

Waterfront Redevelopment in Malaysian Cities

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ABSTRACT

During the last three decades, the waterfront areas of many 'post-industrial' cities in North America, Britain, Europe and Australasia have undergone a remarkable transformation. Emerging from industrial degradation and from burial under transportation infrastructure, inner-urban harbours and riverfronts have been reborn as showpiece cultural and leisure precincts. The waterfront redevelopment had gone hand in hand with a broader renaissance of inner cities after decades of suburban dispersion. After decades of decline, cities are rebounding, and one key to bringing urban areas back to life is revitalizing commercial districts. Successful revitalization approaches need to capitalize on the opportunities presented in inner-city neighbourhoods while addressing long-standing obstacles to their rebirth.

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INTRODUCTION

During the last three decades, the waterfront areas of many 'post-industrial' cities in North America, Britain, Europe and Australasia have undergone a remarkable transformation. Emerging from industrial degradation and from burial under transportation infrastructure, inner-urban harbours and riverfronts have been reborn as showpiece cultural and leisure precincts [7]. The waterfront redevelopment had gone hand in hand with a broader renaissance of inner cities after decades of suburban dispersion. After decades of decline, cities are rebounding, and one key to bringing urban areas back to life is revitalizing commercial districts. Successful revitalization approaches need to capitalize on the opportunities presented in inner-city neighbourhoods while addressing long-standing obstacles to their rebirth.

Design for final project ARC 4003, Studio Project, involved sense of place in three meanings: psychological responses to design, preservation of the past of a place and the creation of a sense of place for the future environment development has raised to represent an ideal outcome in the sum of all. Planners and designers should take note of the implications of the sense of place can contribute to facilitating a healthy and thriving community in every aspect. Urban design can include urban renewal, by adapting urban design methods to existing cities suffering from the decline. In the late 20th century, the term sustainable planning goals internationally [9]. Public spaces consist of outdoors environments, which generally give relief from urban hectic life. These places are sidewalks, streets, parks, city halls, squares, plaza and other forms of gathering spaces. They are generally vegetated, and place where civic, cultural and social activities occur. Tourist attractions of a "non-home" place are the elements that draw discretionary travellers away from their homes. They usually included landscapes to observe, activities to participate in and experiences to remember. Transportation (e.g., cruise liners), accommodations, other services, eateries can also take on the attributes of an attractive tourist destination area, further complicating the distinction between various segments of the tourism industry. At times, some scenarios turned in such that tourists themselves become the attractions [6]. A phenomenon completed with these three components to only be considered as an attraction: tourist, viewer site and a marker or image which makes the site significant [6].

Sustainable in terms of environmental strategies and community strategies are being applied throughout the entire project scheme. For the environmental strategies, passive design of the orientation and sun shading, natural daylighting and natural ventilation, landscape planning, rainwater harvesting, use of recycled materials for construction and solar panels integrated onto building facade was incorporated. For the socio-cultural

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community sustainability, aspects considerate and applied included the visual emotional link to the water; rooftop recreational park encouraged healthy lifestyle and nurture outdoor activities, and the building void that enhanced the journey of the building towards water.

Project 1: Northern Port Terminal (DIYANA BINTI DAHLAN):

The study are undertaken to investigate the potential of Kuala Perlis fisheries industry in deep sea fishing vessel. The west coast of Peninsular Malaysia is traditionally the largest producer of marine fish in Malaysia and Kuala Perlis is the closes to open sea (Andaman sea). Given such a strategic location, issues such as sovereignty, security, sea lanes and environmental protection are of considerable importance to Malaysia's maritime development.

NOTE is the new economy hub that has been planned by the government to increase the local economic growth. To become second national fisheries port in north-west peninsular after Penang port. There are too many potential that can be benefit from the strategically location of Kuala Perlis. Perlis state is the main landing spot for small neritic tuna followed by Kedah, Pulau Pinang, Perak, and Selangor. Perlis advantage in tuna fisheries is due to the open seas facing Andaman Sea and Indian Ocean. Kuala Perlis is more close to other main international port such as Phuket port, Yangon Port and Banda Aceh port compare to Penang port for import and export.

The study aims to ascertain the potential of Kuala Perlis as national and international deep-sea fishing vessel landing port to increase the marine capture landing and import export. There are issues related to existing LKIM complex such as:

- **Shallow estuary fishing boats** to prevent movement and to off base. Therefore fishermen to land their catch easily.
- Infrastructure facilities such as landing jetty / port, mooring and docking facilities are limited. The short landing berth lead to traffic congestion for fishing vessel to landing.
- **Existing facilities** cannot cater the increasing numbers of marine capture such as ice factory, storage, loading and unloading, and auction hall.



Fig.1. Existing facilities on site.

- **Undeveloped area where commercial infrastructure and operation** of the facilities and marketing and distribution facilities can be build. The facility and operation of machinery for loading / unloading, cold and ice plant / freezing it is important to protect the quality of raw materials. Meanwhile, the auction hall, the distribution and packaging and transport containers will facilitate an orderly transaction.
- **No linkage from ferry terminal toward town centre.** The increasing number of tourists using ferry terminal each year but the town centre are dying.
- **No correlation with the urban economy / tourism.** Tourist facilities such as fish sales center, fishing pond, exhibition center and seafood restaurant has a positive impact on the fishing industry, providing opportunities employment in the restaurant and provide additional markets for fish.

The existing programming in this area are already fulfill the needs of tourist and local people, but only if the layout more systematic and in walk able distance are preferable. To enhance the area, using the existing program but create new urban layout. Even the existing line of public transport also not too bad where tourist can stop direct from Kuala Lumpur by bus. The possibility to become a transportation hub also can enhance the number of tourist to Perlis because most of group trips are prefer travel by bus to Kuala Perlis before take a ferry to Langkawi Island. The development along the river is encouraging by the government because it is one of attraction. But some development not considers to protect and the existing cause sedimentation that effect the boat landing and natural ecosystems.

The road circulation toward Terminal ferry causes the traffic congestion. Road in front of terminal Ferry is the most congest area because lots of people are dropping and pick up the passengers. And the width of the road become narrow when there are temporary stalls build along the walkway cause people to walk along the road. In order to counter the demand of car park, any unused space will be converted into parking area. It is too many waste land use for parking instead of designing a multi-level car park which use small scale of land and safe.

Design Solution:

Site strategy and planning:

- The abundant building that become the unattractive view and give opportunity to re-develop into interactive spaces
- Respond to to surrounding users such as Fisherman village, user from town centre, tourist from the esplanade and ferry terminal, landing fishing vessels and transportation on land.
- Strong wind direction can give the natural ventilation in to the building.
- Act as centre by connecting the three type of users which is tourist, local fisherman and businessman.
- Take an advantage of sun-path direction, by highling the spaces using natural daylight in order to apply green design.
- Respond to the connectivity approaches toward the site and nice view.

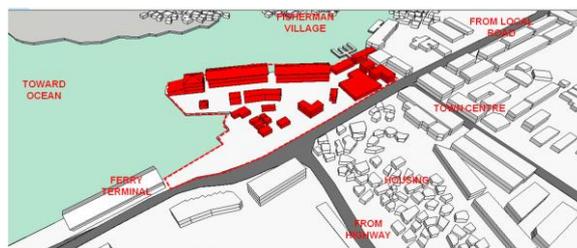


Fig. 2: Building Form.

Planning to remove and demolish all the existing facilities to maximize the effectiveness in layout proposal.

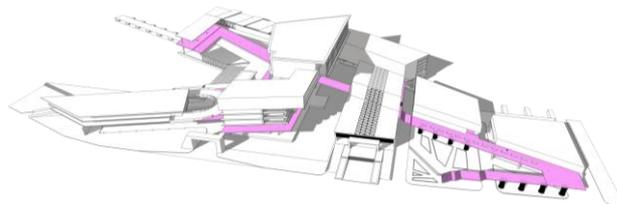


Fig. 3: Open deck as a public linkage trough out the spaces.

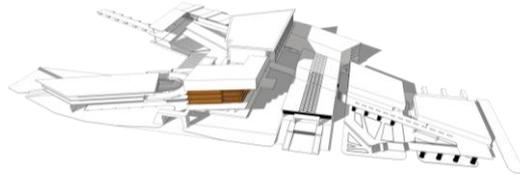


Fig. 4: Office level to serve the local government department and NGOs.

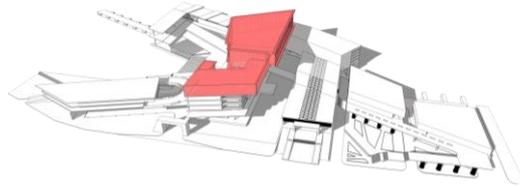


Fig. 5: Multi-purpose hall to have the best view of surrounding.

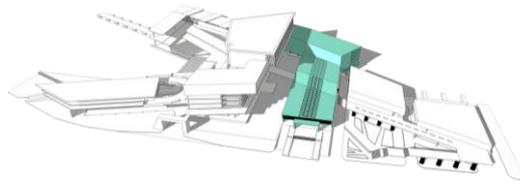


Fig. 6: Training centre to educate young generation and to give an inspiration for them to improve their current level of life.

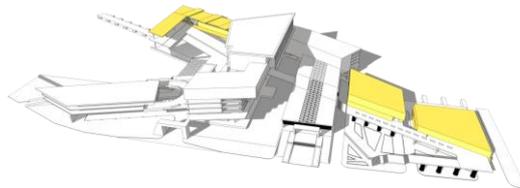


Fig. 7: Commercial area starting from the right to create continuous from town centre and restaurant to serve the tourist.

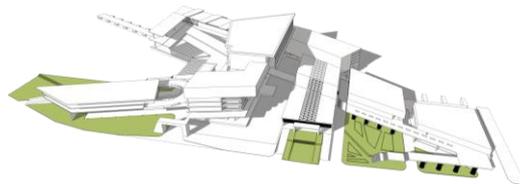


Fig. 8: Green area along the main road to give the soft touch and give welcoming effect towards the visitor.

Conclusion:

There are potential of Kuala Perlis fisheries industry in deep sea fishing vessel. The west coast of Peninsular Malaysia is traditionally the largest producer of marine fish in Malaysia and Kuala Perlis is the closes to open sea (Andaman sea). Given such a strategic location, issues such as sovereignty, security, sea lanes and environmental protection are of considerable importance to Malaysia's maritime development. The design have achieve the aims which is to become:

- National fisheries landing and International import & export port.
- Place to educate public and fisherman about the fisheries sector.
- The new economy hub to increase the local economic growth in fisheries sector.

Project 2: Sibul Waterfront Redevelopment (Samuel Lee Chee Zin):

Sibu town is only the gateway city by default. Not much serious effort has been put to embrace and promote these valuable indigenous cultures. The Sibul Waterfront, in particular, suffers from poor public accessibility, long negligence and environmental decay. The city's promenade is taken up by passenger and goods loading activity with little public access. In addition, the waterfront has become separated from the neighbourhood through road and poor streetscape design. There is no sense of place as a starting point of adventurous wild inner Borneo journey.

The main objective of this project is to highlight the indigenous culture and Rejang spirit. These are the main asset of the town which has long been neglected. By promote and preserve this unique culture, public and

tourist will have deeper understanding to them, subsequently promote indigenous tourism in long term. Besides, the various site issues will be examined and take into consideration during design process

The social impacts of this project include the relationship between public and river, and the highlighted of the value of Indigenous cultures. It also brings economic benefit to both the town and indigenous people by promoting Indigenous tourism.

Design Process:

The design concept revolves the around the idea of initiating a dialogue between modern and indigenous world. This is materialized through the notion of introducing facilities and programmes needed and at the same time reinforcing existing qualities on site. The main elements integrated in the project include indigenous culture centre, tourist centre, inter-model transportation terminal, boutique hotel and waterfront promenade.

The design generation of the project is the long house by the river. The unique elements of long house, such as stilt, pitch roof, wide roof eave and *ruai* have been apply and reinterpreted. The user can easily relate the form of the project to indigenous architecture and thus create a strong resonance. The new waterfront promenade stretching for more than 400m, connect the existing Esplanade to the Tua Pek Kong Temple. This creates a close visual and physical linkage between building and the river, exactly the setting of typical long house.

The planning concept ensures that all the programming is house under one roof lying apparel to the river to mimic simple form of long house while the waterfront is allotted for new spaces and programs as an approach to open up the river to the public. The concept of integrating different programs house under the project is to cater needs of different public segment group.

a. Identify Elements to be Removed

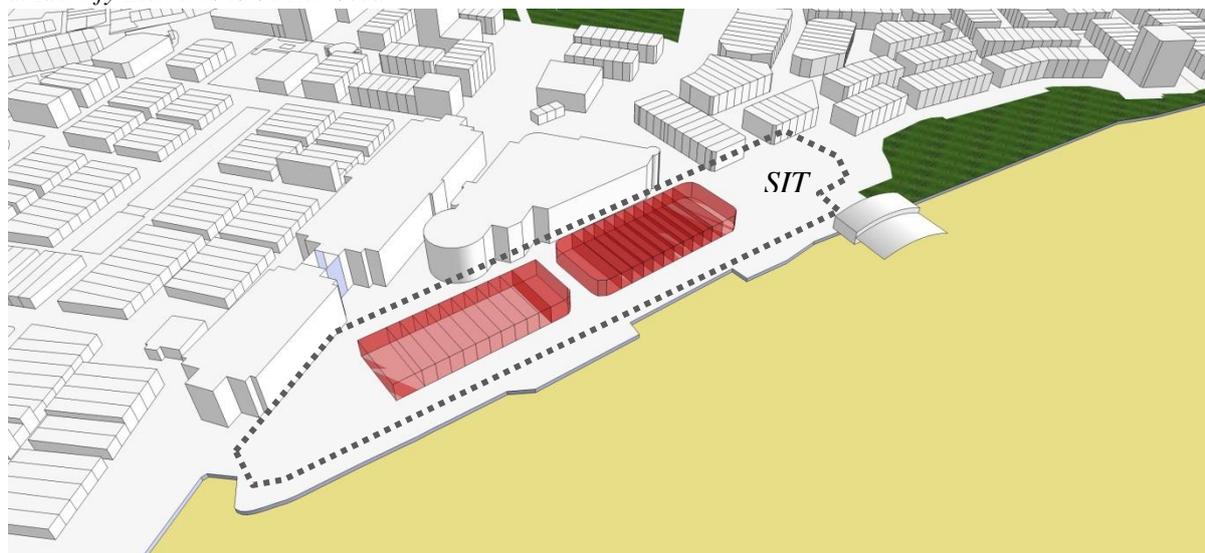


Fig. 9: Existing two rows shop houses to be demolish and road to be relocated remove.

After finalize with the 5 acres site perimeter, the elements on site have been analyzed and identified. The shop lots and road along the waterfront have been identified as obstruction and have no add-in value to the project, thus need to be removed. The existing Express Boat Terminal is still new and functioning well. It will be incorporate into the scheme with some minor amendment on floor plan and structure.

Design Solution:

There are three main sections in the design, namely transportation terminal, Indigenous cultural centre and waterfront promenade. The transportation terminal serves the bus, taxi and expresses boat service while the cultural centre is the place to display indigenous cultures and arts. There is also a resource centre to collect all relevant documentation and studies of indigenous culture. A community library is located at the ground floor for public to read while waiting for the transport. The reading materials will be bring into upper Rejang by floating library to benefit the indigenous people who are less fortune to access into these resources.

In order for the project to be feasible and sustainable, some commercial elements are incorporate into the design for income generation purpose. The top floor of the cultural centre is the 32 room's boutique hotel, while ground floor is mainly for retails and restaurants. The whole building will be operate and manage by indigenous people, marking it a landmark to them in term of social culture and architecture.

Besides bringing impact to indigenous people, this project also aims to improve public accessibility and relationship to the Rejang River. By turning the road into promenade, public can now engage freely with the river without barrier. The passengers can now enjoy proper facilities while waiting their bus or boat as well.

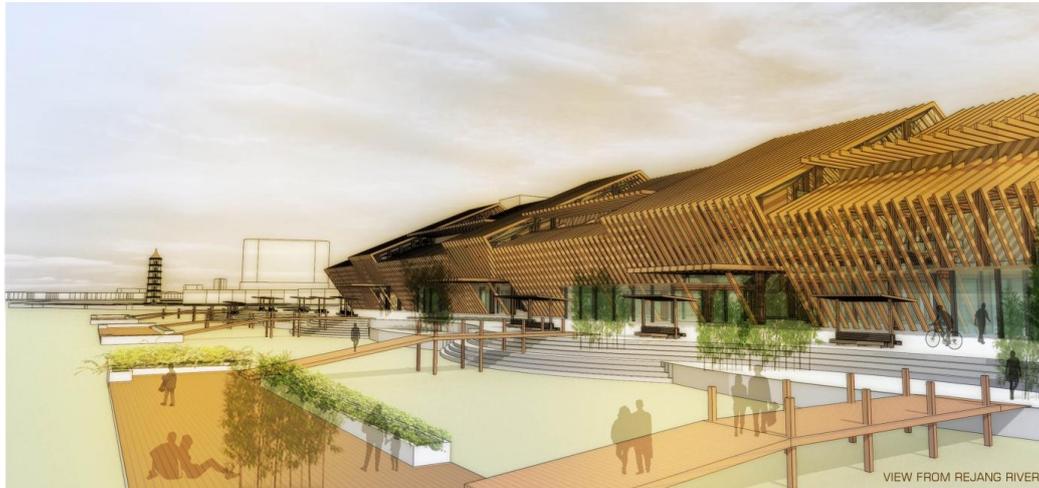


Fig. 10: View from Floating Platform toward the Building.

Conclusion:

Sibu Waterfront will gain a better image and stronger sense of place. It provides the opportunity to overcome the problems on site and create the key success factors for urban riverside celebration. The riverside is connected to the existing urban cityscapes and multiple programmes are created for activity nodes and self-sustained generators of economy and attractions.

This project will enhance the whole future development in Sibul town as it will help more economical and cultural value. The project will activate the existing site together with the surrounding old town district and become one of the major nodes that will boost the socio economy in the city. This proposed project improves and reconfigures back the relationship between the Sibul town and its river. The existing express boat terminal is integrated together with the new cultural centre without the risk of becoming archaic since directs passengers to either the bus terminal, pick up, or even cultural centre. One of the biggest challenges in designing a cultural centre is to make certain that it is constantly in usage for long term.

Another achievement also included embracing the vast potentials of Rejang River which has been faded out from people's memory. This project exposes the prospective benefits of having a waterfront development that is good for both the economics and as a public space for the people who are also ecologically sensitive and responsible.

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