Swettenham Pier Waterfront Redevelopment, Penang

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ABSTRACT

A waterfront is a place where life of a city bloomed. Water is the source of life. Life is the practice of living. A waterfront signified a city's growth, bounded by water. Swettenham Pier is one part of Penang Island's east coast waterfront link, and happened to be at the sport where Georgetown started. The spot where in history, Sir Francis Light landed on this island and where Georgetown is established along with the blooming of international entrepot activities. It was glorious back in the late 80's. The main objective of this thesis is to bring back the glory moment of Swettenham Pier, giving back the waterfront to the people of Georgetown, people of Penang. Having to attend to this sad aim, the redevelopment of Swettenham Pier waterfront is to give a chance to the people to claim a part of this waterfront, for living, for leisure or for any unplanned activities, as to establish its aim to contribute back to the local people, local culture and local living. This call for a strategy to design a waterfront to revive the history, while injecting new life to the place for people and activities to be carry on care freely. The design potential of this project is to look through the entire master plan of the waterfront and then move into the micro elements that support the entire scheme. The master plan plays a crucial role in supporting the waterfront with various types of activities that serve various demographics of users. The redevelopment of the new cruise terminal would also be explored thoroughly in conjunction with Penang Structure Plan in order to come out with the design that could cope with future development. One of the key outcomes of this research is that community magnet or a civic component inserted in the scheme will contribute back to the local people and culture.

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INTRODUCTION

Being a beautiful island surrounded by water, Penang island does not has a significant waterfront on its own. Nothing particularly significant in posting the quality of a tourist information centre and a welcoming spot to introduce the beautiful Penang island to the people. The site acts as a gateway, a significant point of entry for local and tourist to Georgetown, Penang. With its high human traffic, it stood up strong with the strength to revive this waterfront. Revitalization of Swettenham Pier, with the beautiful Georgetown as its backdrop, the strategy is to retrofit the existing Japanese Wharf, remaining its structure to house new range of programming, recycling its facade, and having a new terminal complex erected on the site to house a brand new cruise port, with extended piers; a semi-museum equipped with Penang historical and tourism information; a lively waterfront with water taxi and commercial activities and a brand new place in town, that acts as the interaction spot that serves both tourists and local. The community magnet and civic components will be the starter homes that behold the initiatives to help young, fresh graduates Penangites to have a place of their own to start a living or a young family, in the town where they grew up from. This component of the entire scheme will directly benefit the local general population.

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 [3]. 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 [4]. Successful revitalization approaches need to capitalize on the opportunities presented in inner-city neighborhoods while addressing long-standing obstacles to their rebirth.

Design should involve 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. 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 [6]. 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 development has raised to represent an ideal outcome in the sum of all planning goals internationally. [5]. Public spaces consist of outdoors environments, which generally give relief from urban hectic life (PPS, 2000). 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 travelers 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 [2]. 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 [2].

Case studies are done on precedents that are found in both local and overseas terminal buildings, waterfront planning and starter homes. Precedents are being analyzed based on different factors and parameters for a better understanding and interpretation of the different design approaches and solutions. Comparative analysis of precedents of proposal cases where also studies to gain more fresh ideas.

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 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.

**Background Study:**

Georgetown, in 2008, falls under the name of World Heritage Sites, known as the Historic Cities of the Straits of Malacca. Georgetown situated along the Straits of Malacca has developed over 500 years as trading center, international entrepot and settlements. It went under the cultural influence and exchange between the East and West, between Asia and Europe. This resulted with a city of intrinsic multicultural heritage with both tangible and intangible values. When the seafront of Georgetown was reclaimed during the 1880s, colonnade arcades offices and GoDowns were built on the new waterfront. Most are governmental offices, European firms, shipping agents, importers and tin refiners. During World War II, many buildings near the port were bombed and destroyed.

Weld Quay connects Swettenham Pier to Prangin River, with several Chinese clan jetties sprouted along. Traditional entrepot, import trade, redistribution and re-export of products happened here. Now in the 20th century, the traditional cargo-handling business by the Weld Quay jetty community has dwindled and is replaced by the containers and cargo ports at Butterworth port on the opposite side of the channel.

The significant of Georgetown as trading port has proven to attract large number of traders internationally, from Sumatera, the Malay Peninsula, the Indian subcontinent, China and Europe. Trading became the major uniting factor that brought people from different cultural backgrounds. The waterfront becomes a vibrant multicultural living heritage.

However, today, Swettenham Pier had been abandoned from trading activities and only serves for passengers' cruises. There is a huge drop of people usage and human traffic in the site that used to keep the place lively and vibrant. There is a lack of a community magnet, a civic component. This is a disgrace, for a city surrounded by water to have its waterfront abandoned and shun from public usage and access. This gives rise to an urgent intention to revive Swettenham Pier, not to let go of its historical glory, but to inject human breath again on this once energetic, vivacious place.

Swettenham Pier is an international cruise port operates 24/7 and 365 days a year with high passenger traffic. However, the site current situation is not performing at its optimum potential due to lack of programming and not welcoming to visitors to keep the place vibrant. Therefore site is selected based on the potential it carries of high people traffic. The site is located along Jalan Pengkalan Weld connecting to Jalan Tun Syed Sheh Barakbah with Penang Port Commission office buildings and the historical Japanese Wharfs on site.
The architectural aim of Swettenham Pier Waterfront Redevelopment is to revive the existing waterfront by well-planned spaces and programming by users’ based, while injecting values for users’ culture, privilege, quality, social, intellectual, built environment and economy. It will be a new, significant waterfront for the island, and also acts as a central place for series of events to take place. The events might not be pre-determined, but rather catalyzed by the functions and quality of sites. The site must be able to acts as a platform for the social, intellectual and economical interaction between the locals and tourists.

Objectives of this design project proposal will derived from the issues

**Fig. 1: Issues derived objectives**
(Source: Author)

*Design Process:*

Preliminary ideas in the designing of the redevelopment of Swettenham Pier:

<table>
<thead>
<tr>
<th>Revitalize</th>
<th>Capitalize the Potential</th>
<th>New &amp; Old Interaction and Connection</th>
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<tr>
<td>Revitalizing the historical GoDowns by injecting retrofitting programming to cater for local and tourist users.</td>
<td>Highlight the assets and potential on site. Historical value GoDowns, elongated waterfront, high accessibility from connecting main roads and water ways, and centre focal point at entrance.</td>
<td>House tourist-based programming into historical GoDowns, inject community magnet programming in the new proposed structure. Intertwining movement pattern of the tourists being pulled towards land</td>
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Three major design strategies that allow planning form the macro scale falls into the overall master planning then move inwards and focusing on the new extension and the new terminal building:

**Overall planning strategies:**
- **Purple** - Major water-land visual vista to be maintained and emphasized
- **Blue** - Waterfront area to be extended out towards the water; open plaza to be highlighted in conjunction with several focus point framed for view
- **Red** - Retrofitting programming into historical GoDowns, in order to create human flow towards the focus point plazas
- **Green** - Extension to house new terminal building

![Revised version of the planning strategies sketch](image)

**Fig. 2:** Revised version of the planning strategies sketch  
(Source: Author)

Concept of the design is to bring people out to the water, make sure views to be emphasized and make free off obstacles, made frames to justify.
Fig. 3: Layers of time  
(Source: Author)

The analysis of the existing building demonstrates a framework of concrete and steel structure with its own strong GoDowns aesthetics. Therefore it was decided to keep the GoDowns for retrofitting purposes to house tourist-based activities, while enhancing the building aesthetic quality of the 80s pier warehouses. Whereas, as for the new building, it will reflects the heritage elements of the warehouse, creating contemporary architecture to continue the storyline of Georgetown waterfront.

The aspect of the relationship between the visitor journey through the retrofitted warehouse, to the new terminal building and the solid openings to the outside pictures are shown on the figure below. The outdoor panorama, inclusive the Georgetown view, the sea, and the sky view are implemented as an essential part of the building visitors experiences. The assets of the outside are implemented to intensify the experience of the visitors.

**Design Solution:**

The master plan will be covering the whole stretch of site from the north tip to the south, holds strictly to the concept and strategy of bringing people back to the water, and providing different layers of experience towards the waterfront.

Fig. 4: Master plan and site plan
The entire design and planning progress takes into account all schemes that are involved, which are: the main cruise terminal building, starter homes, elevated walkway, commercial follies, GoDowns retrofit, convention halls, meeting rooms, classrooms and plenary theater and the rooftop recreational park.

The main building ground floor consists of all the services rooms and facilities: the maintenance workshop, loading & unloading, preparation kitchen, service rooms, staff rooms, baggage control rooms, water tank and TNB rooms and disposal room. Two ground floor boarding area are also located at the ground floor, in case in the situation of low tide, and the cruises passengers are to be disembarked at the ground level. The first floor consists of the passengers drop-off/pick up area, arrival CIQ and arrival hall, departure waiting lounge, baggage reclaim, ticketing and check-in counters and commercial shop lots. On the first floor mezzanine house the departure CIQ. The floor plans are simple, designed alongside the waterfront, taking in consideration on maximum functionality for cruises to harbor parallel to the building. The simple geometric forms allows for simple circulation as to not confused users instead, allowing the focus to be on the spatial quality created to respond towards the water. With the simplicity of design and circulation, together with the application of large straight-forward cut-out voids to allow human interaction between layers of spaces while bringing in natural sunlight concurrently framing view towards the open sea, the main building explores the aims to bring people closer to the water and experience it at the different levels.

The starter homes are configured in concept of modular arrangement, where a single modular of 7m x 7m can be divided into 2 single spaces, or serve as a modular home, or stacked up as a SOHO unit. It’s flexibility gives more freedom in terms of living, usage and affordability for the young fresh graduates Penangites to look for an affordable living place, at their origin, the place where they grew up, and it will also be a stone throw away from facilities and their work place in town.

**Fig. 7:** Scheme overall perspective view
(Source: Author)

**Conclusion:**
The development of Georgetown and Penang across the years since late 80’s up to the 21st century has made significant changes along the Penang waterfront. However, the historical value of Swettenham Pier seems to degrade rapidly after the entrepot activities been replaced at Butterworth port. It is very crucial to maintain and conserve the vibrant and life of waterfront as Penang being an island itself. It is also very significant because the place is right where Georgetown had started.

The overall design and planning of the redevelopment of Swettenham Pier can be seen through step by step from this paper. The most crucial thing is the objectives and strategies that are being made clear and set in the early stage of the design. The strategy is to revive the waterfront of Penang island, injecting a community magnet and civic component to bring back people usage and create a sense of belonging towards the waterfront. The idea of regenerating the waterfront can be seen from the overall master planning of the site up to the micro elements of every spaces and the main building.

As a conclusion, human breath and activities are injected back onto the site of Swettenham Pier to revive its historical glory with a touch of the new era. Instead of bringing back the entrepot activities, starter homes are injected as the community magnet to keep the place vibrant at all time, alongside with the upgraded cruise terminal services. The part of Swettenham Pier waterfront will complete the north-east waterfronts line of Penang island.
REFERENCES