

Agonistic Re-Neighbouring

An alternative strategy for the marginalised Mae Kha Community
in the context of gentrification in Chiang Mai, Thailand

Kitsupphat Na Lampang

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Schools of Architecture, Design and Conservation

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Kitsupphat Na Lampang
Supervisor: Daniel Serafimovski

The Royal Danish Academy of Fine Arts.
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Abstract

Introduction

- Chiang Mai
- The Canal and the Earthen wall

Context

- The Site
 - SITE #1 Tha Pae Road - Loi Kroh Road
 - SITE #2 Suriyawong Road - Nanthram Road 6 -ThipNet Road
- Development plan
 - The three strategies of Development Plan
 - The selected strategy.
- The issue

Design Strategy and approach

- Objective
- Strategy #1: Adaptive temporary house
 - Strategies references
- Strategy #2: Slice and Preserve
 - Strategies references
- Project references : Working experiences with local context, climate, and materials in Chiang mai and Bangkok
- Vernacular tectonic and material references

Methodology

Submission

Bibliography

Curriculum Vitae

Abstract

Gentrification is a complex and controversial issue that has gained global attention in recent years. Gentrification can have advantages such as economic growth, improved infrastructure, and crime reduction. However, As urban development projects continue to expand, communities are facing the challenges of displacement for long-term residents, the loss of housing affordability and fading of the local cultural identity.

Several land development projects in Thailand were implemented without consideration for the impact on local communities, resulting in the expansion of historical and cultural erosion to the district level, especially in the Bangkok area. (fig.1) The majority of development initiatives are primarily concentrated in Bangkok, which has limited the active involvement of the local community and led to a range of communal challenges. Additionally, the development activities in the region have given rise to gentrification, which has also extended to Chiang Mai, a significant center for advancing regional growth in northern Thailand. In response, this program seeks to examine the impacts of development in Chiang Mai, Thailand, with a focus on the challenges faced by underprivileged communities in affected areas and also prevent the recurrence of similar issues in the future.

By adopting an agonistic perspective put forth by political theorist Chantal Mouffe, which views conflict as a necessary component of democratic politics. Mouffe's theory views conflict as a struggle between adversaries who share a commitment to democratic principles but disagree on their interpretation, The program aims to develop an alternative intervention that achieves the shared objectives of both adversaries based on the state's proposed development plan. This project will consider the interests of marginalised communities and preserve their cultural identity without disregarding the upcoming gentrification project. Moreover, This project also aims to critique the future development proposal and provoke discourse on alternative solutions to the challenges posed by gentrification by investigating the potential of altering typology and strategies for addressing displacement in the affected areas. The architecture will be used as a medium to contribute to the discourse on agendas of inequality, top-down state strategies, and the loss of the identity of minority communities that often perpetuate gentrification.



Images of the area before development, in Bangkok.



Images of the area after development, in Bangkok.

The images of area transformation before and after of the gentrification project in Bangkok, Thailand. Approximately 1,000 residents are displaced from a community in the center of Bangkok area. This development project plans to commercialise the area, necessitating the relocation of affected residents. (fig.1)

Introduction

Chiang Mai

Chiang Mai established in the 13th century, it is home to 1.78 million people (2022)¹ and is situated in a mountainous terrain, approximately 700 kilometres north of Bangkok. The city is surrounded by two layers of walls, a brick wall and a ramped earth wall, and is bisected by the Mae Kha canal and river, which have played a significant role in shaping its cultural and historical heritage.

Between 1970 and 1990, Chiang Mai underwent significant development, transforming the city's infrastructure and establishing it as a regional education hub. Key to this transformation were improvements to the city's highways, irrigation systems, and transportation networks. By the 1990s, the Thai government had begun promoting tourism, which spurred further growth in the local economy. During this period, there was extensive construction and expansion of the city's infrastructure, including hotels, resorts, shopping centres, golf courses, condominiums, houses, and allocated land. This expansion helped to position Chiang Mai as the largest city in northern Thailand and the second largest in the country, reflecting a period of remarkable economic growth.²

However, due to rampant urbanisation and an influx of Thai residents and ethnic groups, many areas in Chiang Mai have expanded in an unorganised manner, resulting in several problems such as an unhygienic environment, informal settlements, and overpopulation in several areas. In 2016, the Major of Chiang Mai city initiated a plan to promote the city as a world heritage site.³ However, since then, Chiang Mai has faced the challenges of gentrification, particularly in the Mae Kha area. This has resulted in the displacement of local communities and a loss of cultural identity.

As gentrification has become a global challenge, it is of utmost importance to explore alternative solutions to address its impacts and preserve the unique cultural heritage of cities like Chiang Mai.

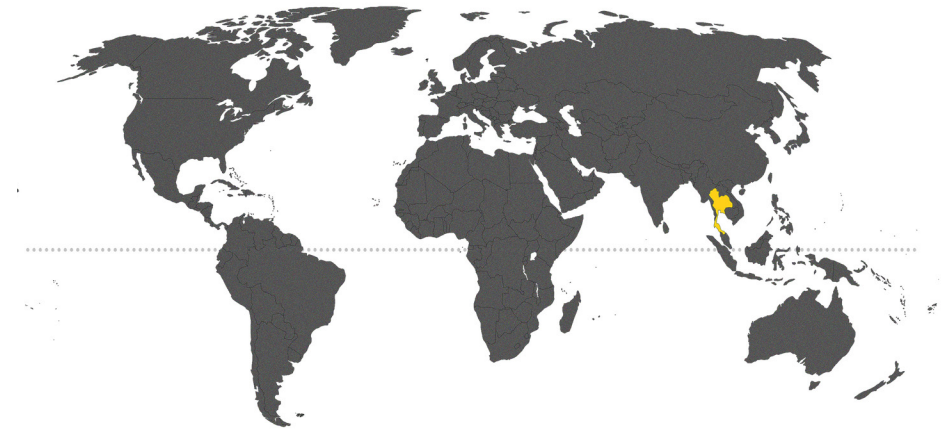


Illustration of Chiang Mai's location

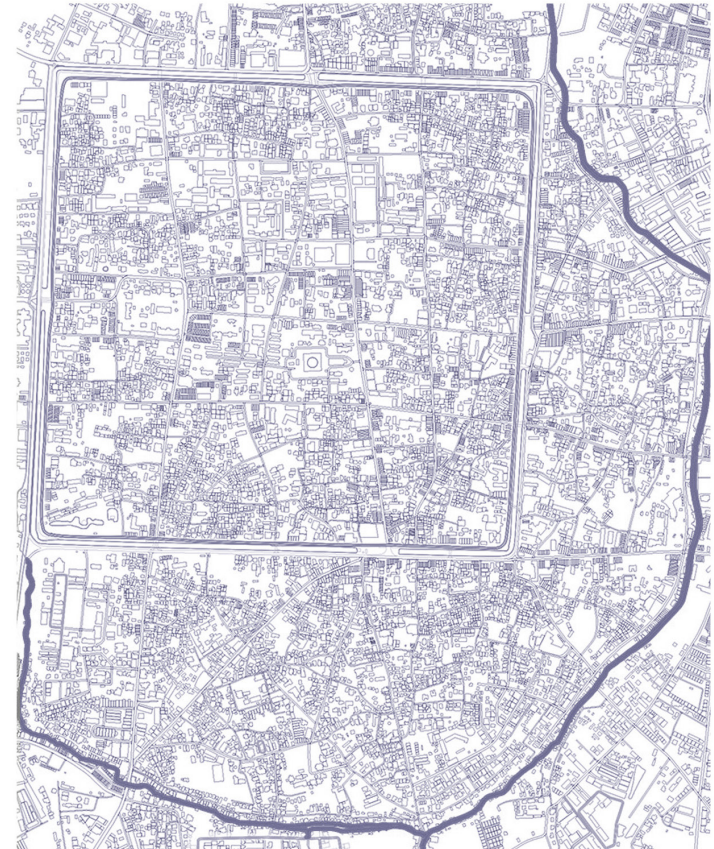
1.Registration Administration Office, Ministry of Interior

2. "เมืองเชียงใหม่ (The dynamics of Chiang Mai city)," The Urbanis by UDDC, December 17, 2021, <https://theurbanis.com/insight/17/12/2021/5712/>.

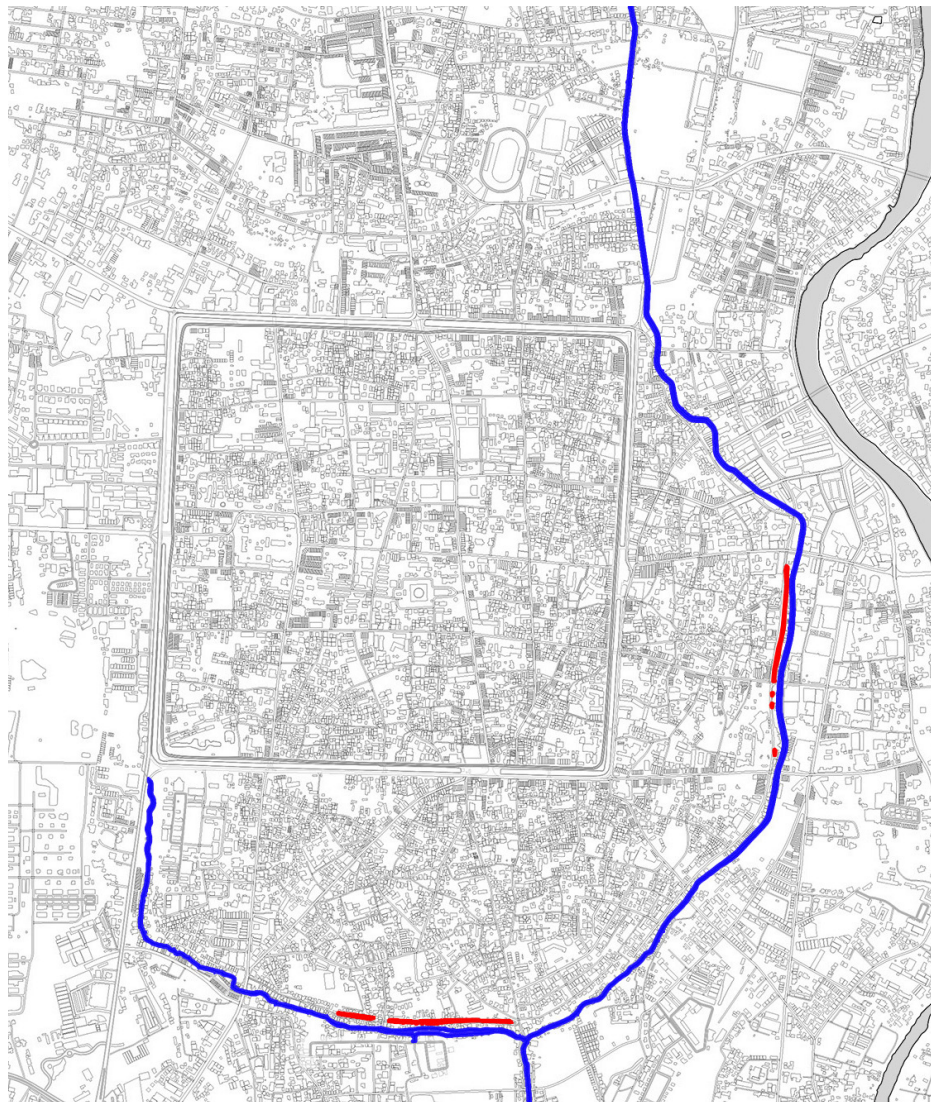
3.Pearsaralee, "Chiang Mai moves towards living world heritage city," Chiang Mai News, November 14, 2016, <https://www.chiangmaimnews.co.th/page/archives/538220>.



An archived map of Chiang Mai city depicts the Mae Kha canal and the earthen wall areas as agricultural fields.



A map of Chiang Mai city depicts the urbanisation of the city, the Mae Kha canal and the earthen wall areas transformed into densely populated residential areas



The Canal and the Earthen Wall

The Mae Kha Canal is a 25-meter wide, canal located in Chiang Mai, dating back over 700 years. The canal served a crucial role in the city's early development, providing flood protection during the monsoon season, and water delivery for agriculture to the town.

Along the canal, there is a rammed earth wall called "Kamphaeng Din". The Kamphaeng Din, or the outer city wall, is an earthen wall of historical significance. The Mae Kha Canal and the Kamphaeng Din wall, were historically used as a combination to create a fort and moat system that provided protection to the city from potential invasions. Some segments of the wall were repurposed into a residential building, following the conclusion of World War II. Unfortunately, several sections of the earthen wall were destroyed to accommodate the construction of roads, commercial areas, and residential buildings, resulting in the absence of visible remains of the original wall. Nonetheless, the wall's trajectory can be approximated by examining its general course.⁴

However, in recent decades, the city has undergone rapid unplanned growth. it has had a great impact on "Mae Kha". As a result, the once pristine Kha Canal and the wall have fallen into disrepair, the canal becoming unsanitary and the area between the canal and the wall becoming a site for the emergence of informal and intensely populated communities.⁵

This presents a challenge for urban planners and policy-makers, who must consider the preservation of Chiang Mai's rich cultural and historical heritage while balancing the need for growth and development. Further research is required to investigate alternative sustainable solutions that preserve cultural and historical significance while promoting responsible urban development in Mae Kha Canal's area in Chiang Mai.

Drawing of Chiang Mai city with the highlight of Mea Kha Canal and the Earthen wall

4. "การเปลี่ยนแปลงของเมืองเชียงใหม่ (The dynamics of Chiang Mai city)."

5. "เทศบาลนครเชียงใหม่ (Chiang Mai City Municipality)," <http://www.cmcity.go.th/list/page/519/๙๘๐๓๓๖๖/>.



Images of historical condition of Mae Kha Canal, National Archive Chiang Mai



Images of current condition of Mae Kha Canal, Thaipost news

Context

The Site

This project focuses on the communities located between the remaining earthen wall and the canal. These areas still have clear traces of the earthen walls. This narrow but densely packed area between the distinctive urban fabrics has an unusual spatial character. The built environment within this area exhibits a range of features that reflect the complex relationship between the existing features and the built environment. These include the use of earthen walls to create a sense of privacy for homes, the integration of the wall as an entrance gate or fence, and the construction of houses over the canal. These features serve to illustrate how people respond to and integrate environmental features within their built environment.

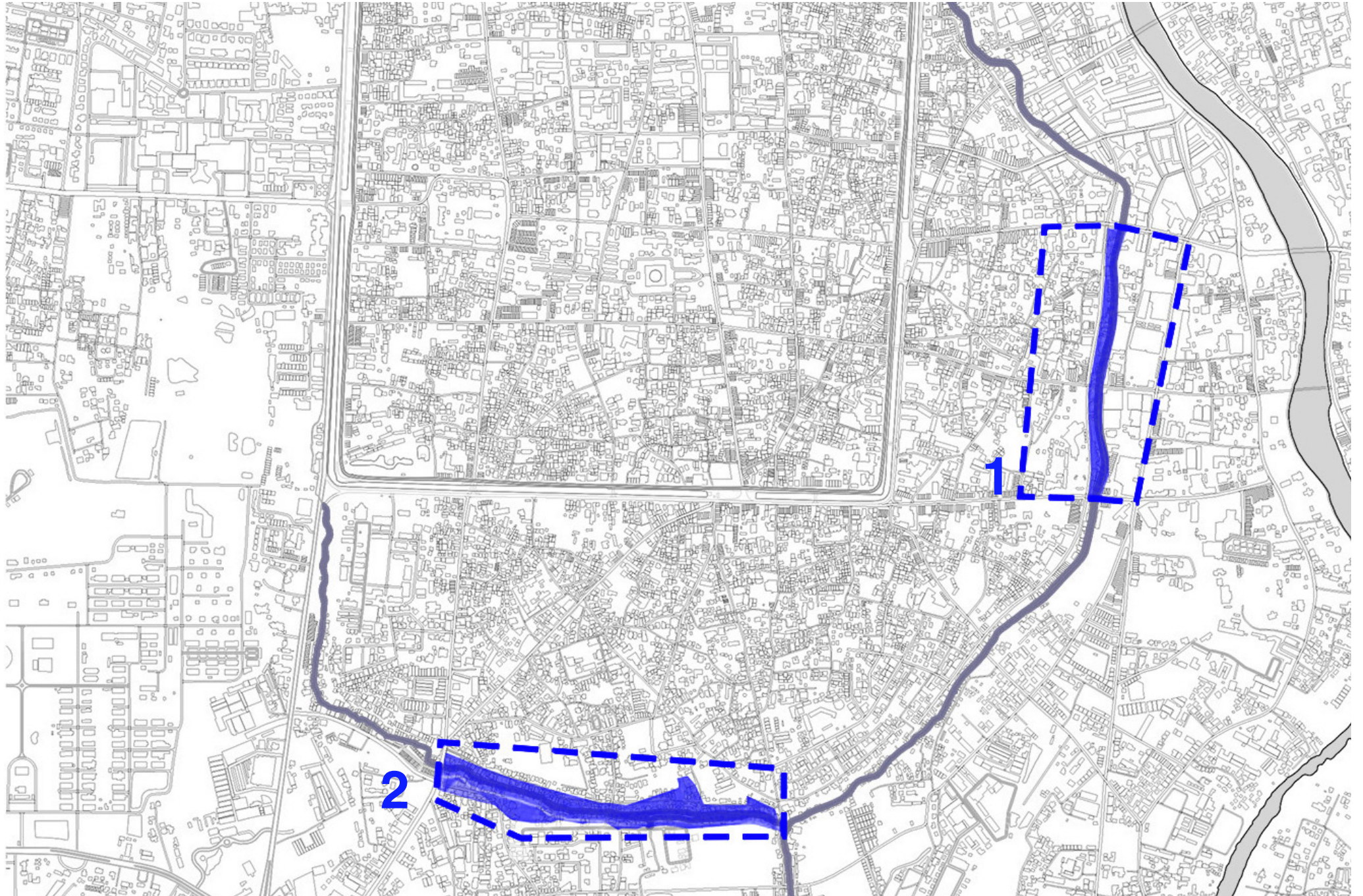
Notwithstanding its unique features, the unplanned development that has taken place in the area has resulted in high-density settlements and a consequent decrease in living conditions. Moreover, these characteristics of the buildings in the community are encroaching and overlapping with public areas, the historical wall, and the canal.

The built environment is dominated by modest structures, built mostly with wood, metal sheets, or concrete, and often constructed by non-architects, a local carpenter or selfbuilt. Notably, a significant proportion of land ownership in the area, roughly 70-80%, is held by the state, and locals are permitted to lease these properties for residential use.

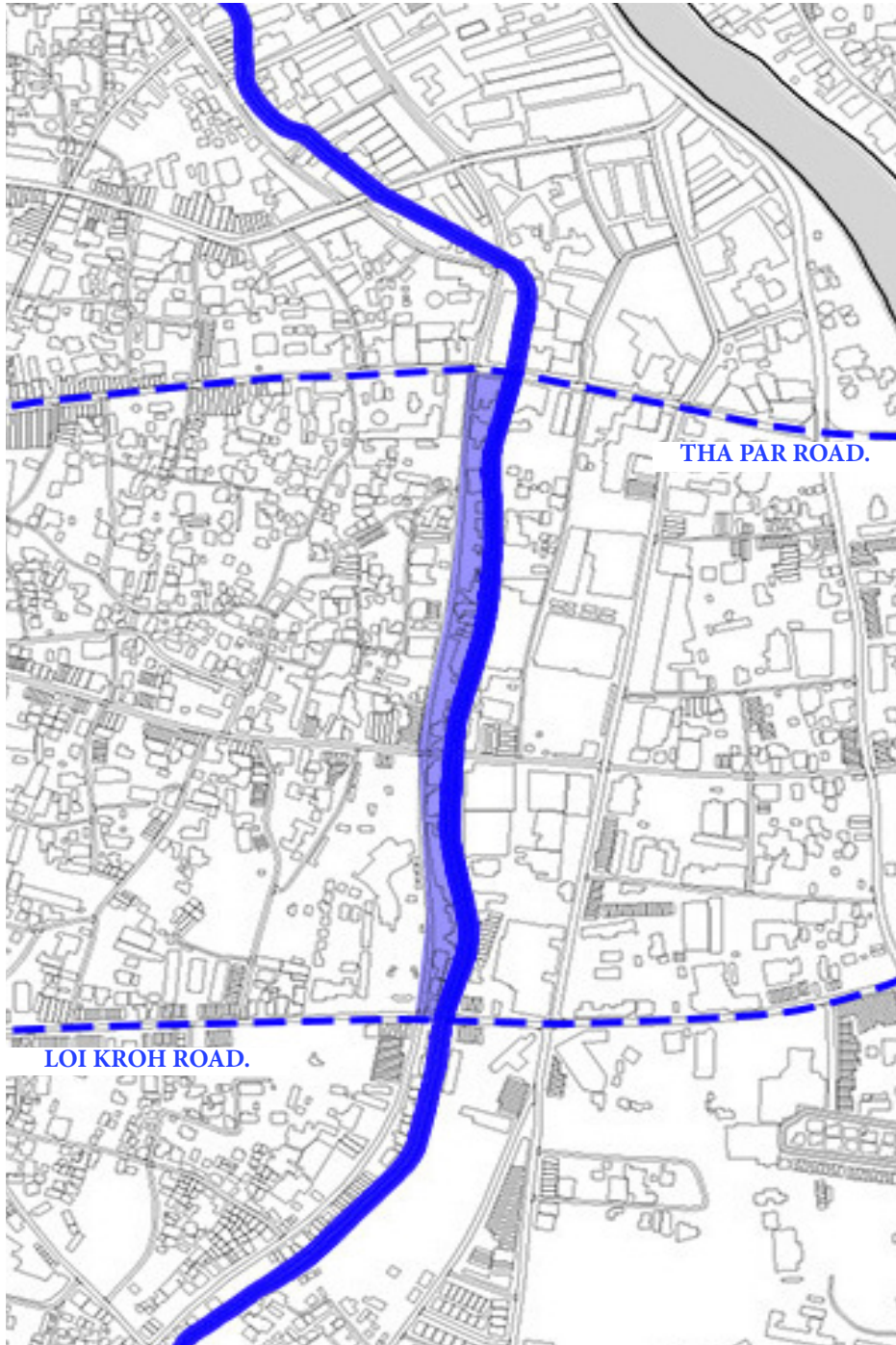
Two sites were identified as subjects of interest for this study due to their distinctive features located between the remaining earthen wall and the canal. Site 1 is situated on Mae Kha Canal in the eastern part of the city between Tha Pae Road and Loi Kroh Road, while Site 2 is located on the earthen rampart and Mae Kha Canal in the southern part of the city around Suriyawong Road and Thip Net Road. Despite their differences, the sites share certain commonalities that are pertinent to the investigation.



Image of the Current Condition of the Mae Kha Canal.



Drawing highlighting the two sites of interest located along the Mae Kha Canal.

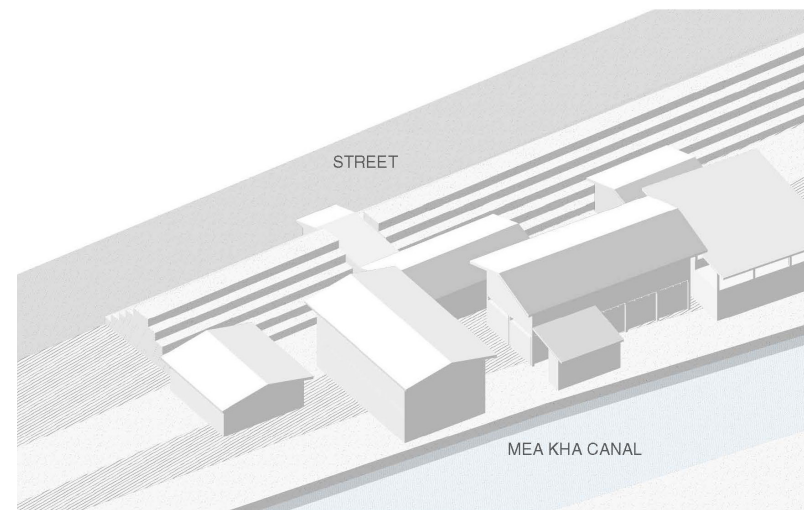
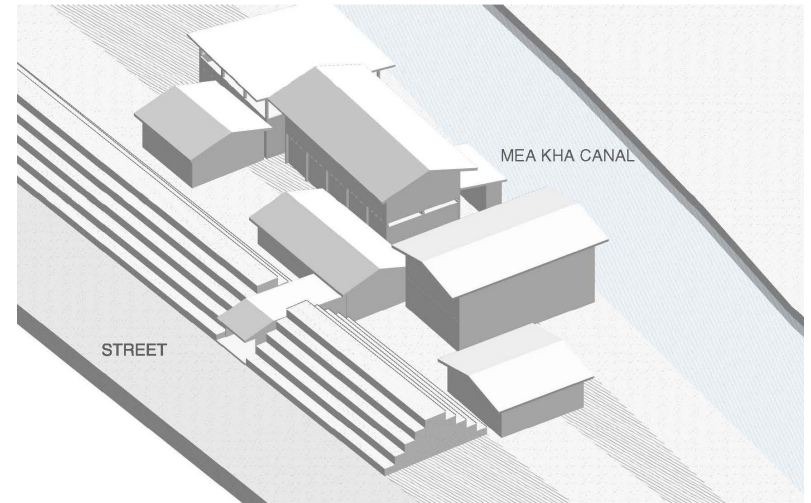


SITE #1 Tha Pae Road - Loi Kroh Road

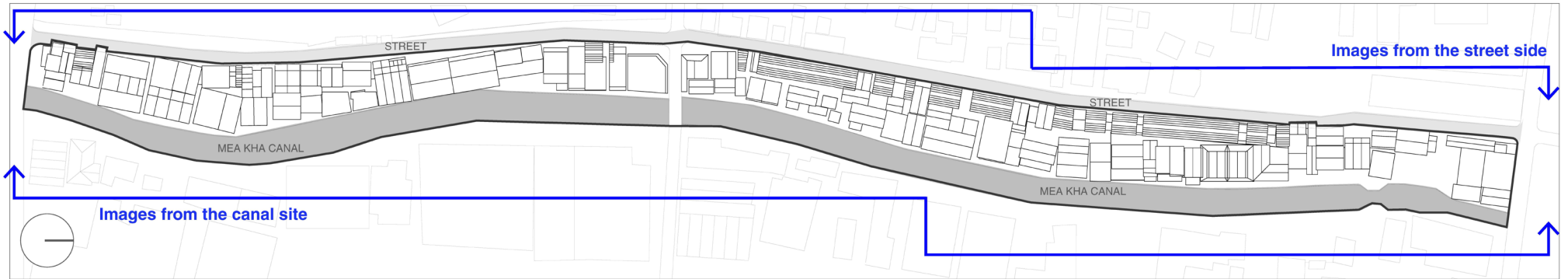
The current area exhibits clear remnants of an ancient wall. Most of the land is occupied by private buildings that have extended beyond the designated title deed area, encroaching on state-owned land (along the canal side). Moreover, some of these buildings have violated building regulations by encroaching upon the earthen wall's boundary, which mandates that buildings should maintain a distance of at least 6 meters from the wall. The buildings are clustered closely together in the limited space between the earthen wall and the canal, resulting in a high-density area.



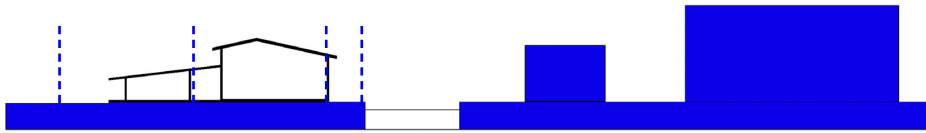
Plan Drawings of the First site.



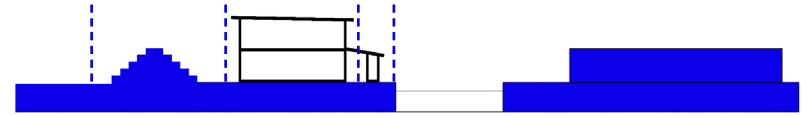
Isometric drawings of a fragment of site 1



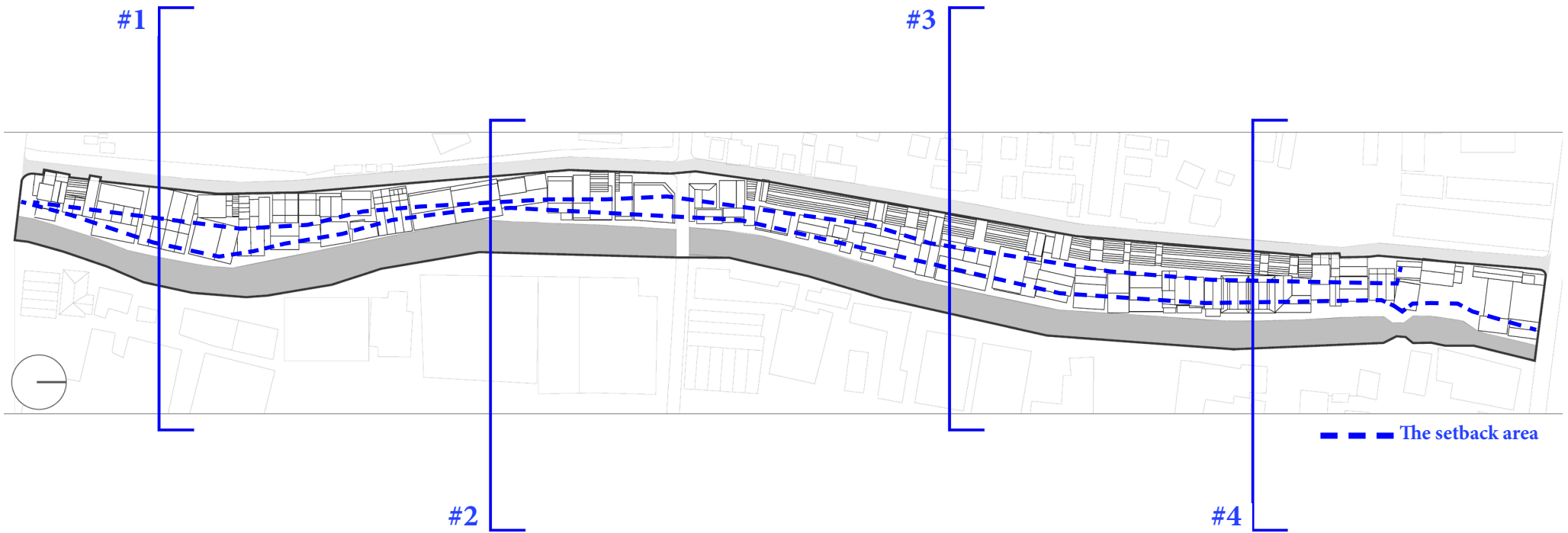
The Collage of Images Showing the First Site and Surrounding areas.



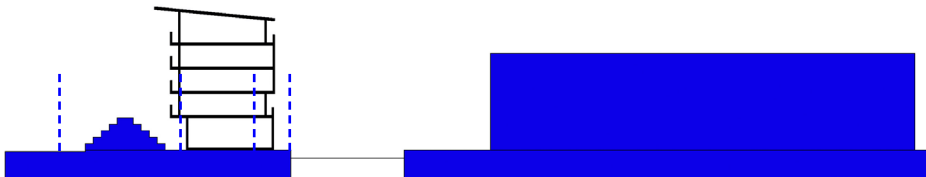
A series of section shows the spatial relationship between the buildings and their surroundings.
 : The building is constructed beyond the designated boundaries and encroaches upon the setback of the earthen wall and canals.



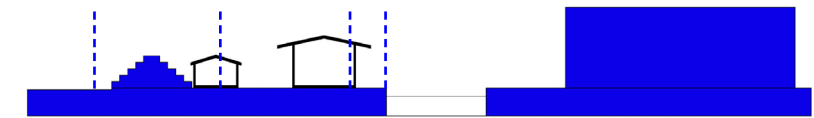
3. The building is situated at a distance from the earthen wall, but it encroaches upon the setback zone of the canal.



--- The setback area



2 The building is situated at a distance from the earthen wall, but it encroaches upon the setback zone of the canal.



4. The building is constructed close to the earthen wall and has encroached into the canal's setback zone, while still leaving some space between adjacent buildings.

Sectional Drawings of the First Site.



The image from the street side depicts how the house is built within the setback zone of the earthen wall.



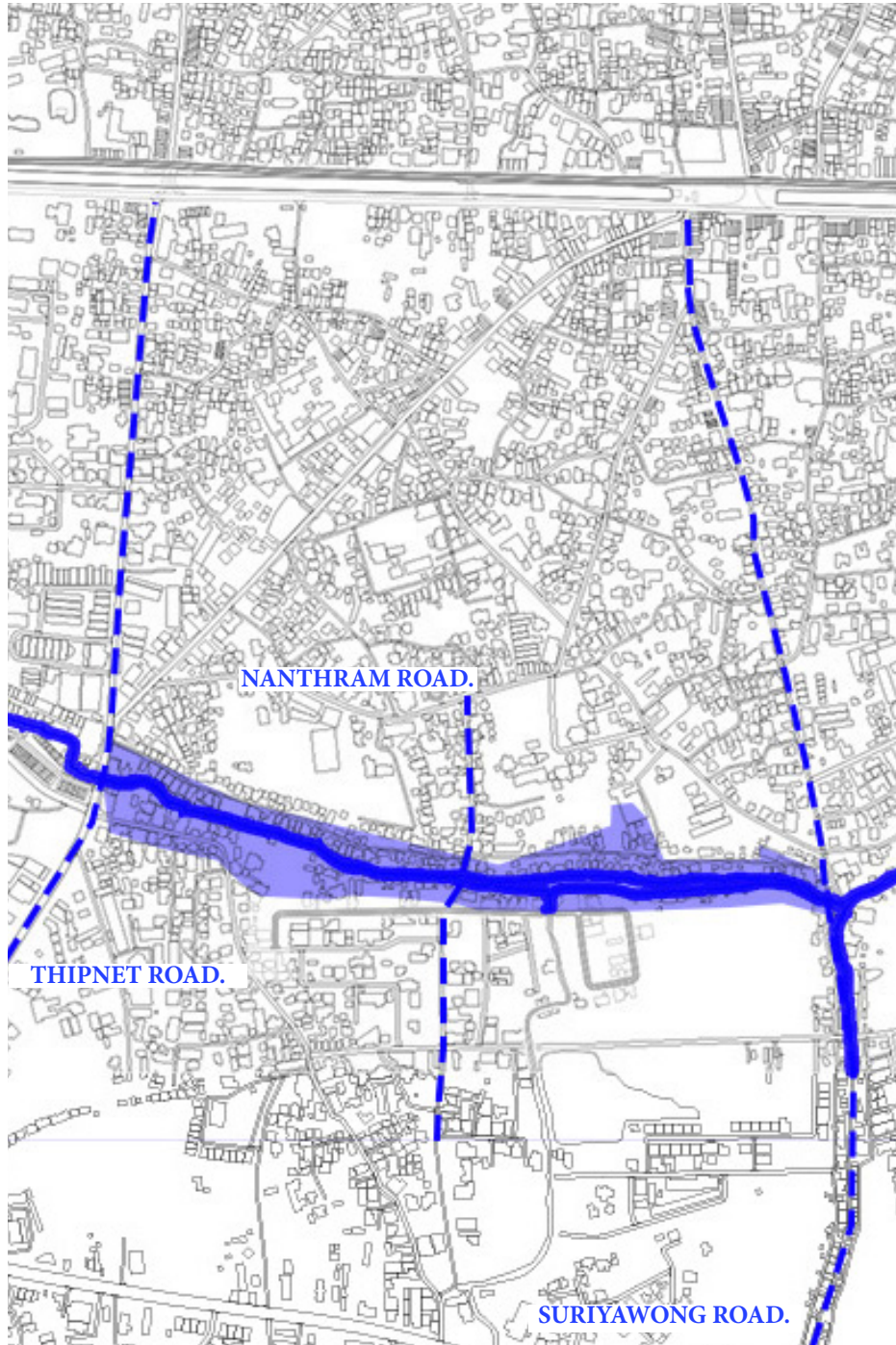
The image from the street side depicts how the house is hidden behind the earthen wall.



The image from the canal side depicts how the house is hidden behind the earthen wall.

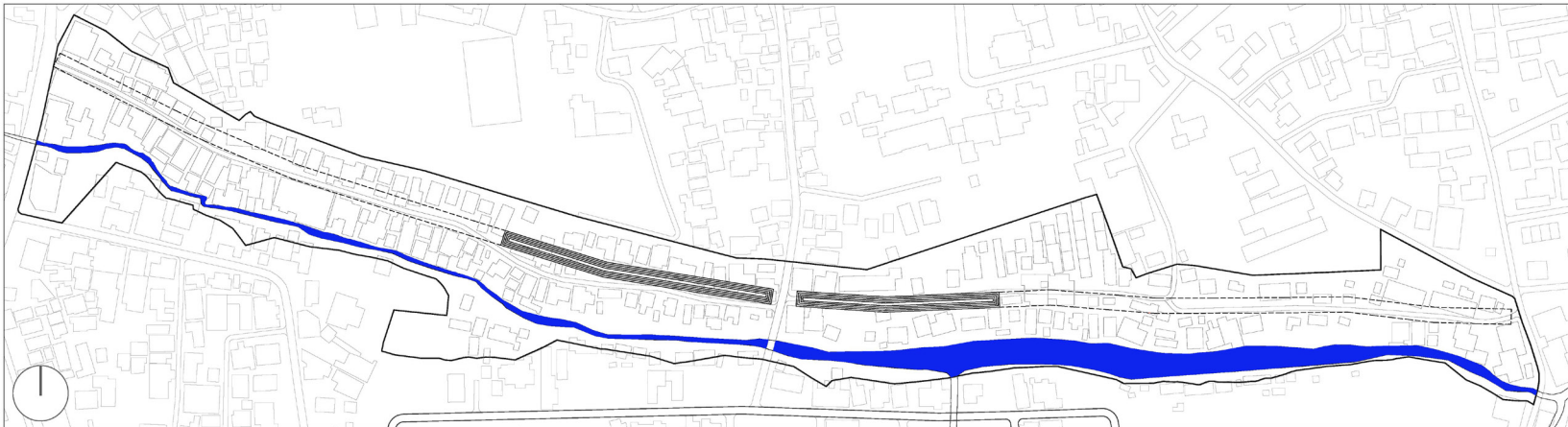
The Image depicts the relationship of the Earthen wall and its surrounding.

The images depict the relationship between the buildings, the earthen wall, and the canal.



SITE #2 Suriyawong Road - Nanthram Road 6 -ThipNet Road.

In this area, situated between the earthen rampart and Mae Kha Canal in the southern part of the city, bounded by Suriyawong Road, Nanthram Road 6, and Thip Net Road, the condition of the earthen wall is relatively well-preserved compared to other sections along the Mae Kha canal, despite some parts being damaged or replaced by community roads. The residential structures in this area extend beyond their designated property boundaries and encroach upon both the canal area and the earthen wall. Additionally, some portions of the land belong to the government and have been rented out for residential and commercial purposes, resulting in densely populated clusters of buildings and shops along both sides of the canal and the wall.



■ Canal

■ Remaining Wall

■ Traces of the wall

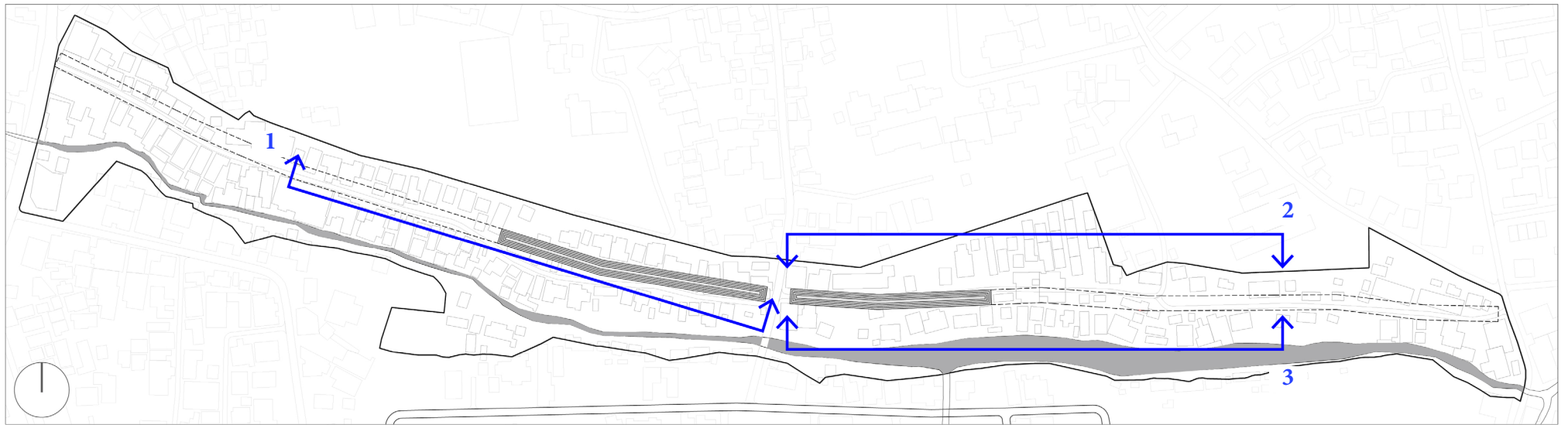
Plan drawings of the second site: Further investigation of the second site will be elaborated on this project.



1.Images from the street side



2.Images from the street side



3.Images from the canal side





The image shows how local residents have illegally claimed the earthen wall as their own and transformed it into a semi-outdoor leisure area.

Context



The image depicts the relationship between the buildings and the earthen wall at the site#2.

Development plan for residential areas along the Mae Kha Canal (2023-2027)

As part of the city's attempt to become a UNESCO World Heritage site, Chiang Mai's mayor launched a revitalisation campaign of the Mae Kha canal region in early 2017. The canal and wall areas have been the centre of attention for redevelopment, as it is regarded as a valuable historical property with substantial cultural and tourism potential. However, The absence of a comprehensive master development plan has led to a lack of shared vision, causing delays and an unorganised development process. On October 13, 2021, the Chiang Mai municipality created a working group to prepare a project aimed at resolving housing issues in the Mae Kha Canal area. The group is focused on developing solutions to improve the canal and surrounding areas.

This Development Plan for residential areas along the Mae Kha Canal (2023-2027) serves as a framework for ongoing the development project on this area, designed to systematically address the problem of housing along the Mae Kha Canal. This development plan was made in collaboration with the Architecture studio, Jai Baan Studio.



Visualisation of Scenario #3 (Please refer to the explanation on the following page.),
the public space along the canal
Development Plan for residential areas along the Mae Kha Canal (2023-2027)

The strategies of Development Plan for residential areas along the Mae Kha Canal (2023-2027)



ภาพแสดงที่ 1

ใช้มาตรการทางกฎหมายทั้งหมด

ข้อดี
1. สามารถแปลงที่ดินในบริเวณที่มีปัญหาของประชาชนได้โดยสะดวกตามกรอบของกฎหมาย โดยไม่มีการรื้อถอนหรือการรื้อถอนที่ผิดกฎหมาย

ข้อเสีย
1. จำนวนของประชาชนทั้งหมด 1,022 ครัวเรือน จะได้รับผลกระทบจากโครงการพัฒนา รวมถึงการสูญเสียที่ดินในบริเวณที่มีปัญหาของประชาชน โดยไม่มีการรื้อถอนหรือการรื้อถอนที่ผิดกฎหมาย
2. การสูญเสียของชุมชนและวิถีชีวิตของชุมชน และการสูญเสียของวิถีชีวิตของชุมชน
3. การสูญเสียของวิถีชีวิตของชุมชนและการสูญเสียของวิถีชีวิตของชุมชน

First Proposal strategy: Utilising all relevant regulations

- Advantages**
- Reclaiming of every informal property in the area, in line with relevant regulations.
- Disadvantages**
- Approximately 1022 households out of 2139 are expected to be permanently displaced.
 - The loss of existing structures and displacement of residents could lead to the erasure of local identities.
 - Highlights the challenges associated with enforcing laws and regulations fairly and inequitably.
 - The displacement of residents underscores the issues of inequality and right to live in the urban areas.
 - Possibility of protest.



ภาพแสดงที่ 2

ดำเนินการเฉพาะอาคารที่ได้รับผลกระทบจากระเบียบคลองและเขตโบราณสถาน

ข้อดี
1. สามารถแปลงที่ดินในบริเวณที่มีปัญหาของประชาชนได้โดยสะดวกตามกรอบของกฎหมาย โดยไม่มีการรื้อถอนหรือการรื้อถอนที่ผิดกฎหมาย

ข้อเสีย
1. จำนวนของประชาชนทั้งหมด 708 ครัวเรือน จะได้รับผลกระทบจากโครงการพัฒนา รวมถึงการสูญเสียที่ดินในบริเวณที่มีปัญหาของประชาชน โดยไม่มีการรื้อถอนหรือการรื้อถอนที่ผิดกฎหมาย
2. การสูญเสียของชุมชนและวิถีชีวิตของชุมชน และการสูญเสียของวิถีชีวิตของชุมชน
3. การสูญเสียของชุมชนและวิถีชีวิตของชุมชน และการสูญเสียของวิถีชีวิตของชุมชน
4. การสูญเสียของชุมชนและวิถีชีวิตของชุมชน และการสูญเสียของวิถีชีวิตของชุมชน

Second Proposal strategy: Utilising regulations only related to the setback area of the canal and earthen wall to guide redevelopment.

- Advantages**
- Reclaiming of land along the canal and wall, with the aim of repurposing the area for public use.
- Disadvantages**
- Approximately 708 households out of 2139 are expected to be permanently displaced.
 - The loss of existing structures and displacement of residents could lead to the erasure of local identities.
 - Highlights the challenges associated with enforcing laws and regulations fairly and inequitably.
 - The displacement of residents underscores the issues of inequality and right to live in the urban areas.
 - Possibility of protest.



ภาพแสดงที่ 3

จัดพื้นที่และชุมชนรูปแบบใหม่ทั้งหมด โดยเป็นการสร้างโอกาสและพัฒนาศึกษาของพื้นที่ ตามกรอบของกฎหมายที่มีการผ่อนปรนบางส่วนเพื่อสร้างแรงจูงใจในการพัฒนา

ข้อดี
1. สามารถแปลงที่ดินในบริเวณที่มีปัญหาของประชาชนได้โดยสะดวกตามกรอบของกฎหมาย โดยไม่มีการรื้อถอนหรือการรื้อถอนที่ผิดกฎหมาย

ข้อเสีย
1. จำนวนของประชาชนทั้งหมด 2,139 ครัวเรือน จะได้รับผลกระทบจากโครงการพัฒนา รวมถึงการสูญเสียที่ดินในบริเวณที่มีปัญหาของประชาชน โดยไม่มีการรื้อถอนหรือการรื้อถอนที่ผิดกฎหมาย

Third Proposal strategy: Replanning the Area with Partially Compromised Regulations to Address Housing and Land Ownership Issues.

- Advantages**
- Providing adequate land and affordable housing can improve the living conditions of current residents.
 - Transforming a portion of the area into public space can promote community engagement and well-being.
 - Promoting the waterfront and historical sites can attract tourists and stimulate economic growth.
 - Maintaining the local cultural identity can preserve a sense of community and belonging.
- Disadvantages**
- The temporary relocation of 2139 households is anticipated during the development phases.

The three strategies of the Development Plan for residential areas along the Mae Kha Canal (2023-2027)

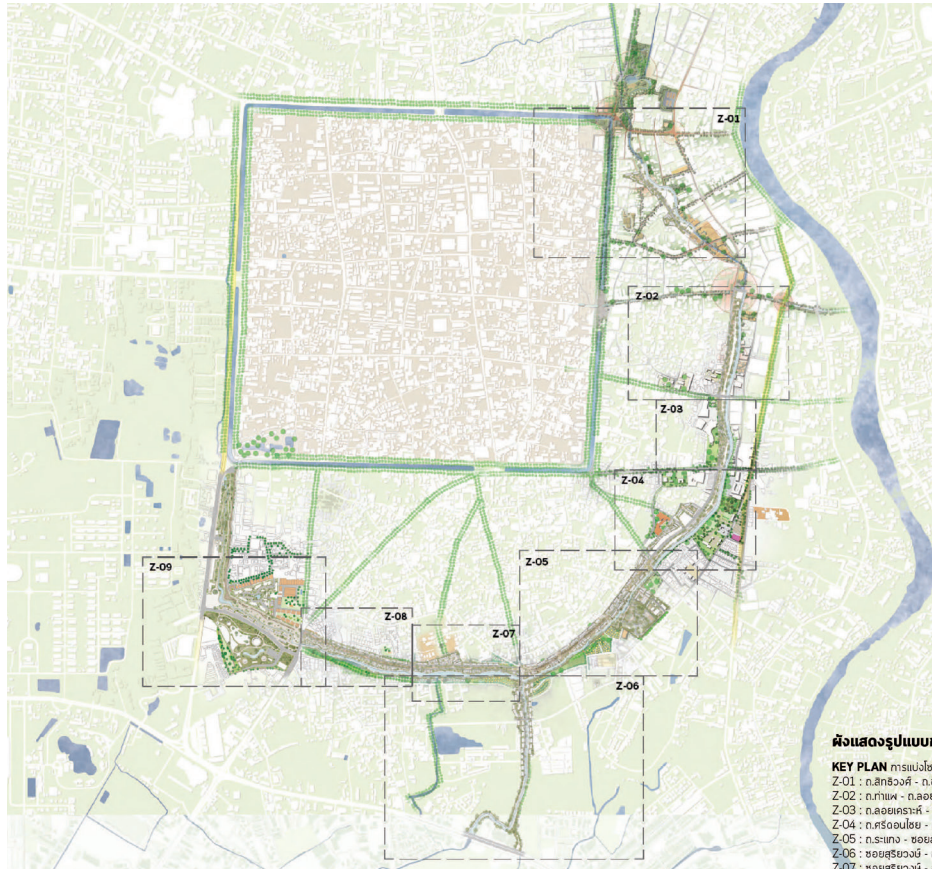
According to the Development Plan for residential areas along the Mae Kha Canal (2023-2027), there are three potential strategies for the transformation of the Mae Kha Canal area, each with its own set of advantages and disadvantages.

1)The first strategy by the central government involves the utilisation of all relevant regulations to reclaim every informal property in the area, which would result in the permanent displacement of approximately 1,022 households out of 2,139. The loss of existing structures and displacement of residents could lead to the erasure of local identities, highlighting the challenges associated with enforcing laws and regulations equitably and underlining the issues of inequality and the right to live in urban areas. Finally, this strategy poses the risk of protests due to the relocation of 1,022 households.

2)The second strategy by group of central and local government propose in the framework involves the utilisation of regulations only related to the setback area of the canal and earthen wall to guide redevelopment. This will lead to the reclaiming of land along the canal and wall for public use. However, this strategy also has negative consequences, including the permanent displacement of approximately 708 households out of 2,139. Additionally, the loss of existing structures and displacement of residents could lead to the erasure of local identities, highlighting the challenges associated with enforcing laws and regulations fairly and inequitably. The displacement of residents also underlining the issues of inequality and the right to live in urban areas, with the possibility of protests due to the relocation of 708 households.

The third strategy proposed by the Chiang Mai Housing Management Working Group and Jai Baan studio involves a re-planning of the area with some regulatory relief to address housing and land ownership issues. For instance, building regulations will be relaxed to allow for the construction of public or community buildings in some setback areas. This approach offers several advantages, including providing adequate land and affordable housing to improve the living conditions of current residents, transforming a portion of the area into public space to promote community engagement and well-being, promoting the waterfront and historical sites to attract tourists and stimulate economic growth, and maintaining the local cultural identity to preserve a sense of community and belonging.

Three Development strategies Development Plan for residential areas along the Mae Kha Canal (2023-2027)



The selected strategy.

The third strategy proposed by the Chiang Mai Housing Management Working Group and Jai Baan studio, has been selected by government as a strategy for the future development for the transformation of the Mae Kha canal area aims to reorganise the entire community while preserving the identity of local residents, who are mostly underprivileged. The strategy seeks to improve the green space by creating a green corridor and open spaces between canals, walls, and buildings. It also involves making some compromises with building regulations on the earthen wall area and canal to allow for public or community building uses in order to revitalise it for tourism purposes. Furthermore, this strategy proposes providing affordable housing of proper size to maintain the way of living of local inhabitants. Although this strategy aims to reduce permanent displacement, it still requires all inhabitants to move for some periods, which could be burdensome for the underprivileged. However, according to the the Development Plan for residential areas along the Mae Kha Canal (2023-2027), this strategy will require temporary relocation of all locals for 6 months up to 1.5 years.

The third strategy : images of overall areas
 Development Plan for residential areas along the Mae Kha Canal (2023-2027)

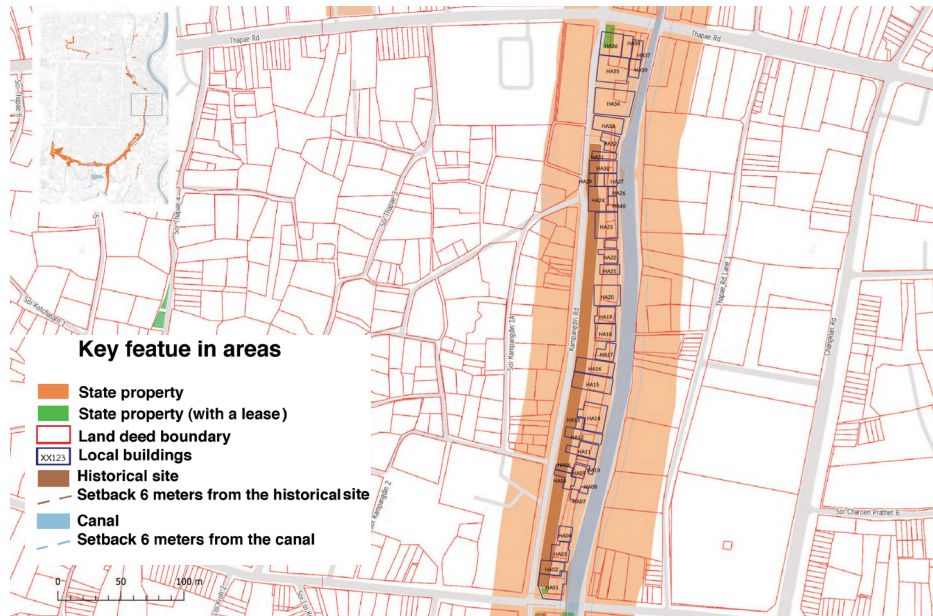


Diagram depicts the current complexity of landownership issues at the site#1. Development Plan for residential areas along the Mae Kha Canal (2023-2027)

The strategy for the first area aims to establish clear boundaries and usage terms for space while converting private encroached areas into public spaces. The goal is to maintain the right to use the space for the same group of people who previously occupied it while also promoting unified development. A bicycle pathway should be constructed to connect this area with other parts of the city.

my translate from the Development Plan for residential areas along the Mae Kha Canal (2023-2027)

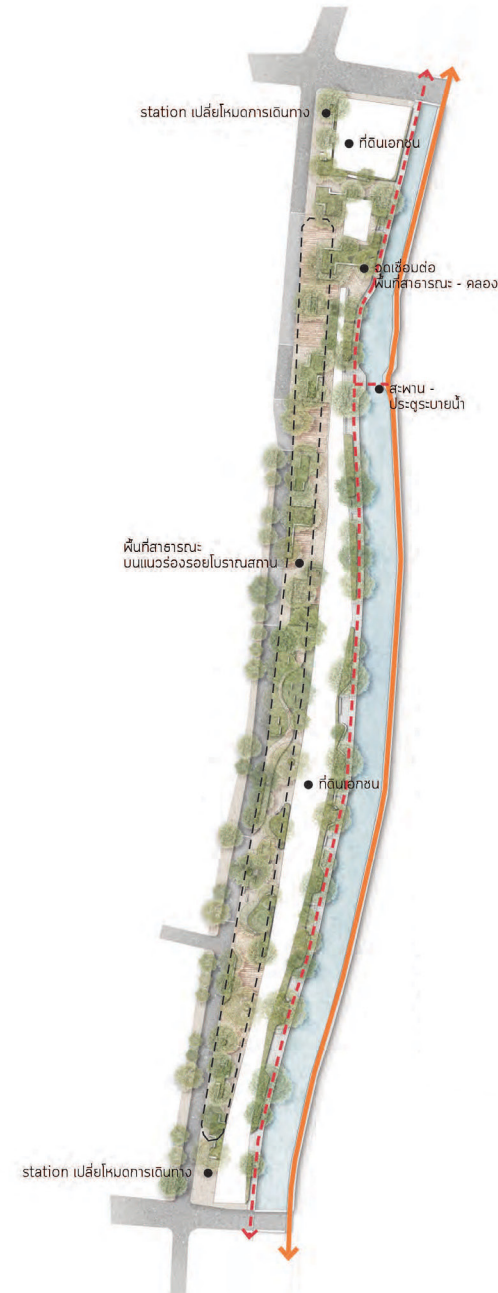


Diagram shows the urban transformation of the third strategy in the site#1. Development Plan for residential areas along the Mae Kha Canal (2023-2027)

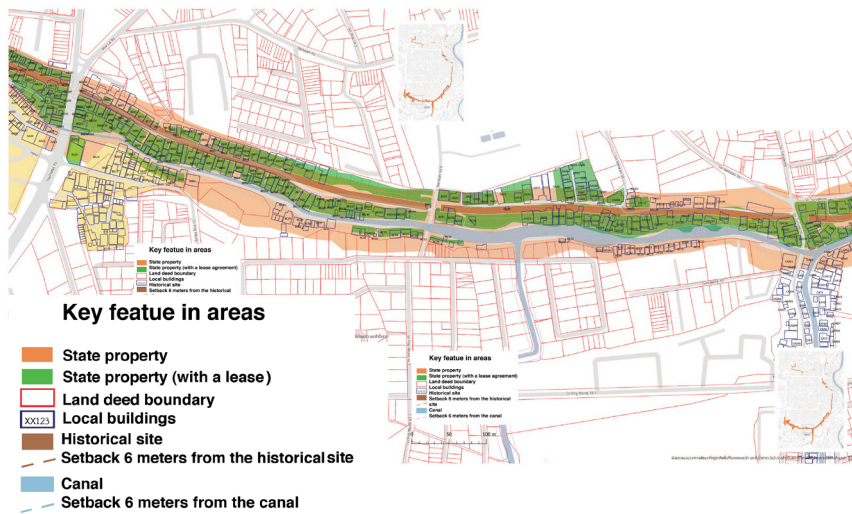


Diagram depicts the current complexity of landownership issues at the site#2.
 Development Plan for residential areas along the Mae Kha Canal (2023-2027)

The strategy for the second area is to rehabilitate and demarcate the boundary of the earthen wall, while also improving it to become a publicly accessible area. The distance from the wall's boundary will be maintained as it is a registered historical site. The canal line's distance will also be adjusted to become an accessible area by the river. Additionally, all new residential buildings will be grouped according to their type, including the row houses, the detached houses by the canal, as well as the apartment.

my translate from the Development Plan for residential areas along the Mae Kha Canal (2023-2027)



Diagram shows the urban transformation of the third strategy in the site#2.
 Development Plan for residential areas along the Mae Kha Canal (2023-2027)

The Issue

The Mae Kha canal is home to a culturally diverse population, including Thai residents and ethnic groups such as the Akha, Lisu, Lahu, Shan, and Burmese. The unchecked growth of the city has resulted in the rise of informal settlements in the areas surrounding the canal. The demographic composition of these areas is characterised by individuals with unstable income and a lack of security in property ownership, reflecting the complex social dynamics at play in the region.

As aforementioned, In early 2017, the mayor of Chiang Mai embarked on a revitalisation effort of the Mae Kha canal's area as part of the city's bid to become a UNESCO World Heritage site. The gentrification of the canal and the wall area had become a pressing issue, as it is considered a valuable historical heritage that holds significant cultural and tourism potential.

The national government has been actively promoting this development project, enforcing regulations to clean the canal and remove informal settlements, while simultaneously preparing the area as a tourist destination. However, there has been little consideration given to the potential negative impact on the existing communities, disregarding their needs and concerns.

Before the development plan was released, the initial requirements from the central government included: 1) the sanitation of the canal, 2) the improvement of the surrounding area, 3) the celebration of waterfront accessibility, 4) the designation of the canal and earthen wall as heritage sites, 5) the promotion of the canal and surrounding area as a tourist attraction, and 6) the elimination of informal settlements.⁶

This plan was to relocate locals and remove all informal buildings in order to sanitise the canal and reorganise the area. That would result in the translocation of 2,139 households in the 20 communities along the canal area, primarily belonging to lower socioeconomic groups who serve as the backbone of the city's economy, prompting protests that demanded support of the following requirements

- 1) Locals want to stay and improve housing while taking care of the Mae Kha Canal,
- 2) Stop evictions and delay proceedings to find solutions,
- 3) Villagers want equal representation on committee for resolving issues,
- 4) Development plan needed for housing, considering residents' lifestyles,
- 5) Compensate affected residents for demolition or relocation.⁷

6. Development Plan for Residential Areas Along the Mae Kha Canal (2023-2027)



People affected by the gentrification plan protesting in front of the municipality

The matter was handed over to the local government for action. Their response has been to prioritise sanitation measures over the issue of informal settlements, which may not fully address the situation at hand. As a result, around half of the residents are still facing the prospect of permanent relocation.

In response to the complex situation, the government provided an initial offer with the equivalent of 4,000 DKK per household that volunteer for relocation and subsequently organised a meeting to deliberate a solution. As a result of the meeting with the local architect and residents, it was decided that the proposal for permanent relocation would be abandoned. However, the 2,139 affected households were still required to temporarily relocation for a minimum of six months to a year.⁸

Although the relocation is temporary, it involves significant costs, including expenses related to moving and the loss of employment opportunities. For example, some individuals may lose their shops, while others may be unable to commute to the same workplace due to the longer distance if they are relocated to a new area. This is exacerbated by the poor state of public transportation in Chiang Mai. These factors are likely to be particularly burdensome for residents in the lower socioeconomic class, who represent a majority of the affected population. Furthermore, such a relocation would pose a significant threat to the preservation of local identity, as well as the basic right to inhabit urban areas for the underprivileged, which are both key concerns of the Sustainable Development Goals (SDGs). Specifically, SDG 1 aims to end poverty in all its forms and ensure the social and economic inclusion of all individuals, including those who are displaced. Additionally, SDG 10 aims to reduce inequalities and promote the social, economic, and political inclusion of all individuals, regardless of their race, gender, or socioeconomic status. Finally, SDG 11 seeks to promote sustainable and inclusive urbanization and improve access to safe, affordable, and inclusive public spaces, which are key components of healthy and thriving communities. SDG 16 also emphasizes the importance of promoting peaceful and inclusive societies, as well as ensuring access to justice for all individuals.⁹



The image depicts The Nail House phenomenon in China : a residence whose owner has refused to relocate. It Symbolises the resilience of ordinary citizens against government development plans that lack inclusivity.¹⁰

7. "“กรณีช่างตีทองกลอนช่างเชียงใหม่” วัฒนธรรมเชียงใหม่ เชียงใหม่ออนไลน์ เชียงใหม่ออนไลน์ 21 เมษายน 2022, <https://prachatai.com/journal/2022/06/98996>.

8. "ชุมชนเมืองเชียงใหม่ ยานยนต์ไร้คนขับเพื่อชุมชนเมืองเชียงใหม่" THECITIZEN.PLUS, June 10, 2022, <https://thecitizen.plus/node/57587>.

9. "THE 17 GOALS | Sustainable Development,"

10. Liu, Yuting. "The nail house phenomenon in China: resistance to forced demolitions and urban transformation." *Urban Studies* 54, no. 7 (2017): 1575-1592.

Design Strategy and approach

Objective

The program aims to investigate the relationship between gentrification, urban development, and cultural identity through the lens of the agonism concept from Chantal Mouffe and the idea of hegemony from Antonio Gramsci. Gramsci's notion of hegemony refers to the dominance of one group over others through the establishment of a particular worldview and values, while Mouffe's agonism concept emphasises the inevitability of conflicts and tensions in society. By using these concepts, the program prioritises the issue of displacement and loss of local identity in an underprivileged neighborhood while working towards a common goal with all stakeholders and exploring alternative approaches to gentrification. Moreover, the program deviates slightly from the proposed gentrification plan to ensure that the community's needs and interests are taken into consideration.

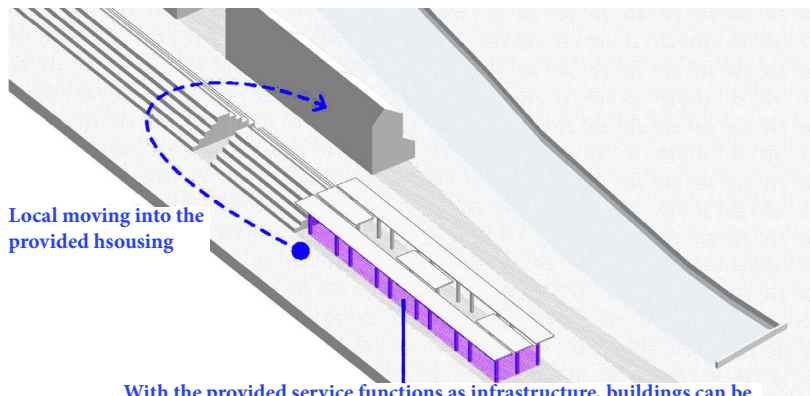
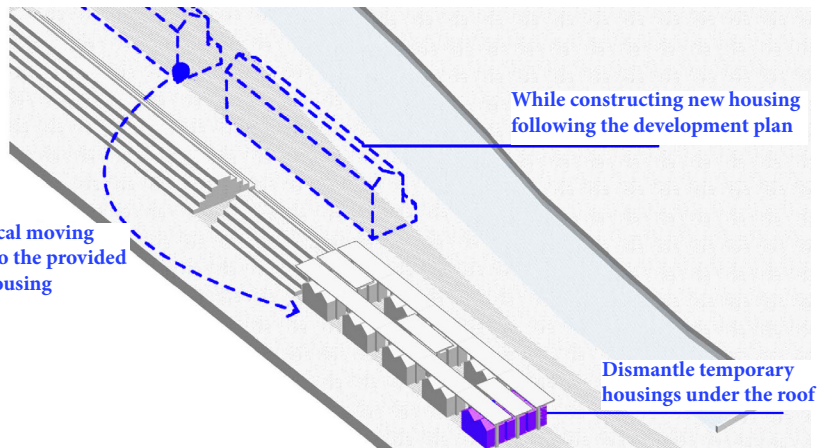
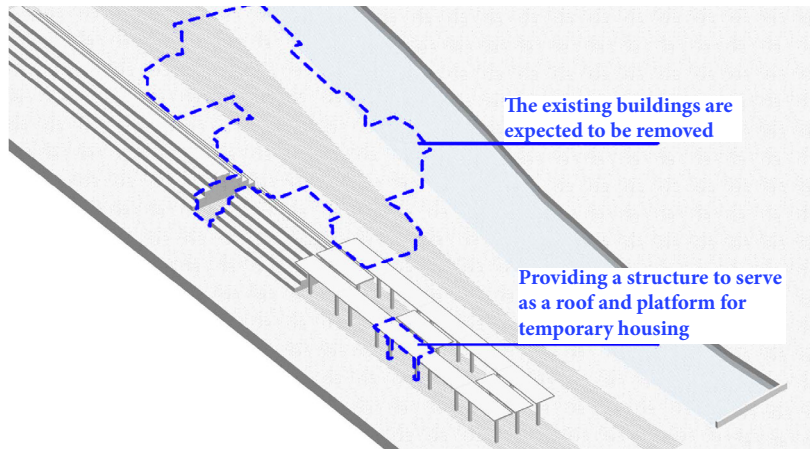
The first strategy will follow the state's proposed plan, which aims to develop an adequate amount of land equally. However, there will be a slight deviation in the design development in order to address the issue of relocation, even if it is temporary. This strategy will propose an alternative typology of temporary housing on the site. This temporary housing will serve as a platform that is flexible enough to adapt to the needs to rebuild the identity of the local community after the gentrification process ends. This approach aims to minimise the relocation process for the locals and facilitate the reconstruction of their identity.

The second strategy will focus on an alternative approach apart from the state's proposal while still maintaining its goal. This strategy will prioritise the displacement issue and the preservation of marginal identity by subtracting or removing portions of existing buildings located in restricted or setback areas. The aim is to reduce all informal settlements without a relocation process while preserving the local identity through their built environment, materiality, and way of life. Additionally, the dismantled materials can be reused to supplement those houses that need to be extended after the modification, particularly in the case of houses located in setback areas. This strategy not only provides a solution for the displacement and informal settlement issue but also helps underprivileged people overcome their lack of new

materials by emphasising the use of existing reused materials. This will reduce the consumption of new building materials and promote more sustainable building practices in line with SDG 12, which aims to ensure sustainable consumption and production patterns.

These alternative urban strategies aim to address urban poverty and inequality, which are the consequences of forced displacement resulting in the loss of economic opportunities. This aligns with SDG 1's goal of eradicating poverty and promoting social and economic inclusion and SDG 10's objective of reducing inequalities within and among countries. Additionally, the strategies emphasise the importance of creating inclusive, safe, and resilient cities and human settlements, as highlighted in SDG 11. Finally, SDG 16's objective to promote peaceful and inclusive societies for sustainable development, and inclusive institutions at all levels will be achieved by pursuing this strategic goal through a two-strategies approach that responds to different site conditions, ultimately leading to a more equitable and sustainable urban future.

Overall, by exploring alternative typologies and urban intervention strategies, this project hopes to contribute to the ongoing discourse on gentrification and address issues of inequality, displacement, and the right to inhabit urban areas, particularly for underprivileged communities that came with gentrification.



With the provided service functions as infrastructure, buildings can be transformed to represent the local needs and identity. For instance, they can serve as community centers, learning centers, or marketplaces.

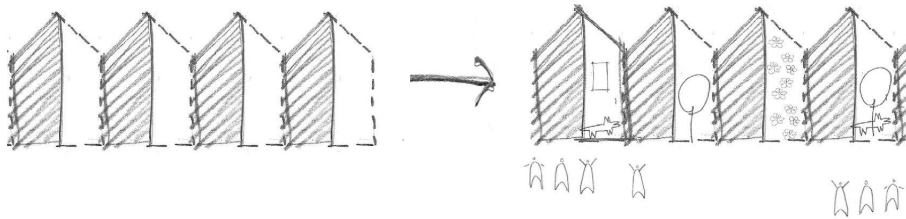
Diagram of the Study of Urban Intervention strategy#1.

Strategy #1 : Adaptive temporary house

The first strategy aims to follow the government's plan for balanced land development but with some alterations to accommodate the temporary relocation needs. My proposed approach involves implementing a unique type of temporary housing on the site to provide a flexible platform for rebuilding the local community's identity after the gentrification process is completed. This approach aims to minimize the relocation distance of local residents and promote the restoration of their identity.

Strategies references

- Half-housing: Quinta Monroy(2003) by Alejandro Aravena, Elemental
- Houses under a common roof (1944) by Jože Plečnik
- Ljubljana Central Market (1944) by Jože Plečnik



Half-housing: Quinta Monroy

Alejandro Aravena, Elemental

Year : 2003

Materials : Concrete & Cement bricks

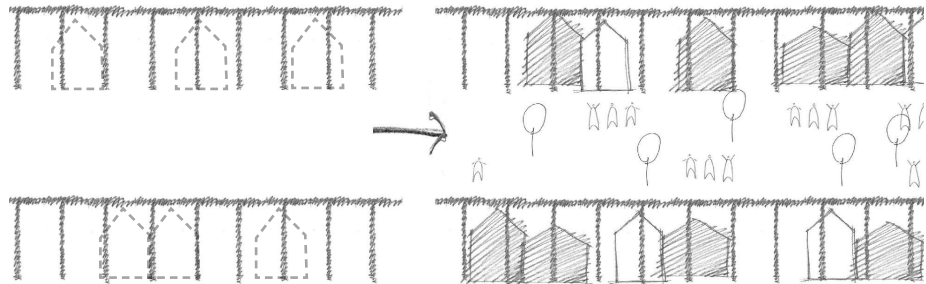
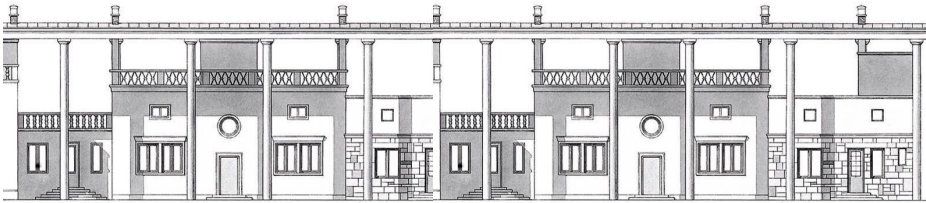
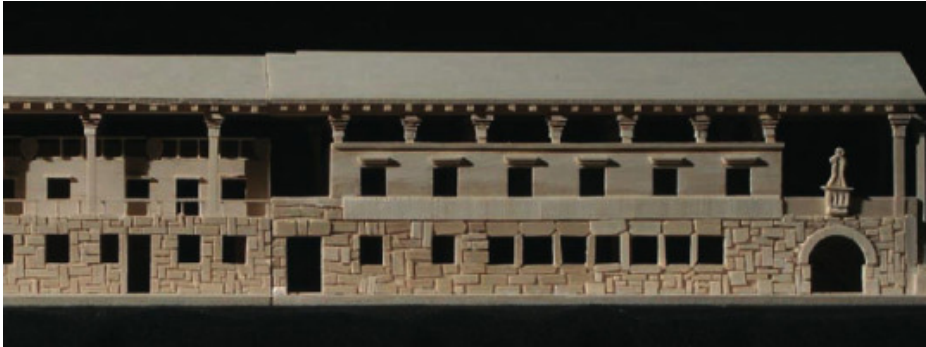
City : Iquique

Country : Chile

This reference project is a social housing project located in Chile that aimed to develop an approach for providing physical space for "extended families," which has been identified as a key factor in the economic advancement of underprivileged families. The project optimised land use by implementing row houses to address challenges related to light and ventilation, privacy, and the expansion of new rooms while prioritising scalability and economic feasibility.

The result of this strategy also suggests the idea that architectural design has the potential to create a responsive environment that is attuned to the needs of its inhabitants while also contributing to the establishment of a distinctive community identity.

Images and diagrams of the reference project, Half-housing: Quinta Monroy (2003) by Alejandro Aravena, Elemental



Houses under a common roof

Jože Plečnik (1872–1957)

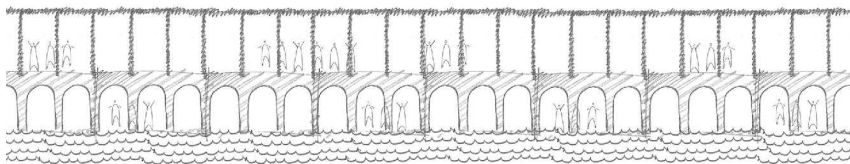
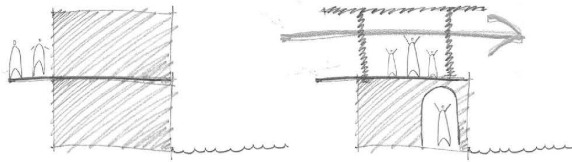
Year : 1944 (unbuilt)

City : Ljubljana

Country : Slovenia

The reference project posits the concept of the roof as an architectural element that functions as an infrastructure or platform for housing various services. Such a design allows for a dynamic space that can be adapted and transformed by the inhabitants in response to changing needs over time within a collective environment. This idea of an open, flexible space that can adapt to meet the needs of the community contributes to the development of a community identity while the sense of temporality of the space transforms its function.

Images and diagrams of the reference project, Houses under a common roof (1944) byJože Plečnik



Ljubljana Central Market

Jože Plečnik (1872–1957)

Year : 1939

City : Ljubljana

Country : Slovenia

The reference project is conceived as a riverside market comprising two levels of halls that follow the river's course. The upper level houses shops that showcase Slovenian products and catering establishments, while the Central Market is an open-air market that forms an integral part of this project. Plečnik, the architect of this project, believed that market buildings should be incorporated into the larger monumental city space.

Plečnik's design philosophy emphasizes an open and flexible space that can adapt to meet the needs of users over time, resulting in a space whose function is temporally transformed. Furthermore, the project's openness allows for the architecture to become an integral part of the surrounding environment, blurring the boundaries between the built and natural worlds.

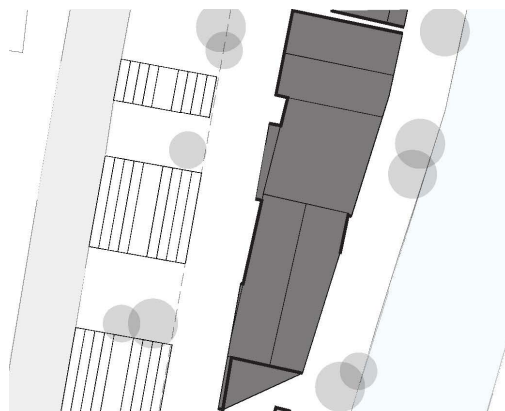
Images and diagrams of the reference project, Ljubljana Central Market (1944) by Jože Plečnik



Existing condition



Respond to the setback area and development plan



Slicing the existing buildings that overlap the restricted area in order to maintain the community's way of living while avoiding a process of temporary/ permanent displacement of the local citizens

The Strategy #2 : Slice and Preserve

The second strategy aims to address the issue of displacement and preserve the marginal identity of the local community by proposing an alternative approach that is in line with the state's development goal. The strategy involves removing or subtracting portions of existing buildings in restricted or setback areas to reduce informal settlements without relocation. This way, the local identity can be preserved through their built environment, materiality, and way of life. Moreover, the materials from the dismantled buildings can be reused to extend or supplement other houses that need modification, especially those located in setback areas.

Diagram of the Study of Urban Intervention strategy#2.

Strategies references

- Nail house, China : an inspiration for the strategy
- Flicking the house , the local intervention technique
- Double-skin house (2018) by Shigeru Aoki Architect & Associates
- Transformation of 530 dwellings (2016) by Lacaton & Vassal, Christophe Hutin architecture, Frédéric Druot



Images of the inspiration to the project, Nail house, China

A '**Nail House**' or dingzihu phenomenon in China: resistance to forced demolitions and urban transformation. - Liu, Y.¹¹, *Urban Studies* 54, no. 7 (2017)

The Nail houses become a symbol of resistance against forced eviction and demolition.

This has become an inspiration for the second strategy of this project, which aims to maintain the living spaces and preserve the local identity of marginalized communities through their buildings and architecture, while also respecting the overall development plan by cutting or removing a certain amount of the illegal construction.

11. Yuting Liu is an Assistant Professor at the Department of Geography and Urban Studies at Temple University in Philadelphia, USA. Her research focuses on the political economy of urban transformation in China, with an emphasis on housing, property rights, and social inequality.

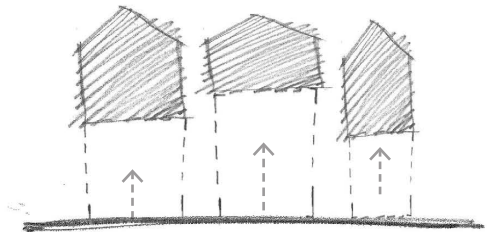
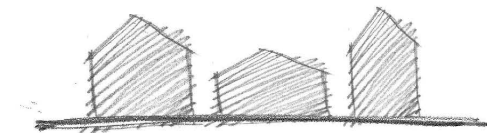


Flicking the house or lifting the house technique

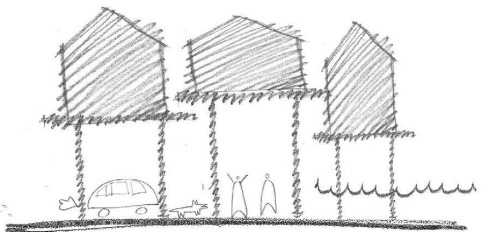
The local technique involves elevating a house to a higher level than its current one. This is achieved by cutting the stanchion structure that separates the house from the foundation and using bracing to support and elevate the house to the desired height. A support structure is then created for the cut stanchion to transfer the weight of the house to the foundation as before.

This method can be applied to both wooden and cement houses and has been in use for a long time, especially in areas prone to flooding.

This approach is used to address various problems such as recurrent flooding or the collapse of old houses. It can also be used to increase usable and ventilated space under the house, essential in hot climate. This method provides a solution to long-term problems without the need to relocate or build a new house.



Elevate the house



Create extra space under the house

Images of the local technique, lifting the house, Thailand



Double-skin house

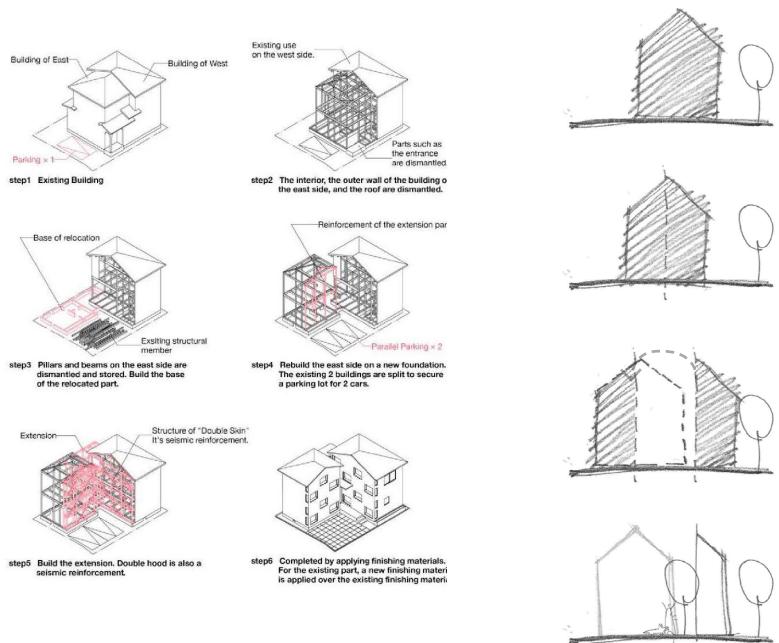
Shigeru Aoki Architect & Associates

Year : March 2018

City : Oita

Country : Japan

The reference project is a renovation project that challenges the notion that wooden houses by cutting one-half of a 30-year-old used wooden house and relocating it. The other half of the house is rotated 90° on its ridge. This renovation simultaneously reconstructing the relationship between the existing house and its external environment. Construction costs were reduced because the foundation work was reduced by half and all existing structural members could be reused. This also allowed for the use of standard carpentry techniques during construction, indicating that wooden houses can undergo bold renovations at a low cost.¹²

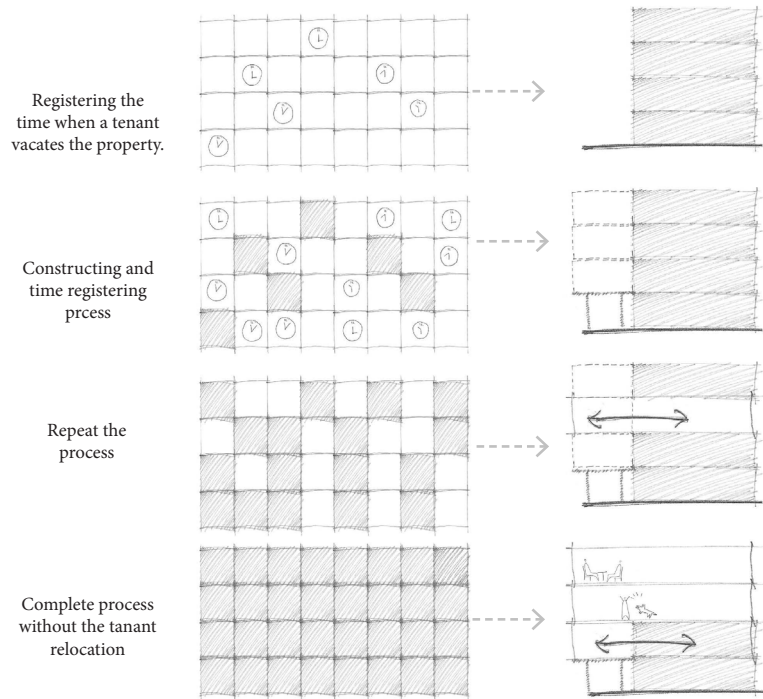


Images and diagrams of the reference project, Double-skin house (2018) by Shigeru Aoki Architect & Associates

12. Makoto Sato, "Double-Skin House," JAPAN ARCHITECTURAL REVIEW 4, no. 2 (2021): 284–89



Time - Construction relation management diagram



Images and diagrams of the reference project, Transformation of 530 dwellings (2016) by Lacaton & Vassal, Christophe Hutin architecture, Frédéric Druot

Transformation of 530 dwellings Cité du Grand Parc social housing in Bordeaux

Lacaton & Vassal, Christophe Hutin architecture, Frédéric Druot
Year : 2016
City : Bordeaux
Country : France

The reference project by Lacaton Vassal Architects involves the transformation of three fully occupied modernist social housing buildings. The project adds winter gardens and balconies as extensions to the existing structure, providing each apartment with more space, natural light, mobility of use, and better views. To maintain a general economy, the architects chose to focus on transforming the existing buildings through additions and extensions, without significant interventions on the existing structure, stairs, or floors. This approach allows the resources to be concentrated on generous extensions, which significantly and sustainably improve the quality and dimension of the dwellings.¹³

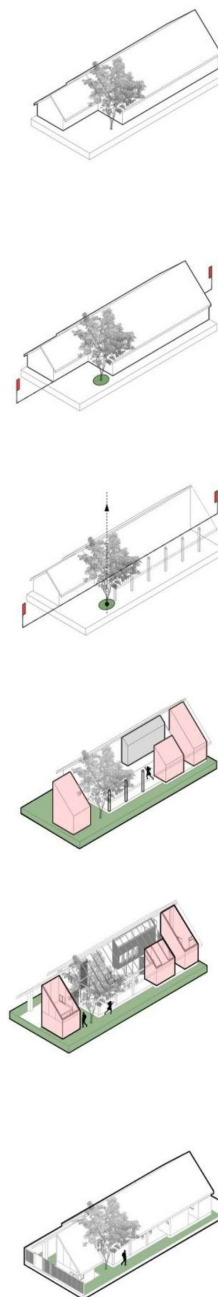
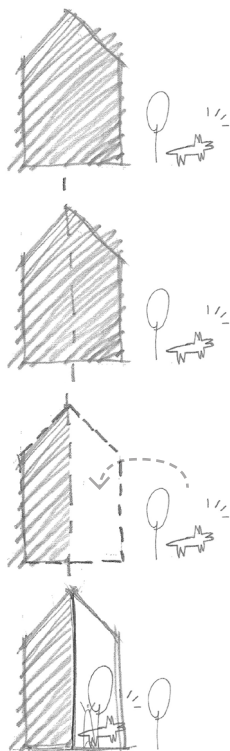
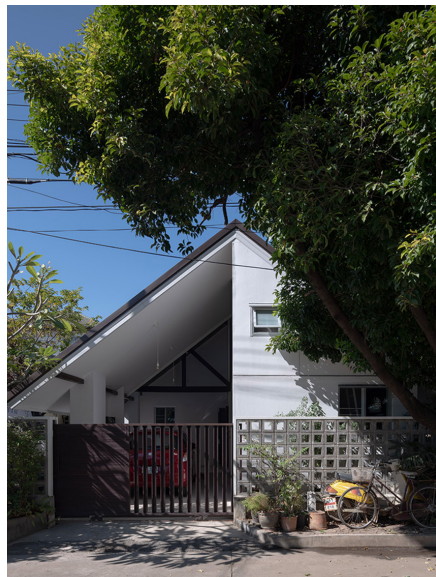
This project demonstrates the effectiveness of a conservation-based approach to renovation. By registering the time when a tenant vacates the property for work, the construction process can be scheduled accordingly to avoid inconveniencing the tenants. This approach allows for construction to proceed without displacing the residents or disrupting their daily activities. This approach not only serves as an example of a cost-effective transformation, but also highlights the possibility of completing interventions to existing structures without the need for resident relocation.

13."Lacaton & Vassal," accessed March 4, 2023, <https://www.lacatonvassal.com/index.php?idp=80#>.

Strategies references:

Working experience with local context, climate,
and materials in Chiang mai and Bangkok

- Half house (2016) by Kitsupphat Na Lampang
- Sonata house of music and language school (2020) by
Kitsupphat Na Lampang, Yusuma Ponsmith



Half house

Kitsupphat Na Lampang

Year : 2017

City : Chiang Mai

Country : Thailand

The reference project is located in Chiang Mai, Thailand and serves as an transformation project that responds to the local climate while also respecting the existing structure. “Removing” is more sustainable is the core idea of this project. The intervention approach involved subtracting half of the house to create a semi-outdoor space that brings nature closer to the house, which not only increases the accessibility of natural ventilation but also passively reduces the overall temperature of the house. These interventions represent significant and sustainable improvements to the quality and dimensions of the residents' lifestyle.

The central space created as a result of the intervention serves as a communal area for all residents, fostering social activities and promoting community engagement. The reduction in indoor space resulting from the intervention also leads to a reduction in maintenance costs, providing economic benefits to the residents. Hence, this intervention strategy is not only sustainable but also an economically viable transformation approach.

The potential of this intervention strategy to be implemented on a larger scale is noteworthy and deserves further exploration. By testing this approach on a broader scale, its efficacy can be established in contributing to sustainable architecture that is both contextually and environmentally responsive.

Images and diagrams of the reference project, Half house (2016) by Kitsupphat Na Lampang



Sonata house of music and language school

Kitsupphat Na Lampang, Yusuma Ponnsmith

Year : 2020

City : Bangkok

Country : Thailand

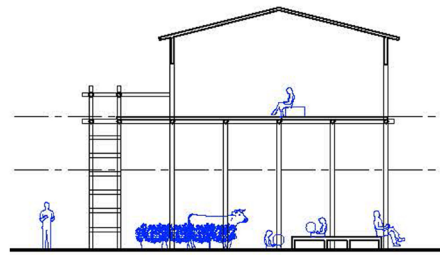
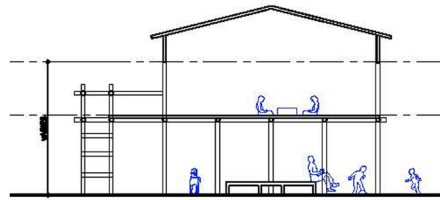
The referenced project is a renovation of Sonata House, a music and language academy situated in Bangkok, Thailand. The main objective of this renovation is to enhance the sense of spaciousness throughout the building, including the leisure area, reception, and new inner stage. To achieve this, the existing full-height brick outer wall was replaced with a solid yet transparent wall, which features linear fenestration at the top, to improve natural light and air ventilation in the interior while also addressing the hot climate of Bangkok. The use of glass blocks as the primary material for the wall not only creates a bright, lively, and comfortable learning environment. The gentle curve of the glass blocks adds a playful, fresh, and creative ambience that caters to the needs of all students at Sonata House.

By altering the materiality, this intervention strategy delivers sustainable enhancements to the economic quality and dimensions of both students and tutors. The potential scalability of this strategy warrants further exploration and investigation.

Images of the reference project, Sonata house of music and language school (2020)
by Kitsupphat Na Lampang, Yusuma Ponnsmith

Vernacular tectonic and local material references

Traditional spatial arrangements and vernacular tectonics, as well as the use of local materials, will be documented and studied to find ways to apply them in a more contemporary manner while emphasising their traditional values. This approach will help to strengthen the connection between the newly built environment and the existing fabric as part of the process of re-neighbouring the neighbourhood through architecture.



Images and section diagrams of space utilisation under a house as a social activities area for Thai people.

Image of the existing built environment featuring vernacular tectonic and materials

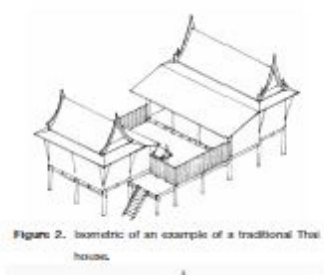


Figure 2. Isometric of an example of a traditional Thai house.

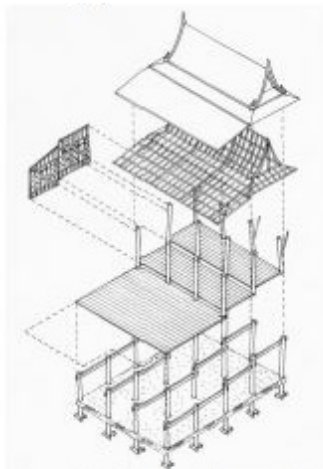


Figure 3. Construction elements of an example of a traditional Thai house.

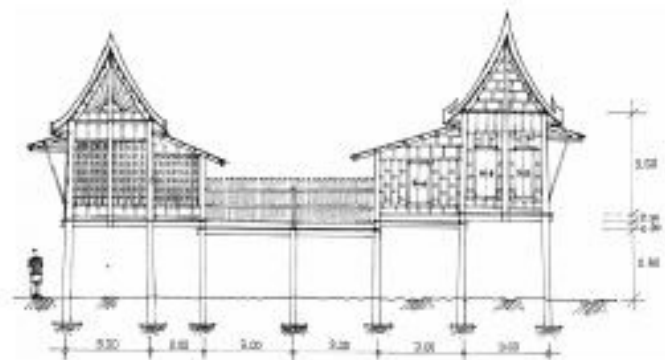
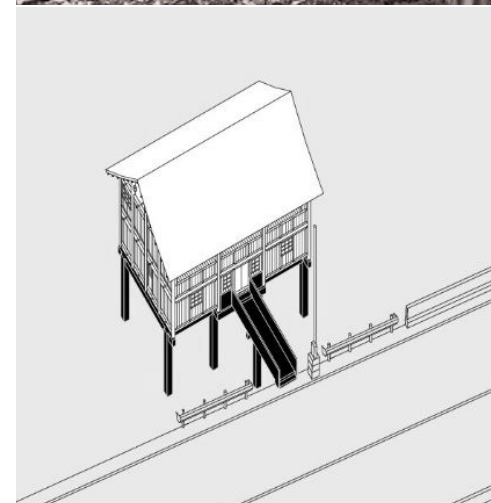


Figure 4. Section of an example of a traditional Thai house.



Diagrams of traditional Thai tectonic wooden stilt houses.

Image of the re-intervention of a traditional building with modern techniques and materials, As Found Houses: Experiments from Self-builders in Rural China Lin, J, & Devabhaktuni, S. (2020)

Methodology

This project will aim to unfold the context and to synthesise strategies by using these methods,

Approach to Existing conditions

- Interview with residents
- Registering and studying the historical precedents of the site
- Registering and studying the current condition of the site
- Study and regeneration of tectonic and materiality of existing buildings
- Investigating the relationship between "Building," "Canal," and "Earthen wall" in drawing and model

Approach to Future conditions

- Interview with project architects, Jai Baan studio, Supawut Boonmahathanakorn, Thanawin Wijitporn, and Pakawat Sattarujawong
- Review the proposed development plan

Approach to Typology and Tectonic

- Investigation of local/traditional techniques for intervention in the existing structure
- Investigation of modern techniques for intervention in the existing structure
- Study of spatial and layout of the referential project from both vernacular and modern project precedents through drawing and diagram.
- Study on the interrelationship of several tectonic solutions and materials in the design concept and connection to the context in drawing and model

Submission

The project will be explored through a comprehensive design process that incorporates architectural drawings at the specified scales. This will involve creating a representation of the following

The site plan and context at 1:1000 or 1:500 scale
Plan at 1:200 / 1:100
Sections drawing at 1:150 / 1:100
Spatial visualisation or axonometric diagram.

Additionally, a series of physical model at an appropriate scales will be produced to further enhance the understanding and representation of the project development and its transformation of the context.

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In my prior projects undertaken in Thailand, I endeavoured to intervene in existing architectural structures by reinterpreting vernacular concepts and integrating them with the urban context to explore typological possibilities. The Southeast Asian region is renowned for its diverse social and economic contexts, and my objective was to challenge conventional ways of living in the area while promoting sustainability through architectural intervention.

It is my belief that utilising methods of subtraction and reorganisation to transform existing structures can be more sustainable, both economically and socially. This approach allows for efficient use of space, reduces maintenance costs, and minimises material and energy consumption. Furthermore, removing unnecessary parts of the building promotes a stronger connection to nature, the environment, and the surrounding neighbourhood. Ultimately, the aim was to support and facilitate individuals while providing alternative approaches that sustainably promote their well-being.

Through this diploma project, it is hoped that such interventions can contribute towards addressing social, economic, and environmental challenges faced by underprivileged communities in Southeast Asia. The project also provides an opportunity for architects and planners to rethink traditional approaches to architectural design and explore alternative methods that promote sustainable development and inclusivity.

Curriculum Vitae

Professional Experience

- 2016-Present : Architect/Designer, Personal Work, Chiang Mai, Thailand
- 2017-2018 : Architect, Architects49 Limited, Bangkok, Thailand
- 2015-2016 : Junior Architect, All(zone) Limited, Bangkok, Thailand
- 2014 : Internship, All(zone) Limited, Bangkok, Thailand

Education

- 2021-Present : Master's Programme in Political Architecture: Critical Sustainability,
Royal Danish Academy of Architecture, Design, and Conservation
Copenhagen, Denmark
- 2010-2015 : Bachelor of Architecture (2nd Class Honours),
Chulalongkorn University, Department of Architecture
Bangkok, Thailand

Awards & Recognition

- 2014 : Honourable Mention Prize, Kumamoto Artopolis 2014
International Symposium in Asia, Kumamoto, Japan