space is maximized for large cooking appliances, ensuring smooth operations for high-volume meal production.(Neufert)

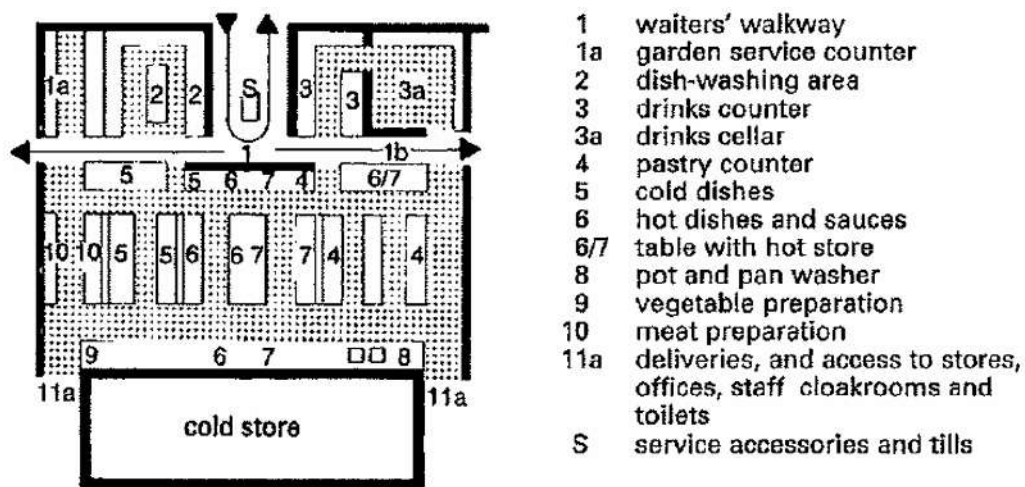


Figure 2. 12 large kitchen layout

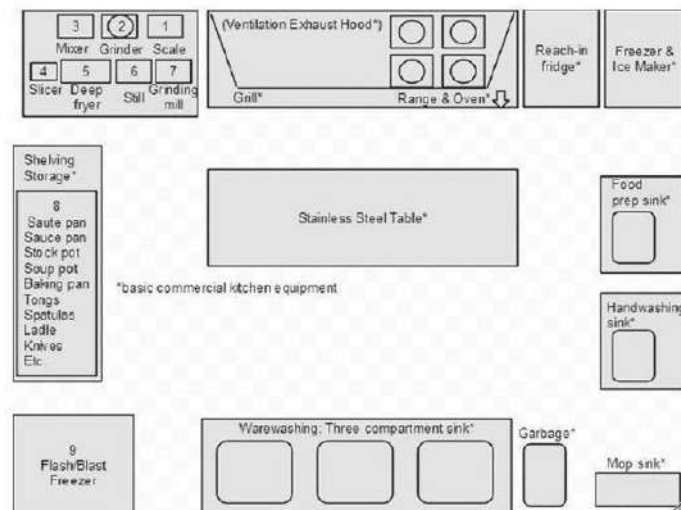


Figure 2. 13 Commercial kitchen layout example

Source: (De Chiara, 2001)

2.5.3 Dining Area (Event Spaces)

Event spaces, also known as reception halls, are essential for hosting large gatherings like parties, wedding receptions, and banquets, catering to dozens or even hundreds of attendees. Among the Newa community, their unique dining culture during events, such as the Suku/Jho Bhoje feast, sets them apart. During these gatherings, participants sit on a *sukul*, a hay carpet, to enjoy their meals. These events are often held in traditional venues like open spaces, streets, Dyochan, Vihars, and *guthi Ghars* within the Kathmandu Valley. Due to the Newa tradition of dining in a long line, event spaces typically feature a straightforward rectangular layout and require ample kitchen space to accommodate larger utensils. Effective circulation planning is essential to ensure smooth movement and convenience for attendees within the event space.

Before entering the event space, guests remove their shoes as a sign of respect. Once inside, there's a lively atmosphere with plenty of joking and banter as everyone settles comfortably onto the long straw mats known as *sukuls*. Each guest is provided with a *lapte*, a leaf plate, and a *pala*, a small clay bowl, while brass *karuwas* filled with drinking water are placed along the rows at regular intervals. Typically, service begins with the eldest guest, and after everyone has finished eating, three servers go around to each guest. One carries an empty *bata*, a large circular vessel, while another holds a *karuwa* of water, and the third has a towel. Guests wash their hands in the *bata* while water is poured from the *karuwa*. The eldest guest rising from their seat, prompting others to follow suit, signals the conclusion of the feast.

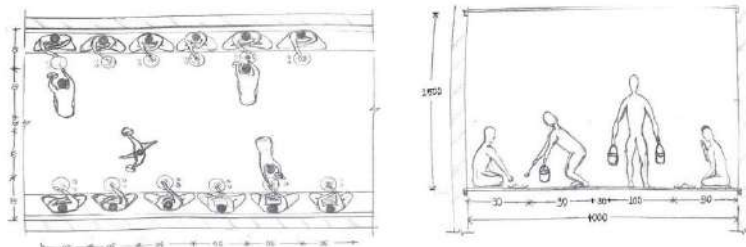


Figure 2. 14 People enjoying *jho bhoje*/event in an open space

2.5.4 Museum and Gallery

A museum serves as a public repository of artifacts that reflect human cultural development. Its purpose is to collect, document, receive, research, interpret, and communicate these objects through display. Different types of museums are categorized based on the origin and nature of the items in their collections. These include art galleries, which house fine art and craftworks; cultural history museums, which display devices, weapons, clothing, and documents illustrating the cultural development of specific regions; ethnology museums, which feature works from traditional peoples and lost cultures; and science museums, which focus on scientific and technical themes. In terms of lighting, museum display rooms should avoid direct daylight to prevent damage to the objects. Thus, flexible lighting systems are recommended, with no permanently built-in or fixed wall and ceiling lights (Neufert, 2012).

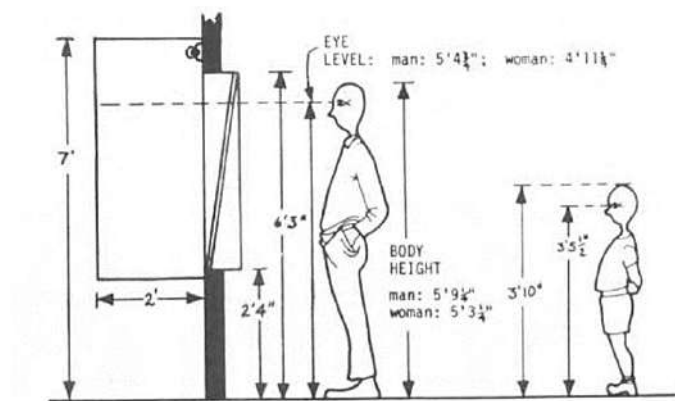


Figure 2. 15 Measurements of adult and six-year-old visitors in relation to cases

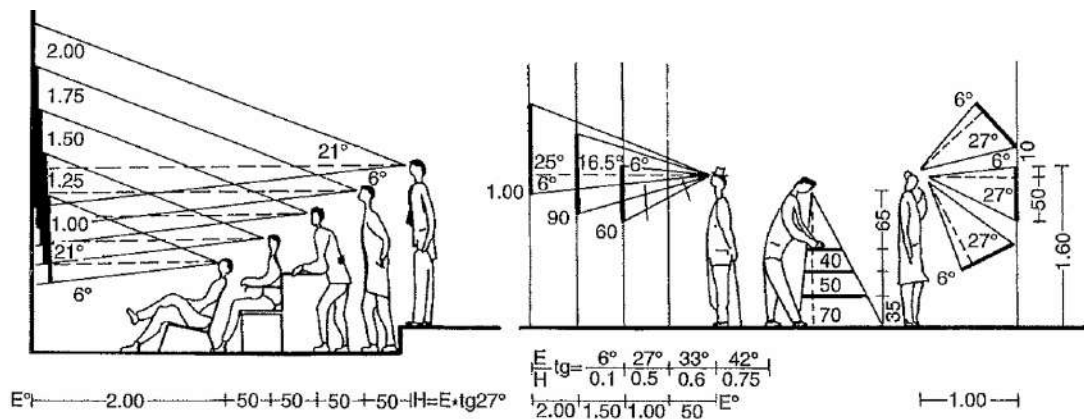


Figure 2. 16 Field of view: height, size and distance

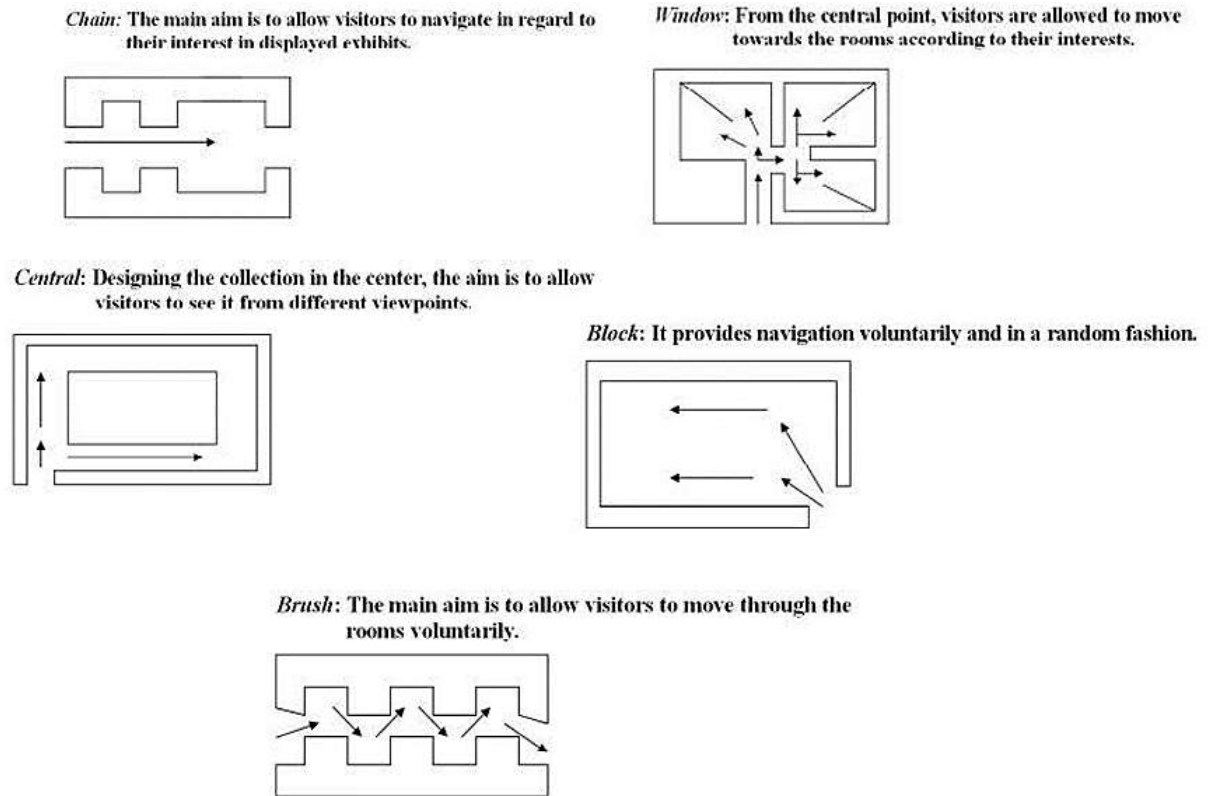


Figure 2. 17 Common Circulations Plan in Gallery

2.5.5 Office

Offices are dedicated spaces for administrative work, requiring a functional layout to support productivity and collaboration. Key considerations include defining the room's purpose, optimizing space planning for efficient movement, balancing privacy and collaboration, and providing adequate storage solutions. It's essential to create a comfortable environment that meets the needs of individual work, meetings, presentations, and team collaboration, ensuring smooth workflow and organization.

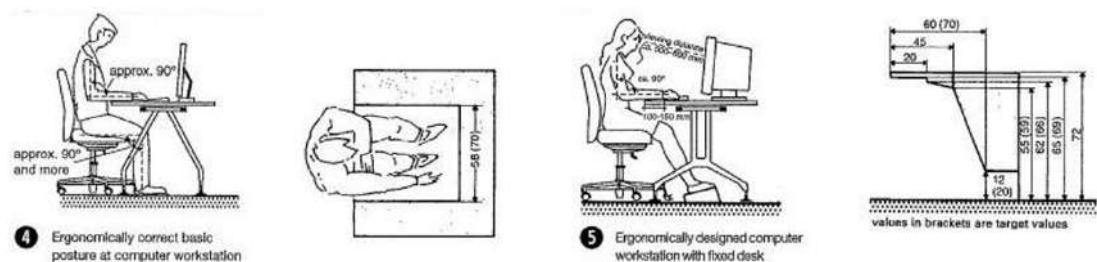


Figure 2. 18 Computer Workstations

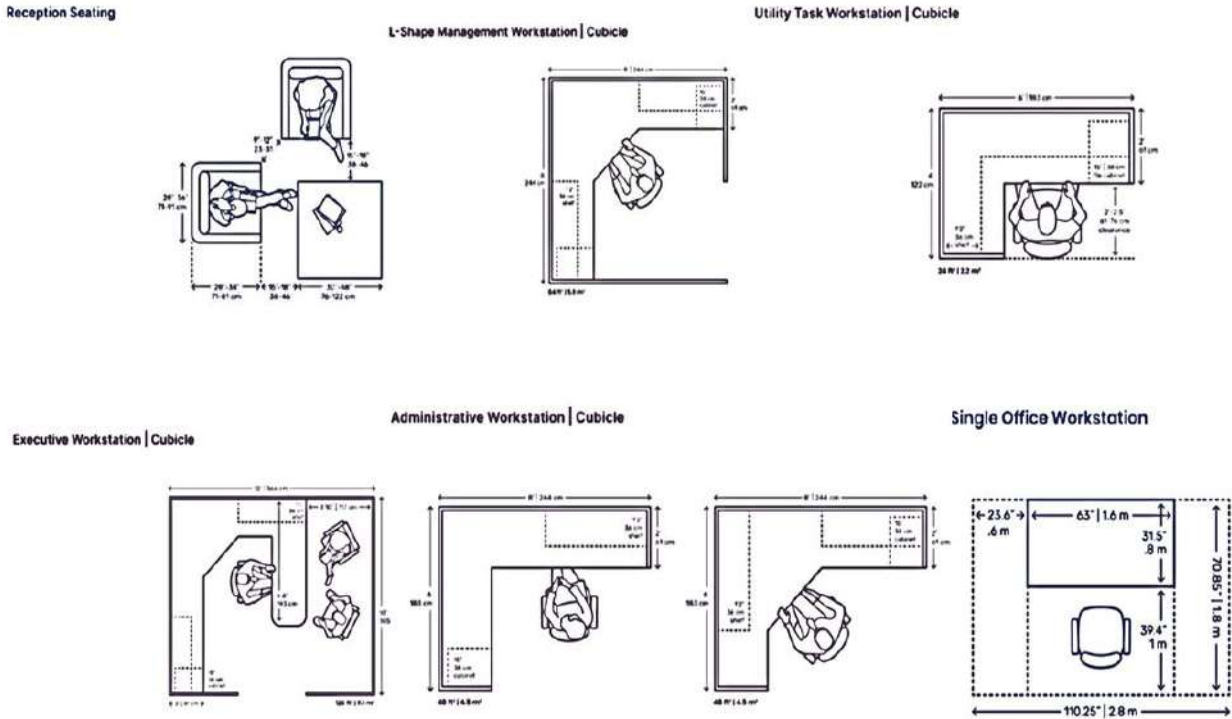


Figure 2. 19 Office spaces furniture layout

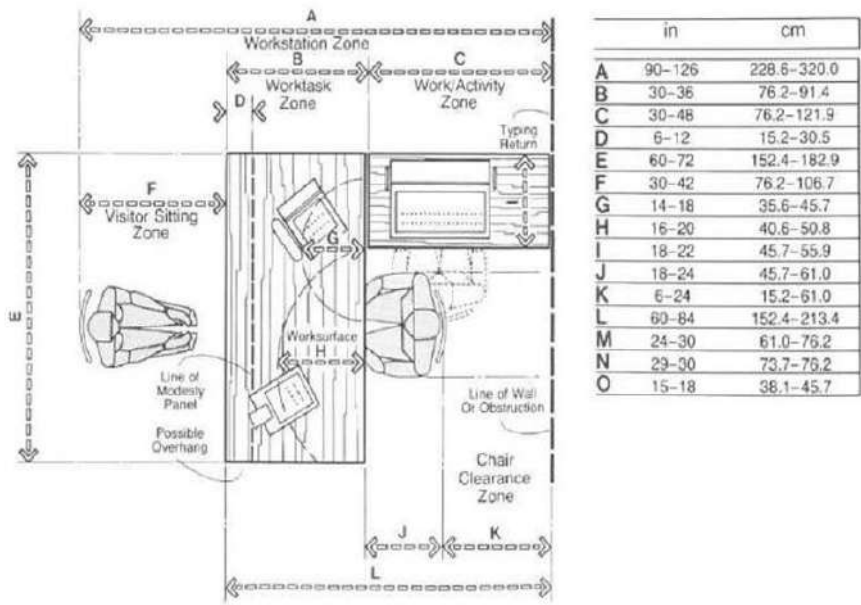


Figure 2. 20 Reception Space Requirements

Source: (De Chiara, 2001)

2.5.6 Public Restroom

A public toilet, also known as a restroom, public bathroom, or washroom, is a facility equipped with toilets (or urinals) and sinks for use by the public. These facilities are commonly found in various settings such as businesses, schools, transportation hubs, and public spaces, serving customers, travelers, employees, students, and other individuals. Public toilets are often segregated into male and female sections, although some may be unisex, particularly smaller or single-occupancy units. Accessibility for people with disabilities is a crucial requirement, and depending on cultural norms, there may be different levels of privacy and separation between genders. Typically, the entire room or individual stalls containing toilets are lockable to ensure privacy and security.

Fig. 14 Women's Large Restroom with Single Door Entry.

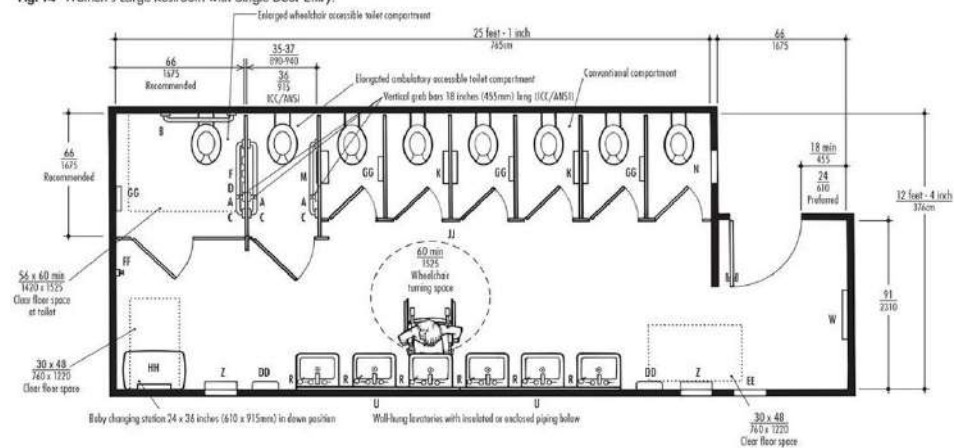


Figure 2. 21 Typical women public restroom Layout

Fig. 16 Men's Large Restroom with Double Open Vestibule.

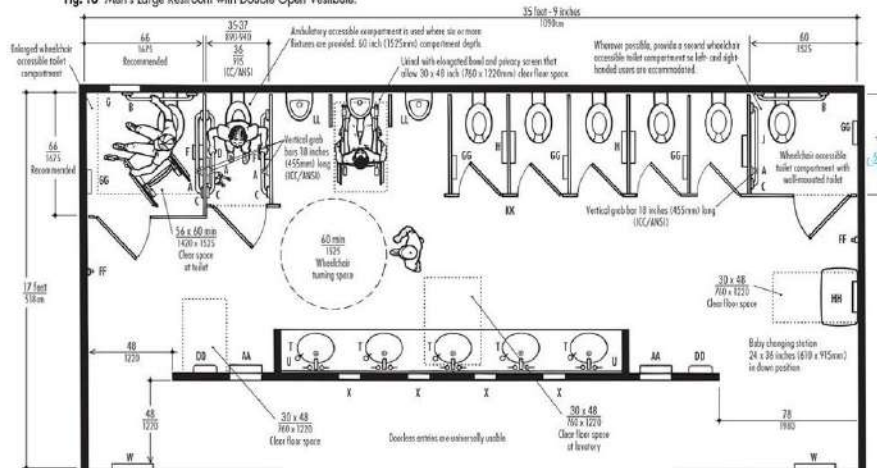


Figure 2. 22 Typical public restroom Layout

Source: (De Chiara, 2001)

2.5.7 Parking

Parking is a crucial aspect of both public and private environments, offering storage for unoccupied vehicles. From roadside spots to multilevel parking structures, these facilities adhere to size guidelines to ensure safe vehicle maneuvering. With the increasing popularity of walkable urban areas, the management of parking infrastructure is vital to balance supply and demand efficiently. Adequate parking, controlled through effective parking control systems, not only serves as a convenience but also plays a significant role in attracting and retaining customers for businesses. Conversely, insufficient parking availability can deter potential customers, emphasizing the importance of well-planned parking solutions.

Parking bays typically range in size from 1.80m x 4.6m to 2.5m x 6m, with different parking angles offering varying space efficiency and convenience. Open and basement car parks cater to diverse settings such as office complexes, town centers, tourist sites, and supermarkets. To enhance large parking areas, elements like varied surface materials, screening or separation features, and landscaping are incorporated to improve aesthetics, organization, and pedestrian integration. Proper location planning with clear markings, signage, and designated spaces for individuals with disabilities or special needs ensures efficient traffic flow and accessibility, contributing to a positive parking experience for users.

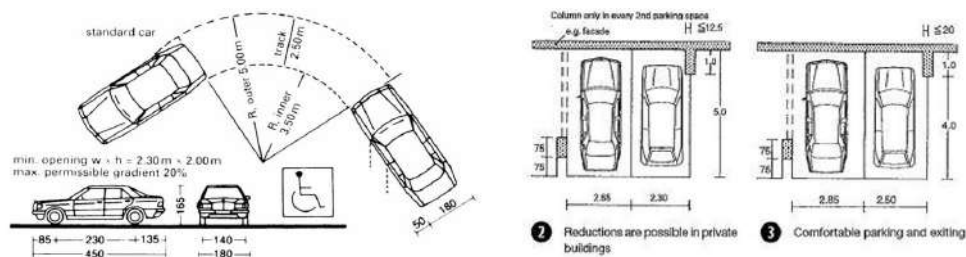


Figure 2. 23 Parking Layout and turning radius

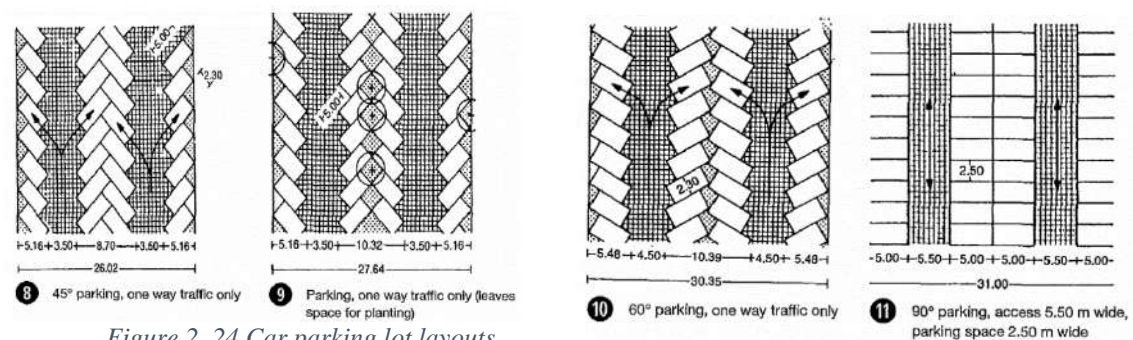


Figure 2. 24 Car parking lot layouts

Chapter 3 Case Studies

3.1 National Case Study

3.1.1 Sasa: Twa

3.1.1.1 Objective of Study

- Experience the classic ambiance of a restaurant.
- Understand the necessary circulation and spatial requirements for a Newari restaurant.
- Gain knowledge of Newari cuisine and traditional cooking practices.
- Study the different spaces required in a restaurant serving traditional cuisine in a traditional manner.
- Investigate how the planning and zoning of different spaces are executed in a traditional setting.

3.1.1.2 Introduction

Sasa: Twa Restaurant, located in the outskirts of Kathmandu in Kirtipur, is a haven for Newa cuisine enthusiasts. Embracing traditional Newa architecture, it offers an authentic cultural experience, attracting around 250 to 300 guests on regular days and up to 500 to 600 on weekends. The restaurant goes beyond food, hosting events like classical music and dance performances, including the rare Lakhe Naach of Kirtipur, serving as a platform to preserve and promote traditional art forms while generating funds to support them.

With its vibrant ambiance and meticulous attention to cultural details, Sasa: Twa embodies the essence of Newa heritage. From its architectural design to its menu offerings, every aspect reflects the richness of Newari traditions. The courteous and efficient staff further enhances the dining experience, making Sasa: Twa a must-visit destination for those seeking an authentic taste of Newa culture.

- Location : Sagal Tole-5, Kirtipur
- Typology : Restaurant
- Area : 3.6 Ropani
- Capacity : Up to 1000 people at a time
- Style : Traditional Newari architecture



Figure 3. 1 Sasa twa

3.1.1.3 Architectural details

The restaurant complex is a beautiful embodiment of traditional Newa architecture, featuring sloped roofs and wooden structures. Upon entering through a meticulously designed gate, guests are greeted by a charming street-like space adorned with a small Dhungedhara on the left and inviting patis (courtyards) on both sides. These patis serve as spaces for traditional music performances, displays of cultural items, and even house a traditional kitchen on one side.



Figure 3. 2 Views of Sasa Twa

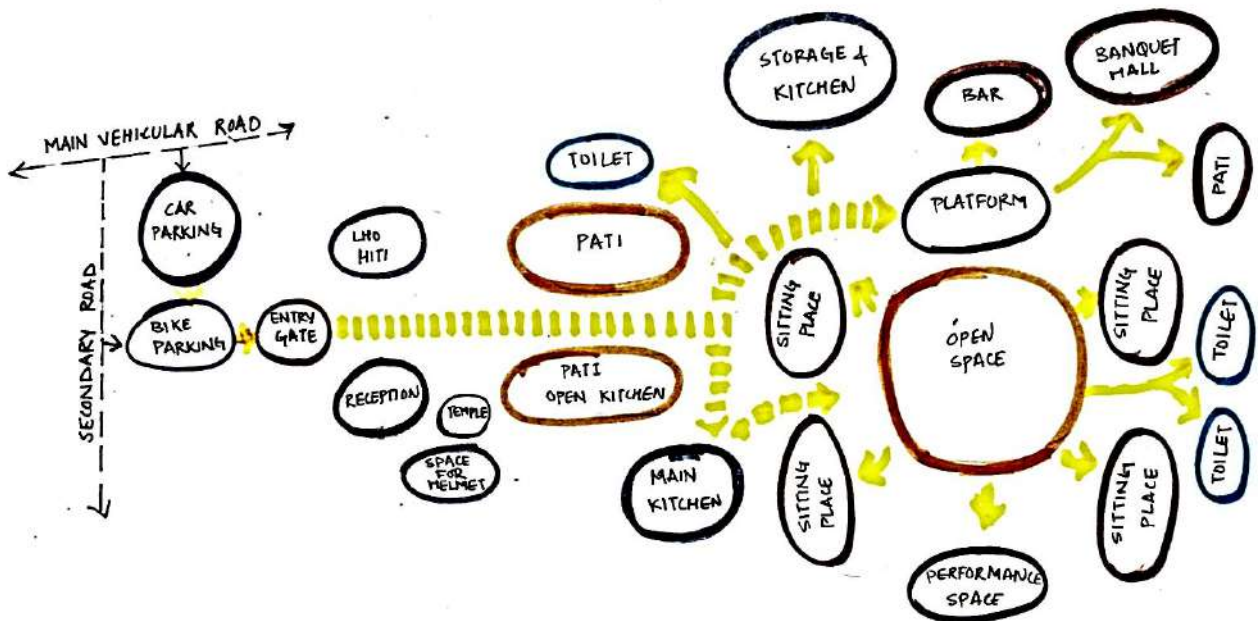


Figure 3. 3 Bubble diagram showing different zones of Sasa Twa

Moving forward, guests encounter a T-junction, where the right path leads to a modern kitchen housed within a traditional building, inaccessible to guests. The left path guides visitors to the main restaurant area, accessed by descending a few steps into the main open space, akin to a Dabali. Here, cultural dances and performances entertain guests,

surrounded by two-story buildings with seating facilities on either side. Guests immerse themselves in Newa culture by dining on the floor, in accordance with tradition. Additionally, a double-height building at the front hosts traditional dance and music performances, while toilets are conveniently located at the back of the complex. The building in front of platform is made of Traditional Newari style, with a ground floor bar, a restaurant on the two floors above with chairs for seating, and an attic floor serving as a mezzanine level. Alongside the traditional four-story building, the ground floor houses a banquet hall capable of accommodating 300 people, providing a space not only for restaurant services but also for hosting events and feasts.

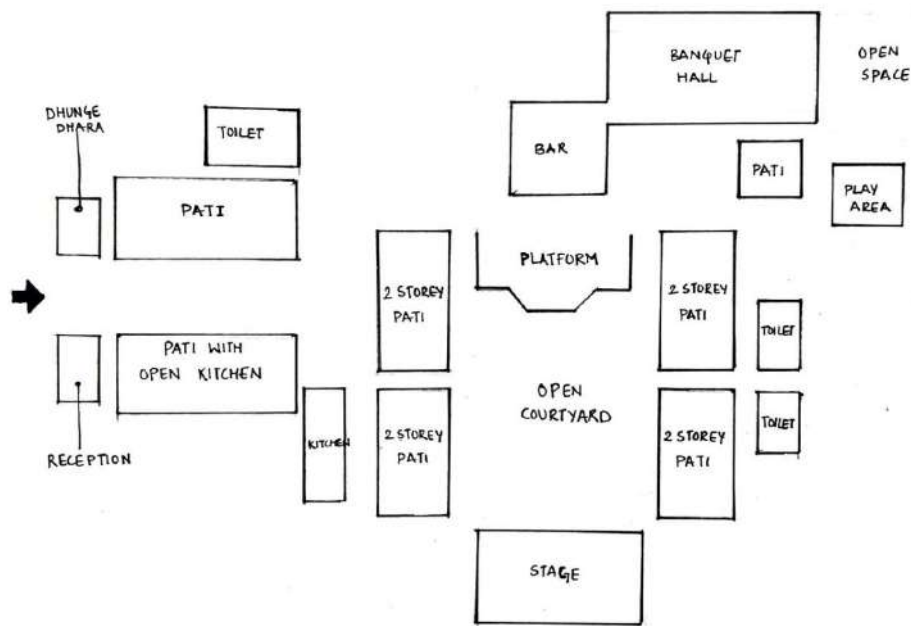


Figure 3. 4 Schematic diagram of Sasa: Twa

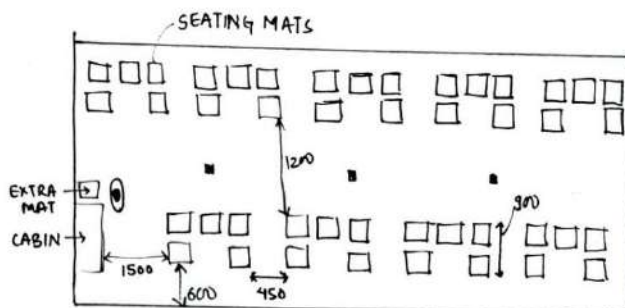


Figure 3. 5 Dining Layout of Sasa Twa



3.1.1.4 Construction technology and material used

The restaurant seamlessly combines traditional and modern construction techniques, blending load-bearing systems with wooden post and beams for structural integrity. Traditional construction methods such as brick, mud, and wooden joinery are prominently featured in visible areas, preserving the authentic Newa aesthetic. Meanwhile, modern technologies like cement mortar and metal trusses are discreetly integrated into interior spaces not visible from outside, ensuring structural stability and durability. Most materials used are traditional, with wooden members repurposed from buildings damaged in the 2015 earthquake. The restaurant boasts brick and mud walls, intricately carved wooden posts, beams, and lintels, square tiles for flooring, and large roof tiles, all contributing to its timeless charm and cultural significance.



Figure 3. 6 Different Dining Layout in Sasa Twa

3.1.1.5 Inference

- The restaurant is designed to host traditional Newari dining experiences and banquets, with a capacity of up to 1000 people.
- Featuring an expansive open dining area, courtyard, and performance stage, the space offers a vibrant setting for cultural events and gatherings.
- Patrons can indulge in a diverse selection of authentic Newari cuisine, catering to both local and international tastes.
- Careful attention to scale, proportion, and visual connections between spaces enhances the overall ambiance and guest experience.

- Thoughtfully planned circulation paths ensure ease of movement throughout the restaurant, minimizing congestion and optimizing guest comfort.



Figure 3. 7 Views of Sasa twa

3.1.2 Newa Lahana, Bhaktapur

3.1.2.1 Objective of study

- Explore space requirements for traditional cuisine restaurants.
- Examine traditional planning and zoning methods for different spaces.
- Study layouts typical of restaurants with traditional designs.
- Analyze the inclusion of museum-like spaces and displayed items.

3.1.2.2 Introduction

Newa Lahana is a branch of the renowned Newa Lahana restaurant in Kirtipur, situated in Sukuldhoka, Bhaktapur. Specializing in authentic Newa cuisine and beverages, it offers a blend of traditional flavors with a touch of modern elegance. The restaurant's ambiance and decor showcase Newa architecture and civilization, providing guests with an immersive cultural experience.

- Location : Sukuldhoka, Bhaktapur
- Typology : Restaurant
- Area : 1700 sq.ft
- Capacity : Up to 100 people at a time
- Style : Traditional Newari architecture



Figure 3. 8 View of Newa Lahana

3.1.2.3 Architectural details

It is a single-story building featuring a small courtyard within, covering an area of approximately 1700 square feet. The building boasts a brick-exposed facade with wooden posts, reminiscent of traditional Newa architecture, resembling a Pati. Accessible through a narrow neighborhood alley, guests enter through an old traditional wooden door. Inside, two buildings, offering both traditional floor seating and table options, with a preference for floor seating, flank an open space. The establishment comprises a reception area, dining space, and kitchen area, with an additional 250 square feet dedicated to open space for small dance and music programs, serving as a ventilation source and allowing natural light. Formerly a private residential square, it has been transformed into a cultural dining destination. The area for keeping shoes and storing belongings is located just before the entry gate.

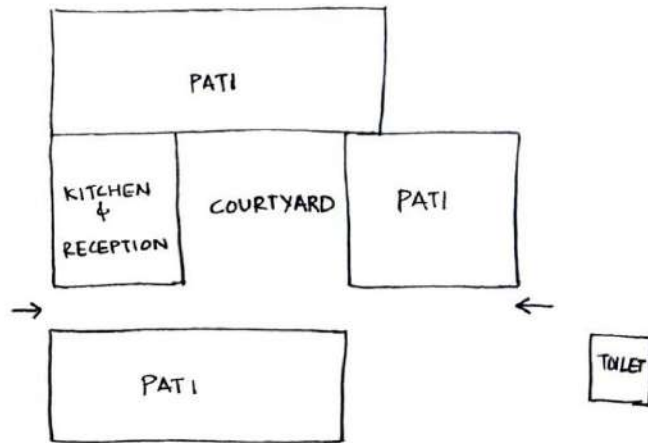


Figure 3. 9 Schematic diagram of Newa Lahana

The restaurant features traditional sukul (mats) and chakati (small mats) arranged in rows, with the chakati placed atop the sukul resembling chairs at a dining table. Additional chakati are added as needed to accommodate guests.

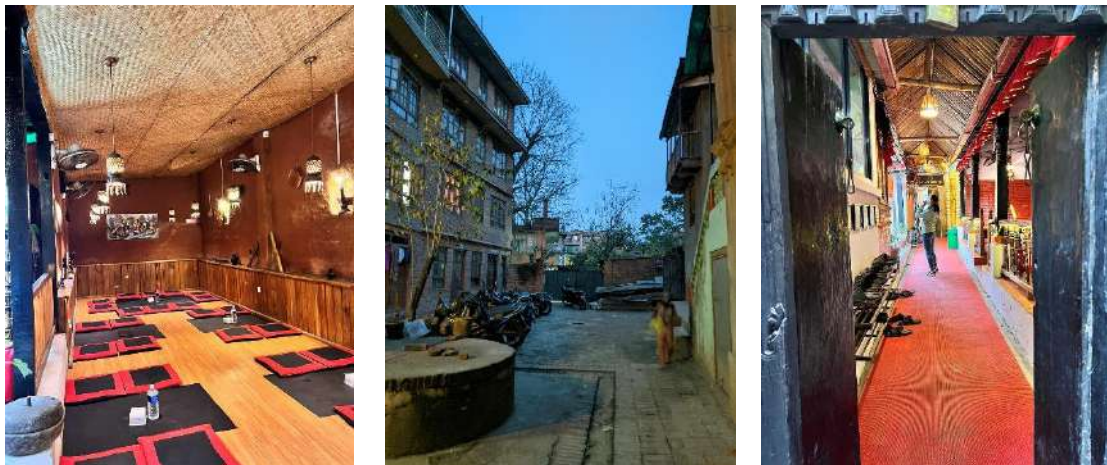


Figure 3. 10 Views of Newa Lahana, Bkt

3.1.2.4 Inferences

- Space Efficiency: Utilizes small area effectively with open and enclosed seating, catering to both traditional floor and table seating.
- Cultural Authenticity: Reflects Nepalese architecture with wooden posts, exposed brick façade, and traditional seating mats.
- Community Integration: Situated in a residential area, entrance through an alley fosters community engagement, hosting events in the open courtyard.

3.1.3 Jyapu Pragya Bhawan

3.1.3.1 Objective of study

- To study circulation of museum display
- To study the light and ventilation

3.1.3.2 Introduction

Jyapu Samaj, a prominent social organization in Lalitpur district, is dedicated to preserving and promoting the ethnic language and culture of over 30,000 indigenous people. Through its museum and various initiatives, it safeguards the diverse artifacts, ceremonies, and festivals of the Jyapus community, ensuring their transmission to future generations. While embracing modern development, the organization remains committed to upholding indigenous traditions and fostering social harmony through volunteerism and community engagement. With sub-committees focused on diverse areas such as tourism, education, and culture, Jyapu Samaj effectively promotes unity and cultural preservation among its members across 40 toles.

- Location: Bhola Ganesh-9, lalitpur
- Total Area: 3.5 ropani
- Type: Community building
- Established year: 2056 B.S.
- Ownership: Jyapu Samaj



Figure 3. 11 Jyapu Pragya Bhawan

- Building Style: Newari Architecture
- Site Context: Mixed use, residential and commercial
- Activities: Cultural program, museum, trainings
- Facilities: Banquet hall for public, auditorium for cultural programs, different trainings for public

3.1.3.3 Cultural museum

Museums serve as invaluable resources for individuals seeking inspiration, education, and cultural enrichment. These organizations gather, preserve, and showcase historical items and specimens, providing access to artifacts held by society. Within these collections, visitors can explore a diverse array of artifacts, many of which are still

utilized in local homes today, such as traditional kitchen utensils and storage containers that have stood the test of time for hundreds of years.

- Life-size models depict lifestyle, vocations, and national cultural events.
- Samples of soil from the valley and beyond, showcasing geological diversity.
- Displays include local food grains, beans, and lentils, offering insights into agriculture.
- Vocational instruments and farming tools provide a glimpse of traditional trades.
- Exhibits cover all life stages, from birth to death, reflecting cultural practices.
- A dummy display showcases Newar customs and traditions.
- Items used in ten karmic rituals are on display.
- Demonstrations highlight traditional wooden and brick architecture.
- The collection includes utensils, clothing, jewelry, and more.
- Objects along partition walls guide circulation.
- Traditional Jyapu musical instruments, like the Yakwa baja, are featured.
- The display space accommodates 150 people and uses tellia tiles for a traditional floor finish.

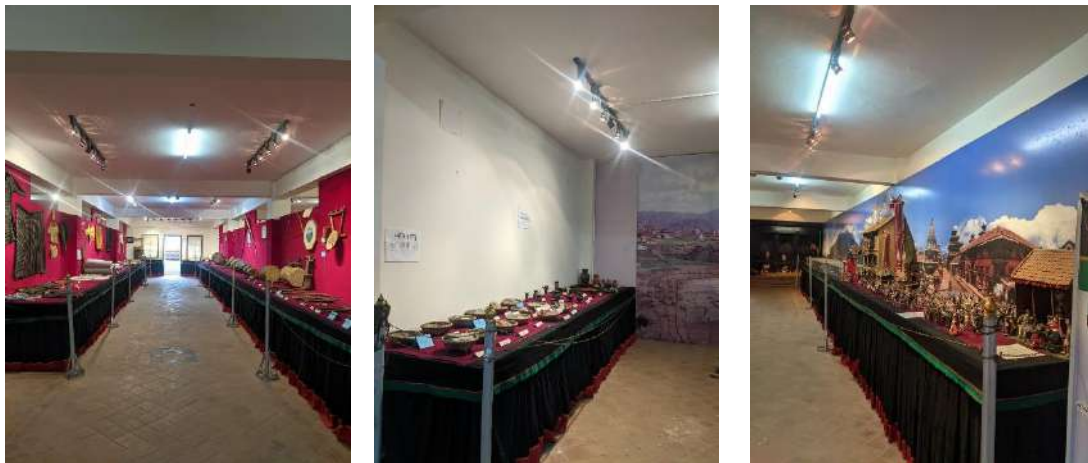




Figure 3. 12 Different types of artifacts that are being displayed in the museum

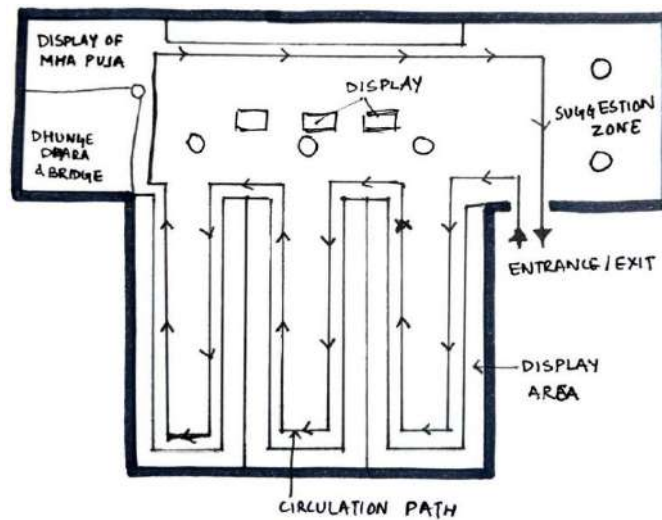


Figure 3. 13 Circulation inside the Museum

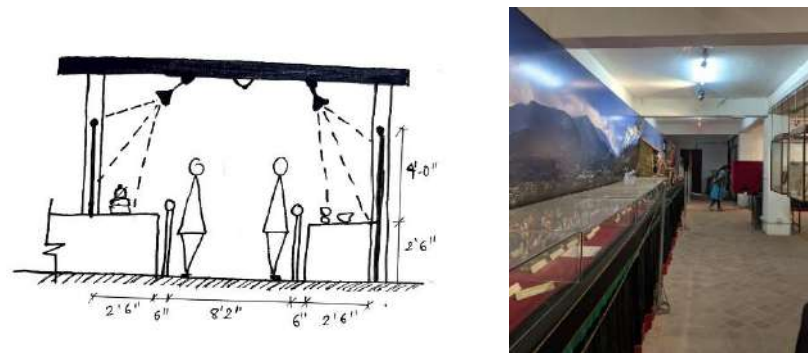


Figure 3. 14 Display space inside the Museum

3.1.3.4 The Live Demonstration Area

- The Live Demonstration Area features overhead lighting for optimal display.
- Proper maintenance of the drain system prevents leaks.

- Regular training programs, including metalwork and Newari music performances like Basuri, are held periodically.
- Pottery-making classes are offered to the younger generation to preserve traditional practices.
- Skylights reduce the need for artificial lighting.
- The demonstration area includes a 300 mm raised platform for presentations.



Figure 3. 15 Live Demonstration of work during workshop



Figure 3. 16 Maximum amount of Natural Lighting

3.1.3.4 Inferences

- Museum exhibits offer insights into Newari culture, including lifestyle, traditions, and rituals.
- Displays include life-size models, agricultural samples, vocational instruments, and household tools.
- Preservation efforts extend to traditional Newari musical instruments
- Demonstrates optimal space utilization with features like overhead lighting and a raised platform.
- Integrates skylights to reduce reliance on artificial lighting, promoting environmental sustainability.

3.1.4 Dathu Baha

3.1.4.1 Objective of study

- Explore various spaces needed for organizing traditional events and feasts.
- Analyze the layout and area requirements for hosting such events.

3.1.4.2 Introduction

- Location : Kasamatunthi, Bhaktapur
- Typology : Bahal
- Area : 2830 sq.ft
- Style : Traditional Newari architecture



Figure 3. 17 Dathu Baha

Previously known as Jetbarna Mahabihar, now called Dathu Baha, this structure stands as a rare relic in Thimi, unlike the more common ones found in Kathmandu or Lalitpur. Erected during the reign of Bhupatindra Malla in Nepal Sambat 832 (early 1710s AD), it serves as a testament to the flourishing of Buddhism in the area. Every year, during the Gunlaa festival, devotees flock to the site from various bihars to pay homage to the deities.

Beyond its cultural significance, Dathu Baha holds social importance as well. It remains the sole mahabihar in Thimi with an open space devoid of personal residences within the compound. Following its reconstruction, locals anticipate gaining a communal space for gatherings and cultural events. This transformation promises a welcome change, offering a venue for feasts and gatherings that was previously lacking in the area. Importantly, it stands as a symbol of communal unity, where people from all castes and communities can come together without any restrictions or charges imposed for partaking in community meals, which has been a tradition in some places.

3.1.4.3 Architectural Details

Its design reflects the traditional Nepali architectural style, characterized by sloping roofs, wooden beams, and intricately carved wooden facades. At the heart of the Baha lies a spacious courtyard, serving as a communal gathering place for various social and religious activities. Elaborate wooden doors and windows adorned with religious motifs further enhance its aesthetic appeal, while a sacred temple within the compound

provides devotees with a serene space for worship and reflection. Open areas within the Baha offer venues for meditation and cultural events, fostering a sense of community and spiritual connection.

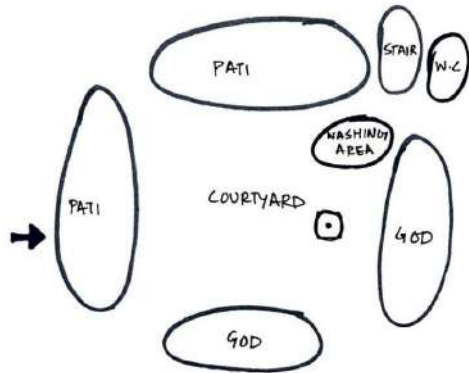


Figure 3. 18 Bubble diagram of Dathu Baha

The layout of Dathu Baha's courtyard system is carefully organized to cater to both religious and social functions. Buildings on the north and west sides are designated as feast spaces, providing ample room for communal dining and celebrations. In contrast, structures on the south and east sides serve as places of worship, housing shrines for the revered Panchdaan gods. This thoughtful arrangement ensures a seamless transition for devotees from religious rituals to communal meals. Dathu Baha seamlessly integrates spirituality with social engagement, reflecting Nepal's vibrant Baha culture. Inside, sukul (mats) are arranged along the walls, leaving a meter-wide space in the center for circulation. This layout accommodates 100-120 guests at a time, with cooking facilities positioned at one end. For those awaiting seating, the ground floor serves as a waiting area until space becomes available.

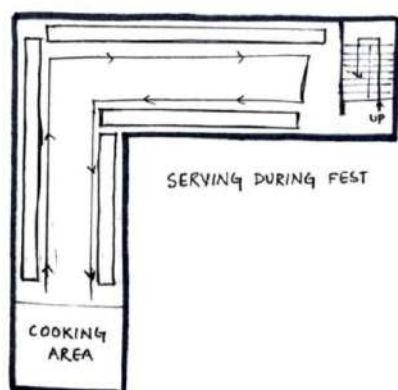


Figure 3. 19 Circulation in feast



Figure 3. 20 View of Dathu Baha

3.1.4.4 Inferences

- Traditional Newa feasts necessitate ample space for seating and food service, often in a courtyard or open area.
- Efficient use of minimal space is crucial to quickly serve a large number of guests during these feasts.
- The layout must be carefully planned to facilitate easy access to food and seating areas for efficient service.
- Managing the flow of people during the feast is essential to ensure a smooth and enjoyable dining experience for all attendees.

3.2 International Case Studies

3.2.1 Kalakal Tibetan Cuisine and Culture Center, China

3.2.1.1 Objective of study

- Investigate global food hub concepts and models.
- Explore the design and functionality of food hub spaces.
- Assess impacts and propose solutions for challenges in food hub development.

3.2.1.2 Introduction

Twenty years ago, a Tibetan family named Pema introduced "Kalakal," the inaugural local Tibetan restaurant in the outer urban area of Dukezong, Shangri-La. Kalakal prides itself on preserving authenticity, maintaining moderate business practices, and sourcing natural food ingredients. Upholding the concept of creating a welcoming space in the heart of warm Shangri-La, Kalakal has become a beloved establishment for locals and tourists alike. After two decades later, a new composite space is being designed and transformed, building upon the foundation laid by Pema Kalakar and displaying the essence of authentic Tibetan cuisine to highlight the regional cultural characteristics of Shangri-La. This space is envisioned as a hub for locals from all walks of life to gather, communicate, and engage in various cultural activities, fostering a vibrant cultural life in Shangri-La (Architizer, n.d.).

- Firm : Parallelect design
- Type : Cultural center
- Year : 2020
- Size : 1000 sqft - 3000 sqft



Figure 3. 21 Kalakal Tibetan Cuisine and Culture Center

3.2.1.3 Design Strategies

In reimagining the site's existing structures within the context of Shangri-La's strong regional architectural culture, the design strategy prioritizes a harmonious fusion of modern techniques with Tibetan cultural influences. Addressing the mismatched facade of the original building and the low space utilization, the renovation project focuses on enhancing visual appeal and thermal efficiency while optimizing interior layouts. Drawing inspiration from traditional Tibetan architecture and successful local projects,

such as the MSunyata Hotel and Arro Khampa Hotel, the design approach strikes a balance between contemporary materials and cultural aesthetics. Emphasizing simplicity, restraint, and user experience, the renovated spaces aim to embody the essence of Tibetan culture while meeting contemporary standards of functionality and comfort, ultimately enriching the built environment of Shangri-La with authenticity and warmth (Archello, n.d.).

3.2.1.4 Façade Transformation

The facade transformation of the building embraces traditional Tibetan architectural elements, such as lattice windows and wooden window heads, to evoke the rhythm and charm of Tibetan building aesthetics. To combat the challenging plateau climate, double-layer hollow glass and thicker glass frames are employed for optimal thermal insulation. Rusty steel plates are utilized for window trim, offering durability in outdoor environments where wood may deteriorate. The exterior walls are coated in pale rammed earth yellow real stone paint to mimic the rough texture of traditional rammed earth walls. Through this modern interpretation of traditional elements and strategic material choices, the design honors the local community's collective memory of regional buildings. Facade lighting is carefully designed to accentuate the texture of materials and highlight the external facades, utilizing bottom and groove lighting techniques to avoid harsh direct light sources (Archello, n.d.).



Figure 3. 22 Kalakal Tibetan Cuisine and Culture Center

3.2.1.5 Interior Renovation

Interior renovation aims to expand usable space and enhance functionality. The first floor hosts new catering formats, while the second floor maintains its original layout. The third floor is transformed into private dining rooms to reflect traditional Tibetan dining habits.

Original street-facing shops on the first floor are opened up to create an open space. Structural reinforcement is used where partition walls cannot be removed. A secondary entrance is established, and toilets are added for independent functionality.

Inspired by traditional Tibetan fire ponds, a modern interpretation is made in the first-floor space, evoking scenes of family gatherings. Metal curtains hide chaotic ceiling beam arrangements, blending visually with the smoke hood.



Figure 3. 23 Interior view of Kalakal Tibetan Cuisine and Culture Center

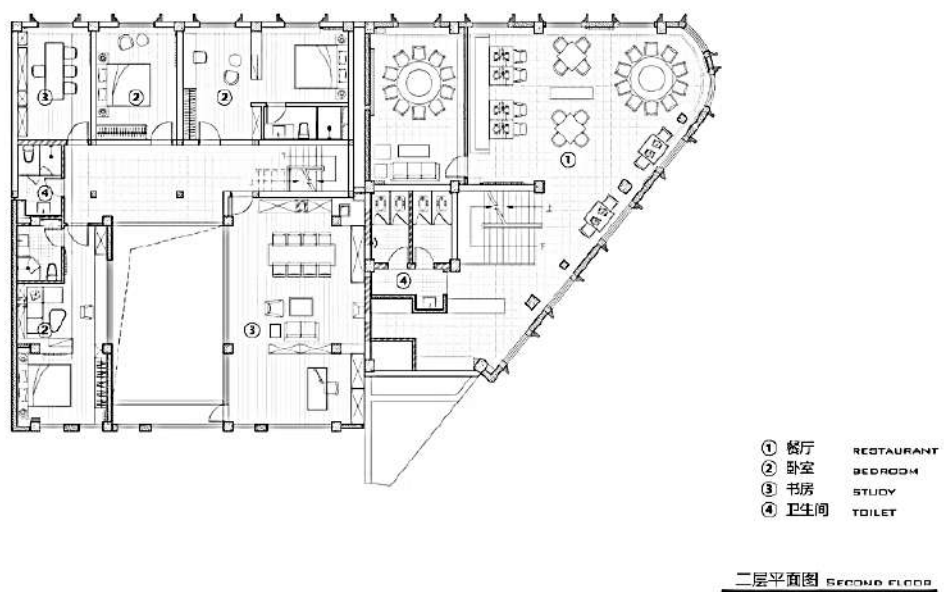
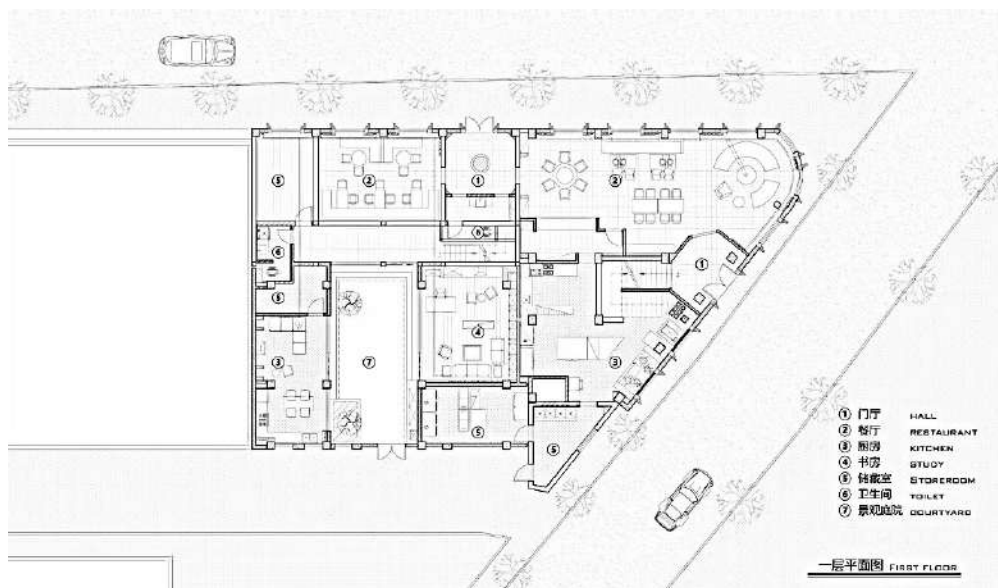
The second floor retains its original layout, with traditional low tables and sitting couches fostering a sense of closeness. Metal mesh curtains echo the layout and shape of square Tibetan tables.

The third floor is reconfigured into private rooms with improved privacy. New door holes are opened in load-bearing walls, and lightweight partitions divide the space into separate compartments with amenities.

Tibetan ornaments, such as Thangka paintings, adorn the interior. Hung against red backdrops, they convey respect for Tibetan culture while serving as decorative elements (Architizer, n.d.).

3.2.1.6 Inferences

- Renovations at Kalakal Tibetan Cuisine prioritized functionality and cultural authenticity.
- Increased space was achieved while preserving the original layout.
- Introduction of new catering formats on the first floor accommodated diverse clientele.
- Traditional Tibetan elements like Thangka paintings were integrated into the interior design.
- Exterior facade transformation balanced modern techniques with Tibetan aesthetics.



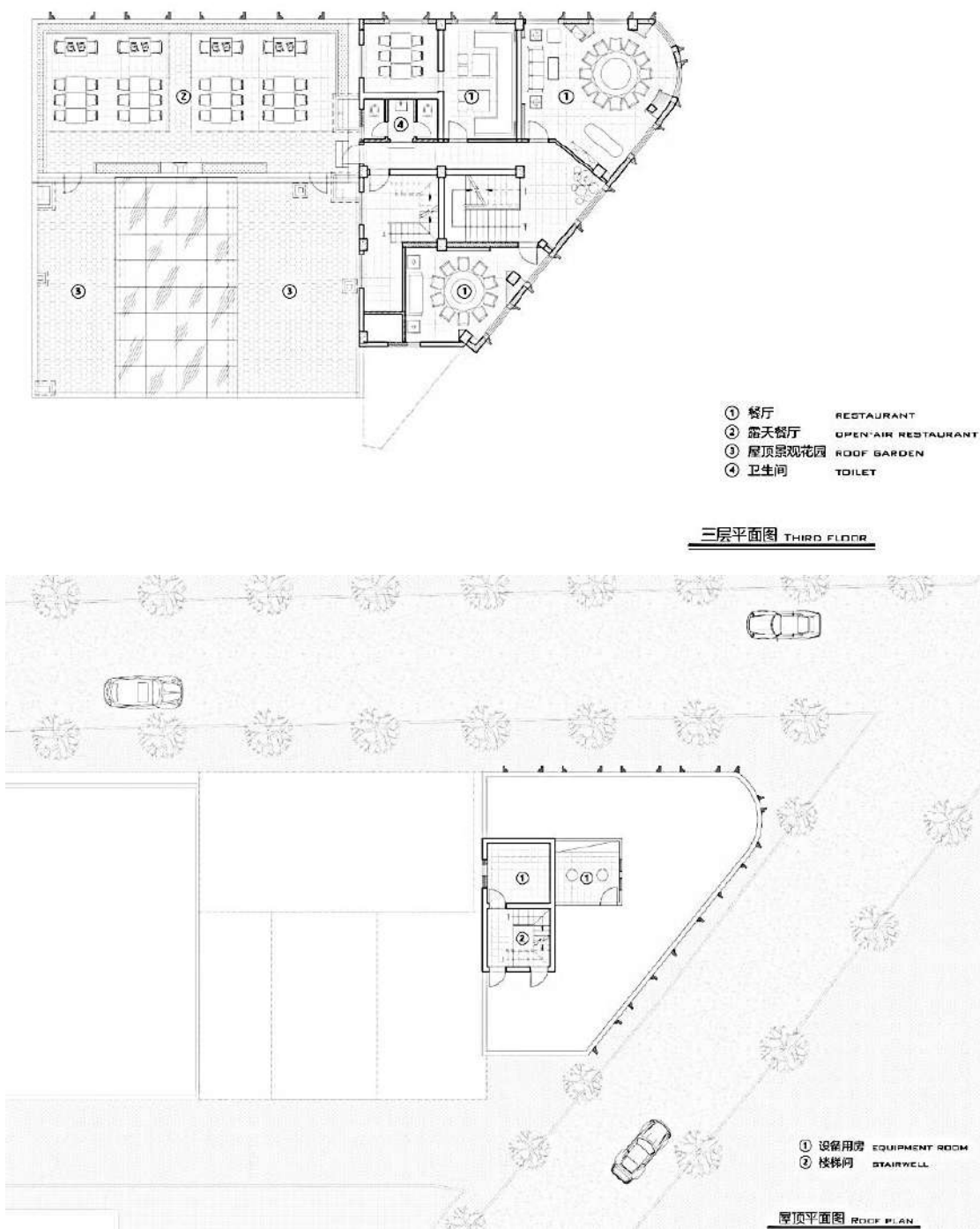


Figure 3. 24 Floor plans of Kalakal Tibetan Cuisine and Culture Center

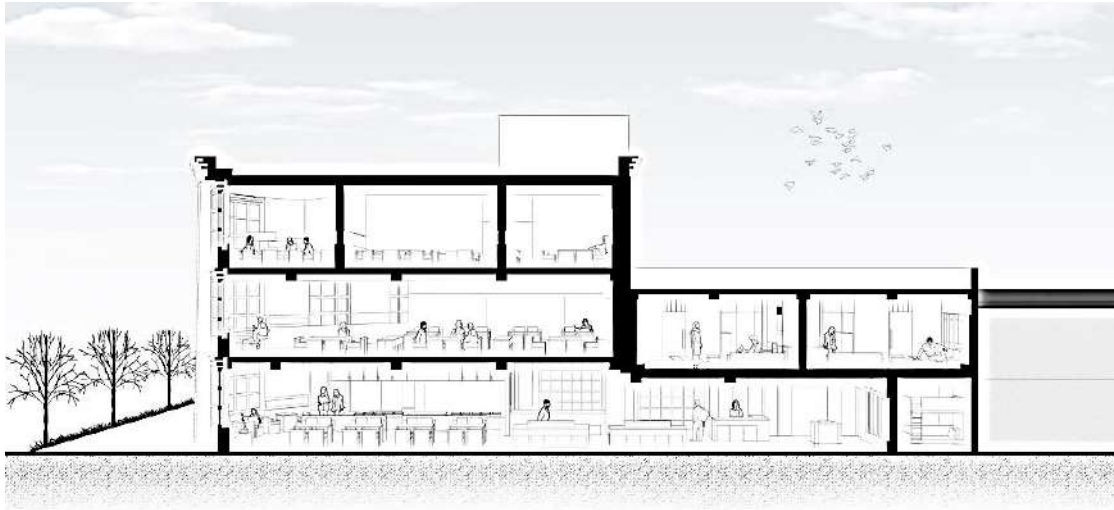


Figure 3. 25 Section of Kalakal Tibetan Cuisine and Culture Center

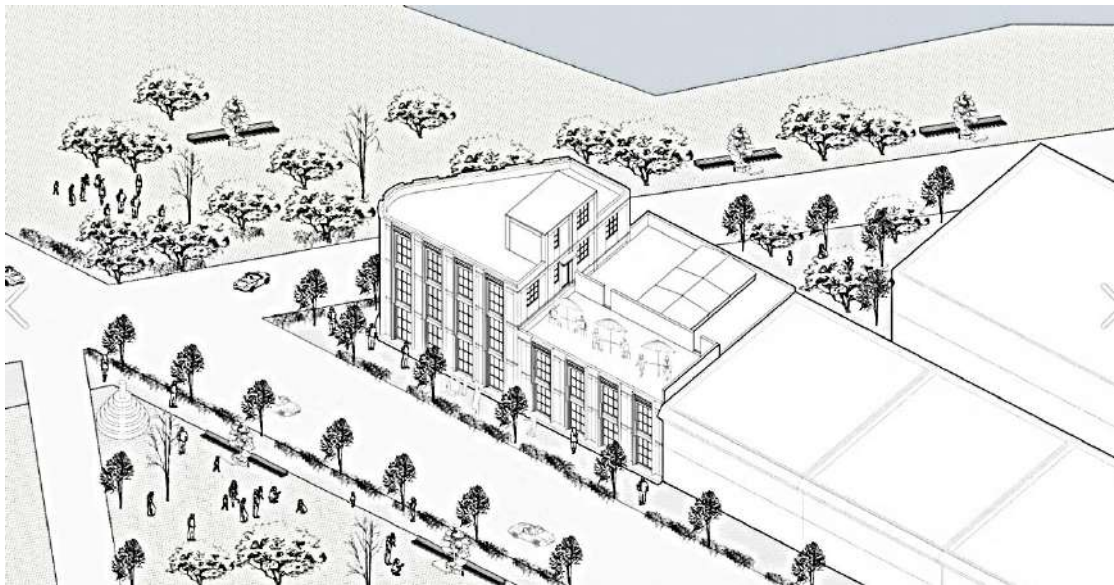


Figure 3. 26 Aerial view of Kalakal Tibetan Cuisine and Culture Center

3.2.2 Whitmore Community Food Hub Complex: Building Community around Food

3.2.2.1 Objective of study

- Study the global concept of food hubs, understanding their role in local food systems.
- Analyze the planning, design, and architectural elements of food hubs, focusing on functionality and sustainability.
- Review successful case studies of food hub projects worldwide, extracting best practices and lessons learned.

3.2.2.2 Introduction

Hawai'i's heavy dependence on imported food, despite its rich and diverse landscape, highlights the vulnerability of the state's food system. Recognizing this, a proposal has been put forward for the development of a Food Hub complex on O'ahu. This project aims not only to support local farmers and communities but also to serve as a model for community-based farming across Hawai'i's main islands. By aggregating, processing, and distributing products from local growers, the Food Hub seeks to foster socio-economic resilience and reduce reliance on global supply chains (Plan, 2019).

- City: O'ahu, Hawai'i
- State: U.S.A.
- Client: Hawai'i Department of Agriculture
- Estimated Completion: 07/2020
- Gross Floor Area: 41342 mq
- Architects: University of Arkansas Community Design Center



Figure 3. 27 Whitmore Community Food Hub Complex

3.2.2.3 Architectural details

Functional Layout: The Food Hub complex is meticulously organized to facilitate the aggregation, processing, and distribution of locally sourced food products. It includes dedicated areas for receiving and sorting produce, state-of-the-art processing facilities, cold storage units, and loading docks for distribution.

Architectural Form: The complex's architectural design seamlessly blends functionality with aesthetics, featuring a modern appearance that reflects the industrial nature of food

processing. Tilt-wall concrete construction ensures durability, while large windows and skylights provide ample natural light for the interior spaces.

Public Spaces: In addition to its logistical functions, the Food Hub incorporates inviting public areas that promote community interaction and engagement. These spaces include landscaped plazas, pedestrian promenades, and outdoor seating areas where visitors can socialize and learn about local agriculture and cultural heritage.



Figure 3. 28 Whitmore Community Food Hub Complex

Sustainable Features: Sustainability is a key focus in the design, with energy-efficient lighting, solar panels, and rainwater harvesting systems incorporated to minimize environmental impact. Waste management strategies, such as composting and recycling, further contribute to sustainability efforts.

Cultural Integration: The architectural design honors Hawaii's cultural heritage, incorporating traditional elements and indigenous materials throughout the complex. Artwork and cultural motifs celebrate the diversity and vitality of Hawaii's food and agricultural traditions, fostering a sense of connection to the land and its people (Plan, 2019).



Figure 3. 29 Loft Micro-Housing Units of Whitmore Community Food Hub Complex

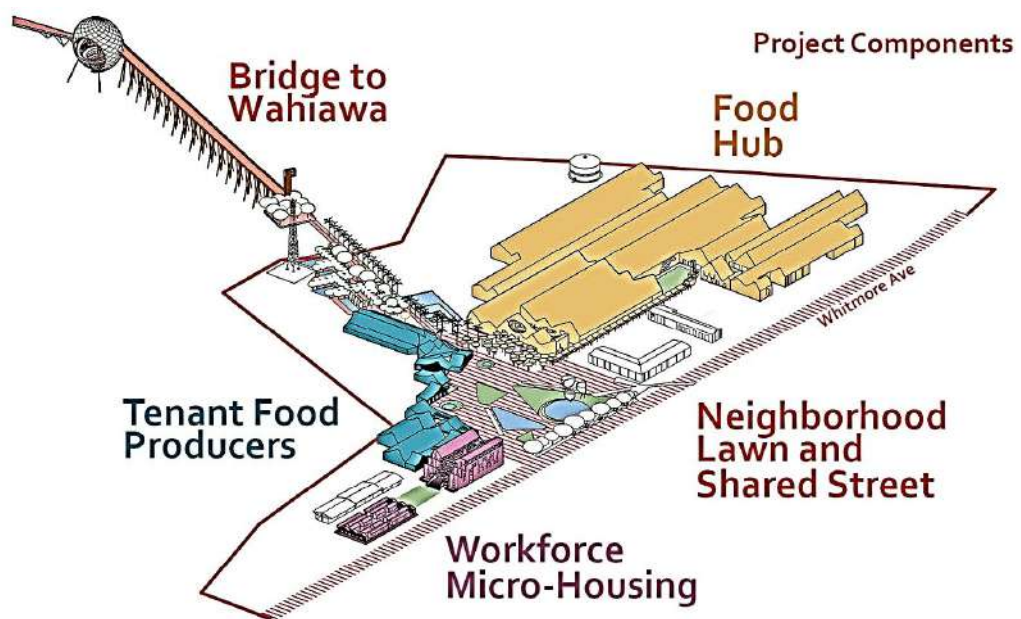


Figure 3. 30 Component diagram of Whitmore Community Food Hub Complex

3.2.2.4 Inferences

- Integrating logistical functions with community spaces within the Food Hub complex addresses Hawai'i's food security challenges effectively.
- Emphasizing sustainability, connectivity, and social equity is crucial for successful project implementation.

- Promoting integrated resource management and sustainable agricultural practices should be the overarching goal for similar initiatives in the future.



Figure 3. 31 Mater plan of Whitmore Community Food Hub Complex



Figure 3. 32 Aerial view of Whitmore Community Food Hub Complex

3.3 Comparative analysis of case studies

Case Study	Area (Approx.)	Design	Spaces (Capacity)	Layout of spaces	Activities
Sasa: Twa, Kirtipur	34611	<ul style="list-style-type: none"> Utilization of traditional building materials and construction techniques. Understanding the various spatial experiences within the environment. Application of design principles like axis, symmetry, hierarchy, repetition, and balance. Construction of a two-story restaurant and a three-story event venue. 	Restaurant-1000	Dining space features Newa-style mats arranged in perpendicular layout.	<ul style="list-style-type: none"> Dancing Singing Performance Cooking and eating
Newa Lahana, Bhaktapur	1700	<ul style="list-style-type: none"> Residential layout emphasizes private courtyards in tradition. Designs adhere closely to traditional architectural styles. Structures typically limited to single-story construction. 	Restaurant-100	The dining area features a combination of Newa-style mats and table-chair setups arranged perpendicularly.	<ul style="list-style-type: none"> Dancing Singing Performance Cooking and eating
Jyapu Pragya Bhawan, Lalitpur	19166	<ul style="list-style-type: none"> Jyapu Samaj Bhawan design incorporates traditional architectural elements. It features central courtyards typical of traditional residential layouts. Utilization of traditional materials and design principles enhances its aesthetic appeal and cultural significance. 	<ul style="list-style-type: none"> Administration office Meeting/ Conference hall Music training room Yoga/ Dance hall Cultural Museum Multipurpose hall Live Demonstration/ Exhibition space 	channel and hall type layout.	<ul style="list-style-type: none"> Host conferences and workshops. music classes and rehearsals. fitness and wellness sessions. Exhibit artifacts and host tours. Showcase live demonstrations and exhibitions.
Dathu Baha, Thimi	2830	<ul style="list-style-type: none"> Newari architectural design with a central courtyard layout. The architecture highlights intricate woodwork and ornate carvings, displaying rich craftsmanship. 	<ul style="list-style-type: none"> Bahal Event space -150 	Courtyard	<ul style="list-style-type: none"> Religious rituals & ceremonies, worship Social gatherings and community events
Kalakal Tibetan Cuisine and Cultural Center	3000	<ul style="list-style-type: none"> Harmonious fusion of modern techniques with Tibetan cultural influences. Enhanced visual appeal and thermal efficiency with optimized interior layouts. Balance between tradition and modernity, emphasizing cultural authenticity alongside contemporary standards. 	<ul style="list-style-type: none"> Restaurant Hall Study Bedroom Roof Garden 		<ul style="list-style-type: none"> Cooking And Eating Study Accommodation
Whitmore Community Food Hub Complex	445001	<ul style="list-style-type: none"> Functional layout supports food processing from sourcing to distribution. Modern architectural design with durable concrete construction and natural light. Public spaces include landscaped plazas and outdoor seating for community engagement, integrating sustainability and cultural elements. 	<ul style="list-style-type: none"> Food Hub Visitor Center Micro Housing Warehouse Food Forest Research And Innovation Hub 		<ul style="list-style-type: none"> Farming Buying and Selling Cooking Working Study Accommodation

Chapter 4 Site Analysis

4.1 Site Introduction

The proposed site is situated in Siddhikali-06 of Madhyapur Thimi in Bhaktapur. It is approximately 7 km east of Kathmandu district and 3 km west of Bhaktapur district. The site's value has increased socially and culturally due to the renowned Siddhikali temple located there.

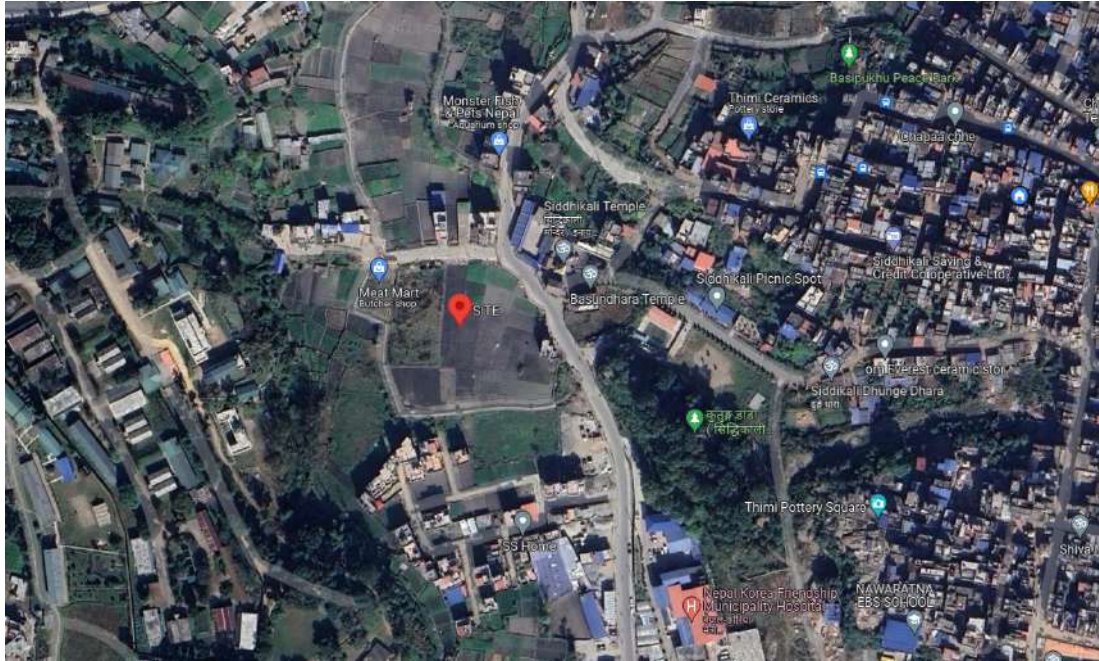


Figure 4. 1 Aerial view of proposed site

4.1.1 Site description

- Total site area : 8573.64 sq.m (16-13-2-2.477)
- Orientation : East
- Topography : Plain
- (3 m down from road level)

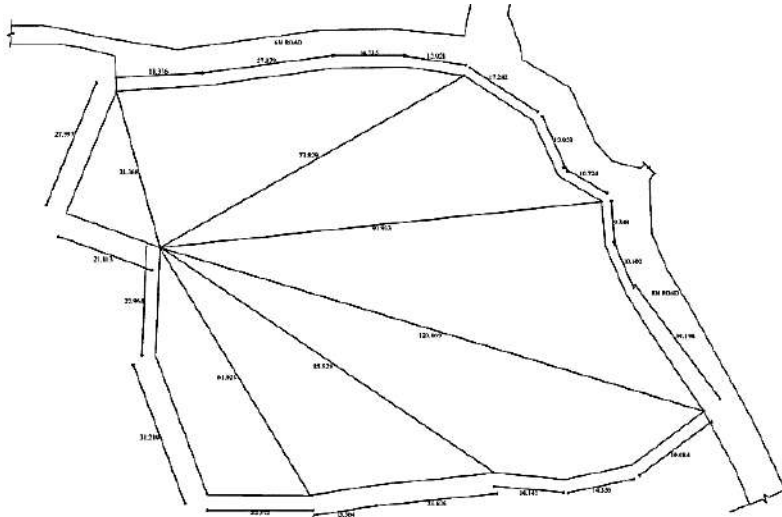


Figure 4. 2 Site with dimension

4.1.2 Site Access

- North: Nagadesh, Bode, Mulpani, Jorpati, Baudha
- East : Sallaghari, Bhaktapur
- South: Arniko Highway
- West : Sanothimi, Pepsicola, Jadibuti, Koteshwor

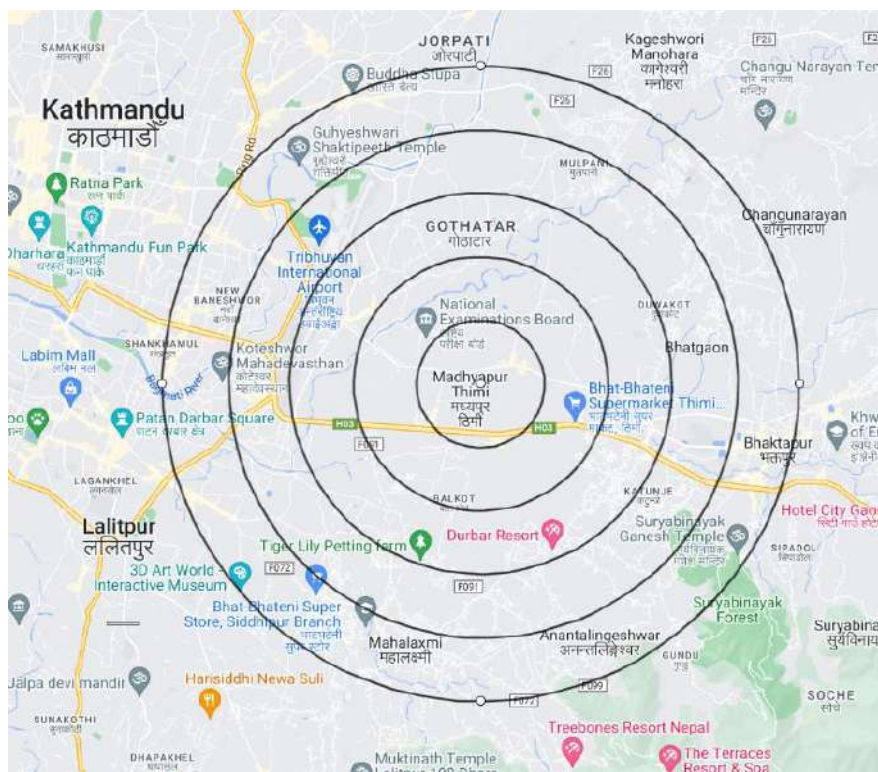


Figure 4. 3 5km radius range from site

4.2 Physical Feature

1. Topography
 - Latitude: 27° 40' 49"N
 - Longitude: 85° 22' 56"E
 - Altitude: 1308 m
2. Climate Study
 - Maximum hot temperature = 27 °C
 - Minimum hot temperature = 15 °C
 - Maximum cold temperature = 19 °C
 - Minimum cold temperature = 1 °C
 - Wind: south-west to north-east

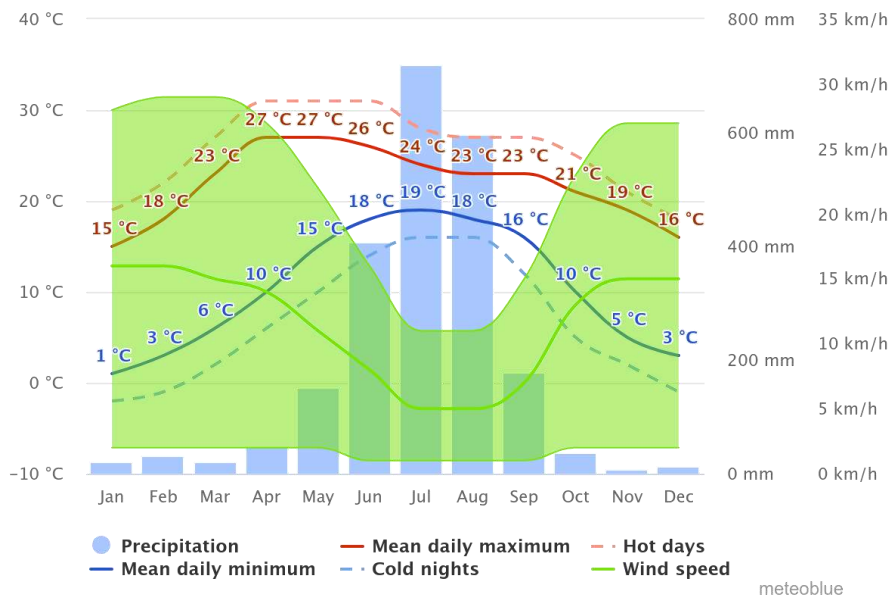


Figure 4. 4 Climate data of site

4.3 Site Justification

The site embodies robust social and cultural dimensions, featuring:

- A significant cultural landmark.
- Proximity to nature, providing an escape from urban congestion while remaining easily accessible.
- Adjacency to the traditional settlement of Thimi.

- Positioned between two traditional settlements, Thimi and Nagadesh, ensuring convenient accessibility.

4.4 Site Selection Criteria

- Peaceful and pollution-free surroundings.
- Accessibility from the core area of Madhyapur Thimi and the main highway.
- High foot traffic.
- Low population density.
- Well-connected road networks.
- Situated amidst two historical settlements: Nagadesh and Thimi.
- Minimal traffic and noise-free environment.
- Proximity to community, culture, and nature.

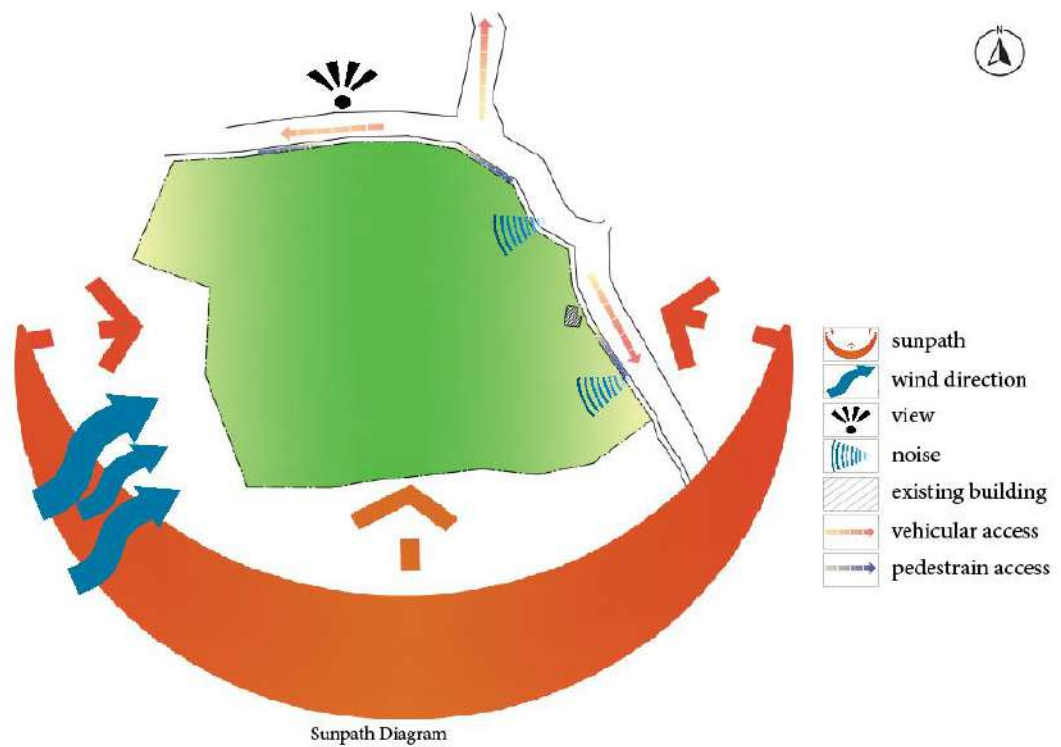


Figure 4. 5 Sun diagram of site

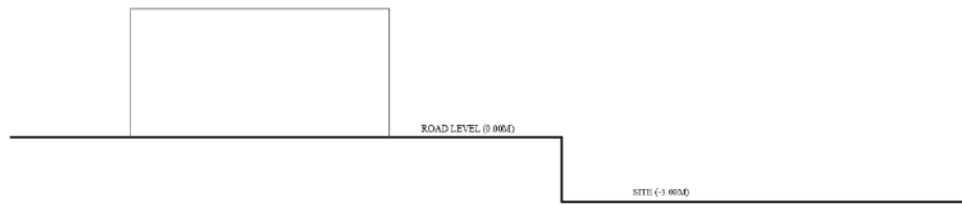


Figure 4. 6 Site section of site

4.5 Neighboring Environment

The site sits adjacent to the prestigious Siddhikali Temple and the historic settlement of Thimi, which holds a deep-rooted heritage spanning centuries. Originating from the ancient Newar civilization, Thimi has stood as a hub for trade, commerce, and artisanal craftsmanship within the Kathmandu Valley. Positioned strategically along pivotal trade routes, it has flourished economically and culturally over time.

Thimi is renowned for its pottery industry, a tradition passed down through generations and still thriving today. The town's pottery artisans are celebrated for their skill and precision, embodying the town's dedication to craftsmanship.

Beyond its economic activities, Thimi pulsates with cultural vibrancy. Various artistic and musical traditions thrive within its boundaries, ranging from traditional dances to folk music performances. This cultural richness reflects the town's dynamic spirit and creative energy.

The Siddhikali Temple, dedicated to the revered Hindu goddess Kali in her Siddhikali form, holds a special place in Thimi's cultural landscape. Legend has it that Newar artisans and devotees established the temple during the illustrious Malla period. Each year, the temple hosts the Siddhikali Jatra, a grand religious and cultural festival. This event, held during the Nepali New Year, features elaborate processions, cultural performances, religious rituals, and communal feasting, drawing devotees and spectators alike. It serves as a cherished occasion for locals to strengthen their faith, forge social bonds, and celebrate the vibrant cultural heritage of the Kathmandu Valley.

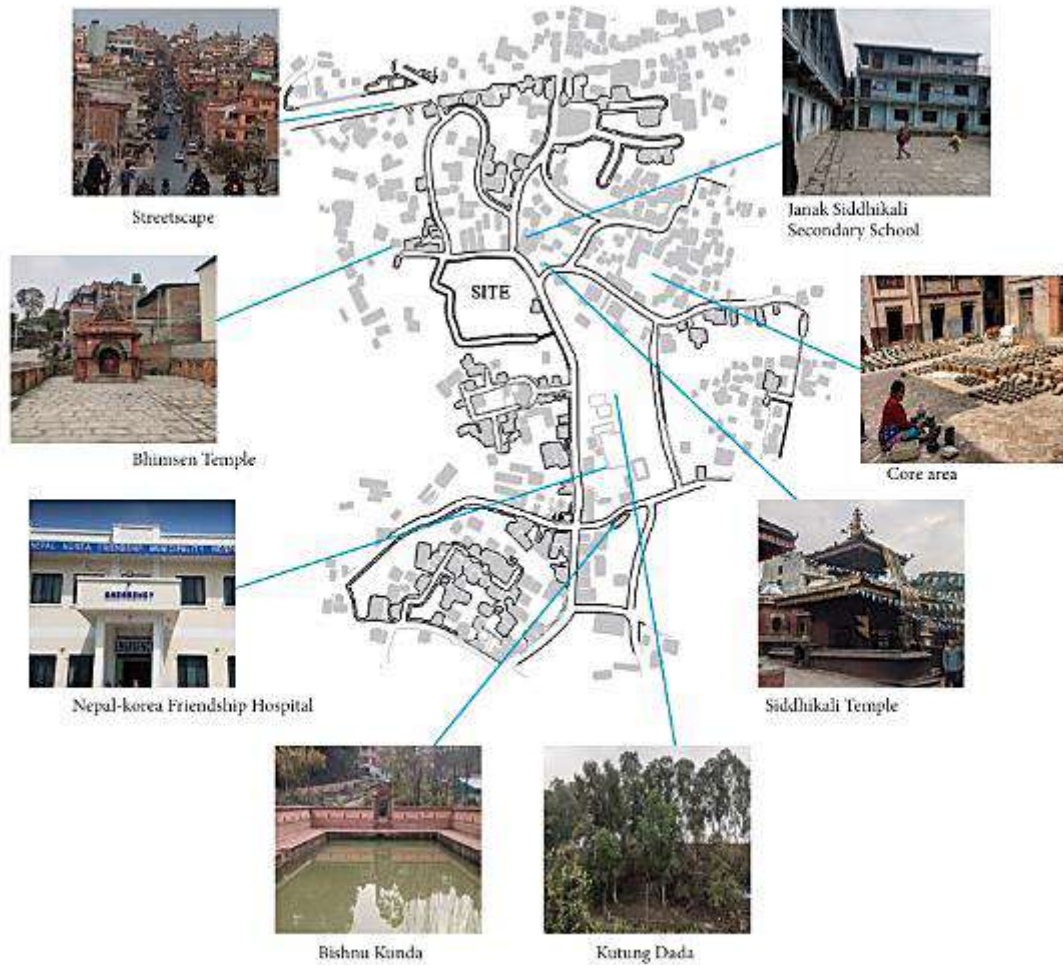


Figure 4. 7 Neighboring Environment of site

4.5.1 Infrastructure

- The site is located within the urban expansion zone, with access to essential utilities such as electricity, telecommunications, and water supply, drainage and waste management.
- The Nepal Electricity Authority (NEA) site is only 850 meters away from the location.
- An 8-meter-wide road directly in front of the site, providing easy access to the nearby Araniko Highway, which is only 900 meters away in south, enabling convenient travel, facilitates transportation and purano thimi-bhaktapur road, which is 220 meters away in north.
- Public amenities include a small forest or green space, open areas for playing football, and a picnic spot.

- Nearby schools include a government school and Manab Bidhya Griha (school to differently-able persons)
- The Nepal-Korea Hospital, located to the south of the site, ensures accessible healthcare facilities is only 300 m away.
- A traditional pond, known as Pokhari-Bhishnu Kunda, is present on the site.
- Additionally, there is a gym facility available for recreational purposes.

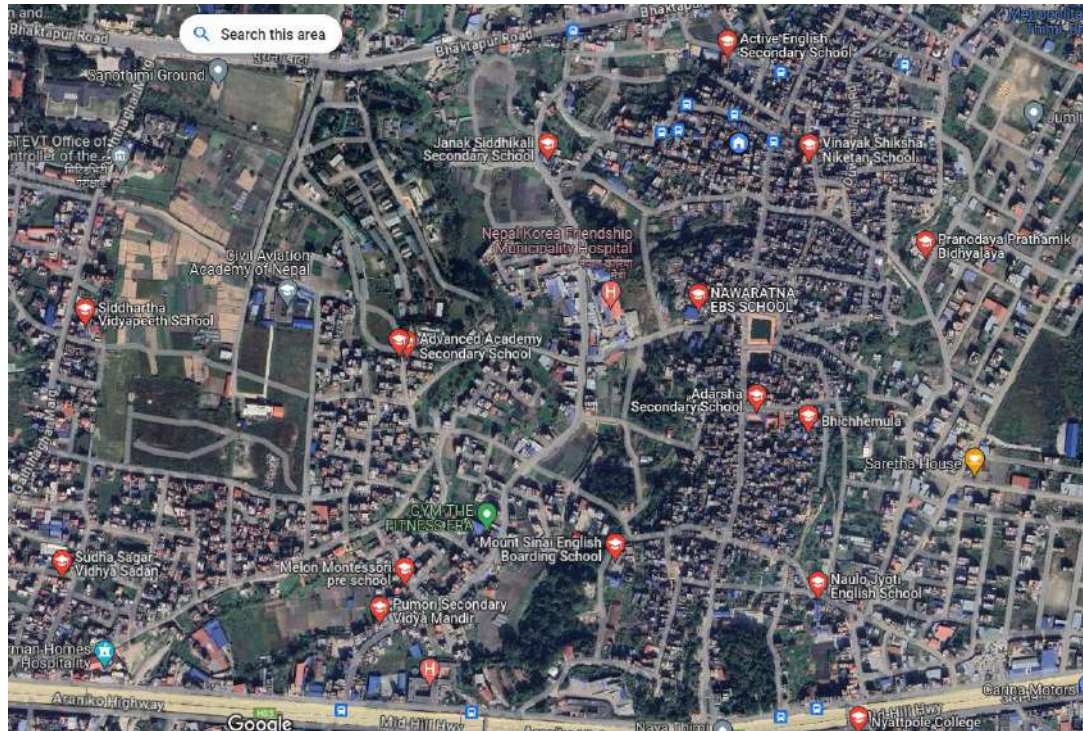


Figure 4. 8 Schools near site

4.6 Legal Considerations

- Maximum Ground Coverage : 50 % of Site area
- FAR : 3.5
- Maximum Height : 11.4 m
- Maximum floor : 4
- Setbacks : 3 m from road and 1.5m from site
- Row : 10m from main road



Figure 4. 9 Views of site

Chapter 5 Program Formulation

Existing Area:

Total Site area: 8573.64 sq.m (16-13-2-2.477)

Maximum Ground coverage allowed: 50% of total site area =4286.82 Sqm

Built-up area: 3464.36 sq.m

Ground coverage: 40.40 %

Requirement

1. Bhoj ghar
 - Sitting
 - Kitchen
 - Storage
 - Service area
 - Handwashing area
 - Restroom
 - Staff room (changing room)
2. Restaurant
 - Dining
 - Kitchen and storage
3. Gallery / Museum
 - Display area
4. Live demonstration area
5. Ceremony Hall
6. Administration
 - Reception and waiting room
 - Account room
 - Admin room
 - Meeting hall / Multipurpose Hall
7. Parking

Table 3 Program Formulation

S.N	Description of Spaces	Area sq.m	Remarks
1.	Bhoj Ghar	3690	410-450 capacity in two bhoj ghar
2.	Restaurant	431	170 capacity
3.	Gallery	194.4	
4.	Ceremony hall	110	
5.	Administration	418	180 capacity in multipurpose hall
6.	Parking	2593.88	Capacity (105 bikes, 25 cars, 5 bus)

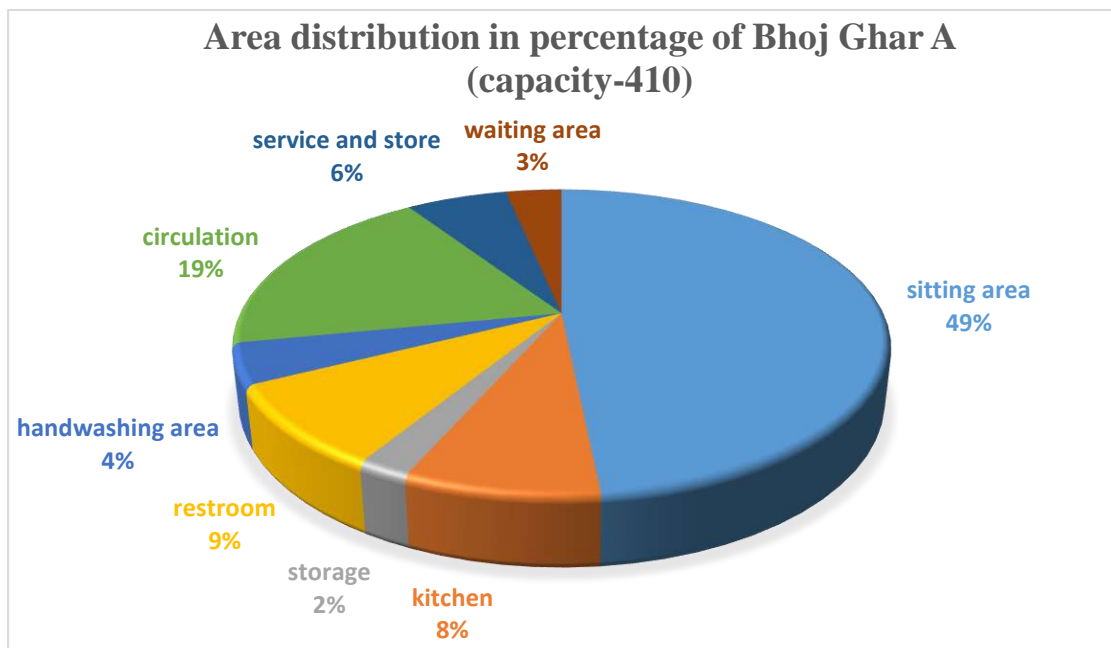


Figure 5. 1 Area distribution of bhoje chhen

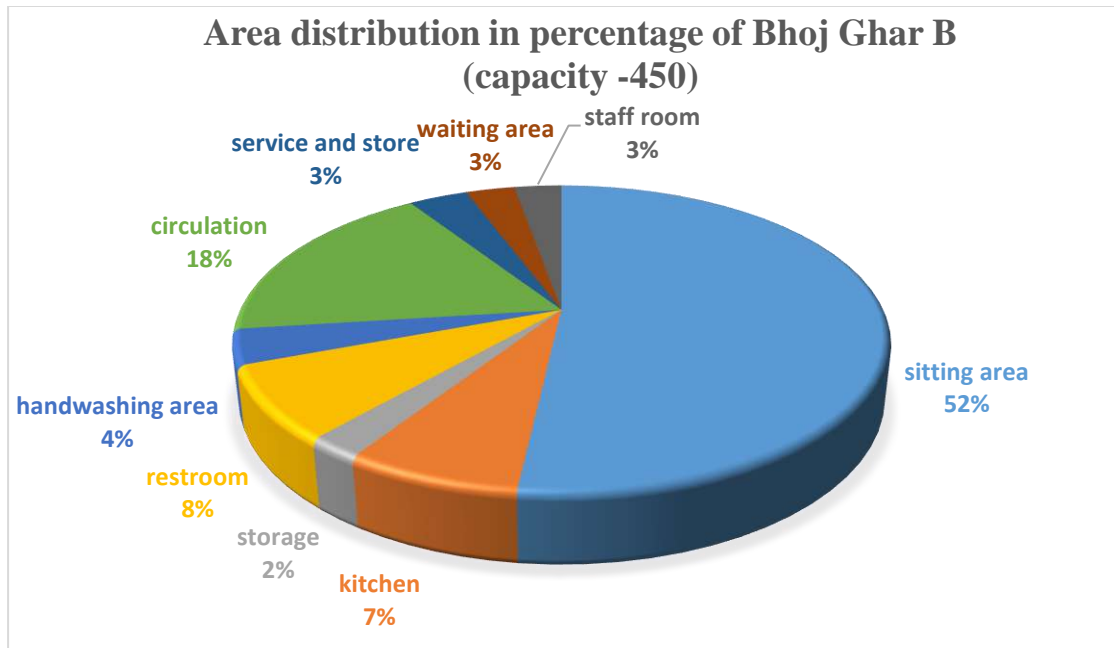


Figure 5. 2 Area distribution of bhoje chhen

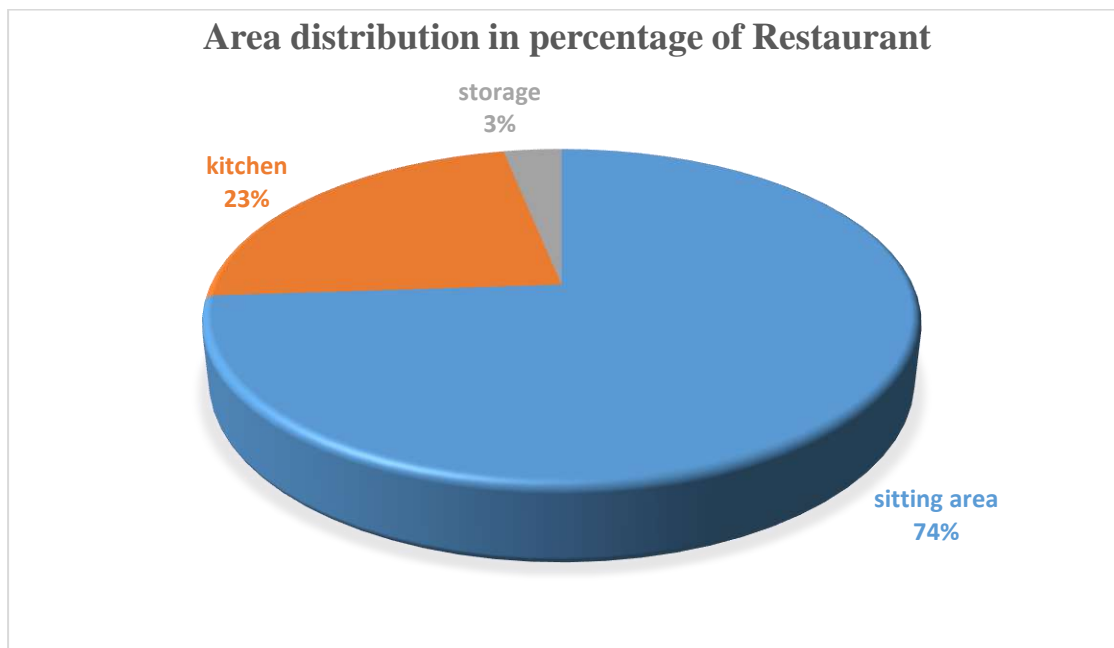


Figure 5. 3 Area distribution of restaurant

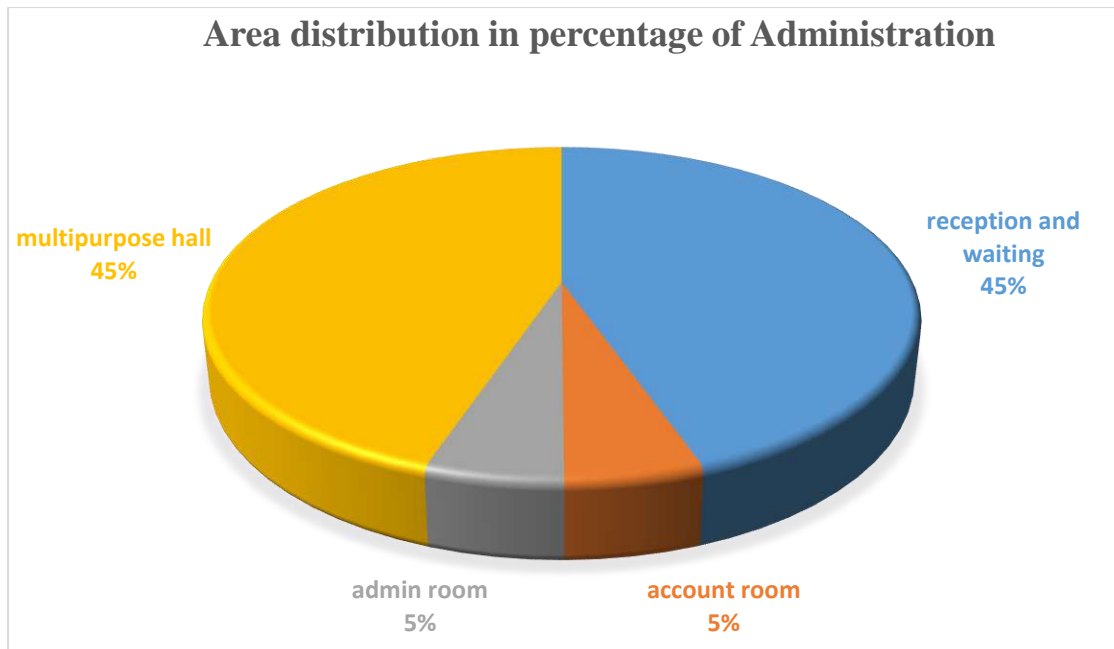


Figure 5. 4 Area distribution of admin

Chapter 6 Concept and Development

Concept: Sunken Courtyard

Sunken courtyards are a significant feature of Nepali architecture, particularly in Newar communities. These courtyards serve as essential gathering spaces and venues for social, religious, and cultural events, enhancing community interaction and cohesion. Architecturally, they provide natural light and ventilation, contributing to the aesthetic beauty of the surrounding buildings while ensuring thermal regulation. The design allows for cool air to flow in during the day and facilitates the cooling of warm surfaces at night. In summer, the courtyards remain shaded, offering a cool retreat, whereas in winter, they help retain warmth. These courtyards also reflect the cultural and religious significance of the community through the presence of shrines and rituals. Overall, sunken courtyards blend functionality, cultural importance, and aesthetic appeal, playing a vital role in the urban fabric of dense built environments in Nepali architecture.



Figure 6. 1 Examples of sunken courtyard

Why sunken courtyard?

- **Spatial Organization:** Creates depth and dimensionality within a structure or landscape.
- **Natural Light and Ventilation:** Efficiently captures light and facilitates airflow, enhancing comfort and energy efficiency.
- **Privacy and Enclosure:** Offers seclusion within the surrounding environment, providing a sense of privacy.

- Connection with Nature: Integrates elements of nature, such as landscaping or water features, fostering a connection with the outdoors.
- Aesthetic Appeal: Enhances visual interest and serves as a focal point with design elements like paving patterns and vegetation.
- Functional Use: Can serve various purposes such as recreational spaces, gathering areas, or circulation nodes.

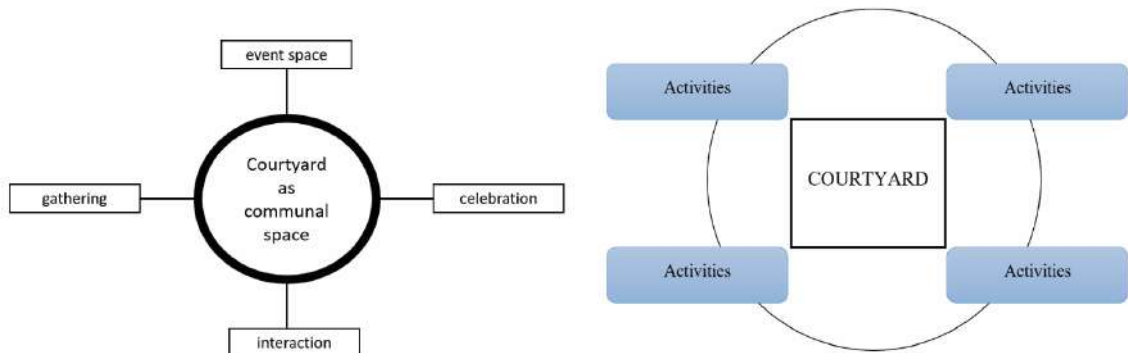


Figure 6. 2 Interlinkage between activities and event space

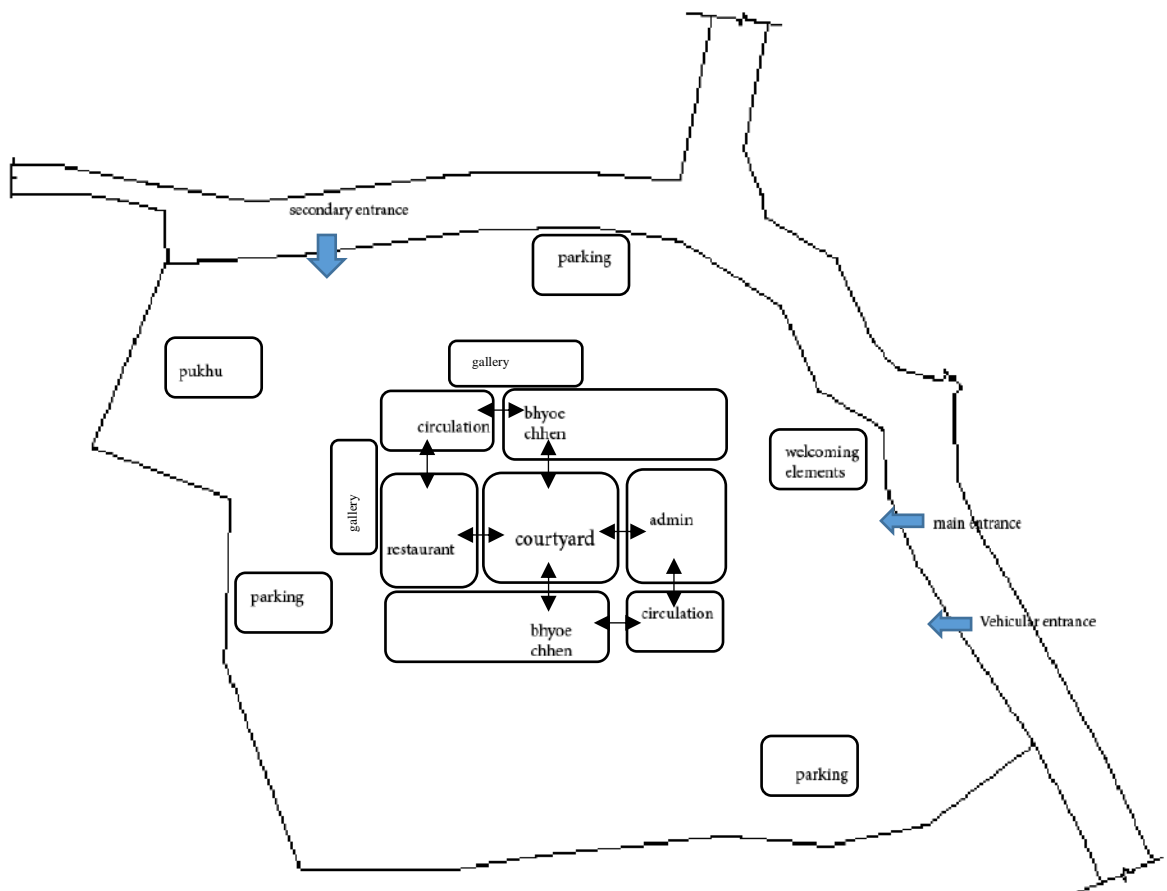
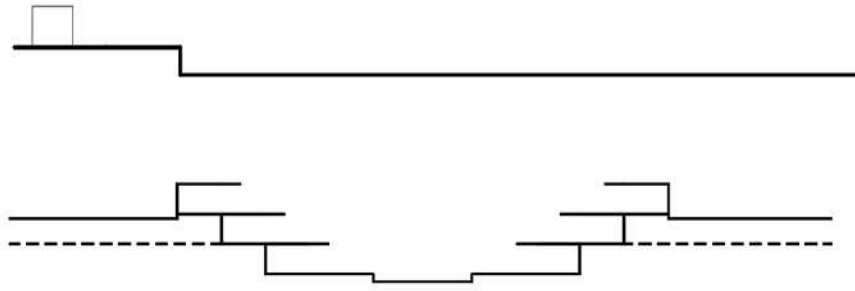
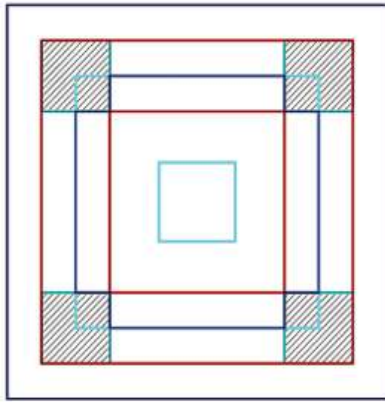


Figure 6. 3 Zoning

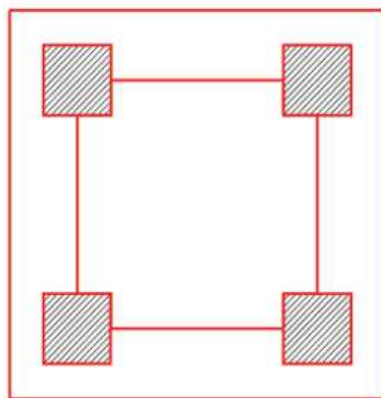
Design development



Given that the site was 3 meters below the road level, I utilized this elevation difference to our advantage. The excess soil from the cutting process was redistributed and used to fill areas within the site, thereby optimizing the use of existing materials on-site.

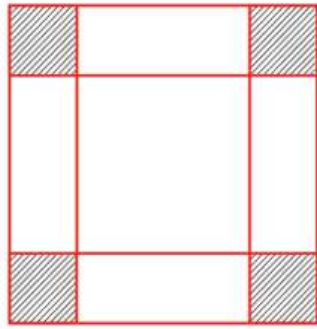


Initially, the required area for the sunken courtyard was determined, followed by measuring the distance for the dining space. Offsets were then created based on these measurements, resulting in a division into three levels. Each level was highlighted with hatching to define the area, which will serve as circulation space.

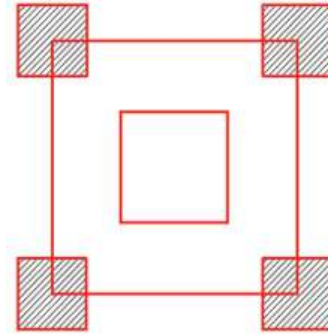


Ground floor

The site is divided into three levels, with the ground floor being larger than the others, and the hatched areas on each level designated for circulation.



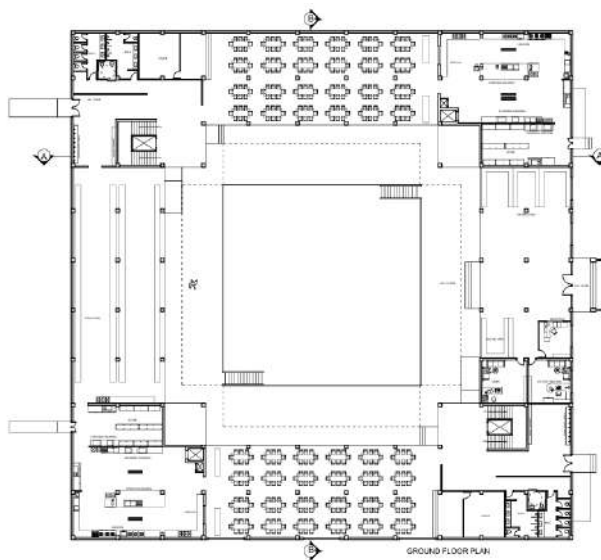
Basement 1



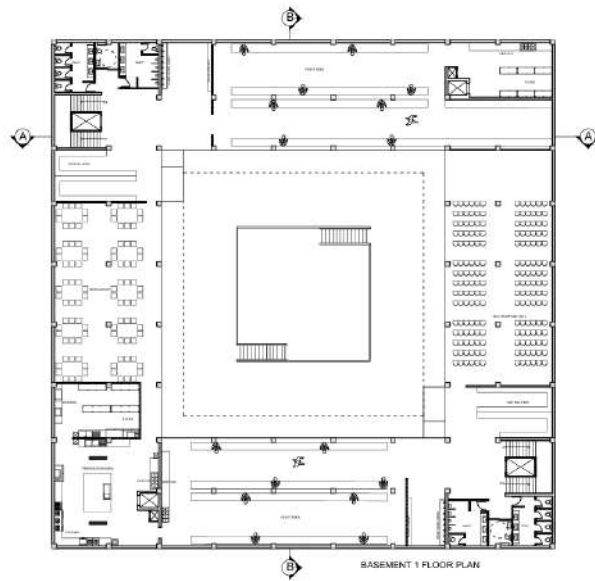
Basement 2

Similarly, the hatched areas on Basement 1 and Basement 2 levels are designated for circulation, creating a continuous, accessible space from the lower floor to the upper levels.

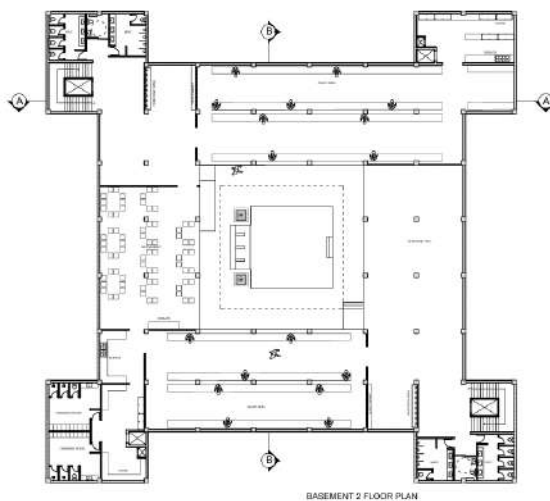
Design Consideration



The design is confined to a single large block, featuring a sunken courtyard with activities oriented towards it. The ground floor includes a traditional-style entry door, with a reception and waiting area visible upon entry. Two separate bhoje chhen are proposed for feasts, with a capacity of 410 on the north side and 450 on the south side. Additionally, the ground floor provides a snack area and kitchen.



To enhance sustainability, a restaurant has been proposed for Basements 1 and 2. Basement 1 will include a multipurpose hall with a capacity of 180. The design features traditional-style dining areas for feasts and restaurants, with a kitchen for the restaurant, as well as designated areas for shoe storage and handwashing facilities.



In Basement 2, a dining area and restaurant are proposed, similar to those in Basement 1, along with a ceremonial hall. The main courtyard in Basement 2 incorporates traditional elements like stone water features and chaityas.

Chapter 7 Conclusion

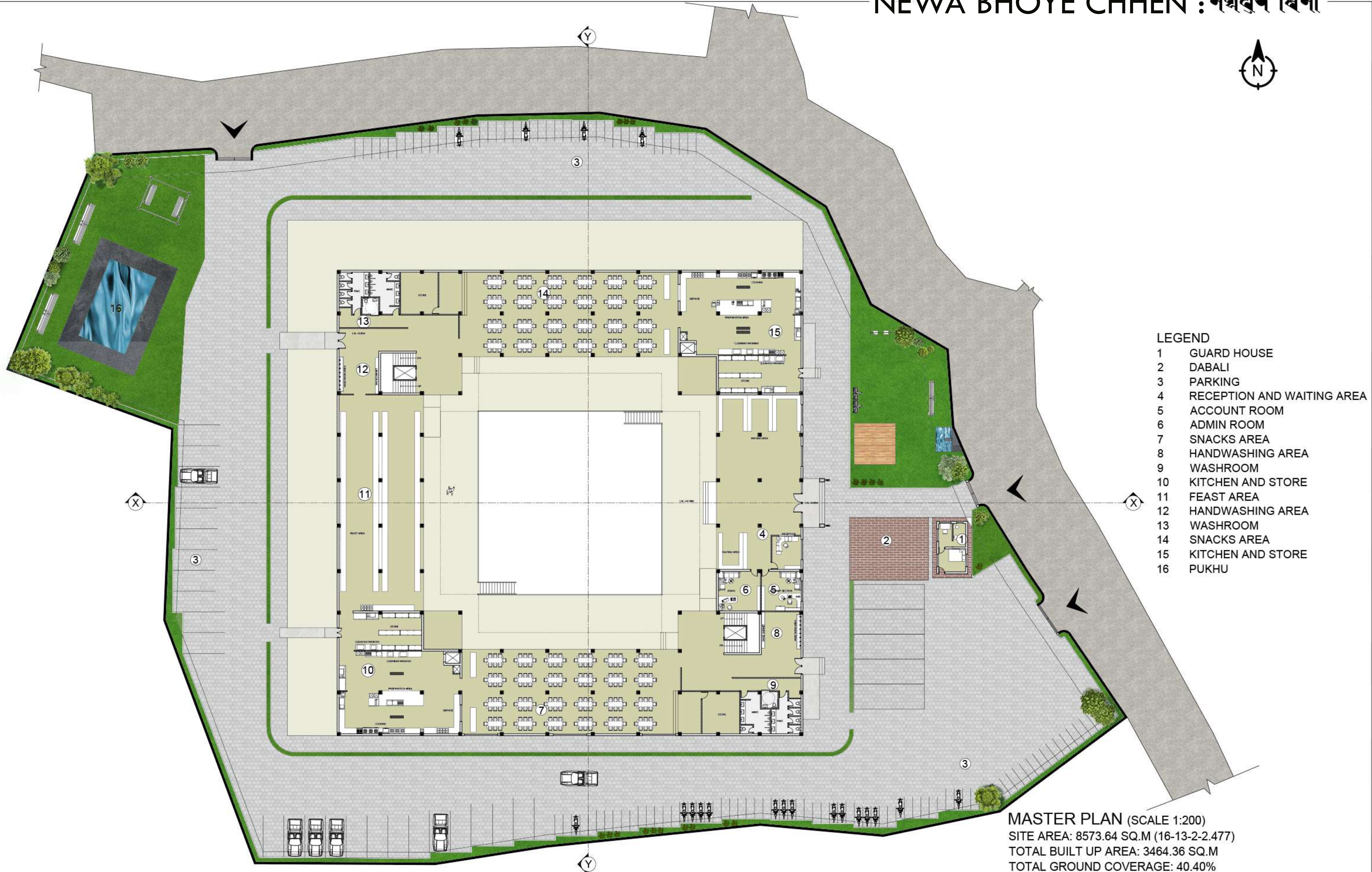
The revitalization of Newa Bhoye Chhen represents a critical endeavor to preserve and celebrate the rich cultural heritage of the Newar people, particularly within Madhyapur Thimi. By focusing on the architectural, social, and culinary traditions integral to Newar identity, this project seeks to create spaces that not only honor historical legacies but also meet contemporary community needs. The proposed interventions are designed to foster social cohesion, promote cultural exchange, and enhance community pride through thoughtful incorporation of traditional elements and modern functionality. The emphasis on Newari feasting traditions underscores the importance of communal gatherings in maintaining cultural continuity. Through comprehensive methodologies including literature reviews, case studies, and community engagement, the project aims to develop sustainable, culturally respectful solutions that will ensure the continued relevance of Newa Bhoye Chhen. Ultimately, this initiative aspires to enrich the social fabric of Nepal, fostering unity and pride while safeguarding the Newar heritage for future generations.

Chapter 8 References

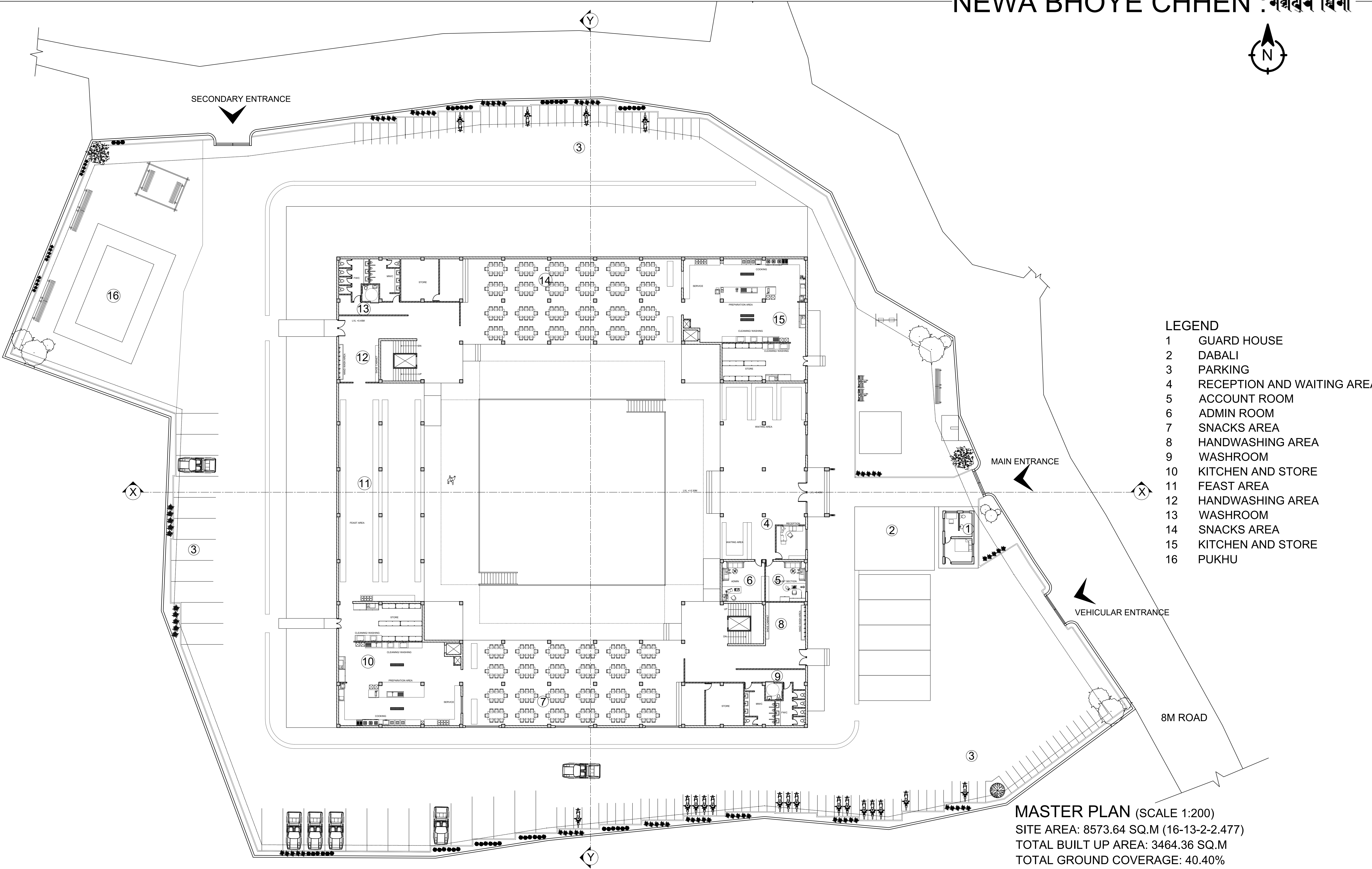
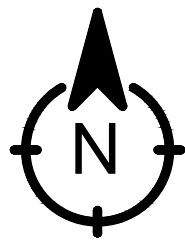
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Appendix

(Project Drawing)



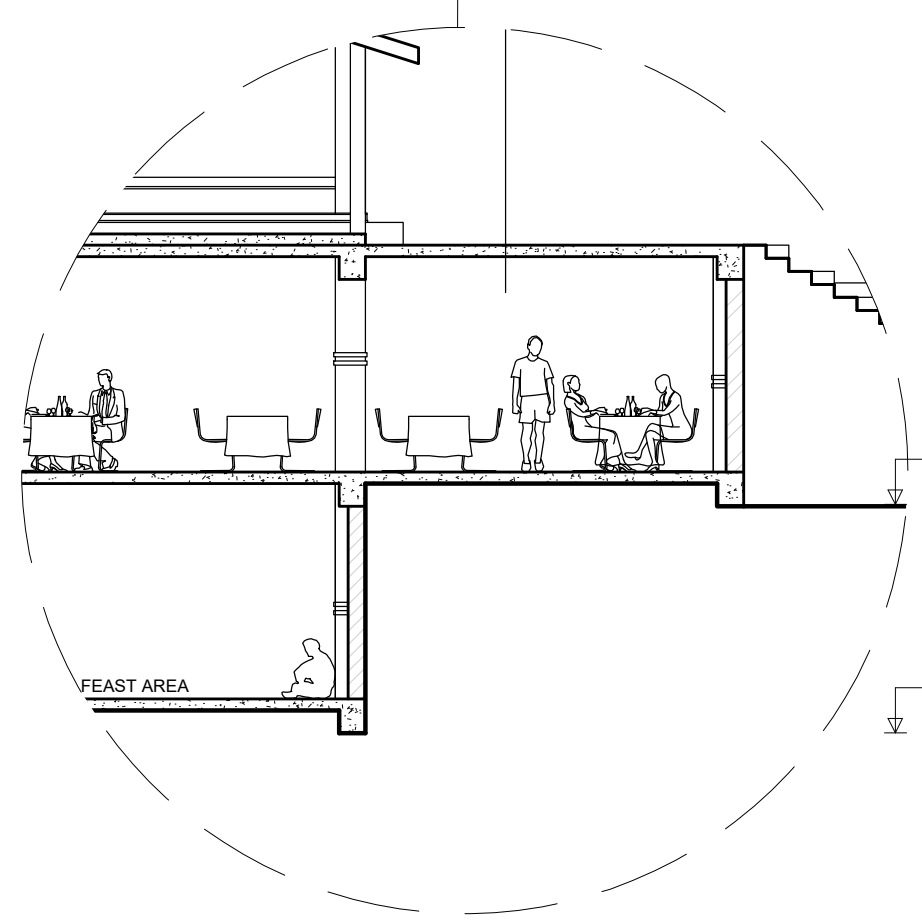
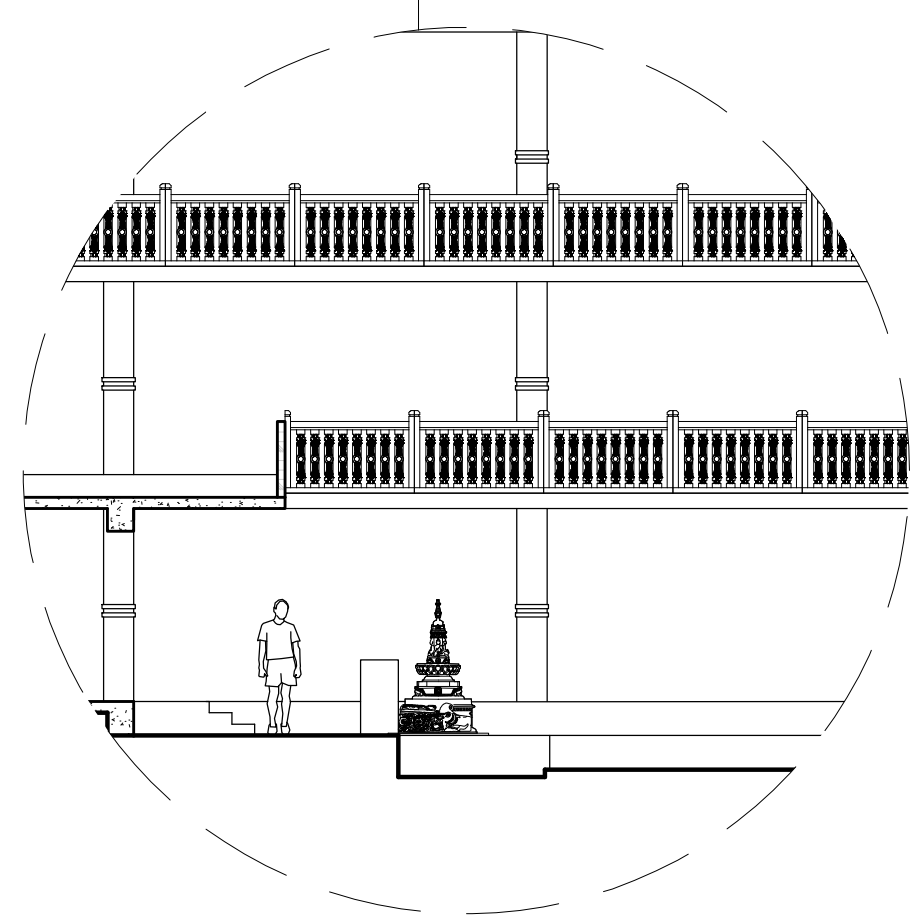
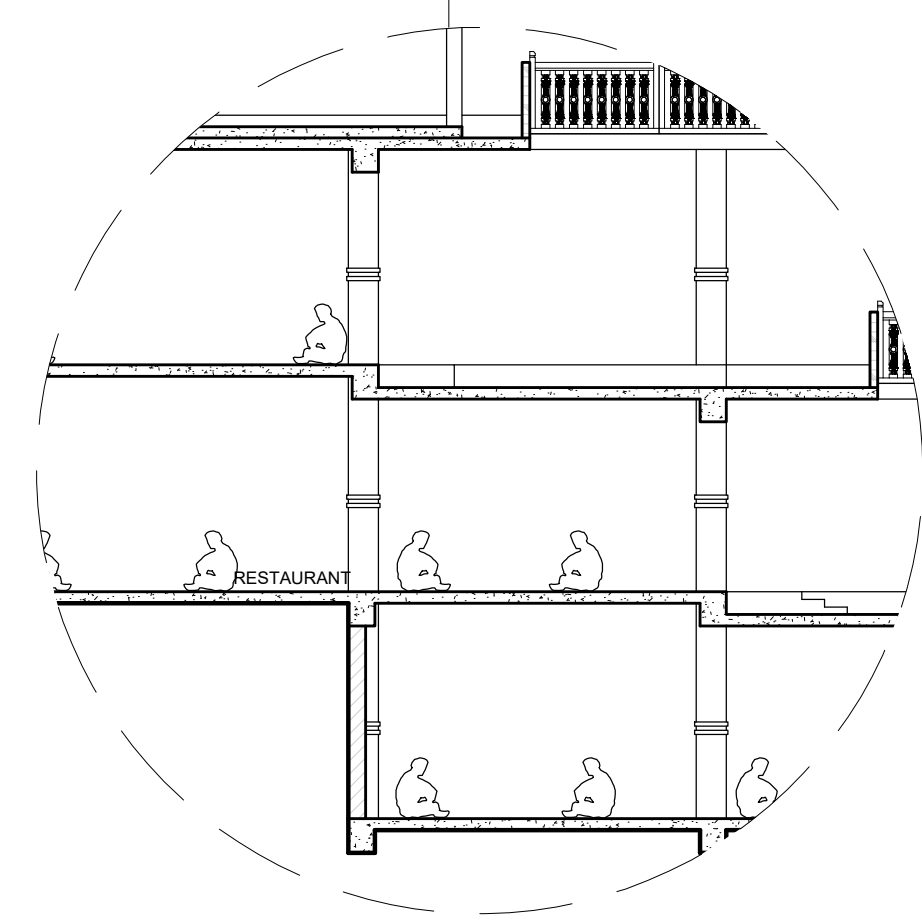
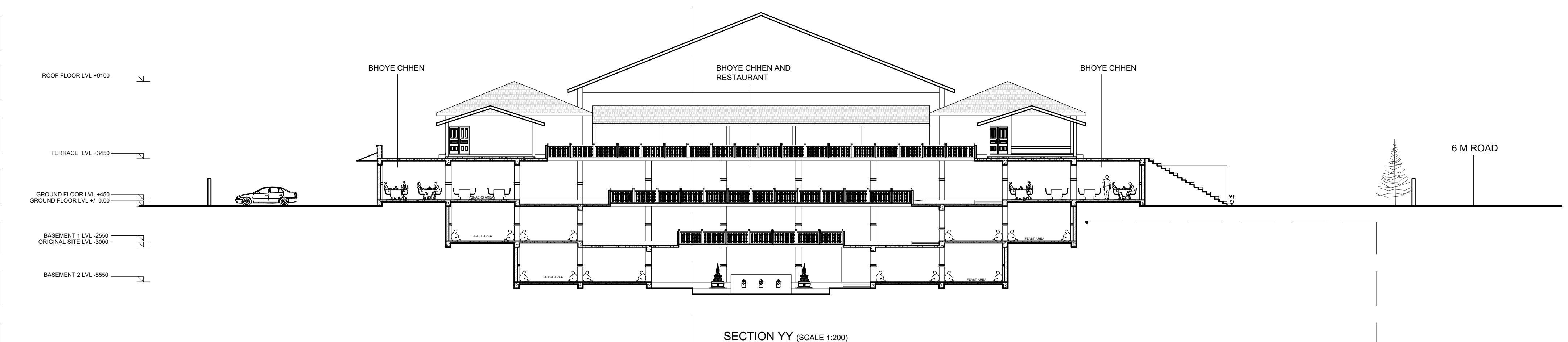
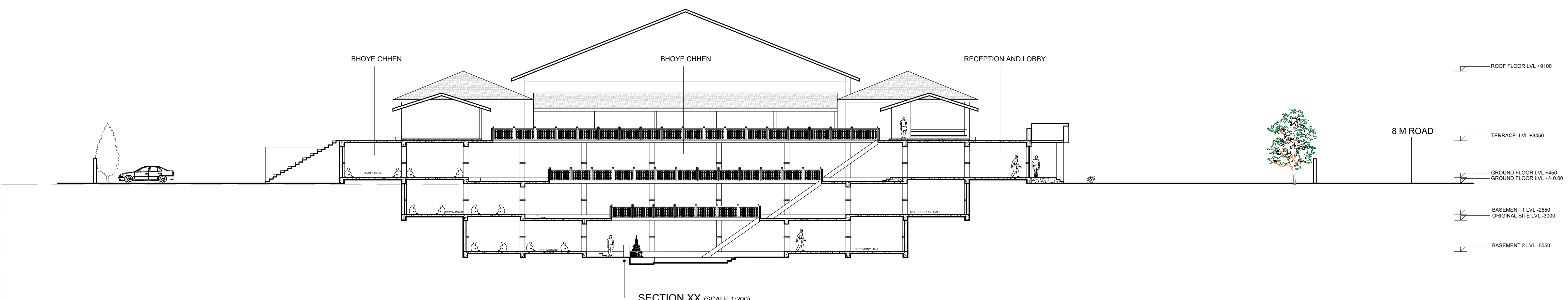
NEWA BHOYE CHHEN : नवभोये चहेन



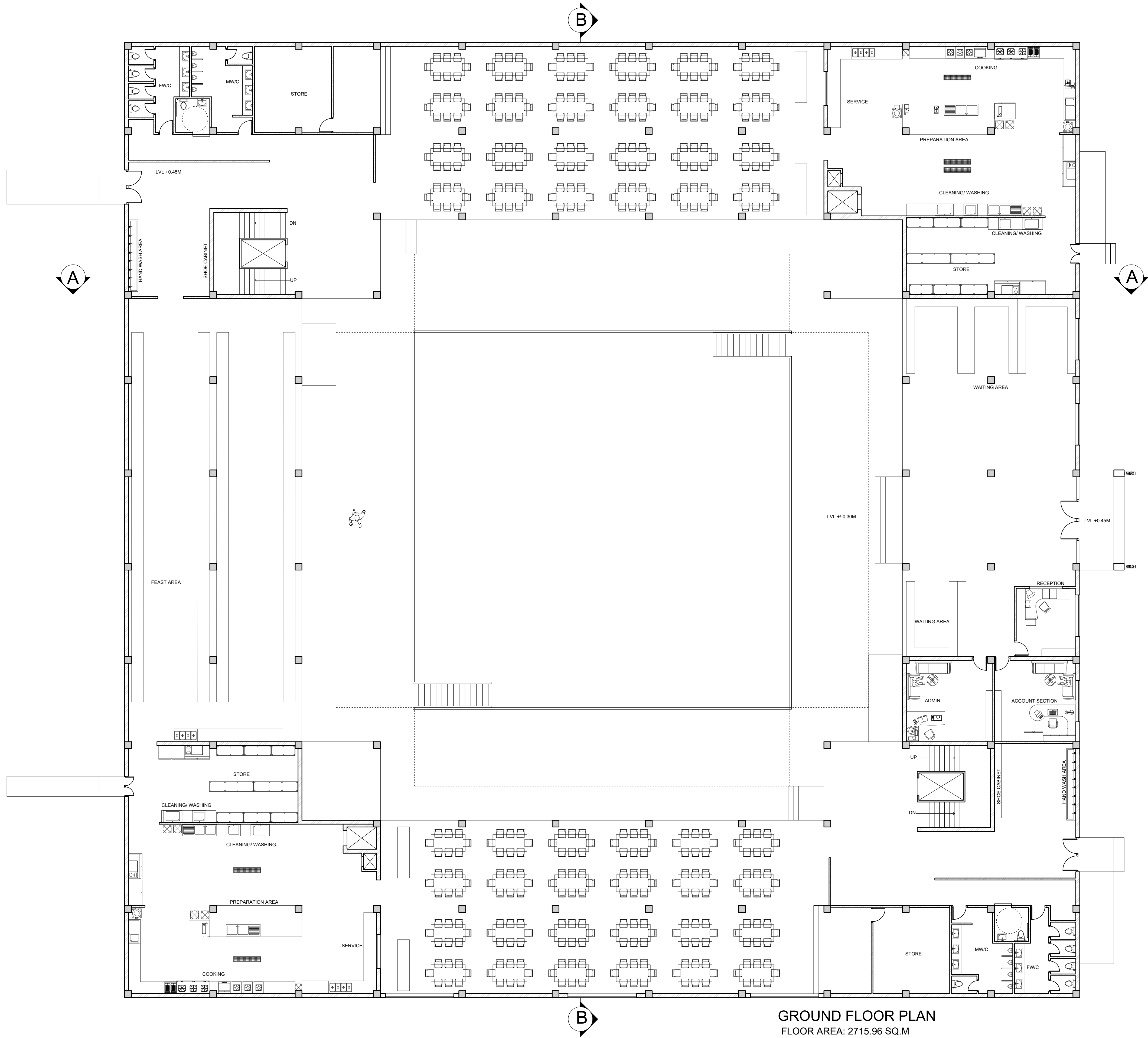
- LEGEND
- 1 GUARD HOUSE
 - 2 DABALI
 - 3 PARKING
 - 4 RECEPTION AND WAITING AREA
 - 5 ACCOUNT ROOM
 - 6 ADMIN ROOM
 - 7 SNACKS AREA
 - 8 HANDWASHING AREA
 - 9 WASHROOM
 - 10 KITCHEN AND STORE
 - 11 FEAST AREA
 - 12 HANDWASHING AREA
 - 13 WASHROOM
 - 14 SNACKS AREA
 - 15 KITCHEN AND STORE
 - 16 PUKHU

MASTER PLAN (SCALE 1:200)
SITE AREA: 8573.64 SQ.M (16-13-2-2.477)
TOTAL BUILT UP AREA: 3464.36 SQ.M
TOTAL GROUND COVERAGE: 40.40%

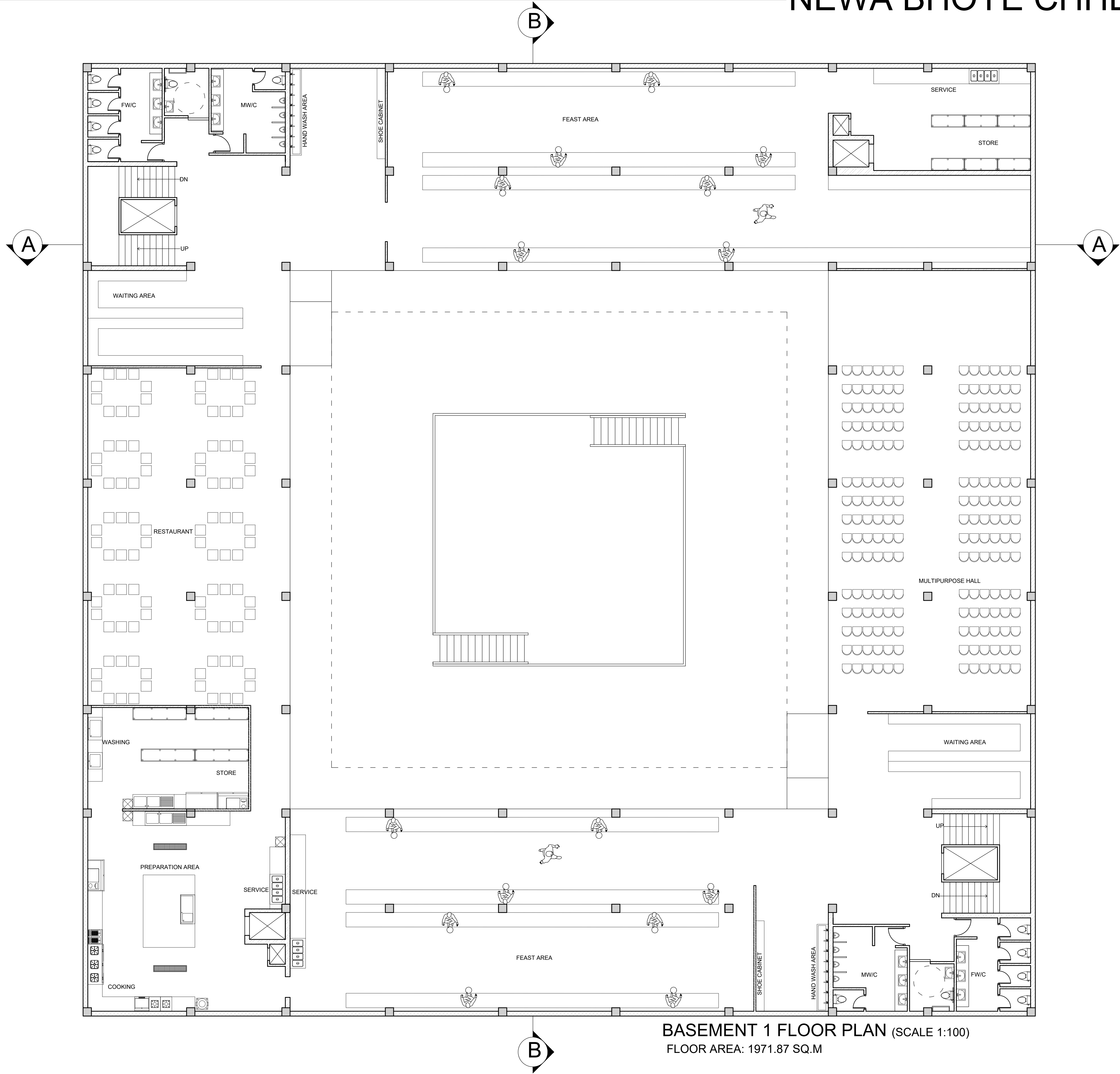
NEWA BHOYE CHHEN : नया बहोय चहेन



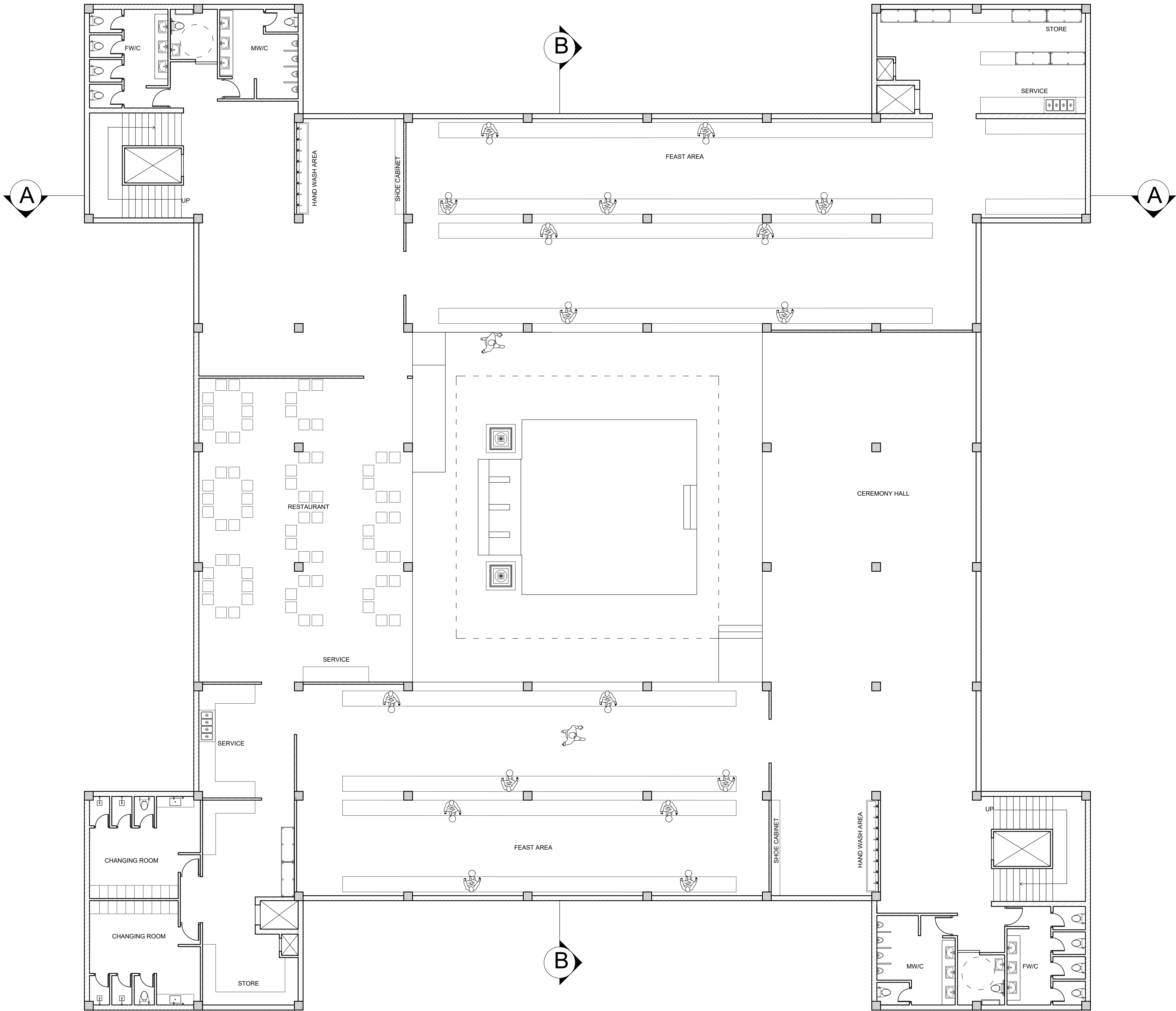
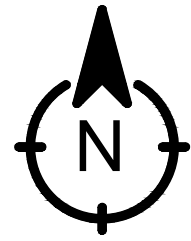
NEWA BHOYE CHHEN : नवरात्र चहेन



GROUND FLOOR PLAN
FLOOR AREA: 2715.96 SQ.M

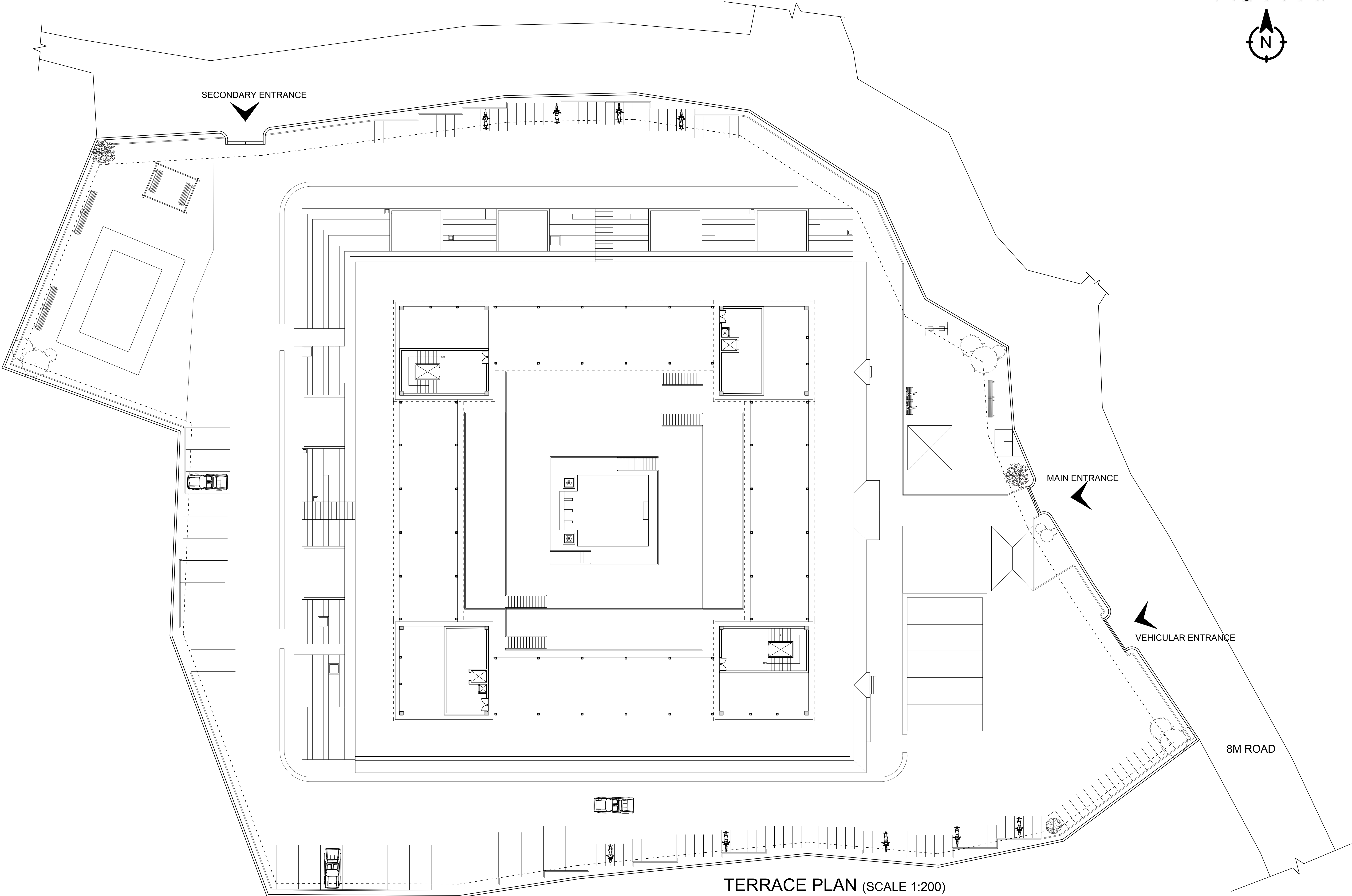
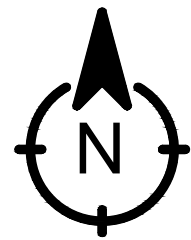


BASEMENT 1 FLOOR PLAN (SCALE 1:100)
FLOOR AREA: 1971.87 SQ.M



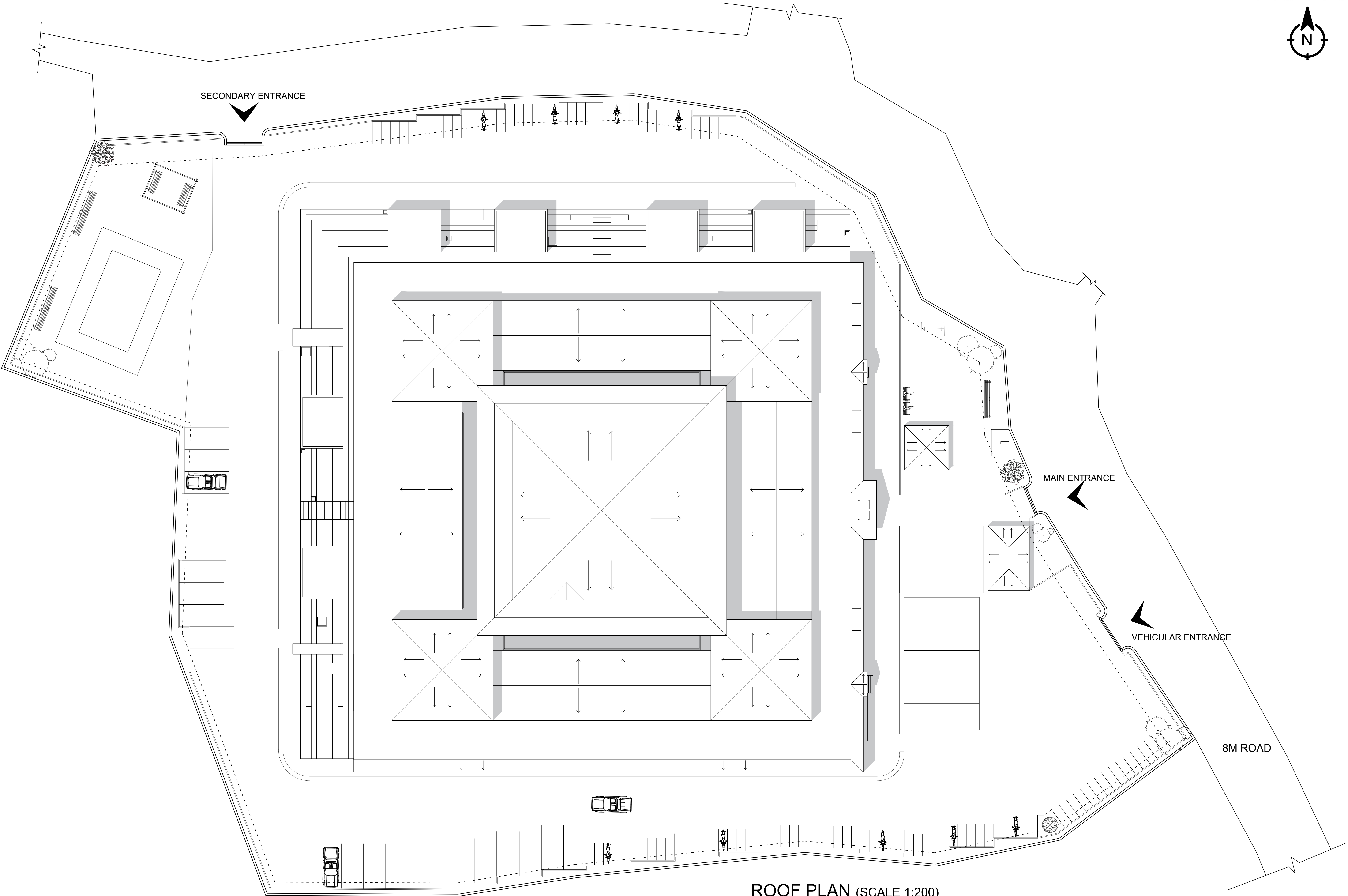
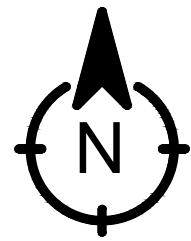
BASEMENT 2 FLOOR PLAN (SCALE 1:100)
FLOOR AREA: 1525.45 SQ.M

NEWA BHOYE CHHEN : নতুন ঘর



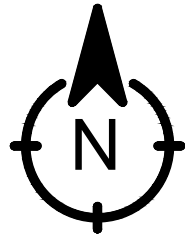
TERRACE PLAN (SCALE 1:200)

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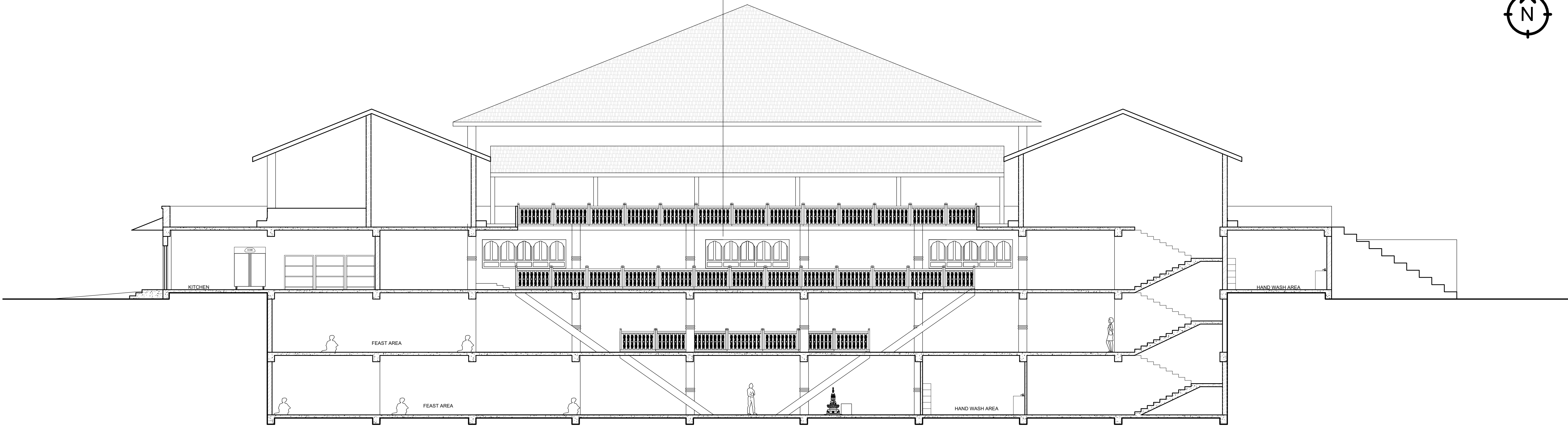


ROOF PLAN (SCALE 1:200)

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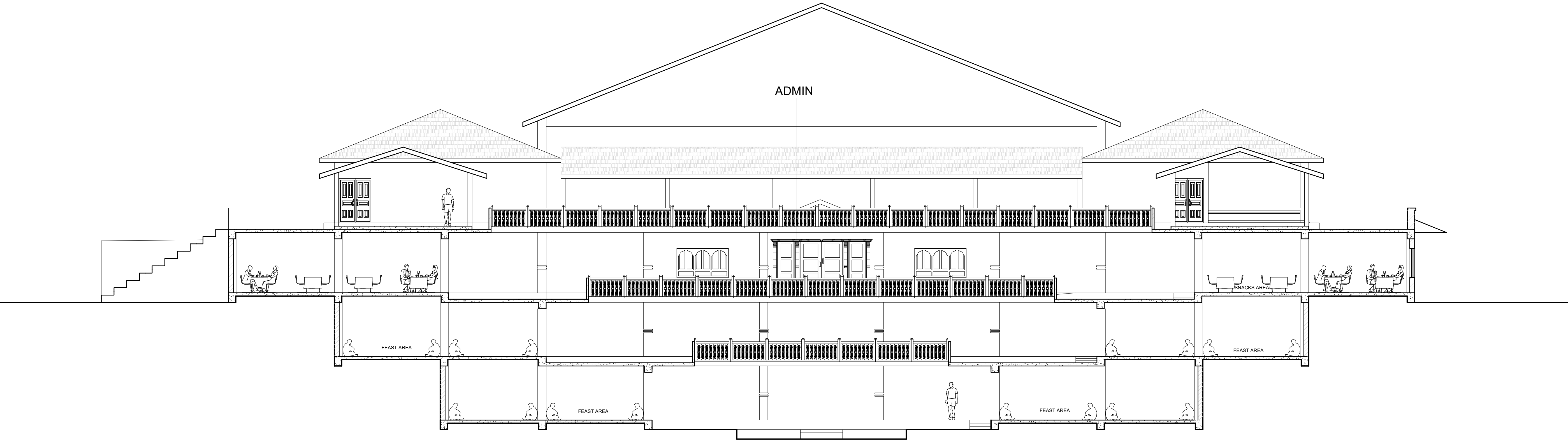


BHOYE CHHEN



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ADMIN

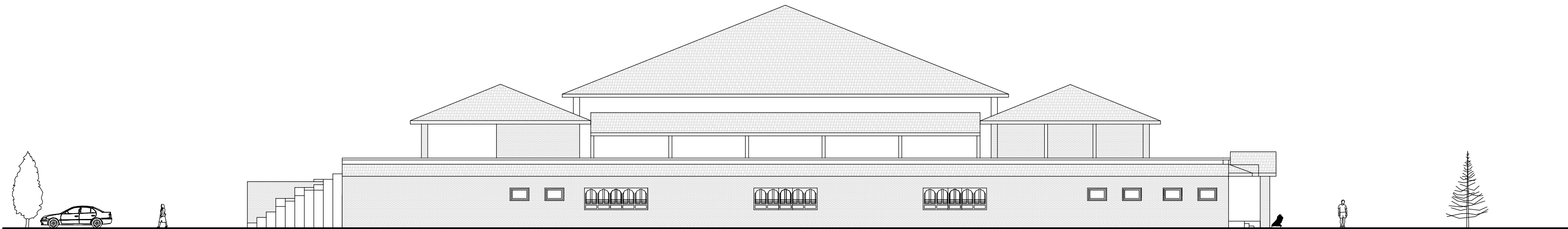


SECTION BB (SCALE 1:100)

NEWA BHOYE CHHEN : নব্বদন চিন্মী



NORTH PROFILE ELEVATION (SCALE 1:200)



SOUTH PROFILE ELEVATION (SCALE 1:200)

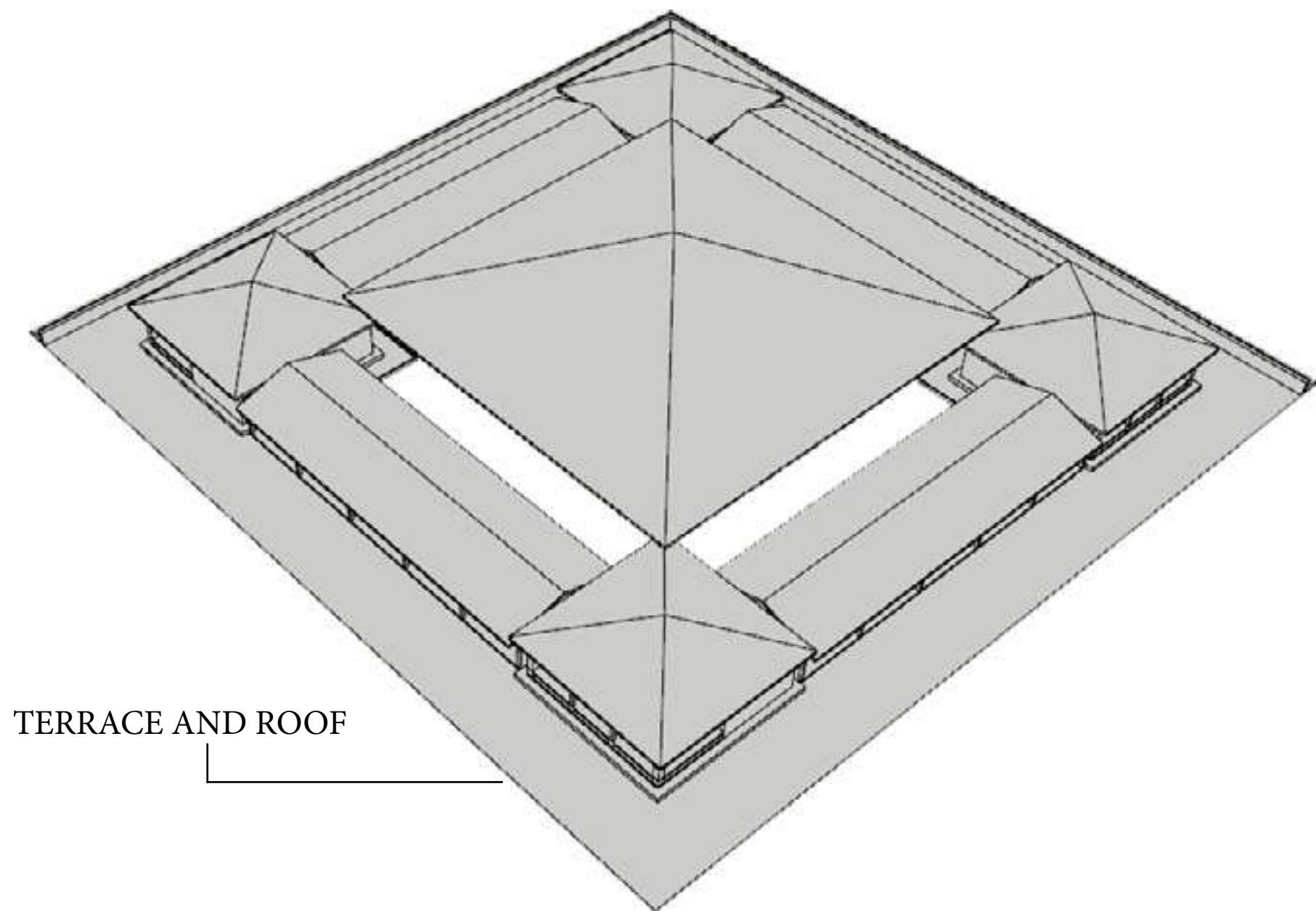


EAST PROFILE ELEVATION (SCALE 1:200)



WEST PROFILE ELEVATION (SCALE 1:200)

3D VIEWS



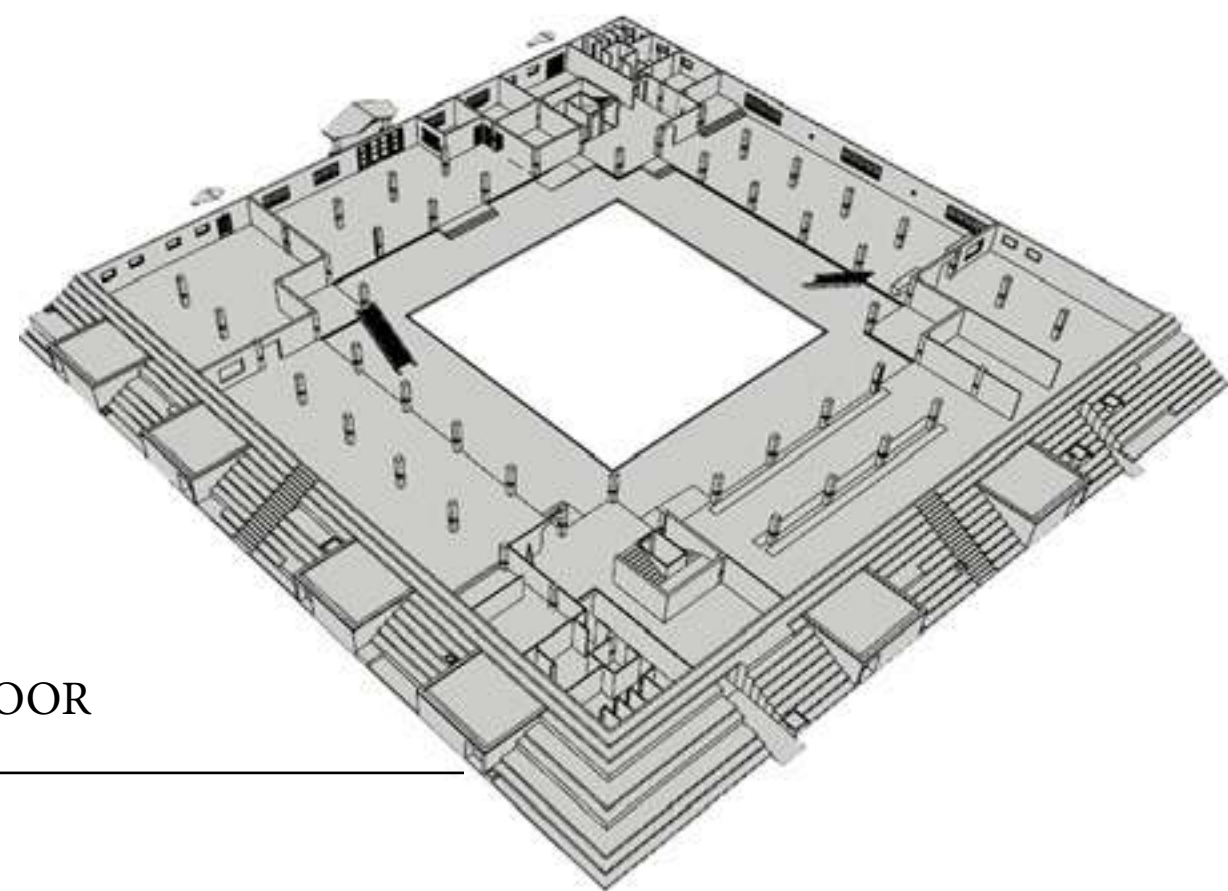
TERRACE AND ROOF



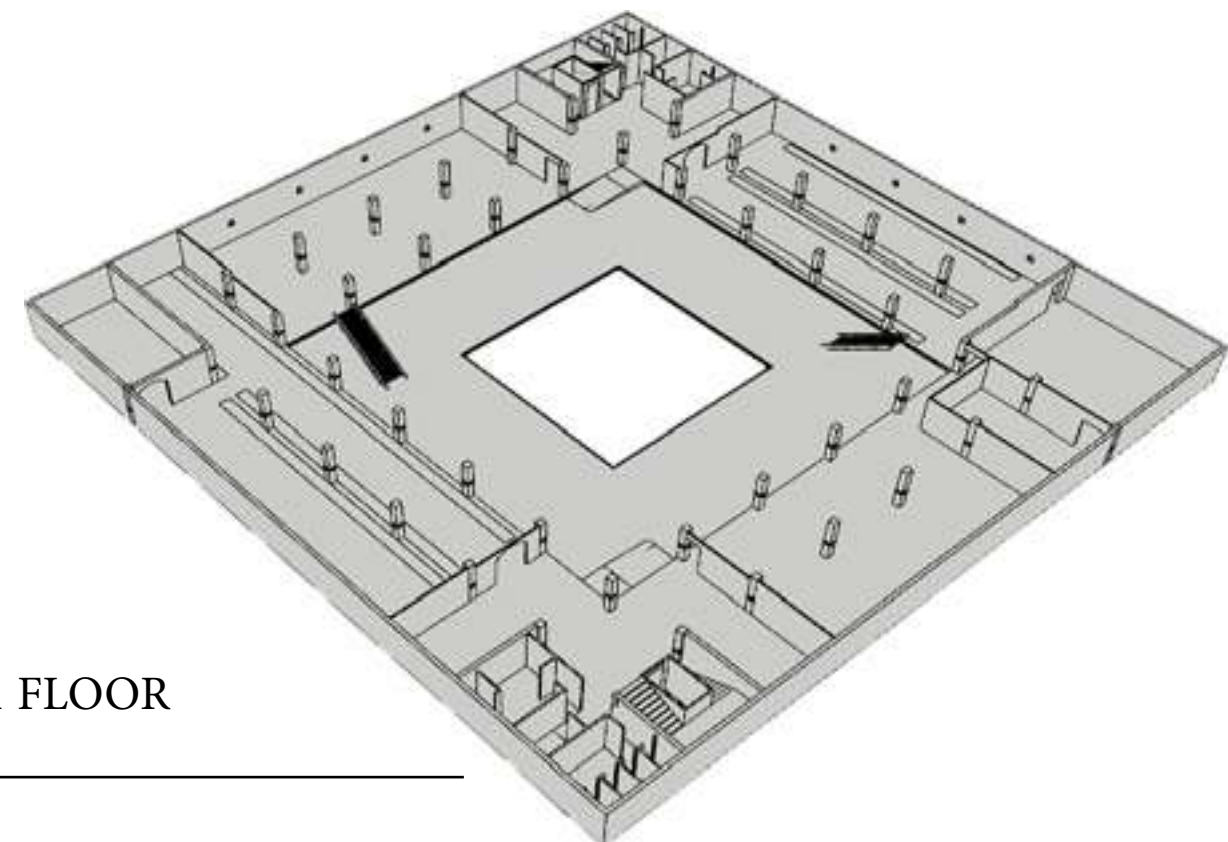
OVERALL AERIAL VIEW



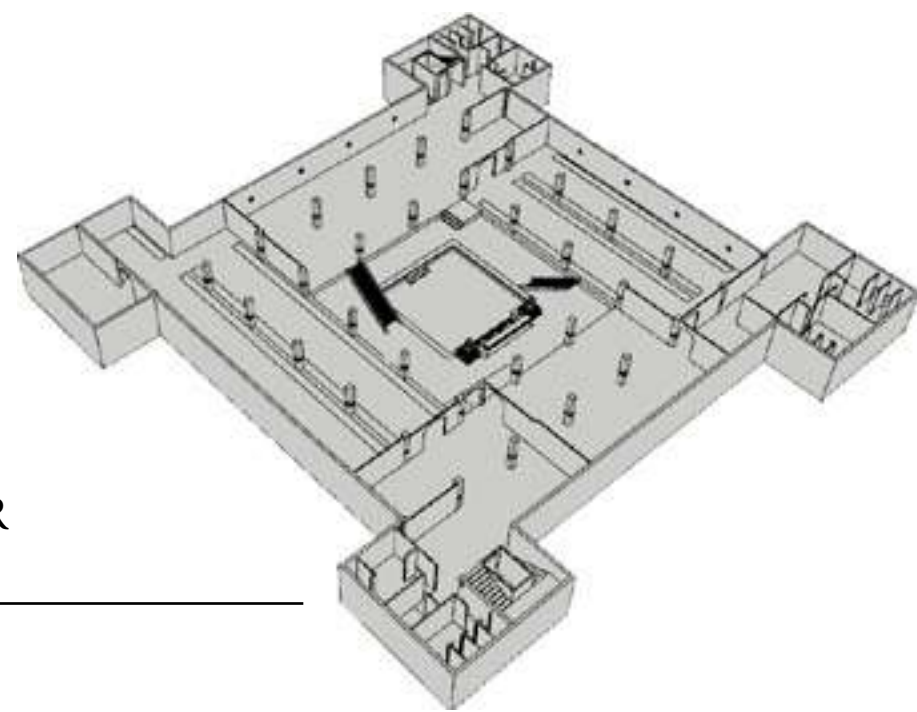
PERSPECTIVE VIEW OF THE RECREATIONAL ZONE



GROUND FLOOR



BASEMENT 1 FLOOR



BASEMENT 2 FLOOR

Axonometric view of building



SIDE ELEVATION WITH INTEGRATED PARKING AREA



VIEW FROM MAIN ENTRANCE



TERRACE VIEW OVERLOOKING THE INTERIOR COURTYARD



VIEW OF THE LIVE DEMONSTRATION AREA WITH OVERLOOKING TERRACE

3D VIEWS

NEWA BHOYE CHHEN : मध्याह्न बिमी



OVERALL 3D VIEW FROM SOUTHEAST



ENTRANCE PERSPECTIVE WITH LIVING WALL ON THE LEFT



VIEW OF THE FEASTING AREA



VIEW OF LIVE DEMONSTRATION AREA



VIEW OF THE RECEPTION AND LOBBY AREA



VIEW OF THE RESTAURANT AREA



PERSPECTIVE VIEW OF THE MAIN COURTYARD



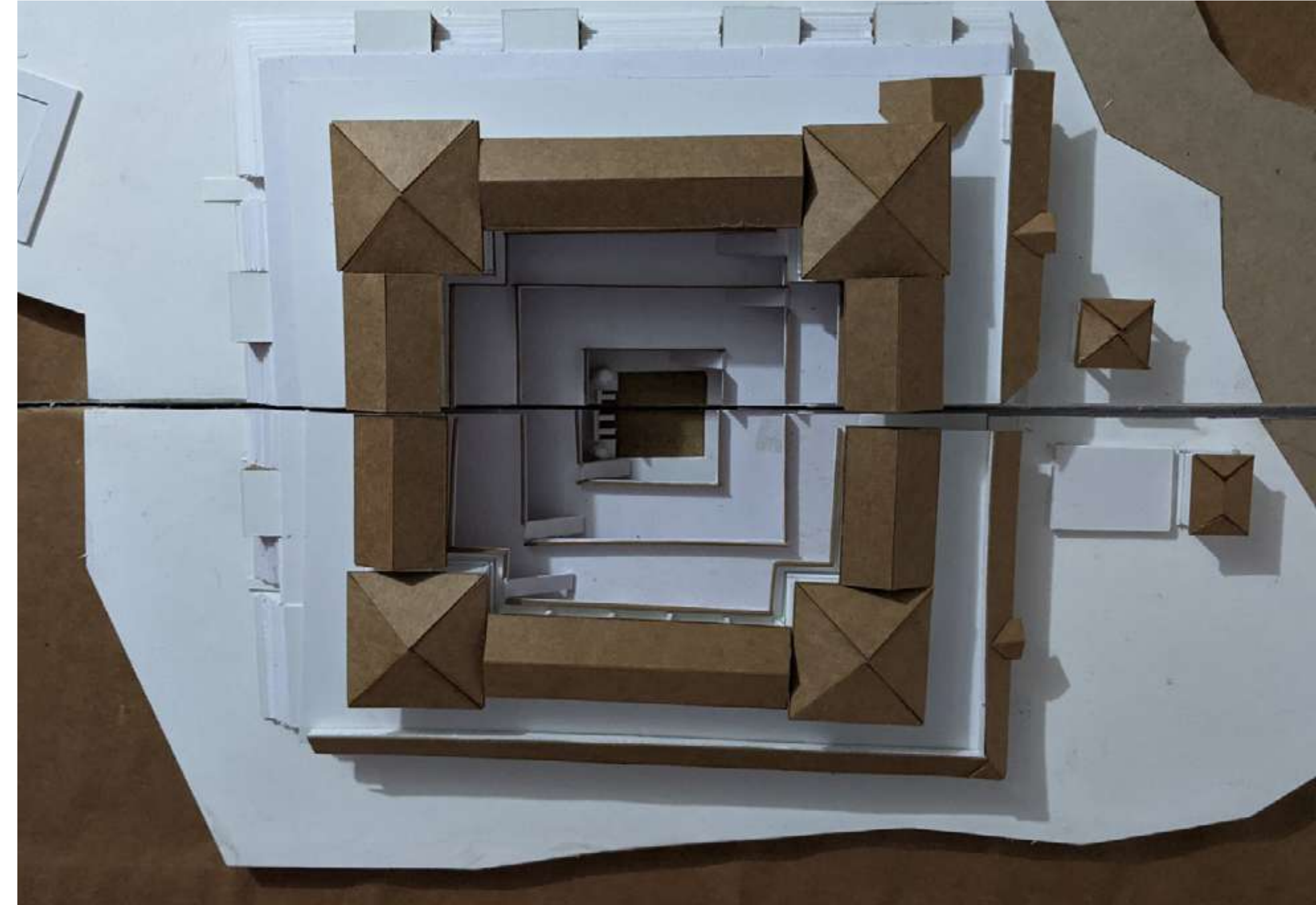
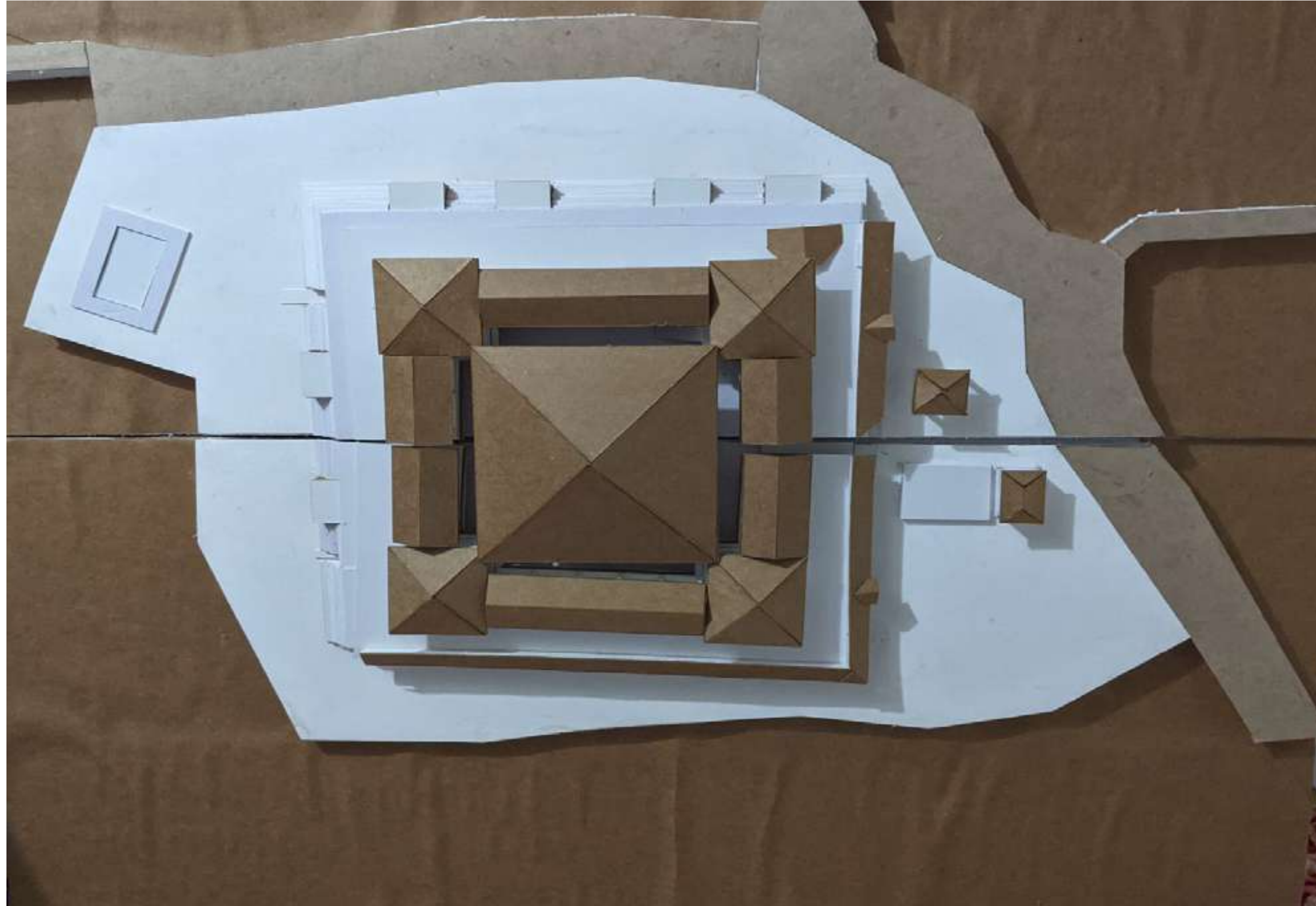
VIEW FROM BASEMENT 1 BALCONY



VIEW OF MAIN COURTYARD

3D MODEL

NEWA BHOYE CHHEN : मध्याह्न चिमी



AFFILIATED TO P.U.
KHWOPA ENGINEERING COLLEGE
DEPARTMENT OF ARCHITECTURE
LIBALI, BHAKTAPUR

FINAL PRESENTATION
B.ARCH THESIS

NAME : RACHANA PRAJAPATI
ROLL NO : 750132
DATE : 2081/05/06