

GEORGE TOWN

HISTORIC CITIES OF THE STRAITS OF MALACCA

SPECIAL AREA PLAN

GEORGE TOWN WORLD HERITAGE SITE
SPECIAL AREA PLAN

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GEORGE TOWN
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PART A

About George Town World Heritage Site

A1 Introduction

A1.1 Background

A1.1.1 In 2008, the World Heritage Committee in (WHC) in its 32nd annual session held in Québec City, Canada inscribed both Melaka and George Town as World Heritage Sites(WHS), known as the **Melaka and George Town: Historic Cities of the Straits of Malacca**. The two historic cities, situated along the Straits of Malacca, have developed over 500 years as trading centres and settlements, benefitting from the cultural exchanges between East and West. The influences of Asia and Europe have endowed the cities with an intrinsic multicultural heritage imbued with both tangible and intangible values.

A1.2 The Need for A WHS Management Plan

A1.2.1 The preparation of the Conservation Management Plan (CMP) and the Special Area Plans (SAP) for Melaka and George Town World Heritage Sites are in accordance with the requirements of the WHC at its meeting in Seville, Spain. The CMP falls under the general requirements of the WHC on conservation management. The SAP on the other hand, is intended to ensure that the guidelines and recommendations of the CMP are implemented under the Malaysian law.



A1.2.2 The preparation of a SAP is provided for under the Town and Country Planning Act 1976 (Act 172). Section 16B of the Act provides for the State Planning Director or the Local Planning Authority to prepare a detailed plan for an area. The detailed plan for an area and shall include guidance on its implementation and management. The SAP is a statutory plan, with legal backing and would have a strong bearing on the impacted areas and the community within these areas. In addition, the SAP is made available for public review and objections before it is finally adopted. Therefore, its recommendations and guidelines for the WHS are open to public debate and scrutiny.

A1.2.3 The need for a CMP stems not only from international guidance but also from the reality of the situation within the Site and its environs. The fact that the two properties are both living cities in their own right means they encounter a variety of development pressures and demands, which if left unchecked, could threaten their Outstanding Universal Value (OUV). Each city has its own living population and yet at the same time, faces encroaching development and gentrification which could in the medium to long term undermine its cultural heritage if there is no management plan and strategies in place to guide and monitor these changes.

A1.3 Purpose of the Plan

A1.3.1 The management plan shall serve to guide the promotion of conservation, preservation, rehabilitation, restoration and reconstruction in the WHS. Its broad objective is to facilitate the proper management of the WHS including the use and development of all buildings, lands and measures that would enhance the integration of the physical environment with the socio-cultural and economic well-being of its people and the demands of growth.

A1.3.2 The management plan outlines the much needed strategies and guidance that would enable and allow changes to take place within a framework of conservation and protection. It would give recognition to the people and communities that live within the WHS and enable them to continue to live and follow their cultural and social practices. It would address threats and issues that would hamper heritage conservation of the heritage and identify emerging risks to enable monitoring.

A1.3.3 The management plan serves as a long term comprehensive framework to guide heritage conservation of the heritage areas of Melaka and George Town. Its principles, objectives and policies are long term, but its strategies and measures are flexible, allowing for change and further improvements.

Objectives of the Management Plan

1. To formulate the vision and policies for the WHS under the CMP and the SAP;
2. To propose management strategies and action plans to protect the OUV significance of the WHS;
3. To review the existing site management plans in George Town in order to enhance the protection and conservation of the city and its significance heritage values;
4. To collect and examine existing data using the Geographical Information System (GIS) and to build up new databases of tangible and intangible indicators which will become the cornerstone to the management and monitoring of both properties in the WHS;
5. To acknowledge and safeguard the intrinsic values of the WHS and understand the emerging issues with regards to opportunities, threats and constraints;
6. To identify current conservation issues and challenges of the physical, social and cultural development which could threaten and undermine the outstanding universal values of the WHS;
7. To prepare planning controls, regulations and guidance for the core and buffer zones of the WHS;
8. To formulate a regulatory urban framework plan that will address form and scale of development, as well as public nodes and open spaces in the conservation area;
9. To formulate guidelines on traffic management plan;
10. To improve physical access and interpretation, encouraging all people to enjoy and understand World Heritage Sites;
11. To create and improve public awareness and create the interest and involvement in the World Heritage Site of George Town to its local communities;
12. To draft an action plan between the relevant agencies, the time frame, methods involved and allocation of resources;
13. To develop short, medium and long term action plan for implementation at all levels; and
14. To suggest incentives for support and compliance for all quarters.

A1.4 Preparation of The Management Plan

A1.4.1 The management plan adopts a participatory approach, taking into consideration the views of the communities and stakeholders. Through a series of focus group discussions held, the views of different interest groups and non-governmental organisations were sought. Perceptions and opinions on issues related to buildings, landscaping, traffic, developments, environment degradation, and cultural and social aspects were discussed. These views and perceptions were taken into consideration during planning and the formulation of management strategies and guidelines.





A1.4.2 Consultations were also undertaken at both the national and state level to ensure a holistic approach towards plan preparation. The Department of National Heritage, through the steering committee, gave their views and suggestions to improve the CMP and to ensure that the plan meets the requirements of the WHC of UNESCO. The draft conservation plan was further taken to the state and local authorities for their views.

A1.4.3 The State Planning Committees (SPC) was then consulted on various occasion for decisions on major directions, strategies and initiatives presented within the CMP/SAP. Within the SPC, representatives from the local authorities where the properties are located, together with representatives from various government department and agencies were given the opportunity to express their views and make recommendation to further improve the CMP.

A1.4.4 The CMP that is presented here has incorporated the views, opinions and recommendations obtained at the different stage of consultations.

A1.4.5 Further public consultations would be undertaken for the SAP. In line with the statutory requirements, the SAP was exhibited to seek public opinion. A minimum time line of 1 month was given to allow for public feedback and if deemed necessary, further discussions then held to inform and explain the SAP to the general public before the SAP are finalised, approved and gazetted.



1.5 User of the Plan

1.5.1 It is for the authorities to refer to and to use in carrying out its implementation and to ensure that the guidelines are adhered to. It is for the community, the building owners and the general public, especially those living within the properties who constantly encounter changes in their physical, social and cultural environment. For the building owners, especially the owners of heritage buildings, the CMP shall serve as a guide and a reference which would enable them to manage and care for their buildings for now and for the future generations. The plan is also to be used for communication and education.

1.6 Monitoring of the Plan

1.6.1 The CMP is a flexible plan. It is a rolling plan although it covers a period of six years. The proposed implementation program allows for change as more information is made available and the database is expanded. The Plan has a monitoring strategy, with a given set of initiatives, each having a time line, and indicators that allow for regular monitoring and tracking on their progress. The indicators facilitate monitoring as well as scope for change and medications, if strategies are found to be ineffective or lacking. The database would be further strengthened by enhancing the GIS for

both areas to enable monitoring.

A1.7 Reviewing the Plan

A1.7.1 This CMP has a lifespan of six years during which a sizeable number of programmes are expected to be carried out. In addition, there are also a number of programmes and elements that would extend beyond six year period. Nevertheless, the lifespan of the programmes proposed within this management plan depend very much on the extent of commitment of all parties involved in implementing the programmes.

A1.7.2 Within the review period of six years on the CMP, annual reviews will be carried out to ensure that the CMP is updated to be as relevant as possible to the circumstances facing the WHS. The annual reviews, which are part of UNESCO's monitoring requirement, will focus on Implementation Plans rather than the content of this CMP. The annual review of the implementation plan will offer short-term updates towards ensuring a better management of the WHS.

A1.7.3 The monitoring and review process becomes the responsibility of the State Party whom will be assisted by the Chief Executive Officer (CEO) of the World Heritage Offices. A Steering Committee will be set up to assist in the review and to provide feedback of the Plan's implementation.

A1.7.3 The SAP shall be reviewed every five years as provided in the Town and Country Planning Act 1976 (Act 172).

A1.8 Structure of the Document

A1.8.1 The following outlines the structure of the Management Plan:

Part A:
INTRODUCTION VISION

- This part contains background information on the George Town WHS, highlighting its significance, the challenges it faces, the opportunity and potential it possesses.

Part B:
VISION AND MANAGEMENT STRATEGIES

- This part elaborates the vision for George Town WHS. This vision is supported by objectives, principles, strategies and proposed actions for conservation of George Town as a historic urban landscape.

Part C:
DEVELOPMENT GUIDE PLAN FOR GEORGE TOWN WHS

- This part contains seven chapters giving detailed actions, planning control and guidance for the inscribed property and its buffer zone. Such detail treatment includes zoning and use control, heritage building control, view and vista protection, public realm proposals, access and circulation measures, and proposals for improving utility and infrastructure.

Part D:
GUIDELINES FOR THE CONSERVATION AREAS AND HERITAGE BUILDINGS

- The part provides detailed guidelines for conservation of heritage buildings and conservation areas.

Annexure A:
HERITAGE BUILDINGS OF GEORGE TOWN

- The annexure provides details on heritage buildings in George Town in order to provide better understanding to user of the SAP.

Annexure B:
PLANNING AND DESIGN GUIDES FOR PUBLIC REALMS

- The annexure provides design guides for purposed development and implementation of pubic realm projects identified for North Waterfront, East Waterfront, Clan Jetties and Masjid Kapitan Keling.

A2 Description of the Property

A2.1 Location

Name of Property

A2.1.1 Melaka and George Town, Historic Cities of the Straits of Malacca.

Country: Malaysia

A2.1.1 Both the Historic City of Melaka and the Historic City of George Town, Penang are located on the west of Peninsular Malaysia, and are bordered by the historic Straits of Malacca to their west.



Figure A2.1: Map showing location of Melaka and George Town



Figure A2.2: Map showing location of Malaysia and the Straits of Malacca

A2.2 Identification of the Property: The Historic City of George Town

Region	:	Peninsular Malaysia
State	:	State of Penang, Malaysia
Municipality	:	Municipal Council of Penang Island (MPPP)

A2.2.1 The Historic City of George Town is located in the State of Penang, 325 kilometers north of Kuala Lumpur. The State of Penang comprises of Penang Island and its mainland component of Seberang Perai (formerly known as Province Wellesley); and is "situated on the coast of northern Peninsular Malaysia".

George Town, the State Capital is located on Penang Island, and is the heart of the second largest metropolitan area in Malaysia, served by a sea port, North-South Highway, as well as an international airport.

Boundary and Coordinates of Core and Buffer Zones

A2.2.2 The Historic City of George Town can be identified by the geographical coordinates at:

Longitude **5° 25' 31.5042" W, 5° 25' 30.7870" W**

Latitude **100° 19' 48.8852" N, 100° 20' 53.20" N**

The site corresponds to the historic inner city of George Town, the first British port town along the Straits of Malacca. The city comprises a rich collection of historic buildings, vernacular, administrative and religious, constructed by European trading settlers under the British East India Company, and later by British colonists and migrants from various parts of the India-China trading route.

Core Zone: 109.38 hectares (42.16%)

A2.2.3 The Historic City of George Town covers an area of 109.38 hectares bounded by the Straits of Malacca on the north-eastern cape of Penang Island, Love Lane to the north-west and Gat Lebuh Melayu and Jalan Dr Lim Chwee Leong to the south-west corner. There are 1,894 historic buildings within this Core Zone aligned on four main streets of Weld Quay, Lebuh Pantai, Jalan Masjid Kapitan Keling and Love Lane and several perpendicular streets of Jalan Tun Syed Sheh Barakbah, Lebuh Light, Lebuh Bishop, Lebuh Gereja, Lebuh China, Lebuh Pasar, Lebuh Chulia, Lebuh Armenian and Lebuh Aceh.

Buffer Zone: 150.04 hectares (57.84%)

A2.2.4 The Core Zone is protected by 150.04 hectares of Buffer Zone (this does not include sea buffer), bounded by the sea around the harbour, Jalan Dr. Lim Chwee Leong to the south-west corner and Jalan Transfer to the north-west corner.



Figure A2.3: The Historic City of George Town, boundary of Core and Buffer Zone and coordinates

A2.3 Total Number of Buildings

A2.3.1 The total number of buildings in these zones are as follow:

Table A2.1: Total number of buildings within the Core and Buffer Zones of George Town

Site	Total Number of Buildings		Total Buildings
	Core Zone	Buffer Zone	
Historic City of George Town	2,569	2,444	5,013

A2.4 Description of the Historic City of George Town

A2.4.1 George Town is situated at the cape or promontory at the north-eastern tip of the island, between the hills and the sea. The hills provide a stunning backdrop of the city, which is built up to the foothills. The settlement that Sir Francis Light, the British country trader, had originally created (1786) and named did not have any grand design as it was not intended to be a "settlement colony". Light had neither resources nor staff to develop the town. The development of George Town during the first century after its founding could be attributed to the courageous and entrepreneurial spirit of early migrant communities who found in George Town a place to make a living and begin a new life.

2.4.2 The Popham's 1798 map shows the early topography and morphology of the settlement. From the map, it can be seen that the town had to be built on land that had to be cleared of vegetation, levelled and filled. These early settlers formed their own neighbourhoods or quarters. The boundaries of these ethnic quarters were not clearly demarcated but centred on certain streets or intersections.

The cultural practices and preferences of the different ethnic groups appeared to have created an impact on the development of the town, particularly in relation to the sitting of important religious and institutional buildings. The European or colonial quarter is to the north, close to Fort Cornwallis and the administrative centre it is clustered around St. George's Anglican Church (Farquhar Street), the Catholic Church and the Armenian Church (which no longer exists) at Bishop Street. This was indeed the best location as it was cooled by the sea breeze from the north.

The presence of the fort and police station in this area also provided security to the Europeans. A Christian burial ground established in 1786 is located on the north-western side of Penang Road, on a site that was slightly elevated and overlooking the north beach.

2.4.3 The Chinese town is located within the grid of early George Town, with China Street as the primary axis and King Street as the secondary axis. An analysis of the Chinese settlement and the location of key buildings suggest that the early Chinese settlers built their houses on a grid pattern laid out by Sir Francis Light's administration, surrounding freestanding kongsi temples.

The Chinese community thus formed not only a “city within a city” but also lived in the closed society that Victor Purcell described as “imperium in imperio”. The Chinese were also particular in choosing the site based on social economy and the feng shui principles.

First they segregated among respective dialect groups and built their associations, kongsi or temples as social centres. The four major dialect groups, Hokkien, Cantonese, Hakka and Teochew were originated from Guangdong and Fujian provinces in China. Each of these sub-groups had their regional tradition in terms of dialect, customs and cuisine, as well as arts and architecture. Secondly, the basic feng shui concept “turn away from Yin and embrace Yang” was followed for major buildings. That means the building is backed most of elements or high land and faces the sea.

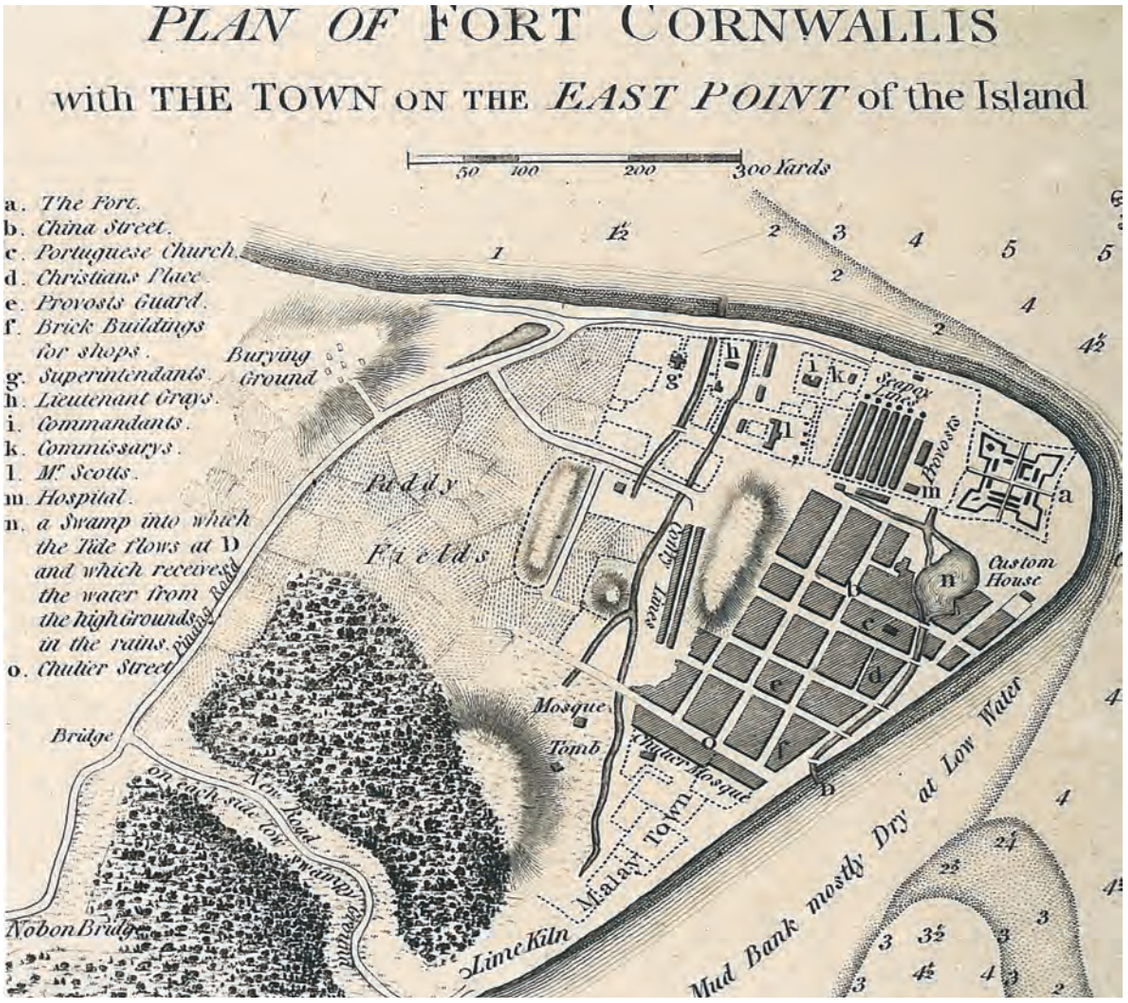


Figure A2.4: Popham’s Map of George Town in 1798

A2.5 Urban Morphology of George Town

A2.5.1 George Town was built on swampy land on the northeastern tip of the island. The 1798 Popham map shows the position of the early settlements in George Town, with administrative buildings scattered to the west of Fort Cornwallis and the town centre to its south. The town centre, bounded by Light, Beach, Chulia and Pitt Streets, continues to function as the main commercial district within the George Town WHS. The town then continues to expand inwards. A series of reclamations and canalisations ensued, with the ghauts extending towards Weld Quay as the new waterfront emerged and new piers and jetties were constructed. The development of the Ferry Terminal, KOMTAR and the Penang Bridge symbolise Penang's rapid development and industrialisation. Today, the footprint of the George Town WHS has remained relatively intact despite the scarcity of land on the island and the intense pressure to redevelop.

A2.5.2 The hills and the straits remain strong topographical features that frame and identify George Town's sense of place. Nonetheless, the surroundings of the city have since experienced rapid developments. The proliferation of skyscrapers and modern buildings now dominate the skyline, in particular the 232-metres tall KOMTAR which is the symbol of a modern, industrialised Penang.

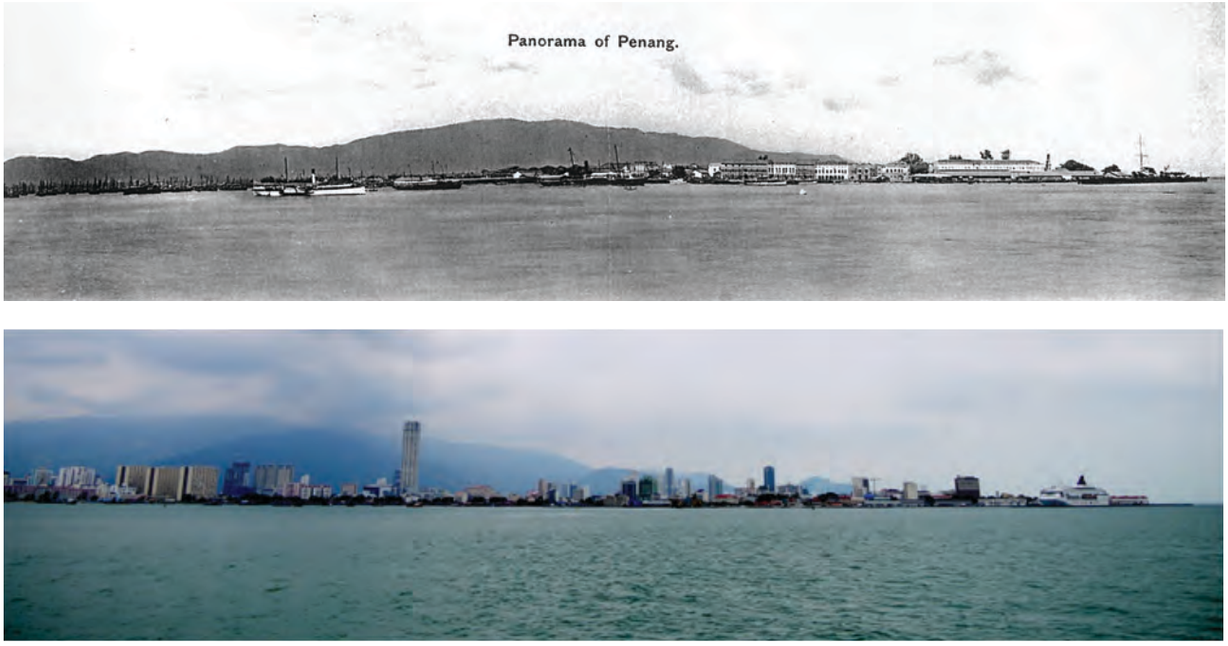
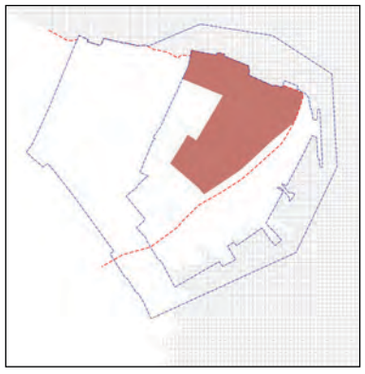
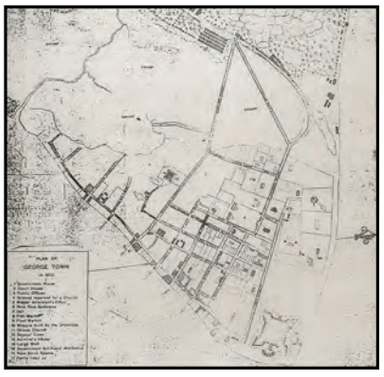


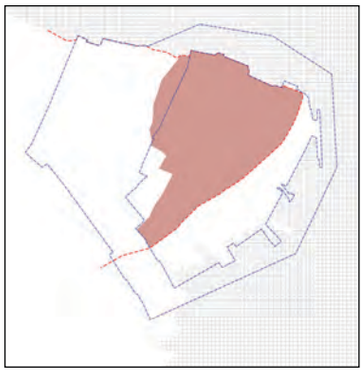
Figure A2.5: Panorama of George Town, taken from the Penang Postcard Collection 1899-1930s and 2010 (Nasution, Wade, 2003)



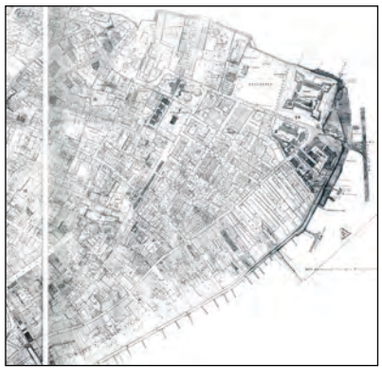


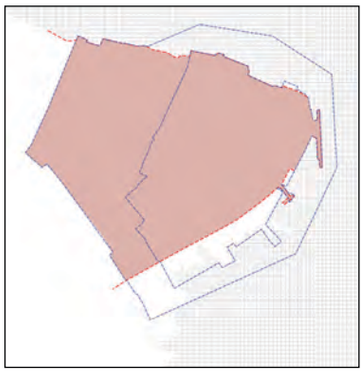
1798



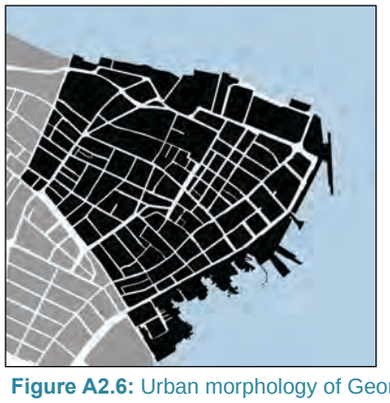


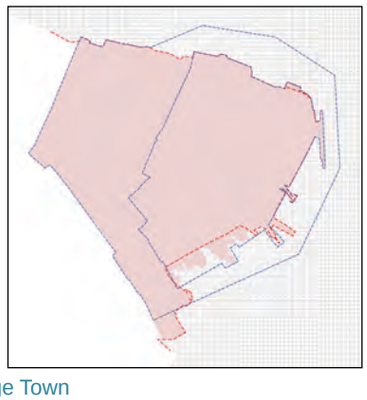
1803





1893





2010

Figure A2.6: Urban morphology of George Town

A2.5.3 Comparing old photographs from postcards and current street photographs enables us to understand the morphology of the streets of George Town, not only in terms of physical change but also the evolution of the way of life brought upon by modernisation. On Weld Quay, the colonial administrative building on the right side of the image was damaged during the war and has since been replaced with a modern building. The tram tracks have been sealed and Weld Quay to this day has become a very busy vehicular passageway connecting to the ferry terminal and expressway (Figure A2.7).

A2.5.4 Further south along Weld Quay, the old photograph shows the vibrant trading activities occurring along the street, illustrating George Town as a bustling trade port. Today, parts of the waterside have been reclaimed for car parking and landscaping. The buildings fronting the waterfront are currently vacant and trade activities have since been replaced with vehicular traffic movement (Figure A2.8).



Figure A2.7: Weld Quay looking form north



Figure A2.8: Weld Quay looking from south

A2.5.5 Nevertheless, many streets of inner George Town remained historically intact, for instance the five temples along Lebuh King. For the most part, the built structures along King Street have been preserved. Modernisation has unavoidably impacted the streetscape character of this historic city, for instance the installations of lamp posts and electrical cables on facades brought upon by introduction of electricity. Today, roadside parking (often illegal) and modern utilities such as electricity substations and bins make up part of the visual character of the street (Figure A2.9).



Figure A2.9: Lebuh King looking into the five Cantonese temples

A3 The History and Development of the Straits of Malacca

A3.1 Straits of Malacca: Geographical Position

A3.1.1 The Straits of Malacca is situated between Peninsular Malaysia and the island of Sumatra, extending approximately 800 kilometers from north to south. It is one of the longest stretches of waters in the world. The widest stretch is approximately 120 nautical miles around Penang Island, where it opens out to the Indian Ocean. This area served as the entrance and exit for ships from India and the Middle East (West Asia). The narrowest stretch, which is only about 9 nautical miles, is near the southern tip of Singapore joining the Singapore Straits. This end became the gateway for ships from China, the Far East and the rest of the islands in Southeast Asia. Being surrounded by countries that are rich in various natural products such as spices from Moluku (the Moluccas), resins, aromatic woods from Sumatra and minerals from the Malay peninsula, the Straits served (and still serve) as a very important highway for maritime traders and merchants.

A3.1.2 Since the beginning of the Common Era, especially during the days when shipping played very important roles in economic and political expansions, the Straits of Malacca was one the busiest seaway. Any powerful country could wrest authority on this seaways would become the super power of the region, controlling both the wealth and economy of the surrounding territories. Hence, there emerged powerful kingdoms and port cities along the Straits of Malacca, such as Srivijaya (7th – 13th Centuries) and its port cities Palembang and Jambi; the Melaka empire (14th -16th Centuries) with the growth of Melaka entrepot; the Aceh kingdom (16th – 19th Centuries); and the emergence of the Straits Settlements (1826 – 1957) with the port cities of Penang, Melaka and Singapore.

A3.2 The Traditions of the Straits of Malacca

A3.2.1 The maritime tradition that started in the early years of the Common Era was the catalyst for multi-culturalism. This was followed by immigration and settlement in both Melaka and Penang by peoples from all over Asia and Europe. Melaka and Penang, situated respectively on the southern and northern parts of the western coast of the Malaysian peninsula, are ports on the Straits of Malacca that grew from around the end of the 14th century through today.

A3.2.2 The Straits of Malacca, however, could have been known much earlier by maritime traders throughout the world, especially those from India and China. The Malays from the south (probably from the present Indonesian archipelago) were already reputed seafarers. They were renowned for their junks which were small, speedy and efficient so that they were able to avoid the pirates who infested the seas along the trade routes. These traders had introduced Southeast Asian products such as camphor, sandalwood, gharuwood and spices, which were exchanged for goods from the Mediterranean, Middle East and Africa, such as frankincense and myrrh and other plant resins used in the manufacture of perfume and incense. As a result of these activities, small coastal polities emerged. In the 7th century the most important of these was Srivijaya which was located in Sumatra, halfway

between the Straits of Malacca and the Sunda Straits. It was a member of the royal family from this kingdom who later founded Melaka in the late 14th century or early 15th century when Srivijaya was on the decline.

A3.3 Founding of Melaka (c. 1386)

A3.3.1 The Melaka founder prince was said to be Parameswara, which meant 'prince consort'; he was the husband of a Majapahit princess in Java. He was a prince from Palembang, the capital of Srivijaya, and was involved in the war of succession before fleeing to Temasek (Singapore). There he was reported to have killed the Siamese regent who ruled the island and was driven by armies from Pahang or Patani, which were vassals of Siam. He wandered until he reached the estuary of a river, later known to be the Melaka River and rested under a tree.

While resting he was said to have noticed a mouse deer being chased by a dog, but the former retaliated back, notwithstanding its smaller size and managed to chase the dog away. This demonstration of steely courage was taken by Parameswara as a symbol of fortune for him. He asked around for the name of the place. Since none knew, he named it after the tree under which he was resting, the Melaka tree. Thus, Melaka was founded. Under Parameswara's rule this small fishing settlement became a thriving port.

A3.4 Melaka the Genesis of Malaysian Traditions and Culture

A3.4.1 Melaka, which was strategically situated at one of the narrowest spots on the Straits and geographically blessed as the area where the northeast and southwest monsoons meet, became the heir of the Srivijayan traditions. The maritime traders who had been plying the sea routes between India and China and had converged at ports of the influential kingdoms of Srivijaya in Sumatra and Majapahit in Java, began to call at the port of Melaka which was then only a small fishing village. With the help of the Orang Laut, or sea-rovers, Parameswara was rapidly able to build up a large settlement by forcing all vessels passing through the Straits to obtain a clearance from him. Melaka began to make its presence felt.

A3.4.2 It was also able to provide traders with fresh water and the harbour was situated such that it could easily be defended, especially against the marauding pirates.

A3.4.3 Right from the start Parameswara's political ambition had contributed to the multicultural characteristic of Melaka. He had opened his doors to Chinese envoys as a hedge against Siamese and Majapahit designs to claim sovereignty over his new kingdom. This coincided with the period of the Ming Dynasty which was restoring Chinese control over states in Southeast Asia. Therefore, when the Chinese envoy, Yin-k'ing or Yi Ching, visited him around 1403, Parameswara seized the opportunity to apply for recognition from the Ming emperor and to request support against the Siamese. Two years later he established an embassy to China which was well received and his position as ruler of Melaka was duly recognised. That was the beginning of Melaka-China relationships which were

strengthened by regular visits by both parties, led by the newly installed Melaka rulers or their regents on the Melaka side and by influential Chinese officers of the court of China on the other.

A3.4.4 Parameswara and the rulers after him surrounded themselves with powerful bureaucrats whose titles carried Indian terminologies, e.g. Bendahara, Laksamana, Shahbandar, etc., showing Indian/Srivijayan influence in the Melaka sultanate tradition. It is also well recorded that some members of the royal families of Melaka intermarried with Indian women. According to Sejarah Melayu (The Malay Annals), a sultan of Melaka had also married a Chinese princess called Hang Li Po. The princess' retinue which consisted of several hundred Chinese youths and maidens were settled on a hill which was then named Bukit China or China Hill which still exists today.

Hence, even the royal traditions draw from the customs of different royal houses. Melaka's rapid growth further enhanced the multicultural characteristics of the people. Malay traders from the island of Moluku (Moluccas) and other islands which produced cloves, nutmegs and mace, now stopped at Melaka before continuing to India. Many, however, waited here and exchanged their products with textiles brought down by Indian counterparts from Gujarat, Coromandel, Malabar and Bengal. Chinese traders also began to throng Melaka with the well sought after Chinese porcelain and silk. These goods were usually exchanged for aromatics and perfumes from the Middle East, spices, corals, sandalwood and other exotic products from the Malay archipelago that fetched very high prices in the East and West. Soon Melaka began to overshadow the ports of Palembang or Jambi in Srivijaya. These latter two ports only remained as ports of export for pepper, whereas Melaka became an emporium. It had wrested the spice trade route from the Straits of Sunda in the south to the Straits of Malacca. The busiest season in Melaka was between December and March when the south westerly monsoon brought traders from the Far East and the West Asians to Melaka. Between the months of May and September the winds brought traders from Java and the eastern archipelago here. About 2,000 ships were reported to anchor at Melaka at any time during the height of her glory.

A3.4.5 Melaka's success was also attributed to the well administered government and trading facilities. The Melaka Maritime Laws were introduced to ensure the rights of ships' captains and their crew. There were four different ports to cater for traders from different countries, each headed by a Harbour Master or Shahbandar. The most important was the person in charge of the traders from Gujarat, as they formed the largest group. The second was from the rest of India, Burma and North Sumatra. The third was traders from island Southeast Asia, as well as from China and Indo-China.

A3.4.6 Since the traders have to lay anchors in Melaka to wait for the respective monsoons to take them home, they mingled together in the markets and the ports, though their places of domicile were accordingly allotted. It was reported that about 80 different languages were spoken on the streets of Melaka every day. The presence of various ethnic groups; Indian, Chinese, Malay, Siamese, Burmese, Indo-Chinese, Arab and others, germinated a multi-cultural and highly cosmopolitan society in Melaka.

A3.5 Islamic Tradition and the Malay Sultanate

A3.5.1 In addition to trading with China, Melaka had commercial connections with Sumatera, Pasai and Perlak. In 1414, Parameswara married the daughter of the Muslim ruler of Pasai. After embracing Islam he changed his name to Mohammad Iskandar Shah. Once it was known that Islam became the main religion of the state, Muslim traders from India, Persia and Arabia also converged in Melaka, not only to trade but also to spread the religion. Melaka became the centre of learning for Islam. The Arabic script was adopted leading to the absorption of Arabic vocabularies into the Malay language. The language which was already used as the *lingua franca* in the Malay archipelago and some other parts of Southeast Asia became more sophisticated with the existence of the Jawi script.

A3.5.2 Official letters and agreements between rulers, bureaucrats, traders and merchants were written in Malay. Mosques began to be built and religious functions were regularly observed. In Melaka and the rest of the Malay States, the Malays became synonymous with Islam. The traditions were further enriched by Muslims from the Middle East, India, China and other parts of Southeast Asia who came as envoys, traders and missionaries. Their life began and ended in Islamic culture, from birth (naming of the child), marriage, till death (burial traditions). Islamic tradition is one of the major features of the multi-cultural society in the Malay archipelago and the rest of Southeast Asia.

A3.6 Portuguese Influence

A3.6.1 Melaka's glory under the Malay sultanate ended in 1511, when the Portuguese captured the 'fabulous eastern empire', under the command of Alfonso de Albuquerque. Melaka's reputation must have (already) reached them much earlier. In 1509 a group of traders led by De Sequeira had landed in Melaka, but were attacked and some were killed. De Albuquerque who had succeeded in capturing Goa in India, decided that it was the best opportunity for him to rescue and avenge his fellowmen and capture Melaka and the famous spice trade. By controlling it, Portugal became the new power to be reckoned with in Europe. With respect to Melaka, a Portuguese had once said, "Whosoever holds Melaka, had his hands on the throat of Venice, for the goods that were transacted in Melaka had very high values in Europe." They were also keen to spread their Catholic religion against the Muslims who were fighting against them in the wars of the Crusades.

A3.6.2 After the conquest, the Portuguese quickly began to work. By using hundreds of workmen, including slaves and captives (probably Malays), they built A Famosa, the fortress, that surrounded the present St. Paul's Hill. This fortress was made of stones broken down from mosques and tombs of royal families and nobles. Within the walls were, "the castle, palaces of the Governor of the State, the palace of the Bishop, the Hall of the Council of the Republic, the Hall of the Brothers of Mercy, together with five churches, namely the Cathedral of Our Lady of the Assumption, with its chapter and the Episcopal see, the Church of Mercy of Our Lady of Visitation, the Church of Our Lady of the Annunciation in the College in the Company of Jesus at the top of the hill, the Church of St. Domingo in the Convent

of the Dominicans and the Church of St. Antonio in the Convent of St. Augustino; [and] there were two hospitals". A famous French Jesuit, St. Francis Xavier "Apostle of the Indies", started St. Paul's College in 1548. On another hill opposite the Bukit Cina, the Portuguese also built a chapel dedicated to St. John the Baptist and the hill was thus named after him as St. John's Hill or Bukit Senjuang (the corrupted Malay name for the hill).

A3.6.3 The destruction of mosques and tombs of nobles was a clear indication of Portuguese intention to weaken the Muslims and the influence of Islam. Missionary works were carried out and a number of people were converted, though not very successfully, for in the 1st decade of the 17th century (almost 100 years after the Portuguese had landed in Melaka), not more than 8,000 people were converted. Muslim traders in Melaka were being prejudiced. Consequently many left to seek other more favourable ports, a development that proved disadvantageous to the Portuguese themselves. But trade did not stop in Melaka, especially with Indian textile traders who came to be more dominant than the Portuguese themselves. Records also mentioned that chettis (chettiars) had partnered with the Portuguese in such trade. The latter had also encouraged these traders, especially those from the Coromandel ports, to settle down in Melaka. They were promised great privileges. This then was the first colonial policy of settlement that became a major feature from the 18th century onwards.

A3.6.4 However, the Portuguese allowed certain local traditions to continue. People from different ethnic communities remained to live in their own sections as had been started by the Malay rulers, such as Kampong Jawa (Javanese village), Kampong Keling (Indian village) and Kampong China (Chinese village). It is also noted that the first Kapitan Cina (Head of the Chinese) was appointed by the Portuguese. The appointment of this position was continued later by the Dutch and the British. Thus multi-culturalism continued to flourish in Melaka.

A3.7 Dutch Influence

A3.7.1 In the 17th century other European traders were actively plying the sea routes between India and China through the Straits of Malacca. Two of the most important traders were the Dutch and the British. The Portuguese influence at this juncture had begun to decline. Its empire had become too large and their home base was too far away. Melaka had repeatedly been attacked by the Malay neighbours, such as the former Melaka Malay sultans who had settled in Johor in the south of Melaka, the upcoming Acenese (Achenese) rulers who were contending as the new heir to the Malay Muslim power in the archipelago and the Dutch who had succeeded in subjugating Java. Between the Dutch and the British, the former were more advanced as they were able to ally with the local rulers. In the attack of Melaka, the Dutch received support from the Malays in Johor. After a five-month siege, the Portuguese surrendered in 1641, 130 years after they had forever removed the Malay sultanate from Melaka.

A3.7.2 Batavia (Jakarta) in Java was the new Dutch capital in the East (they had defeated Java in 1619) and the Dutch were not about to allow Melaka to compete with it. The Dutch aim was to gain paramountcy in the spice and India-China trade, without any other European rivalry. Thus far they had been able to

keep the British at bay and with the defeat of the Portuguese, the Dutch had realised their dream. But they could not retard the trade in Melaka.

In the Malay Peninsula, Melaka became the main base for the Dutch who also concluded treaties with other Malay states, such as Perak and Selangor, which were rich in tin. In fact, at the end of the 18th century, Melaka rose again as a Southeast Asian entreport par excellence. More Asian merchants, especially Chinese and Bugis, traded here again. Although the Dutch continued to monopolise the trade in the Straits of Malacca, they were less restrictive than the Portuguese. In fact, they resented the Portuguese more, for the European wars between the Catholics and Protestants to which the Portuguese and Dutch respectively were adherents, were also continued here.

A3.7.3 After the conquest of Melaka, the Dutch merely took over the infrastructure left behind by the Portuguese. They occupied the fortress, A Famosa and renamed it Porta de Santiago. The coat of arms of the Dutch EIC and the date 1670 were engraved on the gate. St. Paul's College was used as part of the fortress and later as a burial ground for high ranking Dutch officials. The Dutch later built their own fortress on St. John's Hill which was armed with eight cannons. In 1650 the former Governor's residence was converted into the red terracotta Stadthuys (Government House) for the Dutch Governor and his retinue.

A3.7.4 The Dutch were more interested in trade than in religion. They introduced a tax farming system and heads of the different communities were appointed to help Dutch officers administer the state. The penghulu (Malay headman) system was continued, so was the Chinese Captain system. It was probably at this time that the Chinese Captain system was associated with the triad society or the Thian Ti Hui. China was defeated by the Manchus and Chinese patriots who were repressed fled their country to neighbouring countries, including Melaka, formed secret societies and aimed to gather enough support to drive away the Manchus. Thus, Melaka also became a haven for Chinese patriots who became successful in wealth and influence, so that they could help regain China from their enemies. This tradition was to continue when China fought for the 1911 revolution.

A3.7.5 Christianity continued to spread during the Dutch period. Surprisingly it was the Catholic Church, St. Peter's Church, which was first built in Melaka. The Dutch government allowed a Dutch Catholic to construct it in 1710 on a piece of land given by the government. The Dutch Protestants only built their own church, Christ Church, in 1753. This became the oldest Protestant Church in Malaysia. Jalan Gereja (Church Street) where it stands today was named after it. The church, which was built of red bricks specially imported from Holland, had tall slender windows with arched heads, massive walls and heavy wooden ceiling beams. Today the church is still in service and devotees still use the original pews during Sunday prayers.

A3.7.6 Events in Europe also changed the history in Melaka. Holland was defeated by Napoleon and the Dutch king had to take refuge in England. The monarch then agreed to hand over Melaka and other possessions in the East to the British for protection until the Napoleonic wars were over. Thus, Melaka came into British hands between 1795 -1818. By this time (1786) the British was already occupying Penang, which was then named the Prince of Wales Island.

A3.8 Founding of Penang/ English Influence

A3.8.1 Situated at the northern end of the Straits of Malacca, Penang became a British possession in 1786 (specifically, the British made landfall in 1786 (on the site) where George Town would later be). Earlier, the British had attempted several times to occupy a base in the Malay archipelago in order to participate in the lucrative spice trade and to have a share in the trade with China, without much success. The opportunity came when, in the middle of the 18th century, the Sultan of Kedah (a Malay sultanate in the north of the peninsula), had allowed some British country traders to trade in his ports and requested for help against the Siamese and some of his squabbling relatives. Sir Francis Light, a British military officer, was able to sign a treaty with him, promising the help needed by the Sultan. This treaty was later endorsed by EIC. He was also able to convince the Governor General of the EIC in India that Penang could serve as a naval base for the British in Bengal. After the Agreement, Light landed on the island full of hope as he had indicated in his letter to his company, Jourdain, Sulivan and de Souza, "…European ships can easily stop there. There is plenty of wood, water and provisions; there they may be supplied with tin, pepper, beetle-nut, rattans, birds' nests; and the Macao ships will be glad to stop there and all other vessels passing through the straits may be as easily supplied as at Malacca [by the Dutch]…" Hence Penang, became the first leg for the British who gradually stepped into Malay Peninsular in the 19th century.

A3.8.2 Unlike the Portuguese and Dutch in Melaka who held monopoly on trade, the British EIC exercised the policy of free trade. They encouraged people from all over the world to settle and trade in Penang. They were also encouraged to produce export crops such as pepper, gambier, coffee, sugar, etc. To administer the island, a Presidency was set up under the jurisdiction of the EIC in Bengal. In 1826 Penang became part of the Straits Settlements when Singapore had also become a British possession (occupied in 1819) together with Melaka (being exchanged with Bencoolen with the Dutch after the 1824 Anglo-Dutch Treaty) were brought under a single British administration.

A3.8.3 During the period when Dutch Melaka was placed under the protection of the British, the latter did not foresee that political events would eventually unite Melaka with Penang. Penang definitely did not intend to allow Melaka to rival it when the latter would be returned to the Dutch after the Napoleonic wars. The Penang Council ordered the British Resident in Melaka, William Farquhar, to effectively level down the city,"…the whole of the fortifications, arsenal, store houses and public buildings of all denominations in Melaka except Bukit China and St. John's Hill".

A3.8.4 The British action prompted the famous local writer, Abdullah Abdul Kadir Munsyi to lament in his journal, "The Fort was the pride of Melaka and after its destruction the place lost its glory like a woman bereaved of her husband, the luster gone from her face…The old order is destroyed. A new world is created and all around us is changed". The only part that remained of A Famosa and Porta de Santiago was the gate which now still stands. Further destruction was timely stopped by Sir Thomas Stamford Raffles, an agent of the EIC, who happened to be visiting Melaka. His report on Melaka to his superiors stated that, "…the name carries more weight to a Malay ear than any new settlement could," and indeed,

"…with the assistance of Malacca, the whole of the Malay rajas in the Straits and to the Eastward might be rendered not only subservient but if necessary tributary," was almost prophetic in relation to later expansion of British influence in the Malay States.

A3.8.5 Under the single government of the Straits Settlements in 1826, the British EIC began to put the administration of Melaka and Penang in order. In Melaka, the EIC took over the Dutch administrative structure and continued with it and the traditional Malay system of administration was thus continued. For example, the penghulu (headman) who was normally appointed from ancestral bureaucrats was absorbed into the colonial administrative bureaucracy. Under the British EIC, different communities were allowed to administer themselves, led by their respective headmen.

However, to avoid direct confrontation from the local Malays, the British were more protective towards them. In addition, the position of Kapitan China (Chinese Headman) and Kapitan Keling (Indian Headman) were chosen from the most prominent and influential personalities of the communities. In Penang, Sir Francis Light reported that a Kapitan China from Kedah had visited him with boat-loads of Chinese to settle down in Penang. He was Kapitan Loh Lay Huan whom Light had him appointed as the first Kapitan China in Penang. The position of Kapitan China became an institution in the British EIC administration of the Straits Settlements.

A3.8.6 Like the two European predecessors in Melaka, the British EIC also set out to spread Christianity in the newly found settlements through European missionaries. In Penang, in 1787, Arnold Garnault, the French Bishop of Bangkok, was the first to build the Assumption Church. In 1817 another church was built not far from the first. It was the Anglican Church of St. George. The man responsible was the Chaplain of the EIC, Rev. Robert Sparke Hutchings. In Melaka, a twin-towered Gothic church dedicated to St. Francis Xavier was built in the mid 1880's by the French Father P. Fabre. Hence, Penang and Melaka became centres of European Christian missionaries in the East.

A3.8.7 In 1867 Penang officially became a British colony, which brought about the introduction of a British administration as well as a public works department. The Public Works Department engineers began to canalise streams and rivers, build hospitals, gaols and police stations and plan for the reclamation of Weld Quay. Accordingly, the engineers were followed by the establishment of private architecture companies that bring in new architectural forms to accommodate the change in the increasing importance of the car.



Figure A3.1: An aerial view of Penang Island

A4 Significance

A4.1 Statement of Outstanding Universal Value (OUV)

Inscription of Melaka and George Town as a WHS was made by the WHC in 2008 during its 32nd seating session in Québec City, Montréal, Canada.

The inscription adopts the following statement of OUV:

Melaka and George Town, Malaysia are remarkable examples for historic colonial towns on the Straits of Malacca that demonstrate a succession of historical and cultural influences arising from their former function as trading ports linking east and West. These are the most complete surviving historic city centres on the Straits of Malacca with a multi-cultural living heritage originating from the trade routes from Great Britain and Europe through the Middle East, the Indian subcontinent and the Malay Archipelago to China. Both towns bear testimony to a living multi-cutural heritage and tradition of Asia, where the many religions and cultures met and coexisted. They reflect the coming together of cultural elements from the Malay Archipelago, India and China with this of Europe, to create a unique architecture, culture and townscape.

The site was inscribed as a WHS with the following statements of Outstanding Universal Value:

Criterion (ii) : Melaka and George Town represent exceptional examples of multi-cultural trading towns in East and Southwest Asia, forged from the mercantile and exchanges of Malay, Chinese and Indian cultures and three successive European colonial powers for almost 500 years, each with its imprints on the architecture and urban form, technology and monumental art. Both towns show different stages of development and the successive changes over a long span of time and are thus complementary.

Criterion (iii) : Melaka and George Town are living testimony to the multi-cultural heritage and tradition of Asia, and European colonial influences. This multi-cultural tangible and intangible heritage is expressed in the great variety of religious buildings of different faiths, ethnic quarters, the many languages, worship and religious festivals, dances, costumes, art and music, food, and daily life.

Criterion (iv) : Melaka and George Town reflect a mixture of influences which have created a unique architecture, culture, townscape without parallel anywhere in East and South Asia. In particular, they demonstrate an exceptional range of shophouses and townhouses. These buildings show many different types and stages of development of the building type, some originating in the Dutch or Portuguese periods.

***Criteria (ii)** : exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design.*

"Melaka and George Town: Historic Cities of the Straits of Malacca " represent exceptional examples of multi-cultural trading towns in East and Southeast Asia, forged from the mercantile and civilization exchanges of Malay, Chinese, Indian and European cultures."

A4.2 The Influence of the Civilisation Exchanges

The Malay Community

A4.2.1 The Malay community was the earliest settler in Melaka they formed the earliest administration. After the introduction of Islam, which was embraced wholeheartedly by the Malays, the Malay culture and identity began to crystallize, leading anthropologists to conclude that it was in Melaka that the definition of the Malay as a race and culture took form. Their influence in the development of the cultural and built landscape can be seen in the adoption of significant parts of their practices and language by the uniquely Straits of Malacca Peranakan or Baba community (especially in Penang, Melaka and Singapore) and the uniquely Melakan Chitty community. The Malay language, which was the *lingua franca* of the Archipelago and initially used the Arabic script itself, is a testament of the primary role Melaka played in the development of the Malay culture, since it was the Sultans of Melaka who played a leading role in the spread of Islam and the Arabic script in the Malay world. The adoption of the Roman alphabet was said to have been initiated by Francis Xavier a Jesuit priest working from Melaka in the early days of the Portuguese administration.

A4.2.2 In George Town, the Muslim population was clustered in distinct but contiguous neighbourhoods. The Masjid Melayu, or Acheen Street Mosque, was founded by Tengku Syed Hussain, who came with his clan and settled in George Town in 1792. He was the patron of the Arab, Malay and Sumatran community along Acheen Street, many of whom were involved in the pepper trade between George Town and Aceh. This community in the mid-19th century included a colony of about 300 Acehnese traders. Other Sumatrans here were Mandailing, Rawa, Minang, Malay, Batak and Batu Bara.

A4.2.3 Ibrahim Munshi, the State Secretary of Johore and the son of Abdullah Munshi, who visited Penang in 1872 and "went exploring all the lanes of Penang town" gave a vivid description of the ethnically mixed Muslim society. He stayed with a friend in Kampong Masjid Melayu, where he was entertained by Penang-born Indians performing refined Hindustani songs, soul and ghazal. He feasted at the house of wealthy Indian Muslim *kain pulikat* traders Dalbidal and Yahya Marican - likely to be their home in Market Lane, a large early 19th century brick bungalow. Ibrahim Munshi remarked that some of the Malays are shoe-makers.

The Indian Community

A4.2.4 From the founding of Melaka the Indian influence was apparent. Some of the court officials in the Sultanate are Indians and many of the royal ceremonies were of Indian origin. It should also be noted that the Indians at this stage of Melaka history were not predominantly Hindu; they were just as likely to be Muslim or a Gujerati. Unlike Indians in other parts of Malaysia the Indians in Melaka are more likely to be involved in commerce than as coolies in the plantation or railways. This is a reflection of their historical role in helping to establish Melaka as a major entrepot port between the Far East and India and the west. There was always a sizeable Indian community in Melaka and this is exemplified by the fact a Kampung Keling had existed in one location or another on the right bank of the river since the Sultanate days. The unique Chitty community referred to later in this chapter predates the Baba community and is essentially Indian in origin.

A4.2.5 The Chulias or South Indian Muslims who came with the EIC were among the earliest settlers in George Town. A small group of Chulias long settled in Kedah and other Southeast Asian ports, also formed part of the early Penang community. Up till the mid-19th century they outnumbered the Chinese. The Captain of the Kelings founded the Kapitan Keling Mosque in Lebuh Chulia. The street boasts a number of Indian Muslim mosques and keramats representing the different groups of Indian Muslims, such as the Nagore shrine (early 1800s) and the Noordin tomb (1870s). The Kapitan Keling Mosque remained the focus of the Indian Muslim trading community of jewellers, shippers, textile merchants and petty traders.

4.2.6 South Indian Hindus established the Mariamman temple at Lebuh Queen by 1833. Many of them initially worked around the waterfront. The Chettiars came in the early 19th century and were involved in the textile trade and money-lending; they established their lodge at Jalan Penang. Later waves of Hindu migrants recruited for the plantations also passed through the Penang port.

A4.2.7 Apart from Tamils, those of Indian origin included Malabaris from Kerala, Punjabis and Pathans from northwest India, Bengalis who first came as soldiers and camp followers, Biharis, the 'UP-wallahs' from Uttar Pradesh (United Provinces), Sindhis, Gujeratis and so forth.

The Chinese Community

A4.2.8 Chinese migration to Melaka began very early in Melaka's history. The visit of Zheng He is epochal and the visit of a sultan of Melaka to the Ming court in China on a return trip by Zheng He cemented the ties with China until this day. The sultan was said to have been bestowed a Chinese princess as his bride, whose entourage, which counted 500 men and women according to some accounts, were given a hill outside Melaka to settle. This hill is known as Bukit Cina today.

A4.2.9 Records of Chinese settlement during the colonial period were consistent with the major role they played on the cultural and commercial stage in Melaka. The existence of a *Campong China* in an early map by Eredia during the Portuguese era, the establishment of Cheng Hoon Teng Temple in 1640 and the preeminent role this temple plays in the cultural and religious life of the Chinese community in Melaka today, speaks volume of the influence of the Chinese in Melaka. Chinese migration to the Nanyang and in particular to Melaka and

George Town took off significantly during the British administration coinciding with a turbulent period in China's history and the development of the tin and later the plantation (especially rubber) industries. Chinese entrepreneurs and compradors played a pivotal role in the development of the rubber industry; something not always appreciated by history. The central role played by statesmen like Tun Sir Tan Cheng Lock Tan, his son Tun Tan Siew Sin and Mr. Tay Boon Seng in the events leading to independence speaks volume for the influence of the Chinese in their new homeland especially Melaka and George Town.

A4.2.10 More than 60 families, led by Koh Lay Huan from Kedah, founded the Chinese community in George Town. Thus the earliest Chinese permanent settlers were Hokkien, they were shopkeepers who later controlled the coastal shipping. The Hokkien became the core of the Straits Chinese or peranakan Chinese, the Chinese elite of the Straits Settlements.

A4.2.11 The Cantonese and Hakka formed Landsmannschaft, that is, associations for migrants from the same county or prefecture in China. Successive waves of these migrants established no less than 12 temples and associations along Lebuh King alone; three in Jalan Penang and one on Lebuh Chulia. In contrast, the Hokkiens set up temples based on clan village affiliations, most of them to the south of Lebuh Chulia. The temple courtyards of the Five Big Clans, surrounded by clan housing, are an important and intact cultural complex within the WHS.

A4.2.12 By the mid-19th century, occupational guilds such as associations of goldsmiths and carpenters were also formed, especially by the Cantonese. The 'black-and-white' domestic servants who came to work in Penang in the 1930s located their shared quarters *(kongsi pang)* at Love Lane, Muntri Street, Market Lane and Chulia Lane - in the neighbourhood of the Goddess of Mercy Temple. The Hainanese mainly came in the late 19th century and established their temple, school and coffeeshop association on the western end of Muntri Street.

A4.2.13 The Hakkas were always an important minority, but in the late 19th century, Cheong Fatt Tze and other Hakka elite became prominent in Penang society, building their mansions along Leith Street.

The Malay Sultanate Legacy

A4.2.14 Although the physical evidence of the Melaka Malay Sultanate is not obvious, ancient graveyards and tombstones dating from that period and some of which are that of the warriors of the Sultan such as Hang Jebat and Hang Kasturi found in the Core Zone of Melaka are physical legacy of that period. The cultural legacy of the sultanate also survives to this day in the existing monarchies of various Malaysian states and the lifestyle and traditions of the Malay communities.

The Portuguese Legacy

A4.2.15 The legacy of the Portuguese includes a unique Eurasian community who speaks an ancient dialect of the Portuguese language called *Kristang* and profess the Roman Catholic faith. They also left behind the ruins of the church on St. Paul's Hill and the remains of *Fortaleza de Malaca* in the foundations that surround the old civic centre of the City. Culturally the Portuguese language lent a good number of words to the Malay vocabulary such as *almari* for cupboard and *baldi* for pail.

The Dutch Legacy

A4.2.16 The Dutch legacy can be seen in the architectural masterpieces in the form of the old Dutch administrative building called The Stadthuys, the Christ Church and an office/warehouse complex in Jonker Street. The Dutch also left behind a unique array of townhouses in Heeren Street and Jonker Street as well as a unique urban pattern that is the result of the manner in which property taxes are levied according to the width of the frontage of the property onto the street.

The British Legacy

A4.2.17 Penang was originally established by the EIC as the Prince of Wales Island in 1786, upon negotiations with the Sultan of Kedah, in exchange for protection against the Kingdom of Siam. In 1826 Penang became a part of the Straits Settlement, two years after the possession of Singapore and Melaka by the British EIC. The three towns were then brought under a single British administration. The British, who ruled Penang and Melaka until the country's independence in 1957, left behind a significant physical and cultural imprint, manifested in the colonial architecture and the administrative and legal system used by independent Malaysia.

A4.3 Centres of Historic Administration

A4.3.1 Up until recently, both the historic cities of Melaka and George Town have functioned as centres of administration. The physical imprint is seen in the various structures in the Civic Zone of the WHS.

St. Paul's Hill as the Seat of Power of Melaka

A4.3.2 St. Paul's Hill Civic Zone has always been the seat of the governing bodies from the time Melaka was founded to recent times. The establishment of a kingdom at this location was due to its commanding position facing the river mouth and the Straits of Malacca and protected from the interior by a vast swampy area. Known as Bukit Melaka during the Malay Sultanate era, it was a royal abode as well as the seat of power of the Sultans. The Portuguese simply called the area as *Oiteiro* or Hill. They built a fortress around this hill, which was completed in 1548 and stayed within the walls. On top of it, they also built a church. The Portuguese administered the place from within the castle known as the A Famosa.

A4.3.3 The Dutch, who took over the church on the hill, turned it into a Protestant church and named it St. Paul's Church. The hill was renamed St. Paul's Hill and has remained so ever since. The Dutch also built their administrative buildings known as The Stadthuys and their Governor's quarters on the western part of this hill. The hill therefore served as the seat of government during the Dutch era as well. The hill also continued to be the seat of power of the British-Melaka government and the State government of independent Melaka.

A4.3.4 At the foot of St. Paul's Hill facing the sea, several large British plantation enterprises including Dunlop Estates and Sime Darby established their head offices to conduct their business affairs. These companies were/are related to the plantation industry, especially the rubber industry and reflect the role played by local Peranakan Chinese, particularly Tan Chay Yan (who in 1895 planted the first rubber plantation

in Tiang Dua outside Melaka Town) and Tun Sir Tan Cheng Lock, in pioneering the rubber industry. These imposing corporate buildings are now restored and adapted as Museums.

Fortaleza de Malacca, Melaka

A4.3.5 The *Fortaleza de Malacca* was once an imposing part of Melaka urban environment of which the *Porta Santiago* and part of the foundations are visible today. The moniker, *A Famosa*, is often used to describe the *Porta Santiago* or even the entire fortress itself. The misconception arises from Alfonso D'Albuquerque's plans immediately after the conquest of Melaka and the completion of a timber fortress, to build more substantial fortifications known as the *A Famosa* or The Famous. In fact what was the *A Famosa* was a Castle and Keep, square in plan, with walls eight-foot thick, built on the left bank of the river close to the estuary on what was the site of the ruins of the Great Mosque of Melaka. Work by 1,500 forced labourers began on the fortress in September 1511 and was completed the following January. A sketch reproduced in Gaspar Correa's *Lendas da India* shows in 1550's that the square structure of the *A Famosa* square and crenellated edifice was about the only masonry building in Melaka and the town was walled in nothing more than a timber palisade.

A4.3.6 It is recorded that soon after 1550 and certainly by 1580, the Portuguese had doubts about the adequacies of the fortifications. The union of the Iberian monarchies in 1580 led to the fear that their overseas possessions might come under attack from Spain's mortal enemy, The Netherlands, which was beginning to strike out especially to the East in search of the very same spice that inspired the Portuguese. Eredia recorded the visit of Joao Batista, an Italian military engineer tasked with surveying and improving the defenses of Portuguese territories overseas, in 1588 and reported the fortifications had already been completely transformed. By 1588 Melaka was already a walled city and the citadel within the walls previously identified as the *A Famosa* was referred to as the *Fortaleza Velha* or *Old Fortress*. The seaward and riverside part of the city was walled in stone while to the northeast and east, roughly along the Jalan Banda Kaba and southward towards the Porta Santiago gate and the sea, was a timber palisade.

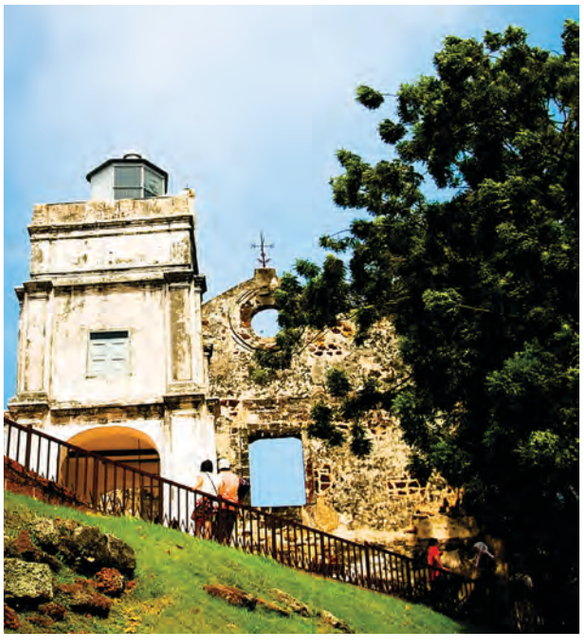


Figure 4.1: St.Paul's Church

A4.3.7 The *Fortaleza da Malaca* had then assumed its basic plan until its final destruction by William Farquhar in 1807. The Portuguese built a total of 4 bastions which were open air gun platforms and the angling of these bastions utilised the philosophy that had radiated out of Italy during the Renaissance. Dutch improvements to these fortifications

included the renovation of the northeast and east palisade into a full stone curtain wall of some 20-foot high, additional bastions and the remodeling of existing bastions and improvements to the city gates. The Dutch expertise in hydro engineering saw the introduction of a moat from the river near Padang Nyiru; controlled with sluice gates so as to ensure that the water in the moat is always fresh; running roughly along what is now Jalan Banda Kaba and southwards along Fort Terrace towards the sea. This effectively made the fortified area into an island and on paper a highly defensive site.

A4.3.8 The *Fortaleza da Malacca* took its final shape during the governorship of Balthasar Bort (1665-1678). As impressive as these defenses are on paper, the entire fortress fell to the British under the command of Major Brown and Captain Newcome after token resistance in 1795. The British, who loathed having such impressive fortifications remaining when they were obliged to return Melaka to the Dutch, decided to raze the structures to the ground. They also ordered the transfer of the trade and capital of Malacca, together with the most valuable part of its inhabitants, to Penang. Raffles' intervention came too late to save the fortress but he and William Farquhar did manage to persuade the EIC that Malacca's residents could trace their local roots back several centuries while Penang was "still an island of transitory adventurers".

A4.3.9 Abdullah bin Abdul Kadir better known as Munshi Abdullah recorded the last moment of the grand old Dame, the *Fortaleza da Malaca;*

"Mr. Farquhar appeared on horseback holding a slow-match in his hand. He sent men to clear out everyone on the Fort and they ran away in all directions. Then he touched off the fuse and at once spurred his horse away. After about ten minutes the gunpowder exploded with a noise like thunder and pieces of the Fort as large as elephants and even some as large as houses, were blown and cascaded into the sea. Some went right over the river and struck the houses on the other side. Everyone was startled when they heard the noise, their surprise all the greater because never in their lives had they heard such a sound or seen how the power of gunpowder can lift pieces of rock as big as houses. At last they realized that the Fort could be destroyed by the English and they shook their head saying 'Great indeed is the skill and ingenuity of these white men but what a pity that a building as fine as this should be brought low in an instant of time. For if they wished to repair it there's not knowing how many years it would take before it was finished.' For the Fort was the pride of Malacca and after its destruction the place lost its glory, like a woman bereaved of her husband the luster gone from her face. But now by the will of Allah it was no more, showing how ephemeral are the things of this world".



Figure 4.2: Porta Santiago, A Famosa.

Town Square, Melaka

A4.3.10 The Town Square or referred locally to as the Dutch or Red Square has been the hub of the town since its foundation. It housed the key buildings during the Dutch period in the form of The Stadthuys (1660 -1700) and the Christ Church (built 1753) forming the edge of the square with the curtain walls of the fortress along the river bank; between Middleburgh Bastion and Ernestus Bastion. Visual to the square increased visually when the British under William Farquhar demolished the fortress. A fountain was built in 1904, paid for by public subscription, to commemorate the reign of Victoria and a Clock Tower was built in 1886 as a civic duty by one of the town notable, Tan Jiak Kee in his father's (Tan Beng Swee) memory. The strategic location of the town square with adjacent important public buildings such as the Stadthuys, is testimony of its significance. The composition of the buildings in this square reflects the character of the townscape typical of a European town, where the civic ambience of the place was heightened by the presence of major civic buildings.

Fort Cornwallis as the Government and Administrative Centre, George Town

A4.3.11 As with most colonial towns, George Town is defined by a fort at its waters edge. Fort Cornwallis was constructed in 1876 on the island of Penang, to protect the town from attacks, but also housing some administrative functions.

A4.3.12 Immediately south of Fort Cornwallis and west of Swettenham Pier are the government offices and administrative buildings. This area was known as the "Government's Quadrangle" or King Edward Place. King Edward Place ends with the Victoria Memorial Clock tower, built in 1897 by a prominent Chinese business man, Cheah Chen Eok, to commemorate Queen Victoria's diamond jubilee. The Tower now stands on a small roundabout that opens to Beach Street on its south, Light Street on its west, Jalan Tun Syed Sheh Barakhbah on its north and King Edward place on its east. A 12-storey government office built by the Public Works Department replaced the former building destroyed during the World War II. The remaining section of the government quadrangle now houses the Syariah Court. Among the major public buildings are the State Legislative Assembly building (formerly the Magistrates Court), Municipal Council buildings, Town Hall and City Hall (at the Esplanade), Supreme Court Building at the end of Light Street, Dewan Sri Pinang (Penang's first auditorium) and Bank Negara (Central Bank). The Esplanade, an open field facing the north beach and its promenade were George Town's main social and recreational centre.

A4.4 Important Ports of the East-West Trade Along the Straits of Malacca

The Melaka River and Bridge

A4.4.1 The mouth of the Melaka River divides the historic city into two. On the left bank, the previously fortified St. Paul's Hill and its surrounding are the administrative enclave, while the residential and commercial enclaves are located on the right bank.

A4.4.2 The nearby Tan Kim Seng Bridge across the Melaka River marks the site of the original 14th century timber bridge, which was attacked and occupied by the Portuguese before they conquered the palace ground. This was also the location of the Portuguese bridge, the Dutch drawbridge and the British cast iron bridge



Figure 4.3 : Dutch Square, Melaka

before it was replaced by the present concrete bridge. This bridge was the principal and only physical link for a long period between the two sides of the city.

Upeh - the Historic Residential and Commercial Precinct of Melaka

A4.4.3 The settlement on the right bank of the river roughly encircled by the river, the sea and what is Jalan Kubu today, was known as Upeh in the Portuguese period. The area roughly corresponds with the part of the Core Zone on the right bank of the river. It was used during the Sultanate era as a market place, as well as a residential area for the transitory inhabitants.

A4.4.4 The name Upeh was first used during the Portuguese period to refer to this part of the WHS. Eredia identified four ethnic quarters in Upeh, namely Kampung Java in approximately the same location as the square in Jalan Kampung Pantai today up to the river bank at Lorong Hang Jebat; a Kampung China just north of this area and a Kampung Keling running parallel with the coast. At the northern end of what is Jalan Tun Tan Cheng Lock today was the Bendahara residence and in the triangle between Kampung China, Kampung Keling and the earthen ramparts (tranqueira -Portuguese) lies the Malay settlement or Kampung Bendahara.
It should be recognised that while the Bendahara was the chief Malay official, his status was nowhere equal to the Bendahara of the Malay Sultanate.

A4.4.5 While Upeh is to a lesser extent fortified, the fortifications are far from satisfactory. It was recorded that during some of the sieges by more powerful forces the residents of Upeh fled to find refuge within the *Fortaleza da Malaca*.

A4.4.6 Upeh reemerged as Bandar Melaka during the Dutch period and became, as Governor Bort described in his report of 1678, the place “where the richest inhabitants and foreigners lived”. Francis Valentijn’s view of Melaka from the sea circa 1720 appears to confirm his report. The street pattern of Bandar Melaka is by now quite recognisable. The Dutch burghers had settled in what used to be Kampung Keling and Heeren Street (Jalan Tun Tan Cheng Lock) and Jonker Street (Jalan Hang Jebat) had been laid out. The area including the occupationally specialised lanes behind Jonker Street Goldsmith Street, Blacksmith Street and Kampung Kuli came to be known as Kampung Belanda. The Indian Muslims relocated further inland to the area known as Kampung Pali, roughly corresponding with Kampung Kekek today. The Javanese had been displaced by the Kelings or south Indians and relocated themselves across the river just north of Jalan Bunga Raya today. To date the northern end of Lorong Hang Jebat is dominated by the Indian community and the local Chinese refer to this street as “Keling Road”. No mention was made of a Kampung China although Chinese burials were beginning to spread over Bukit Cina. By 1678 it was recorded that there were no less than 310 buildings in Bandar Melaka, of which 128 were made of bricks.

A4.4.7 The settlement of Melaka expanded beyond the confines of the *Fortaleza da Malaca* and the Upeh district or Bandar Melaka in the Dutch and British period. To the north of the *Fortaleza da Malaca,* Eredia recorded 38 buildings at Bunga Raya and another 20 as far north as *Panckelaran* (Pengkalan Rama). To the north west, along the coast beyond the earthern ramparts or tranqueira of the Portuguese, another 40 buildings were noted, including two in brick. South of the Fortaleza at Banda Hilir there were 40 houses (2 in brick) and along the axis to Bukit Cina along what is Jalan Temenggong now were 47 houses.

The Right Bank: Lorong Hang Jebat, Jalan Kampung Pantai and Jalan Kampung Hulu, Melaka

A4.4.8 Jalan Kampung Pantai, Lorong Hang Jebat and Jalan Kampung Hulu are streets that run parallel to the river and housed many retailers, merchants, wholesalers and warehouses. In addition, there were also many traditional retailers and craftsmen located here and in the streets leading to these roads. This stretch of road is evidence of the role of Melaka and in particular of the river, as a port and trading post. In the past, the river was the main means of communication, thus goods that arrived via ships and boats were unloaded and stored in the back of the buildings that back onto the river bank. Padang Nyiru, across the river from Lorong Hang Jebat, was the location of the Customs and Immigration offices, a convenient place for the entrepot trade that went on almost non-stop along the river until the 1980's. The values of properties with their backs onto the river had always been higher than their counterpart across the road except for a short period in the 1980's and 1990's when the river slowly declined as a conduit for the transportation of goods and before its rejuvenation as a leisure and tourist resource. Today, the loading and unloading activities still occur but at the front of the buildings and these streets are congested with trailers and trucks from the wholesalers' activities.

A4.4.9 Jalan Kampung Pantai, located at the centre of this stretch of roads, dominates the trading activities. Jalan Kampung Pantai displays the character of a traditional Chinese street and opens up to a square addressing a Chinese temple. A narrow lane and foot bridge links up this square with a tiny mosque on the other side of the river. It is noteworthy that part of the area fronting Jalan Kampung Pantai was formerly known as Kampung Jawa which is the name of the settlement around the afore-mentioned mosque. The decline of trading activities along the river at these streets was expedited by the relocation of the customs and immigration functions on reclaimed land at the mouth of the river as well as the construction of larger warehouses there. The relocation of all barter trade activities to Kuala Linggi deliver the *coup de grace* to the river as a conduit of commerce.



Figure 4.4: Jalan Kampung Pantai, Melaka in 1930

The Harbour and Jetties of George Town

A4.4.10 The Penang harbour in its heyday, had a number of piers: Victoria Pier (1888), Church Street Pier/ Railway Jetty (1897) and Swettenham Pier (1904). The Raja Tun Uda Pier (Ferry terminal) was opened only in 1959. During the 1880s, a stretch of seafront was reclaimed and named after Sir Frederick Weld, Governor of the Straits Settlements (1885-87). Offices and godowns were built on the new waterfront in the distinctive Straits Eclectic style typified by colonnaded arcades. They housed the offices of European firms like Boustead, Behn Meyer, Macalister & Co. and Paterson Simons who were shipping agents, general importers and tin refiners. During World War II, many of the fine buildings near the port were bombed and destroyed, including Government offices at Beach Street and Downing Street (a section of it survived), Victoria Pier and Railway Pier.

Weld Quay and the Ghauts, George Town

A4.4.11 Weld Quay extends from Swettenham Pier to Prangin River, linking ghauts that provided jetties at each end. A ghaut is the stone or wooden jetty along the water front that is constructed as an extension of the street that runs inland from the shore. Several Chinese clan jetties later sprouted along Weld Quay. These jetties served as landing bases for the traditional entreport trade, that is, trade dealing in import, redistribution and re-exporting of products from the hinterland and neighbouring countries. This trade was normally handled by small scale Asian traders. Today, the traditional cargo-handling business by the Weld Quay jetty community has dwindled considerably due to the use of containers at the Butterworth port on the opposite side of the channel.

A4.5 Cities of Migrants and Multiculturalism

A4.5.1 The importance of the historic cities of Melaka and George Town as trading ports meant that they were able to attract large number of traders from the northern region of Sumatera, the Malay Peninsula, the Indian subcontinent and China. Trade became the uniting factor bringing people from various cultural backgrounds to settle in Melaka and George Town, creating a mosaic of multicultural communities. The historic cities of Melaka and George Town are testament to a vibrant multi-cultural living heritage.

A4.5.2 The early migrant population was largely male. The fortunate few who could afford to take wives quite often took wives not of their own ethnicity. Due to the shortage of Chinese women, many early Chinese took slave women (Batak, Balinese, orang asli) or local women (especially Siamese) as wives. Thus cultural hybridity was common. For example, J.D. Vaughan wrote in the 1850s: ‘‘The mixed races, namely the offspring of Kling, Bengali and Chinese fathers and Malay mothers, adopt portions of the costume worn by both parents so that a description of the dress worn by all natives in the Straits Settlements that are classified as Malays would be a description of the apparel of Klings, Bengalis and Chinese…’ People mixed in the market-



Figure 4.5: Swettenham Pier, taken from the Penang Postcard Collection 1899-1930s (Nasution, Wade, 2003)

place or socially to various degrees and among the permanent settlers, attendants and dependant, commonly of different cultural origins, were often considered part of the same household. Cultural eclecticism could be seen in architecture, interior furnishings, dress, food and other elements of lifestyle.

Ethnic Trades

A4.5.3 The distribution of trade activities in the historic cities of Melaka and George Town are typically concentrated along



Figure 4.6: Weld Quay, taken from the Penang Postcard Collection 1899-1930s (Nasution, Wade, 2003)

the lines of ethnic dominance of an area. Different ethnic traders, such as the Chinese (Hokkiens, Cantonese, Hakkas), Hindu-Tamils, the Javanese, the Arabs, the Achenese and Indian Muslims would associatively assemble together to trade on particular streets or areas. The existence of trade societies based on ethnic differences further reinforces the strong ethnic divisions between the trades. This concentration of identities formed the strong characters of these places.

Crafts and Products

A4.5.4 Names of places often reveal their origin. Blacksmith Street or Jalan Tukang Besi had one of the highest concentration of blacksmith forges in Melaka. Two remain today but as recent as the 1960's there were no less than 8 within that 100 metres stretch. Similarly there were gold and silver smiths working in the vicinity of Goldsmith Street. The stretch of Jalan Hang Kasturi between Jalan Tukang Besi/Tukang Emas and Jalan Kampung Pantai is referred to in Chinese as Tofu Street and there was once a thriving food processing trade involving soya beans which also gave rise to the tinsmith and barrel makers.

The latter are now reduce to a singular old man practicing the craft learnt from his father and who had in turn learnt from his father in the back lane between Jalan Hang Kasturi and the graveyard of Hang Jebat. Several tinsmiths and traditional sign and seals carvers still survive today. There were three traditional Chinese timber clogs shops along Jalan Hang Lekir; employing 20 men at various levels of skill turning logs of wood into timber clogs using nothing more than a short adze and tiny timber plane. None of the three establishment are in business today.

A4.6 Eclectic Architecture As a Fusion of Migrants' Influences

A4.6.1 Various cultures have traded and settled in Melaka and George Town and have marked a significant influence in the eclectic and unique architecture of the cities. The early architecture is an amalgamation of cross cultural values, ideas, traditions and the memories of immigrants and indigenous builders, as well as the adaptation to the availability of building materials, skills, transportation and the appropriateness to the tropical climate. Juxtaposition of different building styles and typologies from those built by the Portuguese, the Dutch, the British, the Malay, the Chinese and the Indian mainly, created a rich mixture of urban fabric in Melaka and George Town.

Architectural Types

A4.6.2 The Malayan bungalow emerged during the 19th century, a mixture of European and local features, such as timber posts and thatched roofs, alongside shop houses and temples built by Chinese immigrants, mainly brought in by the British to help open up the mining lands. Later, Indian temples were also built by those who came to Malaya to help the British in the rubber plantations and infrastructure works. Together this mix of cultural influences has created an architecture that is unique in its eclecticism and adaptation to local climate and values. A list of architecture types available in Melaka and George Town is outlined below:

1. Traditional Malay houses
2. The Malayan bungalows
3. Shophouses and townhouses
4. Mosques
5. Churches
6. Chinese temples
7. Hindu temples
8. Administrative buildings from the periods of Portuguese, Dutch and British
9. Commerce buildings
10. Godowns
11. Water villages (clan jetty)

A4.7 Cities for Commerce and Living

A4.7.1 Early settlers of different ethnicities formed their own neighbourhoods, concentrated on certain streets and intersections, the boundaries of which were not clearly demarcated. These neighbourhoods were typically situated adjacent to religious structures, for example a Chinese settlement behind Kuan Im temple and a Malay settlement near Acheen Street Mosque in George Town. Kampong Kling (Indian Village), Kampong Hulu (Arab Village), Kampong Jawa (Javanese Village) and Kampong Serani (Eurasian Village) are examples of ethnic settlements in Melaka. The outcome of this integration of compact settlements, commercial districts, as well as religious and civic zones, led to the evolution of the cities' urban structures to accommodate the lifestyles and cultural practices of their inhabitants.

A4.7.2 An interesting development in Melaka is the lack of ethnic consciousness in the settlement and land use pattern. Here in Jalan Tukang Emas there is a mosque sharing a party wall with the preeminent Hindu temple in Melaka; they are by any standards some of the oldest functioning mosque and Hindu temple in Malaysia. Just behind the ceremonial opera stage of the oldest Chinese temple in Malaysia lies Kampung Ketek which is an old Malay settlement.



Figure 4.7: Heeren Street in 1910



Figure 4.8: Jonker Street in 1890

Historic Commercial Centre, George Town

A4.7.3 The original grid of George Town is framed by Light Street, Beach Street, Chulia Street and Jalan Masjid Kapitan Keling. These streets defined the city's main commercial district, where banks, shipping companies, import export trade and wholesalers are located. According to a survey conducted in 1818, Beach Street was the busiest street in George Town, where the majority of the brick shophouses were located. Warehouses, godowns, shops and offices owned by European merchants were concentrated on the northern end of Beach Street near the Customs House, while the southern end of the street contained shops owned by the Chinese, Indian and Malay traders. Chulia Street was the second busiest street, owned mainly by Chulia merchants who came from the Coromandel Coast and Bengal. China Street and King Street were dominated by Chinese merchants, while Market Street and Penang Street are known as Little India. Within the commercial district is a high concentration of coffee shops catering to office workers.



Figure 4.9: Beach Street in early 1900

The Chinese Kongsi, George Town

A4.7.4 The Kongsi is a Chinese association based on clan, particular dialect group or people from the same district in their original country, or an occupational or mutual benefit society. The Kongsi institution is a distinctive outcome of the 19th century migration of the Chinese to Southeast Asia (nanyang). For more than a century these institutions have influenced to a great extent the socio-economic life of the Chinese community in George Town and created important landmarks.

A4.7.5 Outside the main historic commercial centre, are largely residential quarters of terrace houses and shophouses, interspersed with bungalows. One particular area at the southern section of Beach Street stands out for the network of clan houses (kongsi) which include the Cheah Kongsi, two Khoo Kongsi, Lim Kongsi, Tan Kongsi and Yeoh Kongsi, representing the five Hokkien kongsi. These kongsi buildings are set within a courtyard or compound by residential or shophouses. The layout and network of narrow alleyways, a legacy of the 19th century, are reminiscent of the feuding secret societies. This urban geography of clan temples and houses is a unique feature of George Town.



Figure 4.10: Aerial of Lim Kongsi, George Town

Clan Jetties, George Town

A4.7.6 The timber jetty housing are built on stilts on the sea and spread over an area of approximately 16 acres. The houses are arranged in a fishbone layout with the jetty built of timber planks serving as the major spine for access and communication. Typically a temple, housing the deity brought from the clan's home village in China, is sited at the front or rear of the jetty. Each of the jetty clan communities has set up a system of self-management to look after the security, maintenance of common areas and movement of heavy vehicles.

A4.7.7 The godowns near the waterfront extend from Beach Street to Weld Quay with two street frontages. The warehouses are located behind the offices that front the main street. Stone paved through the warehouse-cum-office buildings connect Beach Street and Weld Quay. The streets extend from the waterfront jetties into the town's commercial centre. The clan jetties represent a unique form of settlement unlike similar water villages elsewhere as each community from each jetty comprises members of the same clan with the same surname, such as the Lim, Chew, Tan, Lee and Yeoh jetties. Since 1969, the residents have been given special permission by the state government to occupy the site in the form of "Temporary Occupation Licence" for each of the premises they occupy.



Figure 4.11: View of the Clan Jetties, George Town

Criteria (iii): bear a unique or at least exceptional testimony to a cultural tradition or to a civilisation which is living or which has disappeared.

"Melaka and George Town: Historic Cities of the Straits of Malacca " are living testimony to the multi-cultural heritage and tradition of Asia, where the greatest religions and cultures met. The coexistence of distinct faiths - both tangible and intangible - in particular the different religious buildings, is a testament to the religious pluralism of Asia.

A4.8 Exchanges of Civilisations, Cultures and Religions

A4.8.1 The Historic Cities of George Town and Melaka represent an exceptional example of a multi-cultural trading towns in East and Southeast Asia, forged from the mercantile and civilisation exchanges of the Malay, Chinese, Indian and European cultures.

Coexistence of Different Ethnic Groups

A4.8.2 The different cultural groups and traditions have helped to further enrich the beautiful traditions and customs of these historic cities. The fact that these various communities are living side by side with one another while practicing their own individual traditions, customs and religion, makes George Town and Melaka, vibrant living multi-cultural heritage towns.

Persistence of Cultures and Lifestyles

A4.8.3 Despite the threats brought over by history and changes in governance, the living heritage and lifestyles of the city of George Town have evolved and persisted and continue to be practiced by the different communities. The continuity of these unique cultural traditions stemmed from centuries of multi-cultural traditions, manifested in religions, cultural practices, trades, crafts, cuisine, languages and inter-ethnic assimilations.

Festivals

A4.8.4 The communities of George Town celebrate many festivals throughout the year. Many of these festivals, while having religious connotations, are often joined in celebration among the different ethnic groups. These festivals create an unparalleled atmosphere of a society that is deeply entrenched in their own cultures and the sharing of their joy to the rest of the communities. Some of the festivals are commemorated publicly and in great splendour, with processions and stage



Figure 4.12: Chingay Festival, GeorgeTown

events, among others. There are two kinds of such celebrations: those which are also celebrated throughout the country and those which originated and are typical only in the Straits Settlements, especially in Melaka and George Town. The first kind includes such event as the Maulud-ar-Rasul, Chingay, the Nine Emperor Gods Festival and Thaipusam and the second are, the Chap Goh Meh, the Bangsawan, Dondang Sayang, Wang Kang and Boria.

Food

A4.8.5 Food is a very important facet in the lifestyle of the people of George Town. The evolution of the local cuisine encapsulates the multi-cultural communities and their wealth of gastronomical flavours. Some of the food came about from socio-economic consequences, such as Char Kuay Teow, Nasi Kandar and Teochew Porridge which was originally intended to feed the working population of the city. While communities like the Baba-Nyonyas have also created their own specialities that represent the finest of their cultures.

Streets of Harmony

A4.8.6 In George Town, religious pluralism was established from the early days of the EIC trading post. As the new settlement had attracted 10,000 people of various creeds and nations, Captain Francis Light proposed that 'each race has a right to preserve its civil and religious peculiarities'. Today, the St. George's Church (1818), the Goddess of Mercy Temple (1800), the Mahamariamman Temple (1833), the Kapitan Kling Mosque (1800), the Khoo Kongsi (1851) and the Acheen Street Mosque (1808) are found on the Jalan Mesjid Kapitan Keling and Cannon Street axis.

A4.9 Inter-ethnic Assimillation

A4.9.1 As important trading ports, George Town brought in an influx of migrants from the Malay Archipelago, the Middle East, the Indian subcontinent, China and others. Consequently, unique groups formed by inter-ethnic assimilation emerged, representing this cultural interchange.

Straits Chinese

A4.9.2 The Straits Chinese also known as Baba-Nyonya or Peranakan, were born in the Straits Settlements. Their lineage did not go beyond the early 19th century. They were of Chinese origin but had few ties with China. They enjoyed Straits Chinese cuisine. In George Town, the Straits Chinese speak a dialect closely related to Hokkien (Fujian).

A4.9.3 The female members wear the Nyonya costumes, sarong kebaya (Malay traditional attire), slippers which are specially designed and sewn in glass beads and jewellery. Their culture is neither Chinese nor Malay, but a charming combination of both. Generally this community is not the result of inter-marriages, for the community practiced strict segregation. They sent their children to English schools and became government officers and professionals. In George Town they are distinct from the other Chinese communities.

Jawi Peranakan

A4.9.3 Another community such as the Baba but of Indian origin, is the Jawi Peranakan of Penang. They were locally born, the result of the union between South Indian Muslim men and Malay women. Most of the men were from Malabar and were traders, merchants and settlers, who had arrived in the late 18th and early 19th century. Although the community still retained some South Indian customs and lifestyles, they assimilated rapidly into the Malay society,

spoke Malay as their first language and identified themselves with Malay concerns. Reputed for their intelligence and language ability, they were often employed by the British as clerks, translators, interpreters and as munsyi (Malay teachers) to the European communities. Some of the well known families were the Merican or the Marakayar. They were wealthy and ranked second to the Arabs as leaders within the Malay-Muslim community. One such example was Kader Mydin, the Kapitan Kling who built the Masjid Kapitan Keling.

Arab-Malays

A4.9.5 Distinct from the Jawi Peranakan were the Arabs who had come to the Straits Settlements directly from Hadhramaut, or indirectly from India and other parts of the Malay archipelago and became more significant in the 19th century. They were known by their honorific titles, Sayyid (Syed) or Sheikh and were held in high esteem by the local Malay community. Although there were intermarriages between them and local women, they preferred to distinguish themselves and their children as Arabs, yet they also firmly considered themselves as Malays. Their sons were often sent to Arabia or other Middle Eastern countries for their education, the girls were married off to Arabs. In George Town, most of them were wealthy traders and merchants involved in inter-island trade in batik and other textiles, spices and tobacco of the Archipelago, brassware and haberdashery of England and India and honey and religious literature of Arabia. Over the years, this group also has identified themselves more with the Malays and speak the Malay language.

A4.10 Religious Pluralism in Melaka and George Town

A4.10.1 Within the Core and Buffer Zones of George Town there are 37 places of worship, mainly mosques, Chinese temples, Indian temples and churches. Many of these religious building are located on the same road, Jalan Masjid Kapitan Keling in George Town, or only a couple blocks away from each other. All are still functioning, as they were hundreds of years ago, where the communities perform prayers and other religious activities.

Kapitan Keling Mosque, George Town

A4.10.2 The Kapitan Keling Mosque along Jalan Masjid Kapitan Keling was named after Caudeer Mohudeen, the head of the Indian Muslim community credited to have built it around 1800. The name “Kapitan Keling” is used to denote the headman or leader of the South Indian Muslim community. He was the first Superintendent of the mosque and brought in builders and materials from India. The mosque was remodelled in 1916 to its present appearance. The exterior is ochre yellowed while the interior has white marble floors and a high ceiling. The interior aisles are formed by a series of horseshoe arches, crowned with King Edward’s plaques. The façade of the building and its interior were decorated with geometric designs.

Acheen Street Malay Mosque, George Town

4.10.3 Acheen Street Malay Mosque is located in the Malay Settlement between Prangin River and the south part of Lebuh Chulia. This mosque was founded in 1808 by Tengku Syed Hussain, a wealthy Arab merchant prince who became Sultan of Aceh. In the old days when the Muslim



Figure 4.13 Kapitan Keling Mosque, Today

pilgrimage to Mecca was by sea rather than by air, Acheen Street was the centre of haj travel. Pilgrims came from Northern Sumatra, Southern Thailand and the northern states of peninsular Malaysia to purchase their tickets, shop and attend religious classes while waiting for the Haj ships. Acheen Street Malay Mosque has an octagonal-shaped minaret following the 16th century Moghul architecture common in old mosques in Aceh. The 1798 Popham's map marked this mosque as a landmark of the Malay settlement.

St. George's Church

A4.10.4 St. George's Church is one of the oldest Anglican Church in Southeast Asia, built in 1816 with the help of the EIC during Colonel J. A. Bannerman's term as British Governor of Penang. It features a Grecian columns and pediments on its front facade. The brick structure has a solid plastered stone base, a gable shaped roof for the tropical climate and an octogonal-shaped steeple (figure 4.14).

A4.10.5 A rotunda was erected across the main building in 1886 to commemorate Sir Francis Light. Underneath the dome is a marble plaque framed by two columns, dedicated to Light. The inscription reads "In his capacity as Governor the settlers and natives were greatly attached to him and by his death had to deplore the loss of one who watched over their interests and cares as a father". The mahogany trees in the lawn, which came from India as seedlings, were planted by A.B.Mackean in 1885. The ones still remaining today are survivors from the destruction wreaked by World War II.



Figure 4.14: St. George's Church, George Town

Kuan Im Temple, George Town

A4.10.6 The most important building for the Chinese communities in George Town is the Kong Hock Keong, also known as the Kuan Im (Goddess of Mercy) Temple. It is situated at the end of China Street on a slightly elevated site as depicted in the 1798 Popham's map. The temple is sited with its back towards the central hills on the island and facing the sea with the hills on the mainland in the distance across the channel. Stone tablets according to Yin Yang (feng shui). Its position on the upper centre of the city grid on Jalan Masjid Kapitan Keling and facing China Street axis indicates the importance of the building. Founded around c1800, this

temple architecture features a sweeping roof with ornate decorated copings and ridges. Oracle sticks are a special features of this temple. Chinese opera or puppet theatre is performed on the granite-paved forecourt on feast days, three times a year. Figure A4.15.

Sri Mahamariamman Temple, George Town

A4.10.7 Situated at Queen Street, Sri Mahamariamman Temple was built in accordance with the saiva agamas with an antechamber, a hall, circumambient dome, surrounding walls and an entrance. The complexity of Hindu mythology is reflected in the sculpture *gopuram*, which is over 23-feet high and features 38 statues of gods and goddesses and four swans over the entrance. It is from this temple that the Navarathri procession starts every year. Built in 1833, this temple is dedicated to the Hindu goddess Sri Maha Mariamman. Historically, it catered to the Tamil community of traders and stevedores originating from South India (Figure A4.16).



Figure 4.15: Kuan Yin Temple, George Town



Figure 4.16: Sri Mahamariamman Temple, George Town

Criteria (iv): *Be an outstanding example of a type of building, architectural or technological ensemble, or landscape which illustrates (a) significant stage(s) in human history.*

"Melaka and George Town: Historic Cities of the Straits of Malacca " reflect the coming together of cultural elements from elsewhere in the Malay Archipelago and from India and China with those of Europe to create a unique architecture, culture and townscape without parallel anywhere in the East and South East Asia. In particular a range and exceptional architecture of shophouses and townhouses.

A4.11 The Shophouse as An Outstanding Example of An Architectural Type

Shophouse

A4.11.1 The dominant building type within the Core Zones of Melaka and George Town is the shophouse. There are more than 2,000 shophouses, mostly two and three storeys, in WHS. The term 'shophouse' here refers to a building form that is unique to the settlements of the Straits of Malacca. Typically the shophouses function as both residence and shop, with the ground floor used for commercial purposes, while the top floor(s) are for residential purposes. However, they may also refer buildings of the same form that function exclusively as residences (Figure A4.17).

(Refer to Annexure B for a more comprehensive description of the shophouses)

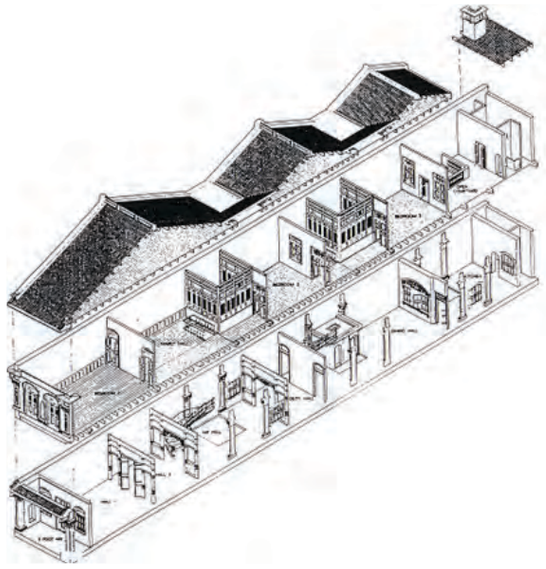


Figure 4.17: Axonometric views of a typical townhouse and shophouse

Evolution of the Shophouse

A4.11.2 The shophouses can be traced to the Dutch terrace buildings in Melaka and the Chinese immigrants from the southern coastal provinces of China. They brought with them both knowledge and methods of building construction which then adapted to the Malaysian urban shophouses. The resultant building type is one that features a combination of vernacular, Chinese and European influences. It is a response to the availability of building materials, skills, transportation and the tropical climate.

Construction and the Shophouse

A4.11.3 The shophouses in the Historic Cities of Melaka and George Town share similar construction materials, techniques, ornamentations and elements. Most of the buildings used soft burnt clay bricks as the main construction material. The load bearing walls at both sides of the shophouse support the roof load through timber joists which span across the width of the building. The upper floors, of local timber planks, were placed on timber joists spanning between the party walls.

Five-footways

A4.11.4 Five-footways are shaded public walkways along the shophouses of the Straits Settlements, giving shelter from the heat of direct sunlight and tropical downpours. They were first legislated in Singapore by Sir Stamford Raffles as part of the Jackson Plan of 1822. In George Town, the five-footways are a significant feature of the streetscape that generally still exist. In Melaka however, the continuous five footways were not traditionally part of the urban structure during the Dutch period. It was only implemented during the rule of the British era. There are, however, a covered verandah five-footways on shophouse during the Dutch period (Figure A4.18).

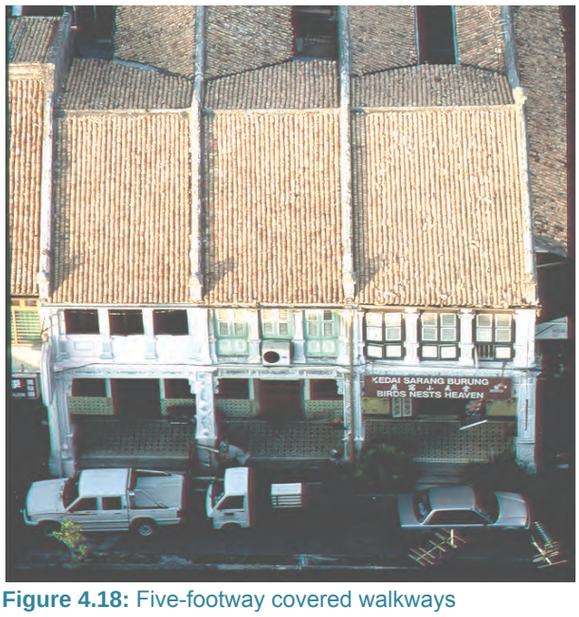


Figure 4.18: Five-footway covered walkways

Urban Form and Roofscape

A4.11.5 The large number of surviving shophouses in both Melaka and George Town retain the historically intact townscape. The pitched terracotta roofscape is one of the strongest distinctive of the two cities. In George Town, the early timber and brick buildings used easily available attap, palm leaf as a roof. A series of devastating fires finally led to the prohibition of their use in 1887. Unglazed terracotta roof tiles were introduced in George Town possibly as early as 1787 as can be seen in Trapaud's painting of Fort Cornwallis of the same year. These tiles were ideal in hot and wet conditions for their ability to absorb moisture, cooling the air space beneath. They came in variety of forms: the rounded pan-tiles, possibly influenced by the roofs found in what was Portuguese governed Melaka and India; the Indian equal sized V-shaped tiles used mainly on the shophouses; and the Chinese temple tiles. The more common Indian tiles continued to be favoured until after the World War II, though Marseilles tiles became popular after their introduction in the 1900s. Post-war Indian tiles tended to be thinner than their pre-war counterparts most likely in the interest of economy and scarcity of materials (Figure A4.19).



Figure 4.19: Typical roofscape of the historic cities of Melaka and George Town

Open Air Well

A4.11.6 In China and India the open courtyard with trees and bushes is an essential element in a building. This concept was brought to historic cities of Melaka and George Town as open air well shophouses. The open air well also serves to retain rainwater from flowing immediately into the street drains.

Feng Shui, Vashtu Shastra and Other Beliefs

A4.11.7 *Feng Shui, Vashtu Shastra* and other beliefs do play important part in the orientation and internal design of the shophouse.

Eclectic Mix of Ornamentation

A4.11.8 The multi-cultural heritage has contributed to the eclectic mix of ornamentation. Such examples include the carved wood panels and fascia boards of the indigenous and Indo-Malay, the elaborate and superstitious images of the Chinese, the arches of Mogul India, the neo-classical elements of British architecture of the Georgian and Regency periods and the modernism of art deco and modern architecture. Roof shapes and gable ends were also ornamented according to the tradition and culture of building ownership. Over the decades, the development of these shophouses in term of their design and styles has evolved from simple plan with plain façade introduced by the Dutch to more elaborate facades that features the Malay, the Chinese and the European motifs or a mixture of these.

A5 Strength, Opportunities, Challenges and Threats

The analysis identifies the key strengths of the two properties in the WHS and the opportunities how they may be further strengthened and used effectively to sustain the integrity of the OUV's of the WHS. As there are strengths, there will also be challenges and threats that would undermine the values and integrity of the sites. All these require constant vigilance from the authorities as strengths can easily slip into challenges and opportunities into threats, if they are not understood and managed effectively and efficiently.

A5.1 Strengths and Opportunities

A5.1.1 The inscription of both Melaka and George Town as a WHS is based on a collection of strengths the two cities have as examples of historic colonial trading cities that continue to grow past the colonial era and today remain as living historic cities at the Straits of Malacca. These strengths are reiterated as a testimony of the thriving, living cultures of the two cities within the WHS.

Living and Working Population

A5.1.2 The WHS still has a relatively large number of people residing in the Core and Buffer Zones. The dominant ethnic group is Chinese intermingled with Indians and Malays. The presence of people living and working in these areas is significant, especially in the conservation of the cities' multi-cultural aspects, both tangible and intangible. The different communities such as the Malays, Chinese, Indians, Arabs, Baba-Nyonya Peranakan and Eurasians, each practicing their own cultural and beliefs, enrich the WHS and create a vitality and vibrancy that are unique to them.

A5.1.3 The living population has a way of life that allows them to adapt to the city working environment; many tend to work in business or trade-related jobs and some have moved into tourism, the emerging economic activity of the two cities. Trading and related businesses like import and export, banking and storage are linked to the cities' historic role as trading ports in the past centuries. Some practice traditional trades, of which food preparations being among their main interests. The two cities are well known for their array of food that is unique to them and this has formed the cornerstone of the tourism industry here.

A5.1.4 Though heritage tourism, is relatively new, the two cities have long engaged in tourism before their nomination for inscription. George Town has many other commercial, cultural and creative opportunities. Cultural tourism is now emerging as the most recent tourism attraction for both cities. Shophouses are being turned into boutique hotels and commercial premises; and this, in turn, impacts the living population who may be uprooted. The residential population in the WHS might now have new opportunities to enhance their livelihood but at the same time, they find that their homes being converted to other uses that threaten their way of life, their families and their living space.

A5.1.5 The prospects of urban regeneration can contribute towards retaining the living population in the Core Zone of the two cities. However, urban regeneration would likely change the characteristics of the residential population, attracting younger people to move into such places to live and work. At present, the Core Zones are characterised by an aging population particularly in George Town, which could deplete the living population eventually and erode the underlying values of these places as living space for a multi-cultural society. The potential for change to attract younger population into the WHS should be harnessed and organised, taking into consideration the sensitive heritage values of the cities through the careful nurturing of its the urban landscape to sustain the vitality and vibrancy of the WHS for its present and future generations.

Multi-culturalism and Religious Pluralism

A5.1.6 The historic cities of Melaka and George Town combine a unique blend of architecture, culture and townscape that reflects their historic past as trading settlements in Southeast Asia. Their role as trading ports in the Straits of Malacca brought together various communities, living in shared space and practicing the same cultural traditions as their ancestors used to. Different communities with different cultural beliefs and customs continue to live together, often along the same streets or in close proximity in small enclaves in the cities. In the Core and Buffer Zones, it is common to find the Chinese, Indians, Eurasians and the Malays living together, sharing common places and understanding yet each follow their own customs, cultural practices and religious beliefs.

A5.1.7 Religious pluralism is rife in the WHS and is accepted among the different communities. It is common to find different religious buildings such as mosques, Chinese and Hindu temples and churches, along the same street. The architecture of their places of worship often reflects a blend influences of the cultures of the communities living nearby. Sometimes, such pluralism spills over onto active shared places like the streets and open space. However, these practices are often received with sensitivity and understanding. For example, religious festivals of different communities in George Town like Thaipusam, the Feast of the Hungry Ghost, the Festival of the Nine Emperor Gods or Wesak Day entail road closures at certain times of the year to allow for road processions. These practices have been ongoing for decades without causing any problems with neither the people nor the authorities, who take careful measures to accommodate these processions.

A5.1.8 Multi-culturalism and religious pluralism are among the major attractions of the two cities of Melaka and George Town. They have become key attractions for cultural tourism into the WHS. It is the blend of multi-culturalism and religious pluralism in these small spaces in both cities which make them vibrant and interesting and turn them into star attractions for tourists. To further add to their cultural and religious attractions, many of their religious buildings, which continue to serve the communities, have on also become iconic architectural buildings, which has its own appeal to tourists.

Architectural Landscape Remains Relatively Intact

A5.1.9 Elements of the Malay, Indian, Chinese and European influence are built into the architectural landscape of the WHS. Among it is a relatively large pool of shophouses built by the Chinese immigrants in the 18th and 19th century. The Chinese brought with them their knowledge and methods of house construction which they adapted to their new homes, blending the influences from the Dutch, Malay and British with their own culture to create this unique architecture.

A5.1.10 In the Core and Buffer Zones, the pool of shophouses is relatively large. Most are privately owned and concentrated in the hands of few owners. The shophouses are two or three storeys high and share common characteristics. They align main streets and have internal courtyards. They were constructed using brick with lime plaster, wooden timber structures and clay roof tiles. The shophouses in the cities continue to function as they were originally intended, playing a dual role as a place of commerce and that of residence. The ground floor is usually used for commercial purpose while the upper floor serves as a residence. A significant strength is that most of these shophouses are still in a good state of conservation.

A5.1.11 The opportunities to make effective use of these shophouses are abundant, especially in response to a growing, vibrant local economy in WHS. That these large numbers of buildings are held by a small pool of private owners would likely make it easier for the local authorities and agencies charged with heritage conservation to bring about change in a more sustainable manner and to monitor such changes. Already, the local authorities have put in place guidelines and procedures to allow such changes to take place that would conform to the cultural values and heritage integrity of these two places. The authorities have also begun to create inventories of these buildings and to build up planning data to facilitate monitoring of future restoration and conservation works in the WHS.

A5.1.12 One of the positive characters of the large number of shophouses is their green features which make them the most ideal places for living in the cities centres of WHS. For this reason, restoration and renovation should always take due cognizance of the intrinsic values of the heritage buildings and their suitability to the hot and humid climate here.

A5.1.13 Some building owners have shown interest in regenerating their buildings and find alternative uses that have helped to revitalises some parts of the Core and Buffer Zones. Investors are moving into the cities to become new owners of these buildings. There is potential for change and accommodation of emerging uses and new economies exist in the large pool of shophouses in the two cities. However, the pursuit of the potential use of the shophouses must conform to the guidelines and management plans of the cities, especially with regard to their carrying capacity.

Historic Port Cities with Thriving Local Economy

A5.1.14 As historic port cities, George Town and Melaka have strong traditions in trading and commerce. Developments and economic growth have brought about industrialisation and changed some parts of the local economy but the people living in the WHS have largely kept their traditional businesses in trading, import and export, banking and commerce. Some continue to provide services to support the main trading activity and port operations. For example, in George Town, the people living in the water villages next to the port

were originally fishermen who have shifted away from fishing to providing services to the ships in port. Today, they are looking forward to participating in the tourism industry.

A5.1.15 As a result of their strong colonial ties, these cities have also built up a strong educational base and these are reflected in the presence of many religious educational institutions in both cities, some of which have become iconic monuments. The culture of emphasising education as a part of their way of life under their colonial past is still maintained among the people in the two cities. Private education is now emerging as a new economic activity in the WHS, with the adaption and conversion of some heritage buildings in the two cities to accommodate such uses. The change reflects how the historic port cities continually adapt and respond to economic changes in order to survive and thrive.

A5.1.16 The local economy within both properties in the WHS continues to thrive, adapting to new challenges through a change in the urban landscape and reuse of heritage buildings into hotels and restaurants. Food business is an important mainstay of the local economy. It is now a major tourist attraction in both cities. Tourist pamphlets not only highlight historical and religious iconic monuments in the two cities, they also show food trails with location of food stalls and restaurants. The blend of different cultures has resulted in a wide array of food, served in formal restaurants and street stalls in both cities. Involvement in the food business provides jobs for the people living in the WHS. Working in tourism-related activities such as hotels and other forms of accommodations is another source of jobs for the local people. Alongside tourism, there is a spillover into retailing and businesses that support the food industry such as the production of ingredients for the food industry.

A5.1.17 The potential for cultural tourism for the WHS is tremendous. It could impose considerable pressures to change the building use in the two cities to cater to the expected influx of tourists. The desire to regenerate to meet the emerging demands of the tourism industry is in accordance with the desire to sustain and keep the local economy thriving and jobs for the people. The goals in supporting the local economy and creating jobs and protecting the cultural heritage of the sites should not be in conflict but are seen to be in tandem with each other to ensure the WHS continues to be there for the benefit of future generations.

A5.2. Challenges and Threats

A5.2.1 The state and local authorities responsible for the day to day management of conservation of the two cities constantly face development pressures. These challenges are acknowledged in the dossiers to the UNESCO but the authorities are meeting these challenges head on and working towards resolving them for the benefit of all who are involved. Of particular significance is the fact that the premises and buildings in both cities are largely owned by the private sector. They must be made fully aware that the cultural values and integrity of the site depend very much on how they care and manage their buildings in the WHS in the long term. Cooperation and partnership between the authorities charged with the responsibility over the WHS and the private building owners form the basis of a good working relationship that is vital to keep the values of the WHS intact for future generations.

The Challenge of Managing Large WHS Area

A5.2.2 Unlike most other WHS, the George Town WHS is a large area, with many buildings, narrow streets and negligible large vacant spaces for recreation and open spaces. There are more than 5,000 buildings to manage with almost equal distribution between the Core Area and Buffer Zone. The WHS faces traffic congestion daily, especially during peak hours. It has no green field sites to plan for change and to meet the needs of the community. It faces constant development pressures. As the city centres of the two largest cities and state capitals in Peninsular Malaysia, there are frequent demands to demolish buildings and rebuild with higher plot ratios to extract the most values out of the urban land in the cities. As living cities, the WHS constantly face problems with pollution from the cities' economic activities. Water, air and noise pollution have to be contained and managed. Urban utilities and services are under pressures from developments and population growth.

A5.2.3 The state and local authorities have drawn plans to manage the city centres and to protect their heritage values as early as in the 1980s. The pressures continue to exist as the city centres in the WHS have to adapt to change and grow with times while trying to conserve their heritage values.

Displacement and Loss of the Residential Population in the WHS

A5.2.4 Whilst the WHS still have a relatively large pool of residential population, the threat of displacement and loss of the population is real and has to be contained before it is of beyond control. Already in George Town, a survey of the area has shown a 30% decline in population since the year 2000.

A5.2.5 The presence of an aging population is another threat to the WHS. An aging population has a lifestyle that not only changes the cities' economies but their use of space. The retail business that thrives on consumer-oriented society is challenged into trying to survive; schools that cater to young children find difficulty filling up spaces; and landlords have difficulty finding tenants who are willing to pay the rents they think they deserve. There are also other indirect impacts as the aging population lacks the necessary occupational skills to engage in new businesses and to attract a wider range of new investments into the city Core Zones.

A5.2.6 The loss of the residential population is compounded by the lack of living spaces to attract younger people, especially those

with families to live in the WHS. Most of the younger people who work in the city centre do not live there; those who do stay with their parents but they have lower skills and are not able to afford places of their own.

A5.2.7 The potential negative effects from displacement and aging population are as follow:

- The slow emigration of traditional businesses away from the Core Zone due to a lack of business;
- The closure of schools that are part of the cities' heritage;
- The declining number of population to sustain the vibrancy of the cities;
- The loss of multi-culturalism; and
- The gradual decline of traditional skills and crafts from the lack of available replacement from the existing population.

Mass Tourism and its Threats

A5.2.8 A major threat to the WHS is the pressures generated by the onslaught of mass tourism. A key strength of both sites is their strong potential for tourism attraction and potential and yet if it is not managed properly, mass tourism, could bring undue pressures and challenges that may undermine the long term sustainability of the WHS.

A5.2.9 Mass tourism is believed to raise traffic congestion in the WHS. George Town, like many growing cities has encountered difficulty with the increasing traffic generated from a rise in private vehicle ownership over time. As such, various measures to manage traffic congestion generated internally have been implemented. Special attention has been given to the WHS because of their narrow streets and lack of parking spaces.

A5.2.10 However, with the rapid expansion of tourism in the two cities, traffic congestion has increased and at times, it threatens the livability of the site. The narrow streets of the WHS would have to now cope with tourist buses, more private motorcars and haphazard parking. The traffic problem is further compounded by inadequate public transportation and pedestrian connectivity in the WHS. Attempts have been made by the different levels of authorities to address these two problems in the WHS but their progress has remain slow and difficult. Even the use of buses in the Core Zones of WHS has resulted in damages to the heritage buildings. In this respect, there is a need for a comprehensive appraisal of the approach to tackle the traffic problem in the WHS.

The Challenge of Gentrification in the WHS

A5.2.11 Another threat is gentrification as building owners respond to new demands for their buildings to cater to tourism and other new needs. Whilst, urban regeneration is welcomed, uncontrolled gentrification of the Core and the Buffer Zones without proper research and sufficient information and knowledge could undermine the architectural integrity and cultural values of the WHS. Gentrification is known to bring about a change that is alien to the living cultural landscape. Poorly executed restoration and renovation and sometimes, illegal works would damage integrity and authenticity of the WHS.

A5.2.12 Gentrification can bring about a displacement of the original communities and their multicultural lifestyles. The replacement of living spaces with commercial and business uses brings about a change of the original character of streets in the WHS and destroys

the intrinsic value created from multi-culturalism of the site. The development of hotels, with restaurants and shops could induce a major transformation in the cities that may not always be positive on the urban landscape and is not always welcomed by the communities living there. Such changes have to be guided and monitored so that they do not undermine the core values of the WHS.

Strong Presence of Dilapidated and Vacant Premises

A5.2.13 Although there is a relatively large pool of heritage buildings in a good state of conservation in the WHS, the presence of many dilapidated and vacant building in the Core and Buffer Zones is worrying. There has been a growing interest in buildings and land located within the WHS as their investment potentials have risen. However, although some of these premises have changed ownership, they have not been restored or improved but are left vacant.

A5.2.14 The change of owners has also impacted negatively on tenancy with rents rising and becoming too expensive for the existing residential population, especially those who are from the lower income groups.

A5.2.15 Leaving the heritage premises vacant and in dilapidated conditions undermines the integrity and safety of the area. Empty and vacant buildings are often vulnerable to thefts of parts and squatting by undesirable parties such as drug addicts and vagrants. They present fire hazards not only to themselves but also to the surrounding neighbourhood. The presence of these premises has to be monitored and controlled and if possible, to be acquired by a third party and restored for the benefit of the entire community and WHS.

An Absence of an Effective Monitoring System and Funding

A5.2.16 It is understood that in a living heritage city, buildings are constantly in use, being adapted, repaired and remodelled by tenants and owners according to their needs and resources. Such modifications require permission and approvals of the authorities, without which, these modifications could threaten the living heritage in the area.

A5.2.17 There are statutory requirements in place for managing changes and modifications. The local authorities have relied on a set of statutes and guidelines for renovation and restoration. Rules and guidelines are being tightened by the authorities to try to plug loopholes in laws and statutes on restoration and renovation to heritage buildings. Owners, on the other hand, have claimed a lack of knowledge and absence of information to cause them to do a poor job of renovations and restoration. In both areas, the authorities are facing challenges.

A5.2.18 Research on buildings and materials is an ongoing task and some efforts have been made to help owners with available information but there are still gaps. Monitoring and enforcing are weak. All these require manpower and resources among the authorities and these have yet to be effectively in place.

A5.2.19 Many owners in the WHS do not have the financial resources to undertake repairs and restoration. One of challenges is the lack of available incentives. Some are in place but they appear insufficient to stimulate and motivate owners to do more. The Department of National Heritage offers financial assistance to owners in the WHS who are willing to list their buildings in the National Heritage Registry. The

Federal Government has allocated funds for grants to help individual owners and is studying the possibility of a loan scheme specially for building owners in the WHS who want to restore. The state and local authorities have also stepped in to provide assistance but the size of the WHS requires a concerted effort of all levels of government in order to have a wider reach.



PART B

Vision and Management Strategies

B1 Vision and Conservation Principles

Dynamic Historic Living City

A city that is capable of accepting the changes that come with the contemporary epoch, and assimilating these new dynamics into its existing historical built fabric, injecting new life into the city without compromising the integrity of its outstanding universal values.

A city that safeguards and protects both its cultural and built heritage, maintains and strengthens the integrity of its components and builds its value on heritage.

A city with vibrant, established communities, grounded in their cultural traditions, with access to amenities for living, working and recreation.

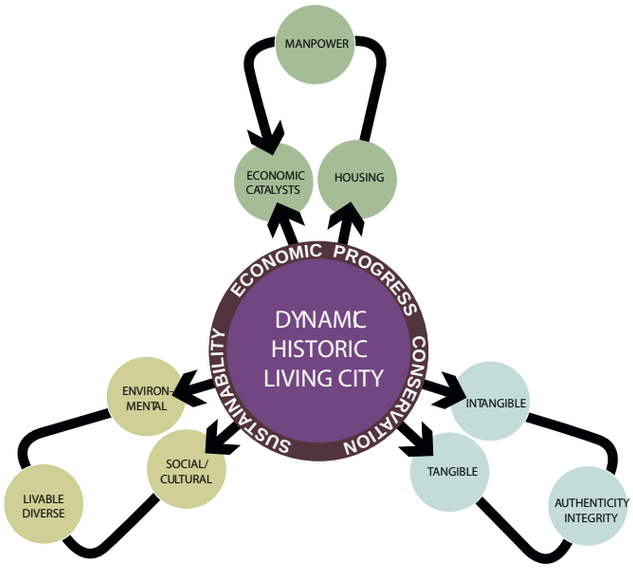


Figure B1.1: Dynamic Historic Living City of George Town

B1.1 Vision

B1.1.1 A central theme of the management plan is to address and acknowledge the transformations that a living city experiences; continuous changes in functional use, social structure, political context and economic development. The key is in establishing a vision statement that integrates the drive for compatible economic progress, sustainability, and the conservation of the historic city's authenticity and integrity. The aim is to enhance the quality of life and production efficiency without compromising existing values derived from the character and significance of the historic urban fabric and form.

B1.1.2 The vision is to create a dynamic historic living city. A city that is capable of accepting changes that come with the contemporary epoch, and assimilating these new dynamics into its existing historical built fabric, injecting new life into the city without compromising the integrity of its Outstanding Universal Values (OUV). A city that safeguards and protects both its cultural and built heritage, maintains and strengthens_ the integrity of its components and builds its value on heritage. A city with vibrant, established communities, grounded in their cultural traditions, with access to amenities for living, working and recreation.

B1.2 Conservation Objectives

The preservation and conservation activities in the World Heritage Site (WHS) of George Town aim to achieve the following objectives:

B1.2.1 To preserve the originality and authenticity of the multi-cultural living landscape;

B1.2.2 To optimise and revitalise the use of cultural heritage for future economic, social, cultural and educational development;

B1.2.3 To preserve and transmit the continuity of the significant values of the living and built cultural heritage as a life education tool and resource of knowledge for the young and for future generations;

B1.2.4 To preserve the close relationship of communities and their socio-cultural ties and further enhance a sense of belonging and pride of place; and

B1.2.5 To offer visitors the unique opportunity to experience an authentic multi-cultural living and built cultural landscape and its diverse manifestations.

The conservation objectives are formulated as over-arching principles to protect the Outstanding Universal Values (OUVs) of George Town as a WHS. The objectives, translated into principles, provide a framework for strategies, policies, implementation actions and guidelines for the Special Area Plan (SAP).

Outstanding Universal Values (OUVs)

Criterion (ii) : Melaka and George Town represent exceptional examples of multi-cultural trading towns in East and Southwest Asia, forged from the mercantile and exchanges of Malay, Chinese and Indian cultures and three

successive European colonial powers for almost 500 years, each with its imprints on the architecture and urban form, technology and monumental art. Both towns show different stages of development and the successive changes over a long span of time and are thus complementary.

Criterion (iii): Melaka and George Town are living testimony to the multi-cultural heritage and tradition of Asia and European colonial influences. This multi-cultural tangible and intangible heritage is expressed in the great variety of religious buildings of different faiths, ethnic quarters, the many languages, worship and religious festivals, dances, costumes, art and music, food and daily life.

Criterion (iv): Melaka and George Town reflect a mixture of influences which have created a unique architecture, culture, townscape without parallel anywhere in East and South Asia. In particular, they demonstrate an exceptional range of shophouses and townhouses. These buildings show many different types and stages of development of the building type, some originating in the Dutch or Portuguese periods.

B1.3 Framework for the Conservation of Historic Dynamic Cities

B1.3.1 A comprehensive approach is adopted in formulating the framework for the protection and conservation of the Built and Living Culture of the World Heritage Sites of Melaka and George Town. Under this framework, urban heritage conservation is an integrated component of the broader urban context and the overall urban design policies and development programmes take into account conservation as a fundamental factor.

B1.3.2 This framework shall be embedded in future interventions or developments within the WHS.

B1.3.3 Some concepts and tools from the UNESCO Preliminary Report on the Draft Recommendation on the Historic Urban Landscape are integrated into the framework with the intention of paving the way to a more integrated, long-sighted, realistic and inclusive approach to managing conservation in the site:

i) An Overall Sustainability Framework;

ii) A Landscape Approach to Conservation;

iii) Observing the Connectivity between Built and Living Culture;

iv) Comprehensive Protection and Development; and

v) Multi-cultural and Historical Layering as the Fabric and Form.

I. An Overall Sustainability Framework

B1.3.4 The principles of sustainability shall be used in assessing development or intervention within George Town WHS. The application of these principles of sustainability adds value and supports public and private actions aimed at preserving and enhancing the quality of the human environment. The use of the mechanism is aimed at infusing a culture where the sustainability considerations become a fundamental value in planning, design, policy making etc.

B1.3.5 It is recommended that any private or public or commercial or philanthropic development project on site, be subjected to a cultural sustainability assessment. This translates into applying the sustainability principles in a simple, or in depth manner to assess the cultural, social, environmental and economic impact of development on the site.

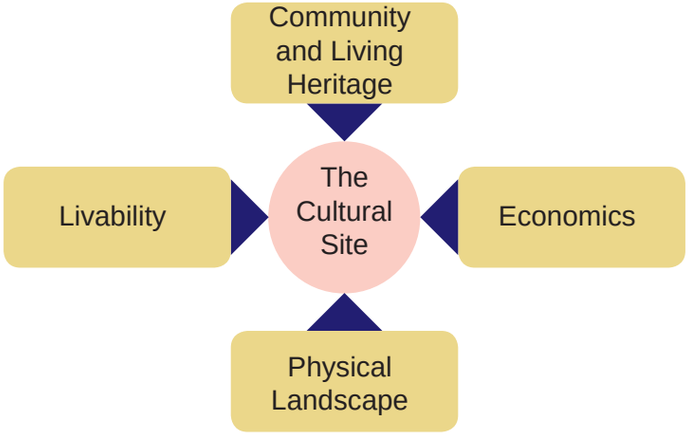


Figure B1.2: Sustainability Lens

II. A Historic Urban Landscape Approach to Conservation

B1.3.6 The Outstanding Universal Values of George Town WHS are intricately tied to their historic urban landscape (HUL). The conservation framework recommends the use of a landscape approach for identifying, conserving and managing the historic areas.

B1.3.7 The definition of Historic Urban Landscapes as per Item 1- HUL Recommendations:

"The Historic Urban Landscape is the urban area understood as a historic layering of cultural and natural values, extending beyond the notion of 'historic centre' or 'ensemble' to include the broader urban context and its geographical setting".

B1.3.8 Item 2 of the HUL Recommendations, describes what comprises the historic urban landscape from the built/physical perspective:

"this wider context includes the site's topography, geomorphology and natural features; its built environment, both historic and contemporary; its infrastructures above and below ground; its open spaces and gardens; its land use patterns and spatial organisation; its visual relationships; and all other elements of the urban structure…"

B1.3.9 It is important to note that the WHS site of George Town is a UNESCO 'cultural site', a dynamic city kept alive by a communities that live and work there. Thus, the historic urban landscape is very much determined by human activity.

The Historic Urban Landscape approach requires new perspectives to conservation of areas:

- To look at land use patterns and spatial organisation of the city as a whole (historical and contemporary) to determine the complex use of space and the urban flow of human traffic;
- To reveal historic and modern urban rhythms of pedestrian and vehicular traffic (domestic, social and commercial) in relation to space (physical landscape) and time;
- To uncover visual sightlines and vistas that reveal the relationship of the urban settlement to the geographical landscape and to the spiritual and cultural expressions of town planning;
- To reveal the layering of urban structures and built environment as expressed in the historical and modern enclaves and townscape, and its relationship to socio-cultural and economic expressions;
- To reveal historic and contemporary building methods and materials (historic and modern) that relate to the geology, geography, settlement patterns, and settlers' knowledge;
- To reveal the historic layering and accumulation of culture and tradition as seen in traditional and modern settlement patterns, gathering spaces, cultural/religious enclaves, commercial enclaves;
- To reveal the morphology and land-use within cultural/religious/commercial enclaves (both historic and contemporary) where 'monuments' 'groups of buildings' and 'streetscape' are intertwined with socio-cultural, religious and commercial activity;
- To unveil sacred, commercial and social navigation pathways such as festival routes, five footways and backlanes and its relationship to domestic, religious or commercial activity; and
- To reveal the permeability between geographical and spiritual space and between personal and public space as manifested through human activity (cultural, social and economic), temporary and mobile structures etc.

III. Comprehensive Protection and Development

B1.3.10 A comprehensive and integrated planning of the historic urban landscape is critical, where human, social and commercial elements are given equal recognition as key elements in the urban landscape. This also means giving equal recognition to the living and the built aspects of the urban landscape and recognition to the tangible and intangible components of each.

B1.3.11 The identification and categorisation of the elements of the historic urban landscape constitutes an important preliminary step in the protection and conservation of the Outstanding Universal Values of George Town.

B1.3.12 The chart below uses keywords/phrases to encapsulate the elements that comprise both the living and built culture in an urban landscape.

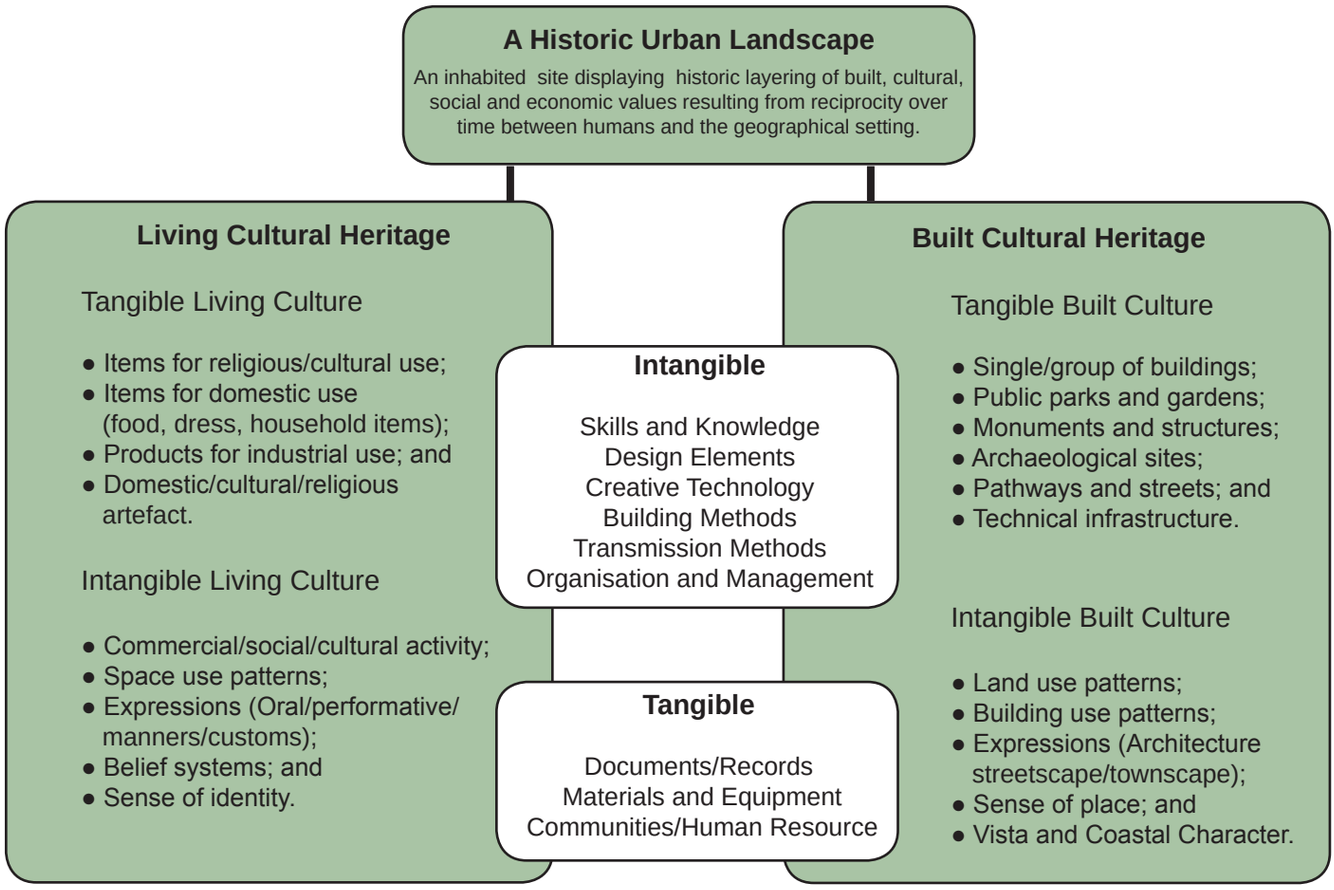


Figure B1.3: Historic Urban Landscape

IV. Observing the Connectivity between Built and Living Culture

B1.3.13 The historic urban cultural landscape has shaped modern society and has great value for our understanding of how we live today (Figure B1.4). The interconnectedness of the built and living elements is complex and collectively contributes towards the cultural sense of place. When looking at the long-term sustainability of the values of the site, it is important in planning to retain the strong sense of the connectivity between working, living and recreational opportunities in the city. This connectivity is manifested in the mixed building use (residential and commercial), accessibility to public amenities such as parks, post office, places of worship etc and commercial chains connecting wholesale, retail and service.



Figure B1.4: Dynamics of a Historic Urban Cultural Landscape

V. Multi-cultural and Historical Layering of Fabric and Form

B1.3.14 Framework 5 emphasises, as per the Hoi An Protocols, *"the need to draw from different sources of authenticity and overlay various dimensions to understand the historic palimpsest"*. This is in contrast to the view that historical narrative could be understood simply in linear form.

B1.3.15 The conservation of the Outstanding Universal Value (OUV) of a trading centre that is multi-cultural, historically layered, and encouraging of cultural exchange, requires an in-depth understanding of the many forces that have shaped George Town's social history and continue to shape its society today.

B1.3.16 The maintenance of these Outstanding Universal Value will itself require a collaborative, multi-disciplinary, multi-lingual and multi-cultural team.

B1.4 Conservation Principles

B1.4.1 Conservation Principles provide a fundamental guideline for the assessment, management and preservation or conservation of cultural heritage. It provides direction for community stakeholders, managers and related agencies before commencing on conservation or development plans, decisions or interventions.

Conservation Principles

1. Retaining Cultural Significance of a Place;
2. Maintaining Authenticity and Integrity;
3. Retaining Association and Meanings;
4. Compatible Use/Functionality;
5. Significance of Setting/Location;
6. Engaging Stakeholders and Community;
7. Interpretation of Significance; and
8. Co-existence of cultural values.

Principle 1: Retaining Cultural Significance of a Place

B1.4.1 Places of cultural significance should be conserved.

B1.4.2 The aim of conservation is to retain the cultural significance of a place.

Principle 2: Maintaining Authenticity and Integrity

B1.4.3 Local practices and cultural preferences should guide conservation decisions and be considered before intervention, as these practices and preferences impact on the authenticity and integrity of a site or cultural asset.

B1.4.4 Authentic refers to the genuineness or originality of expression/activity/object or site

For example, if a community is bent on commodifying a traditional activity for the visitor, it may well loose its authenticity and contextual meaning when adapting to suit visitor needs. It is no longer a part of the tradition or culture that created it.

B1.4.5 Integrity refers to completeness or intactness of an expression/activity/object or site and its attributes.

B1.4.6 To maintain the authenticity and integrity of tangible and intangible cultural heritage, it is important to retain the associations and meanings related to the heritage in the conservation decision making process and intervention process.

Principle 3: Retaining Association & Meanings

B1.4.7 Association means the special connection between people and place. Associations may be include social or spiritual values and cultural responsibilities for the cultural assets. They may relate to people living or dead and to groups, organisations and other communities.

B1.4.8 Significant associations between people and the cultural heritage should be respected, retained and not obscured.

B1.4.9 Meanings denotes what a place signifies, indicates, evokes or expresses. Meaning generally relates to intangible aspects of a place such as symbolic qualities, memories, traditional practices and events.

B1.4.10 Significant meanings should be identified as part of understanding the cultural heritage and may require research.

B1.4.11 Opportunities for interpretation, commemoration and celebration of these associations should be documented and preserved.

B1.4.12 Interpreting associations should be approached with respect for the associated people. Issues may arise about who owns and who has the right to interpret people's history.

Principle 4: Compatible Use/Functionality

B1.4.13 The significance of cultural heritage is directly related to its use, present or past. The use or function of the cultural heritage item/practice/place/expression is based on its cultural significance. Its continued use may reflect the cultural identity and religious importance of a specific cultural individual or group.

B1.4.14 A use is often of heritage significance where the use of the site/artifact and the related activity is the original use or a use of long standing, and where the site/ cultural asset has historical or social value because of that use.

B1.4.15 Continuing, modifying or reinstating a significant use may be appropriate and a preferred form of conservation. It may require changes to significant fabric but this should be minimised.

B1.4.16 Use is a major component of the value and meaning of cultural heritage to a community and should be continued. Sometimes, but not always, a change allowing entry and use by another community may still allow for some of the meaning to be continued.

Principle 5: Significance of Setting/Location

B1.4.17 To identify the setting, establish how the place functioned in the past and how its setting has changed; examine the visual connections and views back and forth; identify features that are historical characteristic of the setting.

B1.4.18 The reasoning behind the setting and the values it encompasses should be described and the related places identified.

B1.4.19 The physical location of a place is part of its cultural significance. A building, work or other component of a place should remain in its historical location. Relocation is generally unacceptable unless this is the sole practical means of ensuring its survival.

B1.4.20 If a component of a place is moved, its characteristics and values should be respected. An appropriate use is one that retains significance fabric, is similar to previous significant uses and allows associations and meanings to continue to experience the significance of the place.

Tangible Content (Related places and objects in Setting):

Contents, fixtures and objects which contributed to the cultural significance of cultural heritage assets should be retained at its setting/location. Their removal is unacceptable unless it is the sole means of ensuring their survival and preservation; on a temporary basis for revitalization; for cultural reasons; for health and safety; or to protect the setting/location. The setting/location should be returned where circumstances permit and it is culturally appropriate.

Intangible Content in Setting:

R*elated content, such as oral history, cultural routes, traditions and practices are part of the story of the use, associations and meaning to people. Those related objects, individual and groups of people have led to the recognition of the significance of the cultural assets.*

Principle 6: Engaging Stakeholders & Community

B1.4.21 Conservation, interpretation and management of the living cultural heritage should provide for the participation of people for whom the cultural assets has special associations and meanings, or who have social, spiritual or other cultural responsibilities for the cultural assets.

B1.4.22 Conserving cultural assets requires acknowledgement of and sensitivity to the values and interest of all associated cultural groups.

B1.4.23 The process for participation should be developed in conjunction with the associated people and other people who may have some interests.

- Focus on consultation and negotiation with communities;
- Community involvement in identifying significance;
- Participation of associated communities; and
- Conservation initiated by community.

Principle 7: Interpretation of Significance

B1.4.24 The cultural significance of the cultural heritage assets should be explained by interpretation. Interpretation should enhance understanding and enjoyment and be culturally appropriate.

B1.4.25 The key principles of Interpretation:

- Should increase public respect and understanding of the significance of the site and communicate the importance of conservation;
- Should allow communities, visitors and stakeholders to participate in the process;
- Should be based on authentic evidence gathered through appropriate research methods;

- Should explore the significance of a site in its multi-faceted artistic, historical, social, political and spiritual contexts. They should consider all aspects of the sites' cultural and environment significance; and

- Should respect and distinguish between the contributions of all periods and all associated communities to the significance of a site.

Principle 8: Co-existence of Cultural Values

B1.4.26 Co-existence of cultural values should be recognised, respected and encouraged, especially in cases where conflicts and contestation may arise.

B2 Management Strategies and Actions

B2.1 Introduction

B2.1.1 This chapter outllines the strategies and actions that will be undertaken in ensuring that the Outstanding Universal Value (OUVs) of the World Heritage Site (WHS) are conserved and transmitted to the future generations, whilst at the same time supporting the vision for sustainable growth of the George Town WHS.

This chapter also frames out the responsibility for the implementations of the proposed actions. Whilst the proposed actions are wide-ranging, implementation will require close coordination between the different agencies. As such, a lead agency has been identified in order to spearhead the implementation within the framework of this CMP.

B2.1.2 The management strategies are structured into the following:

- Understanding the WHS, Education and Information;
- Management of the WHS;
- Use of Land and Buildings;
- Conservation of Living Culture;
- Built Heritage Conservation;
- View and Vistas;
- Public Realm;
- Circulation and Access;
- Risk Management; and
- Infrastructure and Utility.

B2.2 Understanding the WHS, Education and Information

B2.2.1 Understanding and appreciation are vital to meaningful conservation management. As the WHS covers large areas, with a total collection of more than 5,000 buildings, there are still many areas where improved knowledge would benefit the management of the WHS and the appreciation of the the WHS. Additional research on all aspects on significance and management of WHS, both tangible and intangible will be encouraged. Active links between research institutions, professionals and community will be explored.

B2.2.2 A living city such as George Town will benefit more from a coordinated, multi-discliplinary understanding of its significance rather than isolated initiatives. An archive section will be set up in GTWHI whose functions will be to coordinate, undertake and disseminate research outcome and information.

B2.2.3 With modern technology, digitalisation of heritage resources will be useful for dissemination of information on heritage. Digitalisation also helps to preserve knowledge that has been recorded through particular heritage elements. This process has to be carefully planned. Existing heritage artefacts should be digitised and processed in such a way that allows information to be retrieved by different users' criteria.

STRATEGY (A1)
Providing a foundation of knowledge about the historic urban landscape of WHS.

Actions

A1.1
Improve and upgrade existing resource section in the GTWHI into a resource centre, archive and library with user friendly facilities.

A1.2
Develop research strategies and frameworks to co-ordinate aspects on cultural living heritage and built heritage.

A1.3
Produce a detailed base map for the WHS to the quality of old maps of 1891 or 1960 which contain not only information on property/lot boundary, but also building footprints, sidewalks and other information relevant and important for work regarding buildings in WHS.

A1.4
Commission production of measured drawings and schedule of finishes for:

a. All Category I buildings; and

b. Specific Category II buildings and/ or objects of additional interest such as corner buildings, cast iron fountains, granite pathways etc.

A1.5
Commission community mapping and GIS data base documentation of living heritage and resources for example traditional trades, services and products, traditional foods, cultural groups/organisations and functions, culture resource person and expertise, calendar of traditional events, rituals etc. for purpose of cultural planning and management.

STRATEGY (A2)
Assisting in the understanding of traditional ways of building for conservation work.

Actions

A2.1
Produce information and conduct workshops and training session for the public on traditional ways of building and repairing.

A2.2
Disseminate research findings through web-site, exhibitions and site visits for the purpose of commendable heritage conservation or restoration.

A2.3
Offer awards for good conservation or new design projects.

A2.4
Facilitate workshops on conservation techniques, site issues and problem solving, particularly for owners, tenants, contractors and those related to the management of the WHS.

A2.5
Further enhance building conservation clinic program organised by GTWHI, ensuring knowledgeable and experience conservation advisors and advice is offered.

STRATEGY (A3)
Educating and participation of local community in conservation

Actions

A3.1
Educate and involve community in mapping and defining their cultural assets.

A3.2
Engage community associations to manage their cultural assets/properties/ sites.

A3.3
Strengthen communities organisational capacity to manage own festivals, spaces, cultural events etc.

A3.4
Promote and publish activities in the WHS for greater appreciation of heritage by communities and younger generation.

B2.3 Management of the WHS

B2.3.1 Since the WHS inscription in 2008, there exists a number of interim measures to set up institutional and management mechanism for the WHS. These interim arrangements will be strengthened further so as to carry out the necessary implementation programmes more effectively and efficiently in a more coordinated manner.

B2.3.2 Whilst, the Department of National Heritage is the custodian of the WHS, the day-to-day management of both the Melaka and George Town WHS lies with the local agencies of the respective cities. In order to institutionalise a more effective implementation of the Management Plan, a Special Purpose Vehicle (SPV) in the form of a World Heritage Office (WHO) has been set up. The World Heritage Office of George Town (GTWHI) is responsible in providing professional and technical inputs for the application of planning permission and building plan approval (*see Chapter B3*). GTWHI also provides advice, guidance and recommendations on heritage matters particularly in ensuring the integrity and authenticity of the OUVs.

B2.3.3 Section 16B of the Town and Country Planning Act 1976 (Act 172) states the provision for a preparation of a SAP which amongst others may include conservation or management practice for a specified area, in this case for the WHS. The CMP is prepared using this provision.

STRATEGY (B1)
Strengthening the management of the WHS to ensure coordinated implementation of actions and programmes locally.

Actions

B1.1
Strengthen the capacity and capability of the GTWHI as the custodian of the OUVs and as the *de-facto* site manager.

B1.2
Strengthen capacity and capability of the MPPP to carry out its statutory functions in protecting the OUVs more effectively in close partnership with the GTWHI.

B1.3
Increase the role and participation of GTWHI in the control and regulation of development and building works in the WHS.

B1.4
Increase the non-statutory role and function of GTWHI in safeguarding living cultural heritage in WHS.

B1.6
Prepare a conservation plan for the safeguarding and management of cultural living heritage.

STRATEGY (B2)

Putting into effect the CMP into the SAP in order to ensure appropriate statutory protection for the WHS.

Actions

B2.1

Gazette the SAP in compliance to Section 16B of the Act. This is to ensure that sufficient legal powers are entrusted into the implementation of the CMP.

B2.4 Use of Land and Buildings

B2.4.1 Uses that may impact the OUVs will be subjected to the requirement for submission for change of building use. The SAP defines activities prohibited and permissible within the WHS (*see Part C2 under Control on Use of Building*).

B2.4.2 Swiftlet breeding in the WHS is not only a threat to OUVs but also to the safety and sustainability, making living in the WHS difficult and uncomfortable. Restoring buildings formerly used for swiftlet breeding is also costly and time consuming. Thus, it is critical to ensure that the existing farms do not proliferate.

B2.4.3 The Malaysian National Council of Local Government has made a collective decision in 2009 that swiftlet farming would be prohibited in the WHS Melaka and George Town. At the local level, implementation of the above-mentioned decision would be carried out in phases with complete removal by December 2013.

STRATEGY (C1)

Ensuring removal of activities or building use that would potentially affect OUVs.

Actions

C1.1

Institute controls on building use in the SAP (see Part C2 on Managing Use of Land and Buildings).

C1.2

Remove swiftlet breedings from WHS.

B2.4.4 In keeping with the authenticity of a site, ideally the best use will very often be the use for which the building was originally designed for. The continuation or reinstatement of that use should certainly be the first option when the future of that building is considered. However, not all original uses will now be viable or necessarily appropriate. A compatible or adaptive re-use of heritage buildings may be permitted to ensure survival of such buildings. Approval of new use, therefore, must take into consideration the suitability of the use within the cultural landscape which is the OUV of the WHS. A Heritage Impact Assessment will help local authorities in making decision on the suitability of the proposed use.

For the George Town WHS, a socio-economic and land use survey was commissioned in 2010. The survey focused on business and population within the WHS; it can become a starting base for regular updating on the economic activities and population of the George Town WHS. Future surveys should include data collection on license permit and planning approval granted, which would be useful in regular monitoring of building use in the WHS.

STRATEGY (C2)

Ensuring that the new use of heritage buildings takes into consideration the suitability of the use within the cultural landscapes.

Actions

C2.1

Enforce the incorporation of an assessment on the cultural impact within a Heritage Impact Assessment (HIA) report submitted for change of use application to ensure that new use reflect authenticity of OUVs.

B2.3.5 Information is the key to ensure systematic monitoring of use of buildings within the WHS. A monitoring system using GIS to track change of use and permits/approval granted for each buildings will allow easier tracking of illegal activities within WHS and thus faster enforcement. This will help local authorities to manage changes within the WHS.

STRATEGY (C3)

Ensuring systematic monitoring of change of use of buildings within the WHS

Actions

C3.1

Create and maintain a database on building use; matching the use with valuation information, licensing permits given (including their expiry dates) and planning approvals granted for each building in the WHS.

STRATEGY (C4)

Avoiding overwhelming effects of gentrification and touristification and encouraging the return of inner city communities who participate in local businesses and in the religious and traditional festivals.

Actions

C4.1

Initiate an inventory of hotels by classifications, identify licenced establishments and monitoring impact of hotel growth for future review to identify the limits of acceptable charge.

C4.2

Develop a detailed guide on hotels defining and streamlining the different classifications and requirements.

C4.3

Monitor and enforce the current laws and bylaws on all existing hotels and to effect closure on those in non-complience with the law.

C4.4

Encourage affordable conservation and compatible development of housing schemes.

B2.5 Conservation of Living Culture

B2.5.1 The intangible heritage and cultural associations of George Town WHS are an important link to the authenticity and integrity of the OUVs for George Town. Appreciation of these intangible and cultural values require in-depth understanding which in turn requires systematic mapping and identification of the assets. Local communities are important resources and their participation would be more meaningful and beneficial towards developing a clear strategy for conservation of cultural landscapes.

STRATEGY (D1)

Promoting interaction with an understanding of the unique intangible heritage of the WHS.

Actions

D1.1

Develop technical tools for cultural inventory, cultural mapping and cultural asset categorisation.

D1.2

Undertake inventory on cultural assets and facilitate micro-mapping of intangible cultural heritage such as events, expressions, practices, documents, artifacts etc. by the local communities.

D1.3

Engage stakeholders and communities in identifying the significance of a place and encourage conservation initiated by community.

D1.4

Facilitate training and technical assistance of local groups and the communities on identification/mapping and management of their historic urban landscape and living heritage.

D1.5

Undertake pilot projects for the conservation of cultural landscape involving community and local groups participation.

D1.5

Provide incentives and financial grants to aids communities in the process of safe guarding their living heritage.

B2.5.2 Presently, understanding of the cultural meaning and its association to a place within the WHS has not been given due attention. However, the conservation principles set out in this CMP emphasises on retaining the cultural significance of a particular place and that it is being considered before any intervention is made for any particular place in the WHS.

STRATEGY (D2)

Protecting and enhancing the cultural landscape which includes protecting the living communities and their connectivity to the cultural landscape.

Actions

D2.1

Formulate a guide on assessing the impact on culture from any proposals in the the WHS.

B2.6 Built Heritage Conservation

B2.6.1 The George Town WHS have already formulated and implemented their own guidelines on the conservation of heritage buildings. This guideline was renamed regulation as per World Heritage Committee's (WHC) decision. Further knowledge and information of heritage buildings in both cities will facilitate review of existing guidelines and to take account of recent principles for conservation of both built and living heritage.

B2.6.2 The heritage buildings identification map for George Town previously submitted to the WHC with the nomination Dossier has been reviewed. New data that provides a more accurate information on each of the buildings in George Town WHS has been incorporated so as to rectify some of the earlier errors made on the plan (*see Part C, Chapters* C2).

B2.6.3 This map is to be read together with the new guidelines on heritage buildings and building styles (*see Part D and Annex A*).

B2.6.4 With the SAP, the heritage buildings guidelines for both WHS will form part of the SAP which will be a legal document upon its acceptance by the State Government.

STRATEGY (E1)

Ensuring that heritage buildings are conserved and restored in a manner that preserves their authenticity.

Actions

E1.1

Improve and update information on built heritage incorporating new findings and historical information.

E1.2

Carry out regularised monitoring on heritage buildings.

E1.3

Facilitate the understanding of the significance of the built heritage and cultural landscape, the historical, physical, cultural and contextual significance related to the OUV of the WHS.

E1.4

Facilitate the development of a Heritage Management Plan (HMP) template and guide for Category I and II buildings and landscapes.

B2.6.5 Incentives and financial grant aid are presently available for eligible conservation projects within the WHS from various agencies at national and local levels. The existing incentives are relatively attractive and can be further expanded to stimulate more restoration (*see Chapter A4 on Incentives and Fundings for WHS*).

STRATEGY (E2)

Ensuring that heritage buildings are adequately repaired and maintained.

Actions

E2.1

Provide technical assistance to building owners for restoration and repair works.

E2.2

Improve the monitoring of heritage buildings restoration and repair works by increasing capacity of local authorities through provision of additional resources, training, awareness programmes and knowledge sharing workshops with other specialists.

B2.6.6 Development on infill and replacement sites in the WHS should be a stimulus to imaginative, high quality design and to be seen as an opportunity to enhance the area. They should make positive contribution to the overall setting of the WHS and designed with respect for their context, as part of a larger whole.

STRATEGY (E3)

Reinforcing the need to protect the OUVs for all compatible development (infill and replacement).

Actions

E3.1

Ensure all construction works for infill and replacement be undertaken in accordance to the guidelines.

E3.2

Provide examples and advice to developers, owners and designers on good design and construction practice for sites and buildings identified as infill and replacement in the SAP.

E3.3
Commission historical research on infill and replacement sites to aid developers and owner.

E3.4
Periodic monitoring of works done to ensure compliance to approved plan and that conservation works employ the right technique and use the right materials.

B2.7 Views and Vistas

B2.7.1 People orientate themselves by remembering certain features that include unique public views, defined entries and landmarks. These features also can set apart one place from another and are part of what defines the unique character of a place. Preserving these key features contribute significantly to the preservation of the OUV of the WHS.

STRATEGY (F1)
Preserving legibility of historic townscape and important views

Actions
F1.1
Enforce that all development in WHS to respect important vistas and focal points and that visual study be carried out and included as part of the Heritage Impact Assessment.

B2.8 Public Realm

B2.8.1 The streets of the WHS are traditionally shared spaces where changing pattern, performances, rituals and festivals are some of the elements that contribute to the unique character of the cities.

STRATEGY (G1)
Increasing the provision of public spaces in the WHS and improving quality of the spaces for better utilisation and meaning.

Actions
G1.1
Implement the proposed public realm programs with community consultation integrated into the planning and implementation process.

STRATEGY (G2)
Ensuring that the OUVs are preserved in the implementation of public realm programs.

Actions
G2.1
Undertake the inventory of heritage streetscape elements including mapping the significant public spaces, sites and routes of traditional cultural festivals and events.

G2.2
Develop and put in force the design and implemetation criteria and procedures for landscape improvement projects incorporating:

i. Full understanding of historical urban landscape and heritage streetscape;
ii. Community participation at pre-design and design stage to aid sucessful implementation;
iii. Usage of high quality, durable and sustainable materials; and
iv. Implementation of universal design principle.

G2.3
Preparation of the Heritage Impact Assessment shall be considered based on case by case basis for public spaces/ streetscape/landscape improvement programs to avoid compromising the OUVs.

G2.4
Provide an orderly streetscape environment that minimises visual clutter such as utility, signages etc.

STRATEGY (G3)
Facilitating wayfindings, legibility and ease of pedestrian movement.

Actions
G3.1
Implement place markers projects to improve street signages, information boards and other wayfinding elements.

STRATEGY (G4)
Maximising continuity in pedestrian network and ensuring safe and comfortable pedestrian facilities.

Actions
G4.1
Maximise existing five-footways as part of pedestrian network by removing obstructions or barriers to pedestrian connectivity.

G4.2
Implement backlane programs to connect selected parts of the WHS.

G4.3
Implement principles for safe and comfortable pedestrian environment within all pedestrian network improvement programs.

B2.9 Circulation and Access

B2.9.1 Upon the inscription of Melaka and George Town, Historic Cities of the Straits of Malacca, the WHC has requested that measures in decreasing motor traffic in the cities be formulated.

B2.9.2 Solutions for traffic congestion in George Town WHS rely heavily with the overall traffic and transportation network and system for the whole island of Penang. Being the centre of commerce and administration of the state, traffic issues for both cities are very much inter-connected with travelling pattern into the cities. This coupled with poor public transport services in the past and high number of visitors coming into the cities for various purposes have proliferated traffic congestion in the cities.

B2.9.3 The State Government have embarked on a public transport study to resolve traffic problem not only within the WHS, but covering a bigger catchment. The main objectives of these studies are to improve public transport services and network to the cities.

B2.9.4 With overall and holistic transport solution currently being studied by the government, solutions for traffic in the WHS focus on traffic demand management with priority given to pedestrians and residents. The SAP accompanying this CMP highlights proposed solutions to deal with traffic issues. These solutions will be integrated within the overall traffic study once the study is completed.

STRATEGY (H1)
Reducing dependency on private vehicle and shifting transport mode to public transport.

Actions
H1.1
Improve pedestrian network to provide for continuous pedestrian facility and safe and comfortable pedestrian environment.

H1.2
Improve public transport services for the short and medium term.

H1.3
Implement proposals for integrated public transport system and network.

STRATEGY (H2)

Changing street functions towards giving priority to pedestrians and reducing usage within roadspace.

Actions

H2.1

Implement the proposals for a pedestrian network and other measures aimed to reduce conflict between pedestrians and motorised vehicles.

H2.2

Address local issues regarding heavy vehicles and minimising the importance of loading/unloading on pedestrian oriented design through the use of marked loading zones, restricted loading hours and other loading management strategies.

B2.10 Risk Management

B2.10.1 A fire prevention strategy can reduce the potential for damage to the George Town WHS. While full-fledge risk management plan is yet in place, interim solutions for fire protections are being implemented.

STRATEGY (I1)

Improving fire protection measures

Actions

I1.1

Separate fire hydrant water supply line from that of domestic supply line.

I1.2

Installation of underground pillar hydrant to avoid damaged by vehicles.

I2.3

Regulate installation of decorative lighting across light pillars.

B2.11 Urban Infrastructure and Utility

B2.11.1 Improving urban infrastructure of the WHS is a critical component in improving livelihood of the cities for their residents and visitors. Presently, some of the areas within the WHS needs improvement particularly in the aspects of sewerage and drainage.

B2.11.2 A key issue for sewerage in the George Town WHS is that many of the properties in the cities are not connected to the centralised sewerage system. In certain areas, individual septic tanks and pour flushes are still being used and maintained by the owners of premises.

B2.11.3 Clogged drains have been cited as one of the cause for urban flash floods in George Town WHS. Highly built up areas of the WHS reduce the permeability of the surface thus leading to a high quantity water run-off.

STRATEGY (J1)

Improving provision for infrastructure and utility

Actions

J1.1

Coordinate with the relevant agencies responsible for infrastructure and utility provision in implementing proposals in the SAP.

J1.2

Facilitate research into the historical infrastructure related to the physical development of the urban landscape.

B2.12 Summary Implementation of Strategies and Actions

Strategy	Action	Implementation Body		Funding Source	Implementation Period				Note
		Lead	Supporting		Pre SAP	P1 2013-2014	P2 2015-2016	P3 >2016	
UNDERSTANDING WHS, EDUCATION AND INFORMATION									
A1 Providing a foundation of knowledge about the historic urban landscape of WHS.	**A1.1** Improve and upgrade existing resource section in the GTWHI into a resource centre, archive and library with user friendly facilities.	GTWHI	State government	State government					
	A1.2 Develop research strategies and frameworks to co-ordinate aspects on cultural living heritage and built heritage.	GTWHI	MBPP	GTWHI					
	A1.3 Produce a base map for the WHS to the quality of old maps of 1891 or 1960 which contain not only information on property/lot boundary, but also building footprints, sidewalks and other information relevant and important for work regarding buildings in WHS.	GTWHI	NGO / JUPEM / MBPP	GTWHI					
	A1.4 Commission the production of measured drawings and schedule of finishes for: a. All Category I buildings; and b. Specific Category II buildings and/or objects of additional interest such as corner buildings, cast iron fountains, granite pathways etc.	GTWHI	Research institutions such as university etc. DNH	GTWHI DNH					

Strategy	Action	Implementation Body		Funding Source	Implementation Period				Note
		Lead	Supporting		Pre SAP	P1 2013-2014	P2 2015-2016	P3 >2016	
	A1.5 Commission community mapping and GIS data base documentation of living heritage and resources for example traditional trades, services and products, traditional foods, cultural groups/organisations and functions, culture resource person and expertise, calendar of traditional events, rituals etc. for purpose of cultural planning and management.	GTWHI	NGO / University / Local Communities	State Government					
A2 Assisting the understanding of traditional ways of building for conservation work.	**A2.1** Produce information and conduct workshops and training session for the public on traditional ways of building and repairing.	GTWHI	MBPP Develop a registration of trained / qualified contractors	GTWHI					
	A2.2 Disseminate research findings through web-site, exhibitions and site visits for the purpose of commendable heritage conservation or restoration.	GTWHI	MBPP	GTWHI					
	A2.3 Offer awards for good conservation or new design projects.	GTWHI	DNH / MBPP / NGO	GTWHI / DNH					
	A2.4 Facilitate workshops on conservation techniques, site issues and problem solving, particularly for owners, tenants, contractors and those related to the management of the WHS.	GTWHI	DNH / MBPP / NGO	WHO / DNH					
	A2.5 Further enhance building conservation clinic program organised by GTWHI, ensuring knowledgeable and experience conservation advisors and advice is offered.	GTWHI	NGO	GTWHI					

Strategy	Action	Implementation Body		Funding Source	Implementation Period				Note
		Lead	Supporting		Pre SAP	P1 2013-2014	P2 2015-2016	P3 >2016	
A3 Educating and participation of local community in conservation.	**A3.1** Educate and involve community in mapping and defining their cultural assets.	GTWHI	Community	State Government					
	A3.2 Engage community associations to manage their cultural assets/properties/ sites.	GTWHI	Community	State Government					
	A3.3 Strengthen communities organisational capacity to manage own festivals, spaces, cultural events etc.	State Government	GTWHI	State Government					
	A3.4 Promote and publish activities in the WHS for greater appreciation of heritage by communities and younger generation.	GTWHI	State Government / NGO / Private	GTWHI / State Government / NGO / Private					Enhancement on Web Info
MANAGEMENT OF THE WHS									
B1 Strengthening the management of the WHS to ensure coordinated implementation of actions and programmes locally.	**B1.1** Strengthen the capacity and capability of GTWHI as the custodian of the OUVs and as the *de-facto* site manager.	GTWHI	MBPP	State Government					GTWHI set up in year 2010
	B1.2 Strengthen capacity and capability of the MBPP to carry out its statutory functions in protecting the OUVs more effectively in close partnership with the GTWHI.	MBPP	-	MBPP / Ministry of Housing and Local Goverment / Government, Malaysia					A heritage unit at MBPP upgraded to a department status in 2011.
	B1.3 Increase role and participation of GTWHI in the control and regulation of development and building works in the WHS.	GTWHI	MBPP	State Government					Role in TRP at MBPP and comments on plan submitted and consultation to public.

Strategy	Action	Implementation Body		Funding Source	Implementation Period				Note
		Lead	Supporting		Pre SAP	P1 2013-2014	P2 2015-2016	P3 >2016	
	B1.4 Increase the non-statutory role and function of the GTWHI in safeguarding living cultural heritage in WHS.	GTWHI	MBPP / JPBD / NGO	GTWHI					
	B1.5 Prepare a conservation plan for the safeguarding and management of cultural living heritage.	GTWHI	MBPP / JPBD / DNH / NGO	State Government					
B2 Putting into effect the CMP into SAP in order to ensure appropriate statutory protection for the WHS.	**B2.1** Gazette the SAP in compliance to Section 16B of the Act. This is to ensure that sufficient legal powers are entrusted into the implementation of the CMP.	State JPBD	State Legal Department	Federal Government / State Government					
USE OF LAND AND BUILDINGS									
C1 Ensuring removal of activities or building use that would potentially affect OUVs.	**C1.1** Institute control on building use in the SAP (see Part C2 on Managing Use of Land and Buildings).	MBPP	GTWHI	No fund required as implementation is through licensing and development control.					Progressively and continuously starting from the gazette of the SAP.
	C1.2 Remove swiftlet breedings from WHS.	MBPP	GTWHI	-					The Malaysian National Council of Local Government has given directive to local government for complete removal of swiftlet activities by December 2013.
C2 Ensuring that the new use of heritage building takes into consideration the suitability of the use within the cultural landscapes.	**C2.1** Enforce incorporation of an assessment on the cultural impact within a Heritage Impact Assessment (HIA) report submitted for change of use application to ensure that new use reflect authenticity of OUVs.	MBPP	GTWHI / JBPD	Implementation through development control mechanism.					Improve the content and quality of HIA report giving larger consideration on cultural impact to protect authenticity of OUVs.

Strategy	Action	Implementation Body		Funding Source	Implementation Period				Note
		Lead	Supporting		Pre SAP	P1 2013-2014	P2 2015-2016	P3 >2016	
C3 Ensuring systematic monitoring of change of use of buildings within WHS.	**C3.1** Create and maintain a database on building use; matching the use with valuation information, licensing permits given (including their expiry dates) and planning approvals granted for each building in WHS.	MBPP	GTWHI	MBPP					
C4 Avoiding overwhelming affects of gentrification and touristification and encourage the return of inner city communities who participate in local businesses and in the religious and traditional festivals.	**C4.1** Initiate inventory of hotels by classification, identify licenced establishments and monitoring impact of hotel growth for future review to identify the limits of acceptable charge.	MBPP	GTWHI	MBPP					
	C4.2 Develop a detailed guide on hotels defining and streamlining the different classifications and requirements.	MBPP	GTWHI / JPBD	MBPP					
	C4.3 Monitor and enforce the current laws and bylaws on all existing hotels and to effect closure on those in non-complience with the law.	MBPP	GTWHI	Implementation through development control, licensing and enforcement.					
	C4.4 Encourage affordable conservation and compatible development of housing schemes.	State Government	Private Sector	Private Sector					
CONSERVATION OF LIVING CULTURE									
D1 Promoting interaction with an understanding of the unique intangible heritage of the WHS.	**D1.1** Develop technical tools for cultural inventory, cultural mapping and cultural asset categorisation.	GTWHI	NGO / University	State Government					

Strategy	Action	Implementation Body		Funding Source	Implementation Period				Note
		Lead	Supporting		Pre SAP	P1 2013-2014	P2 2015-2016	P3 >2016	
	D1.2 Undertake inventory on cultural assets and facilitate micro-mapping of intangible cultural heritage such as events, expressions, practices, documents, artefacts etc. by the local communities.	GTWHI	NGO / University / Local Communities	State Government/ DNH					
	D1.3 Engage stakeholders and communities in identifying significance of a place and encourage conservation initiated by community.	GTWHI	NGO / MBPP	WHO and respective communities					
	D1.4 Facilitate training and technical assistance of local groups and the communities on identification/mapping and management of their historic urban landscape and living heritage.	GTWHI	NGO / DNH	DNH					
	D1.5 Undertake pilot projects for conservation of cultural landscape involving community and local groups participation.	GTWHI	MBPP	DNH/ GTWHI					
	D1.6 Provide incentives and financial grants to aids communities in the process of safe guarding their living heritage.	GTWHI	DNH	Federal and State Government					
D2 Protecting and enhancing the cultural landscape which includes protecting the living communities and their connectivity to the cultural landscape.	**D2.2** Formulate a guide on assessing the impact on culture from any proposals in the WHS.	MBPP	GTWHI / MBPP	GTWHI					Assessment on the cultural impact is now included within the scope of the HIA

Strategy	Action	Implementation Body		Funding Source	Implementation Period				Note
		Lead	Supporting		Pre SAP	P1 2013-2014	P2 2015-2016	P3 >2016	
BUILT HERITAGE CONSERVATION									
E1 Ensuring that heritage buildings are conserved and restored in a manner that preserve their authenticity.	**E1.1** Improve and update information on built heritage incorporating new findings and historical information.	GTWHI	MBPP / JPBD	GTWHI					
	E1.2 Carry out regularised monitoring on heritage buildings.	MBPP	GTWHI / JPBD / Land Office / PTD	MBPP					
	E1.3 Facilitate the understanding the significance of the built heritage and cultural landscape, the historical, physical, cultural and contextual significance related to the OUV of the WHS.	GTWHI	State Government	State Government / Federal Government					
	E1.4 Facilitate the development of a Heritage Management Plan (HMP) template and guide for Category I and II buildings and landscapes.	GTWHI	DNH	State Government / Federal Government					
E2 Ensuring that heritage buildings are adequately repaired and maintained.	**E2.1** Provide technical assistance to building owners for restoration and repair works.	GTWHI	MBPP	GTWHI					
	E2.2 Improve the monitoring of heritage buildings restoration and repair works by increasing capacity of local authorities through provision of additional resources, training, awareness programmes and knowledge sharing workshops with other specialists.	MBPP	GTWHI / DNH	MBPP					

Strategy	Action	Implementation Body		Funding Source	Implementation Period				Note
		Lead	Supporting		Pre SAP	P1 2013-2014	P2 2015-2016	P3 >2016	
E3 Reinforcing the need to protect the OUVs for all compatible development (infill and replacement).	**E3.1** Ensure all construction works for infill and replacement are undertaken in accordance to the guidelines.	MBPP	GTWHI	-					
	E3.2 Provide examples and advice to developers, owners and designers on good design and construction practice for sites and buildings identified as infill and replacement in the Special Area Plan.	MBPP	GTWHI	-					
	E3.3 Commission historical research on infill and replacement sites to aid developers and owner.	GTWHI	Research organisation either local or international	GTWHI					
	E3.4 Periodic monitoring of works done to ensure compliance to approved plan and that conservation works employ the right technique and use the right materials.	MBPP	GTWHI	MBPP					
VIEWS AND VISTAS									
F1 Preserving legibility of historic townscape and important views.	**F1.1** Enforce that all development in WHS to respect important vistas and focal points and that visual study be carried out and included as part of the Heritage Impact Assessment.	MBPP	GTWHI	-					The SAP provides framework on protected vista (refer Chapter C4)
PUBLIC REALM									
G1 Increasing the provision of public spaces in the WHS and improving quality of the spaces for better utilisation and meaning.	**G1.1** Implement the proposed public realm programs with community consultation integrated into the planning and implementation process.	MBPP	GTWHI / Private Sector / Local Community / State Government	MBPP/Private Sector/Local Community or Businesses/ State Government through public-private-community partnership					The SAP recommends a series of public realm proposals (refer Chapter C5)

Strategy	Action	Implementation Body		Funding Source	Implementation Period				Note
		Lead	Supporting		Pre SAP	P1 2013-2014	P2 2015-2016	P3 >2016	
G2 Ensuring that the OUVs are preserved in the implementation of public realm programs.	**G2.1** Undertake the inventory of heritage streetscape elements including mapping the significant public spaces, sites and routes of traditional cultural festivals and events.	GTWHI	MBPP / NGO / Community	GTWHI					
	G2.2 Develop and put in force the design and implementation criteria and procedures for landscape improvement projects incorporating: i. Full understanding of historical urban landscape and heritage streetscape; ii. Community participation at pre-design and design stage to aid successful implementation; iii. Usage of high quality, durable and sustainable materials; and iv. Implementation of universal design principle.	GTWHI	MBPP	-					The SAP provides performance criteria for projects/ programs/actions on public realm (refer Chapter C5)
	G2.3 Preparation of the Heritage Impact Assessment shall be considered based on case by case basis for public spaces/streetscape/ landscape improvement programs to avoid compromising the OUVs.	GTWHI / MBPP		-					
	G2.4 Provide an orderly streetscape environment that minimises visual clutter such as utility, signages, etc.	MBPP	Respective service providers	-					
G3 Facilitating wayfindings, legibility and ease of pedestrian movement.	**G3.1** Implement place markers projects to improve street signages, information boards and other wayfinding elements.	GTWHI	MBPP	GTWHI					

Strategy	Action	Implementation Body		Funding Source	Implementation Period				Note
		Lead	Supporting		Pre SAP	P1 2013-2014	P2 2015-2016	P3 >2016	
G4 Maximising continuity in pedestrian network and ensuring safe and comfortable pedestrian facilities.	**G4.1** Maximise existing five-footways as part of pedestrian network by removing obstructions or barriers to pedestrian connectivity.	MBPP	GTWHI	MBPP through enforcement					
	G4.2 Implement backlane programs to connect selected parts of the WHS.	MBPP	GTWHI / Local Community	MBPP/State Government/ Local Community					The SAP has identified several back lane programs to be implemented (refer Chapter C5)
	G4.3 Implement principles for safe and comfortable pedestrian environment within all pedestrian network improvement programs.	MBPP	GTWHI	-					The SAP has provided performance criteria to guide design and development process (refer Chapter C5)
CIRCULATION AND ACCESS									
H1 Reducing dependency on private vehicle and shifting transport mode to public transport.	**H1.1** Improve pedestrian network to provide for continuous pedestrian facility and safe and comfortable pedestrian environment.	MBPP	GTWHI	MBPP / State Government					This is related to public realm proposal (refer Chapter C5 and actions)
	H1.2 Improve public transport services for the short and medium term.	State Government / Public Transport Operator	MBPP	State Government / Public Transport Operator					
	H1.3 Implement proposals for integrated public transport system and network.	State Government	Federal Government	State / Federal Government					Implemention of tram in WHS
H2 Changing street functions towards giving priority to pedestrians and reducing usage within roadspace.	**H2.1** Implement the proposals for pedestrian network and other measures aimed to reduce conflict between pedestrians and motorised vehicles.	MBPP	GTWHI	MBPP					

Strategy	Action	Implementation Body		Funding Source	Implementation Period				Note
		Lead	Supporting		Pre SAP	P1 2013-2014	P2 2015-2016	P3 >2016	
	H2.2 Address local issues regarding heavy vehicles and minimise the impact of loading/unloading on pedestrian oriented design through the use of marked loading zones, restricted loading hours and other loading management strategies.	MBPP	GTWHI	MBPP					
RISK MANAGEMENT									
I1 Improving fire protection measures	**I1.1** Separate fire hydrant water supply line from that of domestic supply line.	Fire Department	GTWHI / PBAPP	State Government					
	I1.2 Installation of underground pillar hydrant to avoid damage by vehicles.	Fire Department	GTWHI / PBAPP	State funding					
	I1.3 Regulate installation of decorative lighting across light pillar.	MBPP	GTWHI	MBPP					
INFRASTRUCTURE AND UTILITY									
J1 Improving provision for infrastructure and utility.	**J1.1** Co-ordinate with relevant agencies responsible for infrastructure and utility provision in implementing proposals in the SAP.	MPP	State Government	State Government					Refer Chapter Chapter C7 for SAP recommendations
	J1.2 Facilitate research into the historical infrastructure related to the physical development of the urban landscape.	GTWHI	MBPP / NGO / University	GTWHI					

B3 Management and Implementation Mechanism for WHS

B3.1 Introduction

B3.1.1 This Chapter looks into how the strategies and proposals of the plan for the conservation of the Melaka and George Town World Heritage Sites (WHS) are to be implemented and monitored. It discusses the legal provisions and the government and institutional set-ups for the implementation of the plan. This Chapter also examines the problems and weaknesses of the existing set-up and procedural systems and subsequently recommends some proposals to improve further the efficiency and effectiveness of the legal framework and institutional set-up and procedures for the better management and safeguarding of the WHS and the Outsanding Universal Values (OUV).

B3.2 Levels of Government Involved in Heritage Conservation in the WHS

B3.2.1 Malaysia exercises a three tier government system, with the Federal Government being at the core of the national administration that is governed by the Federal Constitution. The second tier is the State Government and the third is the Local Government. Based on the parliamentary democratic system, the people exercise their rights in electing their representatives to the Parliament and the State Assemblies. The Ninth Schedule of the Federal Constitution specifies the jurisdictions of the federal and the state governments in the country, but there are also some functions that are shared by both the federal and state governments (known as the concurrent list). At the national level, the federal government administration is governed by the legislative, judiciary and the executives. Major laws and national policies as well as those which govern the local areas are passed by the Parliament.

B3.2.2 Although a local government falls under the purview of state government, the federal government could still influence local government policies through the National Council for Local Government which under the Ministry of Housing and Local Government. Land matters and land administration fall under the jurisdiction of the state governments, while town and country planning and heritage are in the concurrent list. With this, the planning and management of heritage sites became conjoint activities between both the federal and state governments.

B3.2.3 Under the Town and Country Planning Act (TCPA) 1976, the local authority is the main planning authority responsible for the day to day planning and control of development and use of land, while the SPC oversees planning at the state level and the National Physical Planning Council at the national level. Major physical planning and development in the local government areas will involve the federal and state governments. With the implementation of the National Heritage Act (NHA) 2005, all heritage matters come under the purview of the Federal Minister in charge of heritage, which presently is the Minister of Information, Communications and Culture. He is aided by the Commissioner of Heritage at the national level. The location of the UNESCO WHS in the capital cities of the states of Melaka and Penang has also

resulted in greater interest and intervention by both the state and federal governments. On top of that, the local governments, as well as the states, are likely to depend on the federal government for financial grants for development and heritage conservation. Under these circumstances, involvement of all the three tiers of government is imperative to the successful planning and management of growth, development and heritage conservation of the George Town WHS and this will certainly be influenced by the working relationship among these governments.

B3.3 Legal Provisions for Heritage Conservation in the WHS

B3.3.1 The major Federal laws which can be used for heritage conservation planning and management in the WHS of Melaka and George Town are as follows:

- Town and Country Planning Act 1976 (Act 172);
- Street, Drainage and Building Act 1974 (Act 133);
- National Heritage Act 2005 (Act 645); and
- Local Government Act 1976 (Act 171).

B3.3.2 Besides the Federal laws, the respective states and local governments have enacted State Laws and adopted several by-laws under the main acts. The enactments and by-laws that are relevant for conservation management in the heritage areas include:

- The Municipal City of Penang Island (MBPP) By-Laws under the Street, Drainage and Building Act, and the Local Government Act.
  - Uniform Building By-Laws 1986 (with amendments until August 2010);
  - Petty Traders By-Law 1979 (with amendments in 1987);
  - Food Establishments By-Law 1991;
  - Trade, Business and Industrial Establishments By-Law 1991;
  - Advertisement By-law 2000; and
  - Entertainment and Entertainment Places By-law 1998.

- Existing Rules prescribed under the Town and Country Planning Act 1976:
  - Town and Country Planning Act 1976, Planning Control (General) Rules 1990, of Penang; and
  - Town and Country Planning Act 1976, Development Plan (Structure and Local Plans) Rules) 1989, of Penang.

- Existing Regulations prescribed under the National Heritage Act 2005:
  - National Heritage (National heritage Register) Regulations 2007; and
  - National heritage (Prescribed Forms) Regulations 2008.

B3.3.3 A Heritage Enactment is also being drafted by the State Authority of Penang to provide sufficient powers to state agencies in implementing the conservation plan of the WHS of George Town.

B3.3.4 Together these laws provide the necessary powers to the authorities to prepare plans and to control works and activities that can affect the conservation areas, heritage buildings and other heritage items in the WHS, as well as to provide funds and carry out conservation projects and other necessary remedial works.

Planning Control Under the Town and Country Planning Act 1976 (TCPA)

B3.3.5 The Town and Country Act of 1976 (Act 172) and its amendment acts of 1993, 1995, 2001 and 2005, provide a comprehensive system for the planning and control of the development and use of land in Peninsular Malaysia, including the conservation of urban heritage.

Provisions for planning control

B3.3.6 An important aspect of the Act is planning control. Under Section 19 of the Act, any person intending to carry out any development has to obtain a planning permission from the local planning authority (LPA). The definition of development is very wide and includes such works as:

- demolition, erection, re-erection, extension, roofing or re-roofing of a building or any part of a building,
- any addition or alteration of a building that is likely to materially affect the building in any manner,
- the making of any material change in the use of any land or building or any part of a building.

B3.3.7 An important provision that can be applied for the protection and conservation of intangible cultural heritage is the control of material change of building and land use. Under this provision, the proposed SAP will incorporate a system of classification of building uses and activities that will reflect the type of building uses and activities that define the OUVs of the WHS. The change of use from one use or activity classification to another will constitute a development and will require a planning permission. Indirectly in this way certain traditional heritage uses can be regulated and protected.

B3.3.8 In addition, Section 18 of the TCPA states that “no person shall use or permit to be used any land or building otherwise than in conformity with the local plan”. Local Plans include SAPs and hence, the SAP can provide measures to regulate and control activities and the use of buildings and land in the WHS.

B3.3.9 Under the TCPA, the local government is the LPA of its area, while the State Director of Town and Country Planning is the LPA of any area outside the area of the local government. In the case of George Town, the MBPP is the LPA. The LPA hence play a key role in the conservation and protection of heritage areas. On top of that the SPC, which is formed under the TCPA and which is chaired by the Chief Minister of the state, can make policies and give directions to his respective LPA in relation to the planning and control of development in their areas.

Procedures and Requirements in the Application and Processing for Planning Permission Under TCPA

B3.3.10 An application for planning permission is made to the LPA in a format prescribed by Rules (the MBPP is using the Town and Country Planning Act 1976, Planning Control (General) Rules 1990). The One Stop Centre (OSC) of the LPA provides administrative assistance to the LPA in the processing of the applications.

B3.3.11 Under section 21A (1), the applicant has to submit a Development Proposal Report (DPR) which may contain, among other information, particulars of the building which may be affected by the development, a land use analysis and its effect on the adjoining land, layout plans, and other matters as may be prescribed by rules, and, if specified by the State Authority, a Social Impact Assessment (SIA).

B3.3.12 The Layout Plans, which are required to be submitted together with the application, have to show the proposed measures for the improvement of its landscape, particulars of the character and appearance of buildings located in the surrounding area, where the development is in respect of a building with special architecture or historical interest, particulars to identify the building including its use and condition, special character, appearance, make and feature and measures for its protection, preservation and enhancement (Section 21B(1)).

B3.3.13 The LPA can give directions to an applicant in respect of matters concerning his layout plans as the local planning authority considers necessary (section 21B(2)).

B3.3.14 Under this section, the LPA can impose the requirement to submit the Heritage Impact Assessment as an item of the Development Proposal Report and the layout plans. This provision and other requirements can be strengthened by spelling them out in the Rules and the statutory development plans such as the SAP.

B3.3.15 If the proposed development is located in an area where there is no approved local plan or SAP, the LPA has to inform the owners of the neighbouring lands of their right to object to the application; if objections are received, and if so requested, the LPA has to conduct a hearing of the objections.

B3.3.16 The LPA, in dealing with an application for planning permission, has to take into consideration such matters as are in its opinion expedient or necessary for proper planning, and in particular:

- The provisions of the development plan, if any, ie, the State Structure Plan, the Local Plan, and the SAP;
- The direction given by the SPC, if any;
- The provisions that it thinks are likely to be made in any development plan under preparation or to be prepared, or the proposals relating to those provisions;
- The development proposal report; and
- The objections.

B3.3.17 The LPA will also take into consideration the requirements of the relevant technical departments and government agencies including the Department of National Heritage.

B3.3.18 The LPA can use the proposals in an SAP that is still under preparation as a basis for the consideration of applications for planning permission if it thinks it is relevant and important. The SAP under preparation is hence an important instrument for the WHS conservation.

B3.3.19 The SPC directions can provide guidance with regard to heritage conservation for the consideration of the LPA. This can be in the form of detailed Guidelines that may not be incorporated in the SAP.

B3.3.20 Under section 22(4)(a) the LPA cannot grant planning permission if the proposed development would contravene any provision of the development plan (local plan or structure plan or SAP).

B3.3.21 Once approved, the SAP is hence to be strictly complied with before the planning permission can be granted by the LPA. The SAP is hence a very strong instrument for the control of works in the WHS.

B3.3.22 Under section 22(5), in granting a planning permission, the LPA can impose conditions such as:

- Conditions to ensure that the new building or its extension is compatible with the architecture, character or appearance of the buildings located in the surrounding area, which the LPA intends to protect, preserve or enhance;
- Where the development involves any addition or alteration to an existing building with special architecture or historical interest, conditions to ensure that the facade and other external character of the building is retained; and
- Where the development involves the re-erection of a building with special architecture or historical interest or the demolition thereof and the erection of a new building in its place, conditions to ensure that the facade and other external character of the demolished building is retained.

B3.3.23 These are some of the treatments required for conservation of heritage buildings and areas. The conditions can include not only the control of physical appearance and character of new buildings and extensions, but also the type of building materials. Here the LPA can impose the requirements for the submission of the Dilapidation Survey Report with the Building Plan submission and the Progress Report when works are being carried out.

Building Control under the Street, Drainage and Building Act (SDBA)

B3.3.24 The Street, Drainage and Building Act 1974 (Act 133) provides powers to local authorities for the management and control of street, drainage and building works in their areas. Under section 70 of the Act, any person who intends to carry out any building works has to submit a building plan to the relevant local authority and obtain its approval.

B3.3.25 Such works include erection of a new building or part of a building, extension or increasing the height of an existing building, external major renovation to an existing building, converting to other purposes a house originally constructed as a dwelling-house or into a dwelling-house a building not originally constructed for human habitation. In considering the application for building plan approval the Local authority can give directions to the applicants. Such directions can include the class, design and appearance of the building is to be erected in a locality or street in which only buildings of a certain class, design or appearance may be erected.

B3.3.26 Section 79 requires a person who erects any partition, compartment, gallery, loft, roof, ceiling or other structure within a building to obtain permission, normally called a building permit, from the local authority.

B3.3.27 The SDBA is supported by a set of Uniform Building By-laws which the local authorities have adopted to provide the detail format, procedures and specifications for the implementation of the Act with respect to the control of building works.

B3.3.28 There are certain works and activities that do not require any approval or permission from the authorities under either the TCPA or the SDBA. These include works such as maintenance, repairs, re-plastering, and change of materials, that may nevertheless affect the integrity and authenticity of the heritage property. In such cases, other approaches have to be taken by the authorities such as giving incentives to property owners to encourage them to apply and consult the relevant authorities. This will be discussed in a later part of this chapter.

Formulation of Development Plans, Policies and Guidelines under the TCPA

B3.3.29 In the consideration by the LPA of the applications for planning permission, building plan approval, or building permit there is a need for development control plans and guidelines to assist and guide the officers and authorities in the processing and consideration of the applications. The TCPA requires the preparation and adoption of a hierarchy of development plans, ie:

- The National Physical Plan at the national level,
- The Structure Plan at the state level and
- The Local Plan and SAP at the local government level.

B3.3.30 These statutory plans together with other non-statutory guidelines form the basis for the consideration and the making of decisions by the authorities on applications for proposed works.

The National Physical Plan2 (NPP2)

B3.3.31 The NPP is prepared by the Direct General of the Federal Town and Country Planning Peninsular Malaysia under the direction of the National Physical Planning Council under section 6B of the TCPA. It is a long term strategic plan that contains written statements accompanied by indicative plans formulating strategic policies for the purpose of determining the general directions and trends of the physical development and conservation of Peninsular Malaysia. The NPP proposals are to be refined by the State Structure Plans and the Local Plans. The goal of the present NPP is “The Establishment Of An Efficient, Equitable And Sustainable National Spatial Framework To Guide The Overall Development Of The Country Towards Achieving A Developed And High-Income Nation Status By 2020”

B3.3.32 In the NPP, it is stated that “local planning shall be sensitive to the conservation of historical, cultural and architecturally outstanding areas to enhance the character and uniqueness of individual cities”.

The State Structure Plan (SSP)

B3.3.33 The SSP of a state is prepared by the State Director of the Town and Country Planning Department (SDTCP), under section 8 of the TCPA. It is a written statement, accompanied by indicative maps, diagrams and illustrations, formulating the policy and general proposals of the State Government in respect of the development and use of land in the state, including measures for the improvement of the physical living environment, the improvement of

communications, the management of traffic, the improvement of socio-economic well-being of the people of the state and the promotion of economic growth, and for facilitating sustainable development.

B3.3.34 Before the preparation of the draft structure plan by the State Director, the TCPA requires that a comprehensive survey of the state be instituted by the State Director, examining all the matters that may be expected to affect the development of the state, and a report of the survey be prepared, which is to be given publicity in order to allow an opportunity for the public to make representations to the State Director in respect to the findings of the survey and to the matters he proposes to include in the draft structure plan. After the draft structure plan has been prepared by the State Director, it is to be submitted to the SPC, which is chaired by the Chief Minister of the state, for consideration and approval. At the same time the draft structure plan is to be made available for inspection by the public, who is again given another opportunity to make objections to the draft plan to the SPC, and then to be heard, either privately by a sub-committee of the SPC, or in a local inquiry or hearing, before the draft plan is approved by the SPC, after consultation with the National Physical Planning Council. The plan comes into effect after the SPC's approval and the State Authority's assent.

B3.3.35 It is the duty of the State Director of Town and Country Planning to review the approved structure plan every five years in tandem with the State's five year development plans, and the NPP, but if the State Director so feels, and if so directed by the SPC, the structure plan, may be reviewed or altered at any time.

Local Plans (LP)

B3.3.36 A Local Plan is prepared, under section 12 of the TCPA, by the LPA. It contains a detailed map, a written statement, accompanied by diagrams, illustrations and descriptive matters, formulating the LPA's proposals for the use and development of land in its area, including the protection and improvement of the physical environment, the preservation of the natural topography, the improvement of the landscape, the preservation and planting of tress, the making up of open spaces, the preservation and enhancement of character and appearance of buildings, the improvement of communications, and any other matters specified by the SPC or as prescribed under rules made under the TCPA. The local plan, which has to conform to the general intentions of the national physical plan and the structure plan proposals, will apply and work out in detail the structure plan strategies. In particular it will serve as the basis for all decisions on planning permissions and development projects in the local planning authority area.

B3.3.37 Again at the local plan preparation stage, the TCPA requires that adequate public participation is incorporated in the preparation process. Even before the LPA commences to prepare the draft local plan, it has to ensure that publicity is given to the draft local plan that is to be prepared, its objectives, the purpose of its preparation, and the matters that the LPA proposes to include in the plan, so that the public is given the opportunity to make representations and recommendations to the LPA to be considered in it's formulation of the draft local plan. After the draft local plan has been prepared it has to be made available for inspection by the public, which is given another opportunity, this time to object to the draft plan in writing to the LPA, and, if so considered desirable by the LPA, to be heard in a

local inquiry or hearing by a committee appointed by the SPC. After considering the objections and other representations, the LPA submits the draft local plan, with or without modifications, to the SPC for consideration. After the approval of the SPC and the assent given by the State Authority, the Local Plan comes into effect. (Sections 12A,13,14 and 15).

B3.3.38 The LPA may make proposals on its own, or, if so directed by the SPC, shall make such proposals in accordance with the directions, for the alteration, repeal, or replacement of the approved local plan. The procedures for the public to make objections to the proposals have to be adhered to as in the preparation of the original local plan. If the LPA has failed to take steps to prepare its draft local plan, or proposals for the alteration, repeal, or replacement of the approved local plan, the SPC may direct the State Director of Town and Country Planning to do so on behalf of the LPA (Sections 16 and 16A).

Special Area Plan (SAP)

B3.3.39 A Special Area is an area planned for special and detailed treatment by development, redevelopment, improvement and/ or conservation. The plan can designate the agency or agencies to carry out the development and spell out the manner in which it is to be implemented. A SAP is hence a more detailed local plan for an area that has been ear marked for immediate or urgent development. The comprehensive management and protection of the heritage buildings and tangible objects in the WHS under the TCPA will hinge a lot on the SAP.

B3.3.40 Under section 16B, the LPA or the State Director of Town and Country Planning (SDTCP) on its or his own initiative or if directed by the SPC can prepare the SAP, which is prepared in the same procedure as a Local Plan.

B3.3.41 The main components of an SAP is the proposals map accompanied by written statements, diagrams and illustrations, which incorporate detailed guidance for the implementation and management of the plan.

Procedures in the preparation of the SAP

B3.3.42 Before commencing the preparation of the SAP, the LPA or Director has to take steps to give publicity to the preparation of the plan, its objectives, purpose and matters that are to be included in the plan, and to give the public the opportunity to give their views and comments (Section 12A).

B3.3.43 When the SAP has been drafted, copies of the draft SAP have to be shown to the public to give the public an opportunity to raise objections or give comments. The public is to be informed by notices in a local newspaper, stating the places where the copies are available for inspection and the period for objections to be made (Section 13).

B3.3.44 A local inquiry or hearing or objections may be held by a committee of 3 persons appointed by the SPC (Section 14).

B3.3.45 The draft SAP, together with the objections, is then submitted to the SPC for consideration for approval with or without modifications, or rejection. If approved by the SPC, the plan is then submitted to the State Authority for assent and after the assent the plan comes into force (Section 15 (1), (1C)).

Existing Statutory Plans

B3.3.46 The statutory plans that have been prepared and related to the George Town WHS:

- Penang State Structure Plan 2020 (gazetted on 28 June 2007); and
- Penang Island Draft Local Plan (currently awaiting approval).

Existing Non-Statutory Plans and Guidelines

B3.3.47 Other than the statutory plans enforced under Part III of the TCPA, both the cities are also using several non-statutory plans and documents which have been either adopted by the LPAs themselves, or as directions from the respective SPC under section 4 (5) of the TCPA. These instruments can be in the form of policies, guide plans and guidelines, and the LPA has to follow these directions in its processing and consideration of applications for planning permission and building plan approval. The term non-statutory is used to mean those plans and documents that are not prepared under the main sections of the acts. However, if instituted and adopted formally at either the local authority level or through the respective State Authorities or relevant Committees, these instruments can validly be used to guide and control decisions on applications, as the TCPA and SDBA leaves entirely to the discretion of the local authorities in their considerations and decision-making, even where there is no statutory guide plans.

B3.3.48 The non-statutory plans, policies and guidelines being used include:

MBPP:

- Policy Plan for the Planning and Control of Development 1996. This is a land use zoning and guide plan for the whole island of Penang, which incorporates a list of guidelines for the land use, densities and plot ratios of new development, height control, etc;
- Regulations/ Guidelines for Conservation Areas & Heritage Buildings 2007; and
- Heritage Management Plan for the Historic City of George Town, adopted by the SPC on 12 February 2008.

B3.3.49 The TCPA is hence a useful act which can be applied in the conservation planning and management of heritage assets in the WHS. Although it is generally an instrument for the spatial and physical aspects of development, it also applies in the control of the use of land and buildings, which to a certain extent can be used to protect intangible cultural heritage in the WHS, such as traditional trades. For this purpose, this can be more specifically defined and spelt out in the Rules made under the Act and in the development plans, especially the SAPs. However there are still many areas which are beyond the ambit of the TCPA, particularly in respect of the intangibles. This has to be covered under the National Heritage Act 2005.

Heritage Protection under the National Heritage Act 2005 (Act 645)

B3.2.50 The National Heritage Act 2005 (NHA) provides “for the conservation and preservation of National Heritage, natural heritage, tangible and intangible, cultural heritage, underwater cultural heritage, treasure-trove and for related matters”. It became effective on 1 March 2006. This Act incorporates all the provisions of the Antiquity Act 1976 and Treasure Trove Act 1957 and replaces them. It includes provisions for the formation of a National Heritage Council, the appointment of a Commissioner of Heritage, the setting up of a Heritage Fund, and the establishment of a National Heritage Register in which are registered heritage items such as

heritage sites, heritage objects, National Heritage, treasure troves, provides for licensing, appeal, and enforcement of offences.

B3.3.51 The Department of National Heritage was set up under the Ministry of Culture, Arts and Heritage (now known as the Ministry of Information, Communications and Culture) to implement the Act. The Minister is responsible for formulating policies and issuing directives with regards to heritage protection and activities and to appoint the Commissioner of Heritage.

B3.3.52 The tasks of the Commissioner of Heritage include establishing and maintaining the National Heritage register for the designating and registering of heritage items, establishing liaison and co-operation with State Authorities and Local planning Authorities in respect of conservation and preservation of heritage matters; advising the Minister, National Heritage Council and other bodies at all levels for the purpose of safeguarding, promoting and dealing with any heritage. In carrying out his duty, the Commissioner is assisted by the Deputy Commissioner(s), Assistant Commissioners and other officers, all are the Minister's appointees.

The National Heritage Council consists of members appointed by the Minister and serves to advise the Minister and the Commissioner on all matters relating to heritage.

B3.3.53 A Heritage Fund is established under the Act, which is to be controlled by the Commissioner for the purposes of purchasing heritage and conservation areas, expenses incurred for conservation and preservation including organising campaigns, research, study, publication of materials etc. and giving of grants and loans.

B3.3.54 The Commissioner, in consultation with the National Heritage Council, is responsible for preparing the CMP for the purposes of:

(a) promoting the conservation, preservation, rehabilitation, restoration or reconstruction of a heritage site;

(b) ensuring the proper management of a heritage site including the use and development of all buildings and lands in the heritage site and the preservation of the environment including measures for the improvement of the physical living environment, communications, socio-economic wellbeing, the management of traffic and the promotion of economic growth; and

(c) promoting schemes for the education of, or for practical and financial assistance to, owners and occupiers, and for community involvement in decision making.

B3.3.55 Under section 112, a person has to obtain the approval of the Commissioner if he wishes to carry out any works or activity that may cause damage in the heritage areas or sites. This is a powerful section, and the works that can be controlled include any demolition, disturbance, destruction, modification or removal of any monument in the heritage site. This covers all repair and modification works of

a heritage building, which are not covered under the TCPA or SDBA. The maximum fine for offences, however, is only RM 50,000, compared to RM 500,000 under the TCPA.)

B3.3.56 The National Heritage Act, 2005 is a very powerful and effective instrument for the conservation of the WHS, and gives powers to the Commissioner to protect, manage, plan, promote and provide funds for the heritage conservation areas and heritage buildings, monuments and objects, including the intangible cultural heritage. However the process of declaring, designating and registering the heritage items are tedious and time consuming. The cost factor is also a big deterrence, as the cost of renovation and restoration of heritage buildings and monuments for example, not to mention of acquiring heritage properties will be huge.

Regulating of Activities through Licensing Under the Local Government Act 1976 (Act 171)

B3.3.57 The Local Government Act 1976 (Act 171) provides for the administrative and management powers and conduct of business of the local authority in managing its area, specifically on matters necessary or desirable for the maintenance of the health, safety and well-being of the inhabitants or for the good order and government of the local authority area.

B3.3.58 Section 102 of the Act gives powers to the local authority to make by-laws with regard to these matters. The matters that are relevant for the management of the WHS include:

- to control and supervise, by registration, licensing or otherwise, including in proper cases by prohibition, a trade, business or industry which is of an obnoxious nature or which could be a source of nuisance, (subsection s);
- to define the streets or areas within which shops, warehouses, factories or business premises may not be erected, or within which specified trades, businesses or callings may not be established or carried on, (Subsection I);
- to regulate, license, restrict, prevent or remove the exhibition of advertisements (Subsection C); and
- to provide for the establishment, regulation, inspection and licensing of places of entertainment, public recreation or public resort, and to make regulations governing the means of ingress to and egress from such places and for providing adequate parking space adjacent or in reasonable proximity thereto, (p).

B3.3.59 Under section 73 (g), the local authority can make by-laws to regulate, supervise and license pedlars, hawkers and street traders and to prescribe streets or areas in which peddling, hawking or street trading shall be prohibited.

Section 107 empowers the local authority to revoke at any time or renew or refuse to grant any license without assigning any reason, and in the granting of licenses, to impose any condition or restriction as it may think fit.

B3.3.60 Although the provisions under the LGA are not directly related to heritage conservation, some of the provisions can be used to regulate and control uses and activities that may affect the OUVs of the WHS, including certain intangible cultural and traditional trades. However clear guidelines have to be prepared to guide decision-making on applications of licenses and the SAP will be useful for this purpose

Public Participation under the TCPA and the NHA

B3.3.61 The participation and involvement of the public is a crucial element in the process of preparing plans especially where the plans and proposals will affect the people's living environment and their socio-economic standard. Heritage conservation has always been a touchy subject, and where the conservation visions and strategies of the government are looked upon as creating uncalled-for restrictions to the people's aspiration of creating wealth through the enhancement of their property values through new and modern development, the objections of the people towards the conservation plans are understandable. To alleviate these fears, the government authorities have to engage the public and the stake holders in every step of the process, to educate and invite them to participate in the preparation of and hopefully to support the conservation plan.

B3.3.65 The TCPA requires that even before the SAP is drafted by the LPA under the TCPA, the public has to be notified and invited to give their views and ideas on the plan proposals. When the draft plan has been prepared, another round of publicity is made where the people can examine the draft and raise objections or give suggestions, and the SPC has to take into consideration of all the objections and views before the plan can be approved.

B3.3.66 In a similar vein, all applications for planning permission are referred to neighbouring land owners for them to raise objections in writing, if they have any, to the proposed development applied for. If the objectors so request, they are given the opportunity voice their objections in a hearing. All objections raised are to be considered before the planning permission is granted. If the application is approved in spite of the objections, the objectors can appeal to an Appeal Board formed under the TCPA.

B3.3.67 Under the NHA, an owner or any other person affected or likely to be affected by the designation of a heritage site may make an objection to the designation of the site, and where an objections has been made, the Commissioner of Heritage has to conduct a hearing of the objection, before deciding to continue with the designation and registration of the site.

Present Procedures adopted in Melaka and George Town for the Processing of Applications for Planning Permission and Building Plan Approvals in the WHS Areas.

B3.3.68 The procedures adopted in MBPP almost follow the TCPA. An application for planning permission or building plan approval is submitted to the One-Stop Centre (OSC) set-up in the LPAs, through the consultants. The OSC then circulates the application, together with the layout or building plans, and other documents, to the various relevant government technical departments or agencies for their comments and requirements. For major projects, either in terms of scale or impact, the application is also referred to the Department of National Heritage. The plan is then sent back to the consultant to be amended to comply with the departmental requirements, before being tabled by the Town Planning Department for planning permission applications or the Building Department for building plan applications, to the LPA One-Stop Centre (OSC) Committee for approval or rejection.

B3.3.69 For minor works or simple building plans, the applicant through his consultant can table direct to the OSC Committee for on-the-spot approval. For simple renovation and repair works, the Director of Buildings can give a repair permit. The various procedures are shown in Figure B3.1.

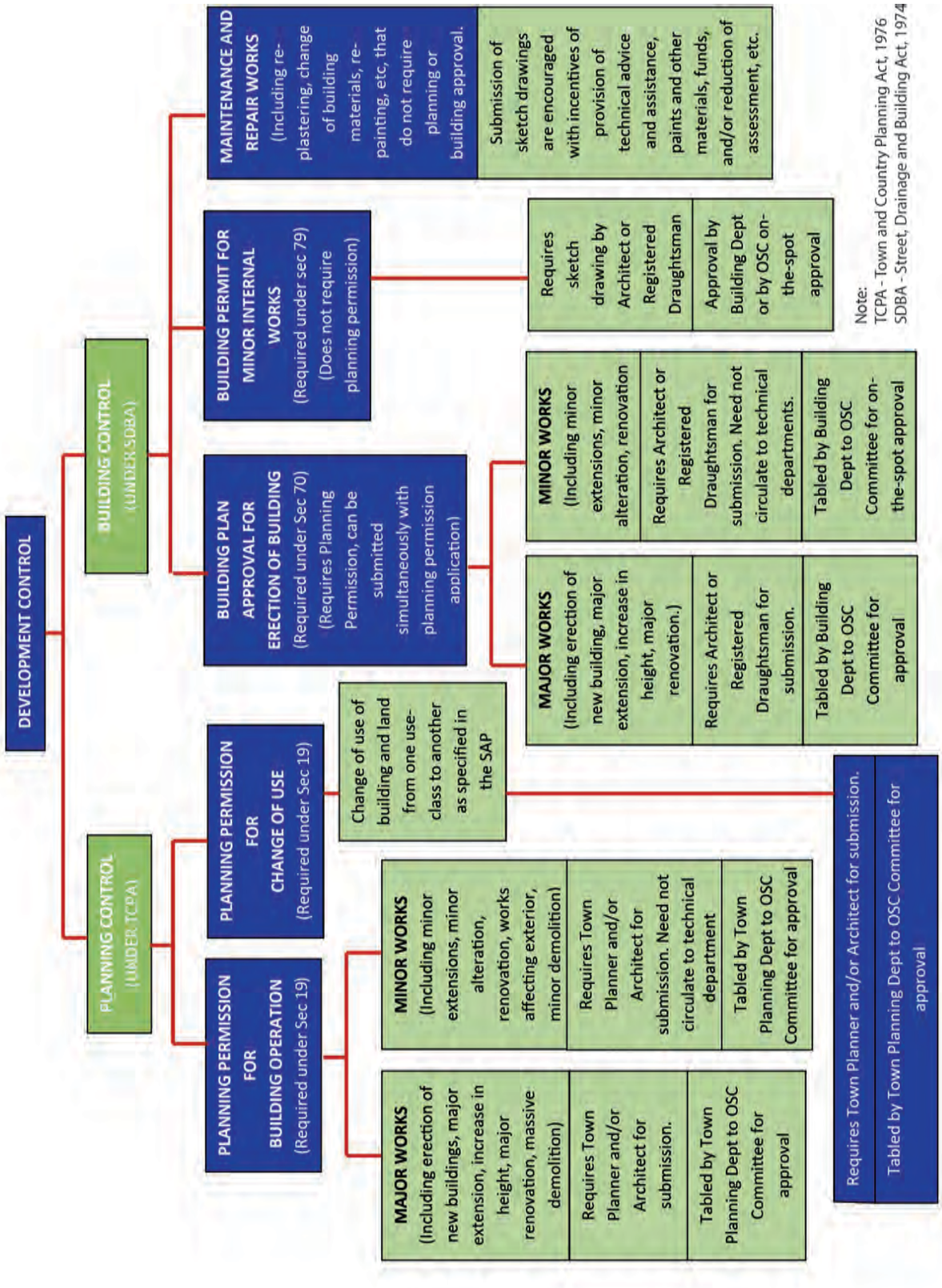


Figure B3.1: Chart Showing Control of Works and Activities in the WHS Under TCPA and SDBA

B3.4 Existing Institutional and Organisational Set-up for Heritage Conservation

B3.4.1 The institutional framework that supports the heritage conservation works of the government can either be statutory that is required under the laws, or non-statutory that is set-up administratively.

Statutory Institutional Set-up

B3.4.2 Following the present laws, the main statutory key players with the authority and responsibility of heritage conservation (and the laws they operate under) are:

At the federal level:

- The Federal Minister in charge of heritage (NHA);
- The Commissioner of Heritage (NHA);
- The National Heritage Council (NHA);
- The National Physical Planning Council (TCPA); and
- The Director General of Town and Country Planning, who is also the secretary of the National Physical Planning Council (TCPA).

At the state level:

- The State Authority (TCPA, SDBA, LGA,);
- The State Planning Committee (TCPA);
- The State Director of Town and Country Planning, who is also the secretary of the SPC (TCPA); and

And at the local level:

- The local authorities (TCPA, SDBA, LGA, NHA).

Administrative Set-up

B3.4.3 Each of these authorities has set up its own machinery and administrative support system to carry out its responsibilities and functions. These include:

At the federal level:

- the Department of National Heritage whose present Director-General is the Commissioner of Heritage; and
- the Federal Department of Town and Country Planning.

At the state level,

- the State Heritage Committees to advice their respective State Planning Committees and State Executive Councils.

At the local planning authority level,

- the Town Planning Departments and the Building Departments;
- the Heritage Department;
- the Technical Renew Panels to help in the evaluation and consideration of planning and building applications;
- the One Stop Centres (OSC) in the LPAs to assist in the administrative processing of applications; and
- the One Stop Centre Committee.

The Department of National Heritage

B3.4.4 The Department of National Heritage (DNH) is the key department at the national level in the safeguarding of natural, cultural and archeological heritage. The DNH was established with the enforcement of National Heritage Act 2005 on 1 March 2006. Prior to this, it was a division under the then Ministry of Culture, Arts and Heritage. The objectives of the Department are to conserve, maintain and protect the nation's cultural, natural and archeological heritage through research, documentation, enforcement and raising awareness of heritage by means of:

- maintaining the National Heritage Register;
- conservation of heritage items;
- dissemination of knowledge on heritage; and
- enhancing expertise in various heritage fields.

B3.4.5 However, the current scope of DNH is very much on the conservation of monuments, sites and others that comes under the national interest.
The head of the DNH is the Director General, who is also the Commissioner of Heritage.

The Federal Town and Country Planning Department

B3.4.6 Town planning is a matter that is the responsibility of both the Federal and State Governments. Under the TCPA, the local government and the Directors General of Federal Town and Country Planning Department are responsible for the planning of development and use of land in their areas. The local government is however the approving authority for applications of planning permission on a day-to-day basis, but they have to abide by the plans and policies made at Federal and State levels, and for major projects have to obtain the clearance from the higher levels, which are monitored by the Directors, by virtue of being secretaries of the planning councils and planning committees at their respective levels. This can be viewed as a checks-and-balances system for the monitoring of development at the local level.

Penang State Heritage Committee

B3.4.7 The State Heritage Committee acts as the highest level of state government to monitor the implementation of the heritage management plan in the state. Its jurisdiction covers areas that include UNESCO designated heritage area and those outside this area. The Committee is chaired by the Chief Minister while the secretary is the State Director of Town and Country Planning Departmnent. Members in the Committee include State Executive Council members, heritage experts, local community leaders and technical agencies of the state and the DNH.

MBPP Heritage Conservation Department

B3.4.11 The MBPP Heritage Unit has been established since July 2011. Prior to that, the department was a unit under the Building Department of MBPP. Its main role is to check on applications for development in heritage areas, and to advise the council and the state government on heritage conservation matters.

Technical Review Panel

B3.4.12 Technical Review Panel have been set up in MBPP. The panel meets to assist the local authority in the evaluation of proposed development projects submitted in planning permission and building plan applications. The panel is chaired by the Mayor/ Presidents and the members include knowledgeable professionals.

The role of the Civil Society in conservation efforts in the WHS

B3.4.13 The Civil Society and Non-Government Organisations (NGOs) have been playing a major role in the conservation activities in both George Town and Melaka. The Civil Society acts as a watch dog on the activities of the government and the private sectors that affect the heritage matters in their areas. Besides lobbying the State and Local Governments over their concern on heritage issues, NGOs like the Penang Heritage trust run their own programmes to create awareness, educate the public and children, raise funds and carry out research and projects on heritage conservation. Besides NGOs, Civil Society in George Town and Melaka include:

- local communities;
- local leaders, community representatives;
- local associations;
- clan associations;
- trades associations;
- workers groups;
- nature and environmental protection societies;
- consumer societies;
- resident associations;
- rate payers associations;
- children and women groups;
- professional groups;
- human rights societies; and
- concerned individuals,

B3.4.14 Being a democratic country, the governments at both the federal and state levels are aware of the power and the driving force of concerned groups and citizens, and are always eager to engage them on all matters related to heritage conservation.

Weaknesses of existing institutional and administrative set-up

B3.4.15 The implementation of the management plan and the SAP and its monitoring will require a strong administrative set-up, adequate staff strength, personnel competency, access to information and knowledge, and efficient procedural and management systems. There are, however, still many weaknesses in the existing government institutional and administrative set-up. These include shortage of staff, lack of experience, non-expertise, incompetency, bureaucracy and red tape that hampers the efficiency of the government machinery, lack of cooperation and coordination among the departments and workers, lack of information, guidance and leadership and lack of adequate equipment, among other problems.

A8.4.16 The decision-making process is often unduly tedious and long. This is due often to the government bodies being sometimes unsure of the best planning options, proposals and strategies. The use of more sophisticated computer softwares and the geographic information system (GIS) will facilitate and hasten the process of data compilation, analysis, mapping, presentation and decision-making. There is a need to keep up to date all the information that has been compiled.

B3.4.17 The procedures in the approval of planning permission and building plans are sometimes unnecessary tedious and time consuming. There are many causes of these delays, including:

- unclear development plans and guidelines;
- unclear and imprecise recommendations on the part of the planning officers;
- indecisions in the consideration of the applications;
- too many irrelevant and unnecessary, and sometimes, conflicting requirements and comments from the technical departments;

- too many departments and committees processing and considering the applications;
- unclear system and procedures of processing of applications, some steps are unnecessary, overlapping and/ or redundant; and
- the applicants and their agents are not competent.

B3.4.18 There is no adequate method to assess the heritage impact of proposed development. A more precise set of criteria and indicators for heritage impact assessment should be formulated, along with a more precise and quick method of evaluating the impacts. These will be invaluable for responsible and effective decision-making in the development control process.

B3.4.19 This is inadequate monitoring of offences and lack of enforcement taken under the planning and building laws. Reasons for the delays and inefficiencies include:

- Some parts of the law and by-laws are not clear;
- Insufficient supervising officers and inspectors;
- The charging and conviction of offenders through the court of law are tedious and time consuming;
- The fines and penalties are not high enough to create a significant deterrence to potential offenders; and
- There are often interferences by politicians.

B3.5 Strengthening the Administrative Set-up and Legal Provisions

B3.5.1 Steps have been initiated in Penang to strengthen the institutional framework and management mechanisms so as to carry out the necessary implementation programmes more effectively and efficiently, and in a more coordinated manner, as proposed in the George Town Heritage Management Plan 2008. These steps include enhancing the role of the State Heritage Committees, institutionalising and enlarging the World Heritage Office, upgrading the Heritage Units in the local authorities to full-fletch departments, increasing the role of the DNH and the Commissioner of Heritage at the State and Local Authority levels, and improving coordination and collaboration Melaka WHS in their conservation management efforts. At the same time the main laws, the TCPA and the NHA are being reviewed to strengthen them further and to make them more effective in the conservation and protection of the WHS and their OUVs.

Enhancing the Role of the State Heritage Committee (SHC)

B3.5.2 The SHC has been formed in Penang to act as the main body to monitor the management of the WHS and of other conservation areas and heritage buildings in the state. It will oversee the implementation of the CMP and act as a forum for the discussion of issues concerning management of the Site in its state among the different levels of government. It gives directions to the Local Authorities and other implementing departments through the SPC and the State Executive Committee for which it acts as the advisor on heritage matters. The committees are chaired by the respective Chief Ministers and members include the relevant State Executive Councillors, the respective State Director Town and Country Planning Department, State Legal Officer, and State Financial Officer.

B3.5.3 Other members include the State Secretary, the Director of State Economic Planning Unit, the President of MBPP, and representatives from the Department of National Heritage, the National Heritage

Trust (Badan Warisan Negara) and the Penang Heritage Trust, and no more than three individual heritage experts or representatives of local business and community, with a total of not more than 15 members and the General Manager of the World Heritage Office is the secretary.

B3.5.4 Broadly the committee's tasks include:

i) To advise the State Planning Authority and the SPC on all heritage conservation matters in the state;

ii) To steer and monitor the preparation of the Heritage CMP, the SAP, the Heritage Conservation Guidelines, and the review of the existing laws, the making of new enactments, rules, regulations and by-laws for the purpose of conservation management of the WHS and other conservation areas in the state;

iii) To liaise and coordinate with the (National) Commissioner of Heritage, and the partner city on the conservation of the WHS;

iv) To monitor the implementation, and to ensure the smooth progress of implementation the CMP, the SAP, and other conservation plans projects by all the relevant authorities and agencies;

v) To keep under review the achievements of the objectives and the vision of the CMP and the SAP and propose amendments and alterations to these plans to better achieve the desired results;

vi) To formulate principles, policies, proposals and programmes and give directions for heritage conservation;

vii) To oversee and monitor the works of the World Heritage Office;

viii) To advise and over — see fund raising programmes and projects for heritage conservation;

ix) To approve all budgets, including those for major conservation, restoration and preservation projects, and other programmes and projects undertaken by the WHO; and

x) To adjudicate on disputes on heritage conservation and management.

Up-grading the Heritage to Heritage Departments

B3.5.5 With the inscription of George Town UNESCO WHS, the increase in the importance and the volume of work and responsibility for the conservation of the historic cities warrants the up-grading of the Local Authorities' units in charge of conservation to the level of a department on par with other departments in the MBPP. The Heritage Departments will be responsible for the evaluation and recommendation on all planning and building plan applications, and the inspection and monitoring of physical development in the Site. It will report to the SHC through its representation as an ex-officio member of the SHC.

B3.5.6 The Heritage Department will be headed by a Director and supported by a full team of professional, technical and clerical staff. The Director of the Heritage Department can come from any of the related built environment disciplines, preferably an architect or town planner, and must have knowledge and experience in cultural heritage management.

B3.5.7 In particular the functions of the Heritage Department include:

i) To process and monitor the applications of planning permission and building plans of proposed works in the WHS, and in the process to evaluate the plans, design, and the heritage impact;
ii) To prepare and keep in review the Conservation Guidelines for conservation of heritage buildings and sites and to implement these Guidelines;
iii) To carry out periodic inspections and undertake surveys on heritage buildings for compliance with Conservation Guidelines and best practice standards;
iv) To maintain and up-date the data bank and inventory of heritage sites and properties, including of intangible cultural heritage;
v) To provide advice and consultation to property owners, consultants, developers and the general public on the planning, design, renovations, amendments, additions, extensions, reconstruction, change of use, repairs, maintenance and other matters pertaining to heritage conservation of heritage buildings; and
vi) To undertake programmes to raise awareness and educate public, members of the community, owners and residents on conservation standards and practice.

Enlarging the Organisation and Functions of the World Heritage Office

B3.5.8 World Heritage Offices are set up as an assurance to the WHC so that the World Heritage Sites can be adequately protected. In spirit of the setting up of the Heritage Departments in the Local Authorities, there will still be weaknesses and problems for the Departments and the Local Authorities to fully carry out the demands for good and successful conservation and safeguarding of the WHS. Local Authorities have their limitation, which include the lack of expertise and experienced staff, lack of incentive and motivation, financial constraints, and the bureaucratic constraints to hire and reward good staff or punish wayward ones, that will form a stumbling block in the efforts on heritage and conservation management.

B3.5.9 The need to set up a special purpose vehicle to assist the state and local governments in the conservation of their historic cities has long been felt. The Penang State government has moved to set up such an organisation in 2010 and is currently in operation with a skeletal organisational set-up. The George Town World Heritage Incorporated (GTWHI) was established under the Company Act 1965. It is important that state governments establish the required WHO to support the institutions, especially the local governments concerned, towards heritage and conservation management at the Sites.

B3.5.10 The primary function of the WHO will be to manage and liaise with the local authorities as well as State and Federal agencies on all matters pertaining to the Site which are currently outside the purview of the statutory system, including branding, promotion, tourism and liaison with State, Federal and International organisations and agencies for betterment of the Site. Bearing in mind that this is a living site, the WHO also liaises with the community that lives and work there. Issues that arise could include matters pertaining to public transportation, security, research, impact studies, site

interpretation, public awareness and community liaison.

B3.5.11 Essentially, the WHO will ensure unified management and implementation of the CMP, and it will play the role of the *de facto* site manager. The WHO is headed by a General Manager who must be knowledgeable in matters related to the conservation and management of heritage sites.

B3.5.12 The WHO compliments, assist and supports the Local Authorities in carrying out all the functions necessary for the efficient and effective management of the WHS. These functions can be divided into statutory and non-statutory functions, and the non-statutory tasks can be outsourced to the WHO. The legal scope of the local authority and the WHO is shown in Table B3.1. The WHO must also have the ability to hire and fire as freely as possible, and not be saddled with bureaucracies and red tape in making decisions and taking actions, like the public agencies.

B3.5.13 The divided functions of the local government and the WHO are shown in Table B3.2 and Figure B3.2. As the WHO is to co-exist with the local authority in managing heritage sites of the respective cities, the WHO should have the right structure to administer and provide services to ensure the non-statutory functions are taken care of in the management of heritage sites. This takes the view that statutory functions will continue to be function of the local government.

B3.5.14 The organisational structure that would befit WHO in George Town is as shown in Figure B3.3. This structure incorporates the proposed guidelines of the Department of National Heritage as per Guidelines to the Establishment of World Heritage Office for Melaka and George Town World Heritage Sites, formulated by DNH under consultation with both state authorities in 2010.

B3.5.15 In addition, the structure incorporates the need to have a technical advisory section which would provide assistance and guidance on heritage matters to individuals and developers besides attending to request for opinions from local government concerned on applications received from the heritage sites. In addition, an Archives Section is deemed necessary for the WHO to function as a Depository System at the site, and one that can have a formal linkage with the National Archives Department and the Department of Museums Malaysia.

B3.5.16 The George Town World Heritage Incorporated (GTWHI) has already been incorporated as a corporate body under the Companies Act, 1965 in the form of a company limited by guarantee and not having a share capital.

Table B3.1: Statutory and Non-statutory functions of the Local Authorities and the WHO in Heritage Management

Heritage Management Local Level		
Organisation	Local Government (1) MBPP Federal Government (1) Department of National Heritage	(1) George Town WHO (i.e. World Heritage Incorporated Office, GTWHI)
Scope of Functions	Statutory	Non-Statutory

Table B3.2: Functions of Local Government and WHO

Local Government (Statutory functions)	WHO (Non-statutory functions)
1. Planning and building control 2. Urban services 3. Enforcement 4. Licensing 5. Infrastructure development 6. Legal services 7. Formulation and Adoption of Policies 8. Sourcing development funds (from state and federal government). 9. Technical advisory 10. Road construction and management and utility works	1. Education and awareness 2. Monitoring the implementation of CMP 3. Monitoring the heritage premises 4. Maintenance of the registry 5. Provide incentives 6. Implement projects (enhancement, cultural, maintenance and landscaping) 7. Raise funds 8. Reporting of performance and activities 9. Review Plan 10. Publicity 11. Conduct Studies and Research 12. Manage Heritage Trust Fund 13. Capacity building

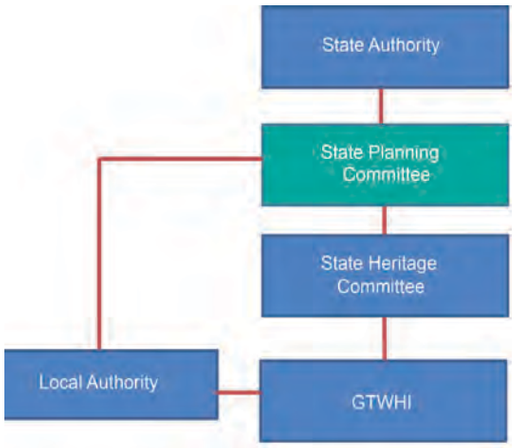


Figure B3.2: Management of WHO at State Level

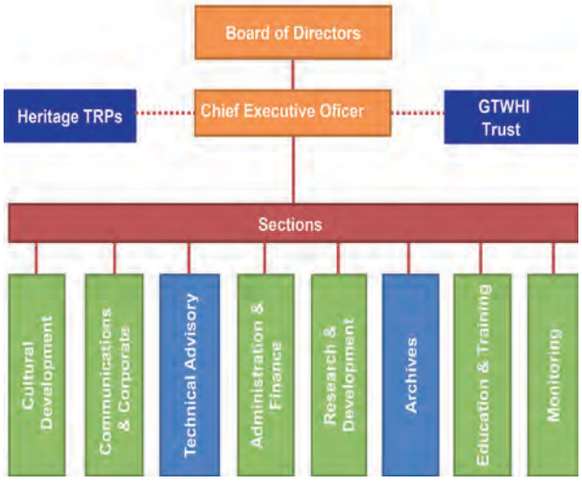


Figure B3.3: Organisational Structure of WHO

B3.5.17 The functions of the WHO at George Town would include the following:

- To supervise respective heritage sites in line with the need of CMP;
- To develop and manage a heritage database for effective implementation and monitoring;
- To support research and development in heritage;
- To promote sustainable development of cultural tourism and manage tourist services and facilities;
- To support local community involvement in conservation of their cultural heritage;
- To promote socio-economic development of local residents;
- To promote awareness on heritage by implementing programmes;
- To recommend, implement and fund projects and programmes in relation to heritage conservation;

- To prepare, manage and control the finances of the organisation;
- To seek funding;
- To prepare and present reports on the implementation of the CMP; AND
- To function as the secretary to the State Heritage Steering Committee, and coordinate meetings towards effective management of the CMP.

A8.5.18 The functions of the Sections in the WHO of both cities are as shown in Table B3.3. With the designated functions for the sections, the General Manager will have to be able to carry out the following key functions:

- Manage, promote and administer the WHO;
- Chair meetings at WHO level;
- Seek participation of experts and citizens on specific areas/ topics;
- Organises workshops and seminars for information dissemination, training and capacity building;
- Managing the Trust Account;
- Administer incentives;
- Seeking financial resources;
- Facilitate and coordinate local citizen meetings;
- Represent the state government on heritage matters;
- Prepare periodical reports;
- Publish information;
- Promote local heritage area; and
- Monitor heritage site.

B3.5.19 To help perform its duties, the following are to be established whenever the need arises at respective WHO:

(i) Technical Review Panel (TRP). Until the SAP is approved by the state government, it is important that 2 TRPs are established under each WHO, one is to provide expertise on funding and incentive matters; and the other to advise WHO on planning and control applications and related matters. In addition, the WHO may establish any other TRP as need be. The TRP cannot make decisions but may advises and make recommendations to the WHO or the local authority on heritage matters. For TRPs, each of the WHO is to establish a directory of experts who could fit into the TRPs. Each TRP meeting may be convened with different combinations of experts, of at least three experts on a rotational and availability basis.

(ii) Working Committee with Local Authorities and Technical Departments. There is a need for the WHO to convene a periodical meeting with local authorities; and with other technical departments in relations to heritage management.

(iii) Stakeholder groups. The WHO may convene stakeholder meetings to work towards getting opinions and public participation on heritage conservation and preservation initiatives. These meetings can be held as frequently as possible depending on the needs as viewed by the WHO.

(iv) Topic-based Working Groups. These groups could be formed to address issues that emerge and to seek expert opinions. These experts could be players in the trades and economic activities concerned. For example, hoteliers could be requested to attend to provide their input on tourist accommodation in heritage areas.

Table B3.3: Functions by Section of the SPV

Section	Key Functions
Cultural Development	– Promote and manage socio-economic development of local communities – Develop sustainable cultural tourism and manage visitor facilities and services.
Communications & Corporate	– Public relations and publicity – Complaints and participation – Information management and production of materials – Encourage community awareness and public participation in conservation management – Liaising with federal, state and international organisations and agencies – Communication with international WHS offices
Technical Advisory	– Provide avenues for public consultation – Provide professional advisory services to applicants
Administration & Finance	– Administration – Raising and managing funds – Develop proposals and funding packages for major projects – Prepare budgets and to manage, monitor expenditures
Research & Development	– Encourage and facilitate research – Establishing baseline data and information on built and cultural elements
Archives	– Managing documents on heritage site – Seeking, collecting and purchasing archiving information – Ensuring an effective mechanism on archives and its protection – Depository system about the Site
Education & Training	– Strategising policies – Capacity building – Raising awareness – Instrument and tool development – Teaching and learning in formal and non-formal aspects
Monitoring	– Supervising the monitoring of the site – Ensuring conservation of built and living heritage – Monitoring threats to OUV on the site – Risk management – Coordinating with various agencies and authorities

Similarly, petty traders, tinsmiths, ironsmith, goldsmiths and others alike could be specific groups who can be requested to participate in relation to continuing their traditional trades.

(v) Staffing and Training. It is important that sufficient numbers of staff are hired by the WHO and stringent measures are undertaken to ensure they are able to perform multi-tasking, though it should keep a reduced number of staff so as to reduce wastage of public funds. To begin with, each WHO may employ about 30 persons and this number can be increased over time depending on the availability of funds. In addition, it is necessary that each staff is highly trained to provide their professional services to WHO and the parties that require their inputs.

(vi) Trust Account and the Finance Advisory Committee at WHO. A Trust Account can be set up by the WHO to fund its expenses on its heritage conservation management. The Finance Advisory Committee will become a tool in the management of the Trust and to advise the CEO on financial matters including raising funds for the Trust. It is important for members of the Advisory committee to have knowledge of finance. The Finance Advisory Committee may propose the Trustees for the Trust Account. Members of the TRP committees may be considered as Trustees for the Trust Account.

(vii) Charging fees. WHO may impose fees on some of the services to cover its costs. For example, the Technical Advisory Section in WHO may charge a fee to advice applicants.

(viii) Finance Advisory Committee. This committee is to assist the WHO in matters pertaining to financial matters including that of the Heritage Trust Fund under respective WHOs. It is also to serve as an internal financial audit under WHO. For this purpose, it is imperative that a qualified accountant's service is required under this committee to perform with two other members from the Board of Directors.

(ix) Empowering the WHO. In order to facilitate the WHO to perform the roles above and to call for meetings, it is important that sufficient power is conferred upon the WHIs. Towards this end, the state enactments will need to make necessary amendments/ incorporation of related clauses.

The role of the WHO in the development planning and control process in the WHS

B3.5.20 The WHO will play a key role in the preparation of the SAP by the LPA and in the control and regulation of development and building works and activities in the WHS. As shown in Figure B3.4, the WHO will be providing crucial technical, professional and administrative advice, support and assistance to the LPA in every step in the preparation, providing public education and obtaining public participation, and advising the SPC in the consideration of the draft SAP before approval. Major projects in the WHS will also need the consent of the Department of National Heritage.

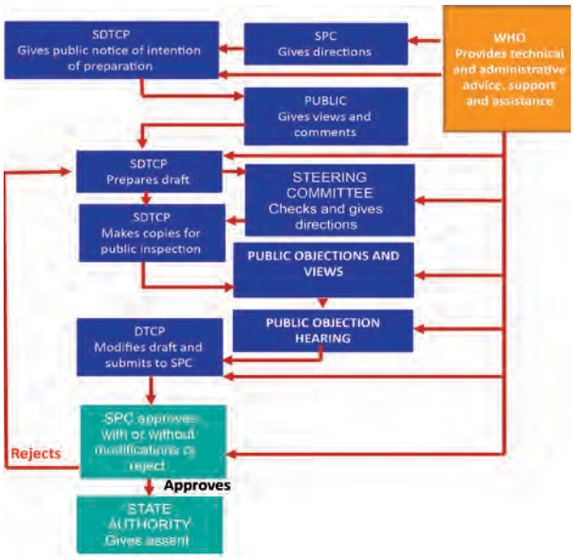


Figure B3.4: Flow chart for the preparation of the SAP

B3.5.21 Similarly the WHO will be needed to ensure that the processing of applications for planning permission and for building plan approvals for proposed development work and change of use in the WHS will be effectively and efficiently carried out towards the protection and management of heritage and the OUVs. Even at the early stage the WHO can provide valuable advice and directions to land owners and developers and their consultants in the planning and design of their development and in the preparation of plans, drawings and documents for submission of applications.

All applications will have to be vetted by the WHO which will be empowered to ensure that the proposed development complies with the SAP before they are approved, as shown in Figure B3.5. As will be pointed out in the next section, the Director General of National Heritage Department will be entrusted with the checking of major projects in the WHS and her clearance will be needed. The WHO will also be called upon to give guidance, advice and recommendations on heritage matters to the local approving authority, the SPC and the State Heritage Committee in their consideration and

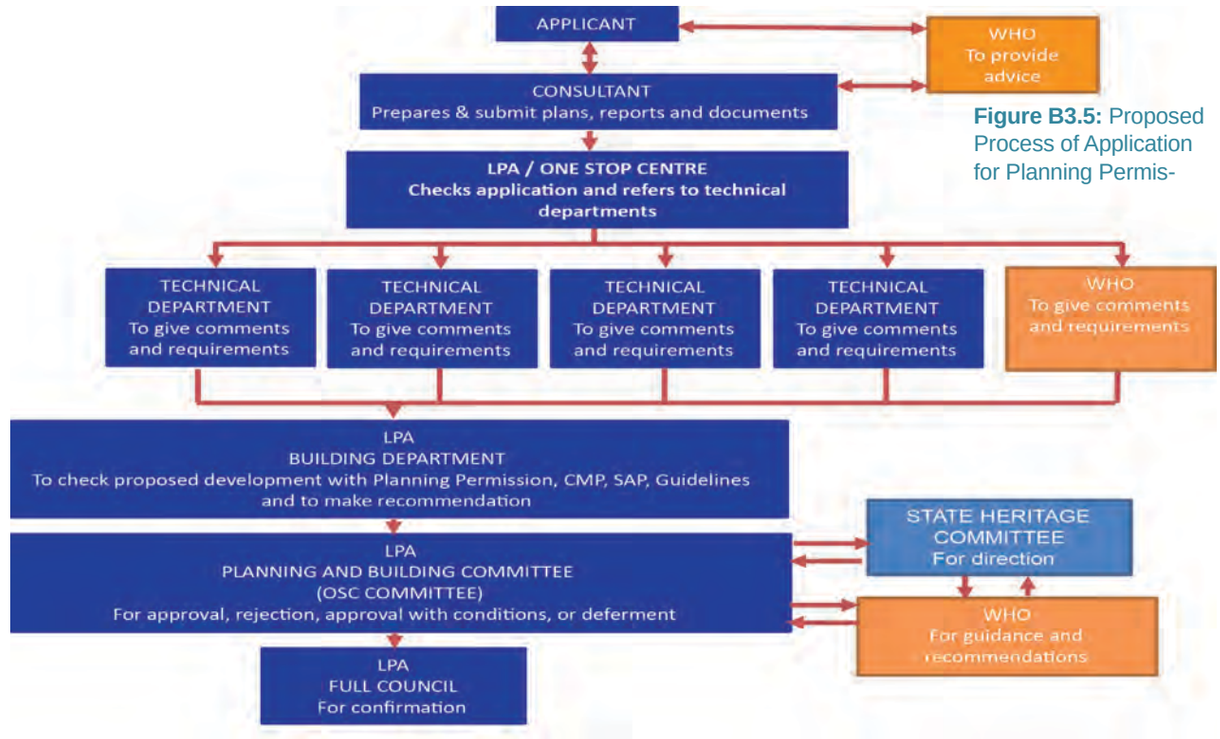


Figure B3.5: Proposed Process of Application for Planning Permis-

making of decisions on these applications.

Increasing the Roles of the Department of National Heritage and the Commissioner of Heritage at the State and Local Authority Levels

B3.5.22 The Commissioner of Heritage plays an important role in the heritage conservation of the George Town WHS. Under the NHA, her main functions, besides maintaining the National Heritage Register and designating and registering heritage sites and other heritage items, include overseeing the conservation, preservation, restoration, and maintenance of heritage, to advise and co-ordinate with the local planning authority, the National Heritage Council and other bodies and entities at all levels for the purpose of safeguarding, promoting and dealing with any heritage, and to advise the Minister with regard to any matter in respect of conservation and preservation of heritage.

B3.5.23 To facilitate her task in the protection of the George Town WHS, the Commissioner of Heritage should be a member of the State Heritage Committees of Melaka and Penang. She is a member of the National Heritage Council, and hence she can coordinate the heritage conservation efforts not only between the national bodies and the states, but also between the two states of Melaka and Penang. A "Joint" Heritage Committee at the National Level has been formed under the National Heritage Council for the purpose of coordination and collaboration of the works in the WHS of the two states, and the Chief Ministers of the states should be members of this "Joint" Committee. The Commissioner is also an important source of funds for heritage conservation, promotion and research in the states. She is at the moment heading the Department of National Heritage and it is has also been proposed that the Department sets up branches in the two states to assist in the conservation efforts of the states and the local authorities better.

B3.5.24 Her role in the WHS becomes more crucial as more and more buildings and areas are in the WHS are registered in the National Heritage Register

Amending the laws to strengthen them for the conservation in the WHS

B3.5.25 Both the TCPA and the NHA are at the moment being reviewed and amended to incorporate more specific provisions for the conservation of heritage sites and buildings in general and in the WHS in particular. These amendments and additions should among others include:

i) Amending the definition of "development" or amending the definition of "material change of use" to include change from "traditional" use, for the protection of intangible heritage;
ii) Requirements for the Heritage Impact assessment, Progress Report, and Dilapidation Survey Report for major works in the Heritage Areas that may affect the heritage values.

B3.5.26 Other the main acts, amendments can also be made to the subsidiary acts or new subsidiary acts be made, (in the form of Rules under the TCPA, By-laws under the SDBA and LGA, and Regulations under the NHA) to provide clearer powers and provisions for the planning and control, promotion, protection and funding of heritage and conservation efforts. For example, the Fire Requirements, the strict building specifications can be waived for the restoration and maintenance of old heritage buildings.

B3.6 Implementing the Management Plan

Introduction

B3.6.1 While the implementation mechanism has been established at the local and state government level (as discussed in Section B3.3), it is important to define the hierarchy of reporting progress and performance of CMP, and establishing the responsibilities of CMP management by different authorities and by different tiers of the government.

Hierarchy of Responsibility

B3.6.2 Figure 8.6 shows the hierarchy of responsibility of the CMP beginning from the collaboration between the WHO and the local authority concerned in George Town WHS. Both organisations are set to the most critical implementers of the CMP. The CMP/ SAP was submitted to both state governments on 17 January 2011 (Penang) and 18 January 2011 (Melaka) for approval. This endorsement was subsequently submitted to the Ministry of Information, Communications and Culture through the National Heritage Commissioner's office at the Department of National Heritage on for approval and onward submission to the World Heritage Centre.

Partnership and Commitment to Implement CMP

B3.6.3 At local levels, the WHO will need to collaborate with the following in its operations and decision-making:

- Stakeholder groups such as local residents, businessmen, hotel operators, academicians, heritage and conservation experts;
- Specific target groups, such as hawkers, food operators, business operators, printers and others;
- Local government;
- Inter-WHO coordination meeting to be coordinated by Department of National Heritage; and
- International bodies.

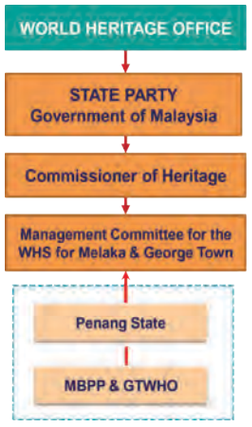


Figure B3.6: Hierarchy of Responsibility of CMP

B3.6.4 Partnership with these groups will be able to enhance the deliverables and capacity building of the WHO. Such partnership will be necessary to ensure that heritage and conservation efforts are sustainable in the long-run, i.e. will be able to coerce the stakeholders and owners to conserve their heritage assets on their own.

B3.6.5 The working arrangement of the WHO with other agencies on heritage and conservation can be seen in Figure B3.7. The diagram illustrates the relationship between all three tiers of government in the heritage management of Melaka and George Town WHS in the country.

B3.6.6 At the Ministry of Information, Communications and Culture, the Minister chairs a Management Committee for World Heritage Sites of Melaka and George Town, which is represented by the Secretary of State of both Melaka and

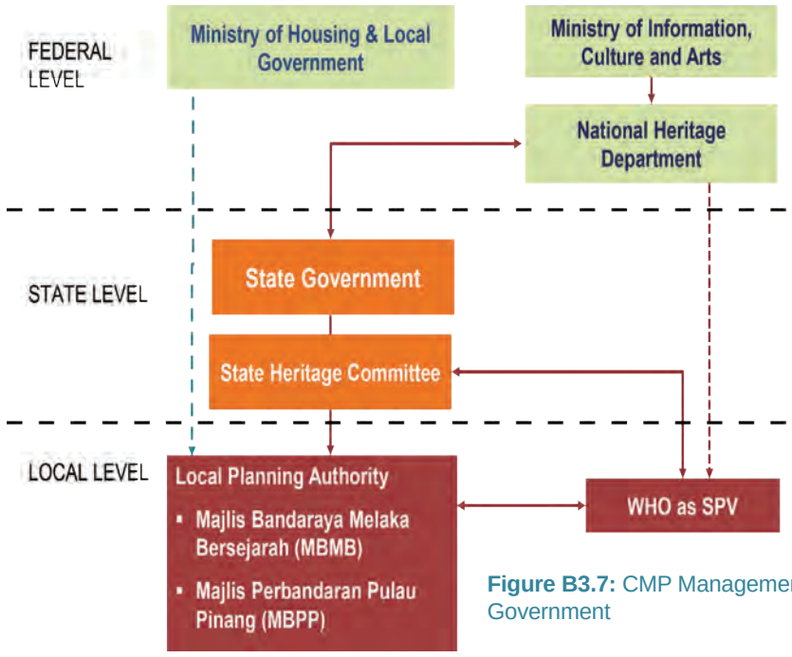


Figure B3.7: CMP Management by Tiers of Government

Penang.

B3.6.7 The agencies shown in Figure B3.7 carry out their functions according to legal powers enshrined in some of the legislations. While the municipalities involved, i.e. MBMB and MBPP, are empowered by Act 172 and Act 133 as well as the Uniform Building By-Law, and other by-laws, the WHO requires a legal backing to support its operations, especially that of non-statutory functions. By history, Melaka already has had its enactment on heritage management and conservation established in 1988 which was further amended in 1993 and in 2008. Similar enactment will be required in Penang to support its WHO at George Town. However, all enactments, including existing and future ones must not contravene with the contents of National Heritage Act 2005 which is currently being amended. Given there exists a conflict between the federal and state laws on heritage matters, the federal law on heritage will prevail.

B3.6.8 It is also understood that depending on the type of organisation that the WHO takes, some statutory functions may also be transferred to the WHO. For example, enforcement functions can also be carried out by the WHO, provided there is a clause on it in the enactment, in parallel with the powers of local government and the DNH on enforcement.

B3.6.9 At the federal level, the DNH is the custodian of the CMP as being the State Party to UNESCO. DNH is empowered by the National Heritage Act 2005.

B3.6.10 However, the following may need some attention in assisting the effective management of the CMP:

(i) Establishing a Heritage Commissioner's Office at State level. This Office is to provide advice to the WHO and the State Heritage Committee in heritage matters, and become the location to deposit the heritage registry at state level. The Office may be established as a state initiative or by the DNH in accordance with the state heritage enactment but

should not contravene the provisions of National Heritage Act 2005. Upcoming amendments to this act may shed some light to this matter;

(ii) Town and Country Planning Act 1976 (Act 172) is also currently being amended and is likely to incorporate measures to enhance the power of the local planning authorities in heritage and conservation management. In addition, the amendments to Act 172 are likely to incorporate the need for developers to submit a Heritage Impact Assessment (HIA) as part of other impact assessments for heritage areas; and

(iii) The need to have joint consultative discussions between both WHIs (and all that comes in future) to compare notes and experiences, including the Steering Committee under the Department of National Heritage.

B3.6.11 Besides the effort to conserve the buildings, this organisation also runs many programs to create awareness, raise funds and lobbying the government about the plight of the citizens of Penang.

Awareness and Educating the Public

B3.6.12 Educating stakeholders is part of managing change that must be undertaken as part of the process in implementing the CMP. In particular, this is highly important if there are owners of heritage assets who feel that CMP is cumbersome and difficult to follow. The establishment of WHO at the WHS in Melaka and George Town will certainly be supportive towards educating the owners, developers and all stakeholders in heritage and conservation management.

B3.6.13 Hence, the Education & Training Section has been proposed as one of the administrative structure under WHO for this purpose. The GM of the WHO will have to ensure that this Section undertakes necessary efforts to create better awareness of heritage and conservation management and getting stakeholders to participate willingly in the programmes under the CMP. The Section should also be responsible for carrying out interpretive works of the site, organizing campaigns, increasing the knowledge of the people concerned, improving the capabilities of the staff through training, and publicity. Interpretive works includes orientation programmes, exhibitions and seminars, books and guides to unique heritage assets in the Site, leaflets, guided tours and other publications.

The Section may undertake short-term to long-term programmes to instill interest in people, especially the young and women, by providing technical knowledge and skills training to enable them to be part of the larger effort of recruiting volunteers and paid staff in heritage and conservation management. There is certainly room for providing training to create entrepreneurs to produce local products and souvenirs for visitors to purchase. They should also be trained to take the economic opportunities in heritage and conservation management, especially in the field of cultural tourism that covers food, cultural displays, interpreters, hotelling, transportation, and travel and tours.

Table B3.4 Players in Heritage Management and Related Legislations

Level	Key Agency	Related Legislations to CMP Implementation
Local	**MBMB** **MBPP**	The Town and Country Planning Act 1976 (Act 172) The Streets, Drainage and Building Act 1974 (Act 133) Uniform Building By-Law (UBBL)
		MBPP By-Laws
	GTWHI	States to empower the WHO to perform part of local government responsibilities in heritage and conservation management
State	**State Government**	The Town and Country Planning Act 1976 (Act 172) Melaka Preservation and Conservation of Cultural Heritage Enactment 1988; amended 1993, 2008.
Federal	**Department of National Heritage (Custodian)**	Federal Constitution National Heritage Act 2005 (Act 645)

B4 Incentives and Funding for the World Heritage Site

B4.1 Introduction

B4.1.1 This section aims to establish an incentive programme for the WHS that would in the short and medium term, provide sustained assistance to the many players within the WHS to encourage them to conserve and protect the OUV of the Site. It draws upon what is available and describe how to further promote, consolidate and strengthen them under a system which would bring long term benefit to the World Heritage Office (WHO).

B4.2 Existing Incentives for WHS

B4.2.1 Incentives and financial grant aid are presently available for eligible projects in the WHS from various agencies at the national and local levels. The Department of National Heritage gives grants to owners of private properties that are in the National Heritage Registry to help them restore their buildings. In the WHS, selected buildings that opt to be listed in the National Heritage Registry receives financial aid and technical advice. In addition, the Federal Government has allocated RM50 million for the preservation and conservation of the WHS. Of this, RM30 million is allocated to Melaka and is under the management of the Department of National Heritage.

B4.2.2 In the case of George Town, the Federal Government allocation of RM20 million has been entrusted to Think City Sdn. Bhd. a private company set up under Khazanah Nasional Bhd, the Federal Government investment company to provide financial assistance for heritage conservation.

B4.2.3 Think City Sdn. Bhd has established a grant system, the George Town Grants Programme (GTGP) to provide seed-funding of heritage projects in George Town. The four types of grants are:

- Project and booster grants;
- Repayable grants;
- Matching grants; and
- Technical assistance and capacity building grants.

B4.2.4 Project and booster grants are one-off grants and their values range from RM200,000 to RM500,000. Repayable grants are aimed at private property owners to encourage them to apply the best practices in heritage conservation. The repayable grants vary from RM50,000 to as high as RM2 million and repayment is expected to go into a revolving fund (Think City Repayable Grant Fund) to benefit others. The grants are given based on certain terms and conditions. Matching grants are extended to applicants whose projects involve public spaces, public buildings or projects with strong public impact. The applicants are likely to be public or private bodies and public-private partnerships. The value of a matching grant can range from RM50,000 to RM2 million for projects that would also have their own funding sources. Technical assistance funding and capacity building grants are given to technical assistance and capacity building programmes. The GTGP does not cover maintenance works and are available to projects on conserving tangible and intangible values. They are granted to individuals, companies and public agencies. Around RM2.7 million has already been disbursed in George Town; among the recipients is the WHO of George Town which used the grants for education, research and dissemination.

B4.2.5 At the local level, the local authority in George Town, the Municipal Council of Penang (MBPP) has established its own set of incentives to encourage heritage conservation which are fiscal and non-financial. The MBPP has set up a one-stop committee chaired by the Council President to fast track plan processing for the George Town WHS. It has waived some planning and building requirements. The waivers are not blanket waivers and vary between building classifications and in-fill developments. Examples of waivers given are waivers on widening of roads and back lanes (where appropriate), permission for adaptive re-use, car park provisions and contributions (such as development charge, tree planting and drainage). In addition, maintenance grants are given by both state and local authorities to assist building owners in the George Town WHS. The grants are in fact tax discounts, given for a period of 5 years. Their equivalent value is 90% of annual assessment rate and 90% of annual quit rent. These incentives are relatively attractive and can be further expanded to stimulate more restoration. These incentives should be provided with attached terms and conditions, one of which is approval of building works and compliance with guidelines and technical requirements of the local authorities.

B4.3 A WHS Incentive Programme

B4.3.1 A WHS Incentive Programme is proposed to encourage heritage conservation in the WHS and to facilitate the implementation of the CMP. The WHS Incentive Programme, comprising financial and non-financial incentives, is intended to encourage and stimulate private sector participation in heritage conservation within the WHS. It is also intended to facilitate the implementation of the CMP programmes aimed at protecting the OUV of the WHS and to address and prevent losses of heritage integrity and value within the site. It is further proposed that the WHO of the respective areas within the site be responsible for implementing the WHS Incentive Programme. Where the incentives are not directly under its control, it is to work and coordinate with the awarding agencies to ensure that the benefits reach the intended beneficiaries.

B4.4 Appointing WHO as the Key Coordinator of the WHS Incentive Programme

B4.4.1 Placing the WHS Incentive Programme under WHO's coordination and management would reduce fragmentation of incentives across agencies and help the intended beneficiaries to receive the aid they need to undertake heritage conservation. Through this, it is also believed that it may expedite the process of managing and monitoring response to changes taking place in the WHS. It is anticipated that the WHO, as the expert heritage agency within its respective area, should be able to streamline and direct the incentives to where actions and help are most needed.

B4.4.2 The advantages of making WHO as key coordinator of incentives are summarised below:

- As the key coordinator, WHO would be able to monitor and track various ongoing and new restoration activities within the site and use the incentive programme to achieve the aims of the CMP;
- The WHO, being the expert agency in its respective area, would have access to in-house and external expertise, to assist in the WHS programme, providing technical assistance to help the public;
- The WHO is expected to use the incentive programme to accord equal emphasis on tangible and intangible values of the WHS; and
- The WHO should be able to evaluate objectively applications for assistance, including emerging requirements, and respond quickly to new requirement for assistance.

B4.5 Contents of the WHS Incentive Programme

B4.5.1 The incentive programme is subdivided into four packages as follows: (i) financial, (ii) non-financial, (iii) revenue-generating, and (iv) technical assistance. The financial package is focused on providing financial assistance through grants and loans. The non-financial package is made up of three types of incentives, namely fiscal, planning and development, and technical assistance. The income-generating package is based on generating income from the working partnerships between WHO and the private sector. The fourth package is on technical assistance. The packages are not mutually exclusive; they are used simultaneously and reinforce each other in order to stimulate heritage works in the WHS.

a. Financial Package

B4.5.2 Two schemes, proposed under the financial assistance package, are grant and loan schemes (Figure B4.1). The grant scheme can be further subdivided into various types to meet the varying needs of the community on restoration. The loan scheme is devised to supplement the grant scheme. A major constraint of the loan scheme is the WHO's legal limitation in extending loans to borrowers without a money-lending permit.

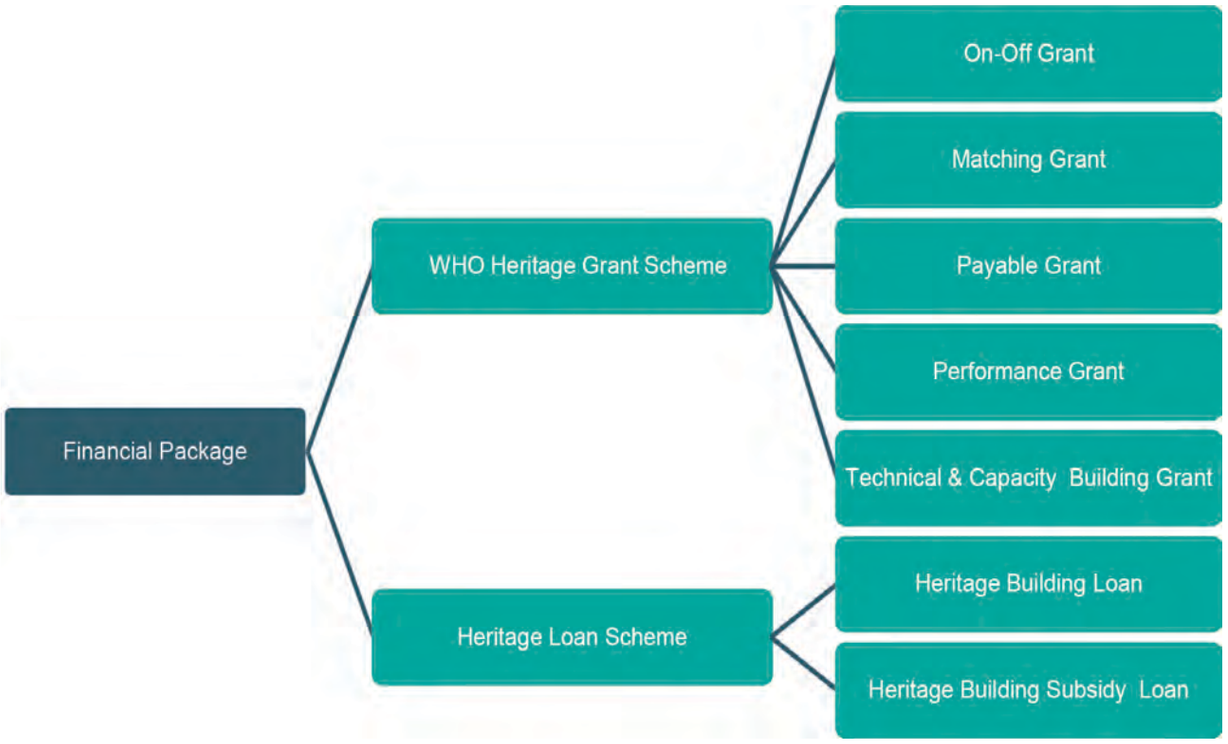


Figure B4.1: Financial Package and It's Components

i) Grant Scheme

B4.5.3 The WHO grant scheme essentially is a scheme where financial assistance is extended to the people involved in heritage conservation. It includes both tangibles and intangibles. Grants usually do not entail repayment unless otherwise specified.

B4.5.4 The proposed WHO grant scheme is fashioned after the Think City's George Town Grants Programme. Its main underlying principle is to encourage the private sector to work towards sustaining the OUV of both properties in the Site. Its goals are (a) to encourage restoration, (b) to prevent further deterioration of existing premises, (c) to encourage rectification of dilapidated buildings, (d) to encourage appropriate infill development and vacant lands in the property, (e) to support capacity building and skills training and (f) promote education and raising awareness.

B4.5.5 In proposing the WHO grant scheme, flexibility and monitoring are emphasised to enable WHO to modify the grant system in response to changing circumstances. The grant scheme is proposed for a term of 2 years, subject to review depending on its practicality, available resources, and WHO capacity and ability to achieve the goals of the CMP. The review would allow for changes and modifications to adapt to changing circumstances.

B4.5.6 The suggested types of grants are summarised in Table B4.1. At the early stage of implementation, the WHO is not expected to implement all grant types; it would pick selectively for implementation and use those it adopts in conjunction with existing grants to achieve a wider reach within the community. Over time, as existing grants are phased out, the WHO grants are expected to play a more significant role in conservation.

B4.5.7 At the start, WHO grants are not expected to entail large sums of monies. They are subject to WHO financial resources which are not likely to be substantial during the early stage of implementing the CMP. Thus, the amounts given are expected to target at individual building owners and small corporations undertaking small-scale projects within the heritage site. The values of grants would range from RM2,000 to RM50,000. The grants are to assist and are not expected to cover entire costs of projects. Applications are to be made to the WHO Technical Committee, and the amount awarded would be evaluated on technical and intangible considerations.

Table B4.1: WHO-Grant Scheme and Proposed Types of Grants

Grant	Purpose	Amount (RM)	Beneficiary
One-off Grant	• Maintenance and upkeep including interiors • Improvements to interiors • Painting and facade improvements • Education, publicity and awareness • Research and publication • Skills training • Renovations and restoration	RM2,000-RM10,000	a) Individuals b) Corporations c) NGOs d) Institutions of higher learning
Matching Grant	• Maintenance and upkeep • Improvements to interiors • Painting and facade improvements • Education, publicity and awareness • Research and publication • Skills training • Renovations and restoration • Area improvement • Technical assistance	Ratio is 50:50 or 30: 70. Maximum grant is RM50,000	a) Individuals b) Corporations c) NGOs d) Institutions of higher learning e) Public agencies
Repayable Grant	• Improvements to interiors • Renovations and restoration	Zero interest Maximum: RM50,000	a) Individuals b) Corporations
Performance Grant	• Improvements to interiors • Renovations and restoration	RM2,000-RM10,000	a) Individuals b) Corporations c) NGOs
Technical and Capacity Building Grant	• Education, publicity and awareness • Research and publication • Skills training	RM2,000-RM10,000	a) Individuals b) Corporations c) NGOs d) Institutions of higher learning

B4.5.8 The proposed grants are:

- One-off grants are small grants provided to assist individuals, NGOs and small corporations undertaking works to protect the value of the WHS.
- Matching grants entail the recipients to match the value of the grant given. The matching ratio could be 50:50, with each contributing equal sum or it could be 70:30 with the recipient providing 30% of project cost. The ratio is a variable, subject to recommendation of the granting body.
- Repayable grants are a form of loan except that there is no interest. WHO is not a licensed lending institution and has no authority to give loans. It can provide grants which are repayable but as a form of guarantee, it may want a heritage agreement to be signed to enable it to recover the grants. The repayable grant is likely to range from RM10,000 to RM50,000.
- Performance grants are aimed at specific targets to achieve. Targets could be physical improvements such as improvements to structures or to facades or roofs.
- Technical and capacity building grants are another form of financial assistance directed at technical and capacity building aspects of heritage within the WHS.

B4.5.9 The above list is not exhaustive. WHO can further improve on the proposed grant scheme, adding or removing those found to be not effective and replacing them. The Table 9.1 also indicates the grants having low monetary value. This takes into consideration that during the early stages of implementation of the CMP, WHO may not have access to substantial monies to provide grants with high monetary values. In fact, during this early stage, WHO may not be able to implement all the proposed grants simultaneously. This would depend on its financial, technical and human capacity. Each WHO shall have the flexibility to determine which types of grants are appropriate for its respective site, and what terms and conditions to set. However, all WHO grants are subject to a qualifying condition that approval for building works and compliance to the technical requirements.

ii) Heritage Loan Scheme

B4.5.10 Another financial assistance scheme is a heritage loan scheme (Table B4.2). The WHO is not licensed to give loans so it would have to negotiate and work with banks to create a special heritage loan scheme for individuals and corporate investors. Under the loan scheme, the WHO plays a supporting but important role in encouraging banks to participate and extend financial assistance for restoration projects in the form of loans. Crucial to the proposed loan scheme is a firm commitment from the banking institutions on how they could contribute towards preserving the OUV in the WHS.

Table B4.2: Proposed Heritage Loan Scheme

Loan Type	Purpose	Beneficiary
Building Loan	• Improvement to the interiors • Renovation & restoration • Skill improvement	a) Individuals b) Corporations
Building Subsidy Loan	• Improvements to the interiors • Renovations & restoration	a) Individuals b) Corporations

B4.5.11 There are two variations to the loan scheme. One is a direct loan scheme which the commercial banks can give to eligible borrowers working on restoration and renovation projects within the WHS. The other variant has an element of subsidy whereby the interest rate on such loans is lower than market rate, and the difference is to be financed through a grant from WHO.

b. Non-Financial Package

B4.5.12 The non-financial package has its origins from incentives provided by the local authorities such as those provided by the MBPP in the George Town WHS. There are two parts to the non-financial package. One part is the planning and development incentives and the other is the fiscal incentives in the form of tax exemptions and discounts (Figure B4.2**)**.

B4.5.13 The WHO does not play a direct role in the provision of non-financial package for the WHS because it does not have regulatory functions. For this package, the state and local authorities are the main players and the extent to which incentives under this package are given would depend on how much these authorities could and would give.

B4.5.14 Although the types and contents of this package are outside the control of the WHO, it is important for the WHO to contribute and assist in the provision and management of the non-financial package. One way it can do this is for the WHO to work closely with representatives of the state and local authorities on these incentives, forging working partnerships to ensure that the incentives are relevant and operational. It could use its Technical Review Panel to vet applications for these incentives before they are submitted to the relevant authorities for approval. These incentives are not blanket incentives and would vary on a case to case basis.
The non-financial incentives include:

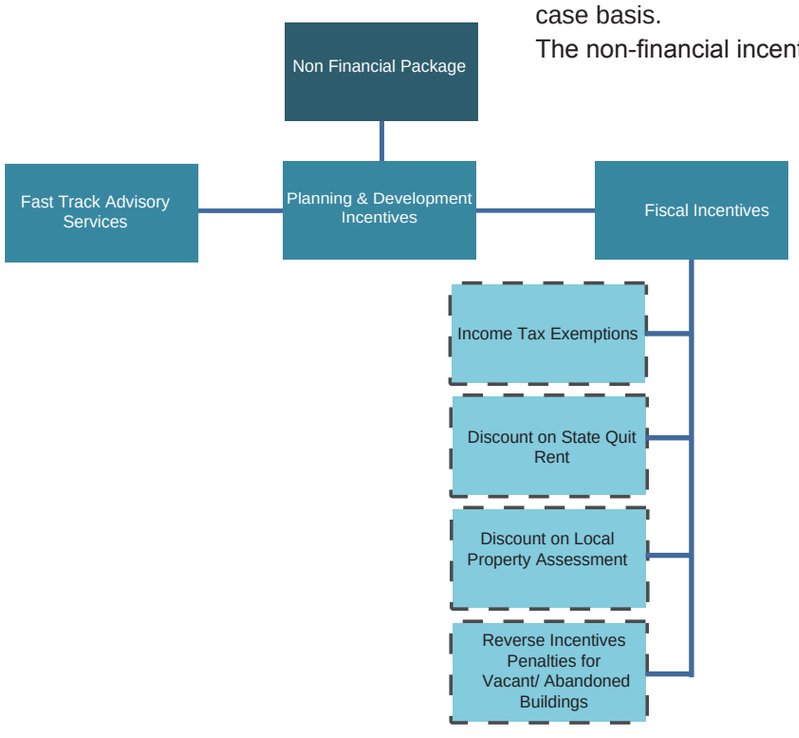


Figure B4.2: Non-Financial Package and It's Components

i) Fast Track Advisory Services Unit in WHO

B4.5.15 A Fast Track Advisory Service Unit in WHO is established to assist in fast tracking of applications for restoration and renovation in the WHS. The proposed advisory unit will have technical expertise to provide advisory services on planning and building procedures and requirements, materials, contractors, guidelines and regulations. The unit helps applicants and their consultants to comply with guidelines, regulations and other pertinent requirements before formal submissions are made to the Technical Review Panel for consideration.

ii) Planning and Development Incentives

B4.5.16 Some planning and development incentives are already available from the MBPP in the George Town WHS. (Table B4.3). The incentives are to help building owners in the WHS. They should be extended to Melaka's part of the WHS and be institutionalised as part of the WHO Incentive Programme. The incentives should be given on conditions that the proposed restoration or development works have approved building plans and are in compliance with heritage guidelines and technical requirements.

B4.5.17 New planning incentives such as the transfer of development rights or plot ratios (subject to other existing planning regulations) could also be introduced. These, however, have to be further studied before they could be adopted by the respective local authorities in WHS.

iii) Fiscal incentives

B4.5.18 Fiscal incentives are tied up to tax rebates, credits, exemptions or discounts provided at different government levels. At the federal level, the most important incentive would be that given by the Inland Revenue and relates primarily to exemptions or rebates on income tax. At state and local levels, the fiscal incentives are based on exemptions or discounts of taxes on land (state) and properties (local authority).

Exemptions from Income Tax

B4.5.19 Requests for exemptions from income tax by WHO from the Inland Revenue would benefit WHO and donors (individuals and corporations) who make contributions in support of the WHS. An income tax exemption would be beneficial when WHO establishes a trust account to benefit projects and activities in the WHS.

B4.5.20 **Exemptions or Discount on State Quit**

Table B4.3: Planning and Development Incentives

Planning & Development Incentive	Categories of Buildings I and II	Infill
Deletion of road widening*	Exempted	Exempted
Deletion of back land widening*	Exempted	Exempted
Allow adaptive re-use	With permission	N/A
Waiver of Car Park Provision	Full Waiver or 70%	50%
Exemptions of Development Charges & Other Contributions to Local Authorities	Full Exemption	N/A

Notes: (1) * Subject to technical requirements of relevant authorities
(2) N/A –not applicable

Source: Investing in Penang's Heritage. A Guide for Investors

Rent and Property Assessment.

The factors to be considered under this proposed scheme are the duration of the incentive and whether a discount or full tax exemption is preferred. Table B4.4 shows the possible fiscal incentives that can be initiated by both state and local authorities. These incentives are conditional upon the building works having approval and are in compliance with the development and building guidelines.

B4.5.21 The fiscal incentive from the state governments is used together with that from the local governments, as a double reward to owners who have approvals and comply with all technical requirements.

B4.5.22 A longer duration of incentive of up to 10 years is proposed. The rationale for a longer duration is to make the incentive sufficiently attractive to promote restoration works while encouraging greater compliance to technical requirements and guidelines.

B4.5.23 In using the incentive on annual property assessment, the awarding authorities may opt to give incentive only on the enhanced value of the building/property or they may allow the entire land or property to receive discount from annual assessment. It is suggested that the duration and the quantum of the incentive be varied, using 5 years as a benchmark for exemption and allowing the discount or exemption to taper off gradually at the tenth year.

B4.5.24 This fiscal incentive has terms and

Table B4.4: Options for Fiscal Incentives at State and Local Levels

Options	Nature of Fiscal Incentive	Duration
Exemption on Enhanced Value of Assessed Property (as result of restoration/conservation)	100% tax exemption on the enhanced value of the property	Total Duration: 10 years For 5 years after which, tax is imposed at 25% discount for next 5 years
Discount on Property Assessment or a Tax Credit	90% discount	Total Duration: 10 years 90% discount for first 5 years; reduce to 50% in subsequent 5 years. Tax credit is an alternative form of discount where a credit is given for use later on.
No change in Assessed Value of Building (after restoration)	Assessed value is unchanged & not reviewed	Total Duration: 5 years Value of tax base is held constant
Discount on State Quit Rent or Tax Credit	90% discount	Total Duration: 10 years 90% discount for first 5 years; reduce to 50% in subsequent 5 years. The alternative is tax credit

Sources: (1) Comprehensive Development Plan (January, 2011)
(2) Investing in Penang's Heritage. A Guide for Investors

conditions of which approval and full compliance to guidelines and requirements of the approving authorities is the most important qualifying condition. The incentive can also be varied by the awarding authorities, depending on the types of heritage works such as whether they are major or minor works, whether there is a change in use from commercial to residential or from residential to commercial, and whether they are in line with the recommended land use policies in the WHS.

B4.5.25 Alternatively, instead of giving discounts, the authorities can opt for a tax credit. This scheme works on the basis that prior to the award of tax credit on property tax, the recipients must have paid these taxes in the immediate past 2 years to be eligible (those who had not been paying such taxes are not eligible). The tax credit will only be given to buildings after restoration, if they have complied with heritage guidelines and other technical requirements.

B4.5.26 Reverse Incentive and Penalty
In Peninsular Malaysia, local authorities are known to exempt properties which are vacant or unutilised for a period of time from property assessment.

B4.5.27 Owners of such properties can apply for exemptions by providing proofs to the local authorities that their properties were vacant. This incentive tends to benefit property owners with vacant premises. This incentive may have a negative effect on the WHS as property owners who leave their premises in disrepairs and vacant would not be penalised. Under such circumstances, a reverse incentive is introduced. Property owners in WHS who leave their premises vacant and in poor conditions, would not enjoy this benefit. They would be penalised by having to pay the full tax unless they show proof that they are starting to repair, to seek tenants or to approach WHO as partners under a revenue-generating scheme.

c) Income-Generating Package

B4.5.28 Under this incentive package, two schemes are to be initiated and managed by WHO (Figure B4.3). The objectives are (i) to stimulate restoration and preservation among owners of buildings and (ii) to generate income for WHO, where possible. This forms part of its efforts to increase its independent revenue sources while encouraging and helping building owners in WHS to start restoration or repair works.

The schemes are:

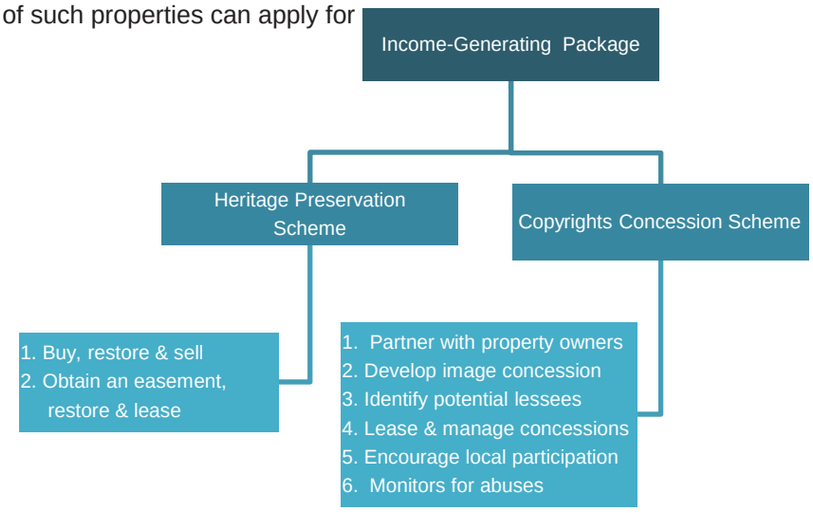


Figure B4.3: Income-Generating Package and Its Components

i) Heritage Preservation Scheme

B4.5.29 The objective is to encourage the reuse of heritage buildings in the WHS through purchase or donations. WHO acquires properties either by purchase or donation in order to safeguard these buildings. Whether the buildings are acquired through donations or purchase, the key player is the WHO. It would restore and sell or lease the buildings, with attached heritage covenants that restrict their uses. Any revenue or income earned would be put into the WHO to finance other heritage initiatives under its management.

B4.5.30 An alternative arrangement is to create a preservation easement between the WHO and a building owner who wants to retain ownership of a heritage building. The preservation easement gives the rights for WHO to restore a building and lease it out to earn rentals. Income generated is shared between the owner and the WHO on an agreed revenue sharing principle that also takes into consideration maintenance costs. This arrangement is intended to induce more owners to restore; especially those who lack knowledge and financial resources to take proactive measures to restore their buildings and yet are reluctant to sell or unable to lease.

ii) Copyrights Concession Scheme

B4.5.31 This scheme proposes to centralise copyrights on WHS heritage image into the hands of WHO to manage and ensure that they are not abused or misused commercially. The WHO would form partnerships with the heritage building owners over such images. The WHO would coordinate the lease concession of these images to potential users such as hotels, restaurants, bus and other transport companies, retailers, tourism agencies and souvenir makers. The lease concessions are formalised through agreements and fees to be paid by the users. The fees are managed by the WHO, and the income earned shared between the WHO and property owners through buildings in WHS. Conditions can be imposed, for example, souvenir manufactures are to use local resources to produce the WHS souvenirs in an attempt to create a positive socio-economic impact for communities living in the WHS through the generation of jobs and business opportunities.

d) Technical Assistance Incentive Package

B4.5.32 The provision of technical assistance is vital towards sustaining the integrity of the WHS. On ground, the various group discussions held have revealed that having access to information, technical skills and technical advice are important for people impacted upon to respond positively. Some areas of concern identified are inadequate knowledge of building plans and materials, lack of specialist building skills among local contractors and lack of appropriate building materials. In these areas, WHO, through a special technical assistance incentive package, can begin to target much needed technical advice to communities, interface with them to help them to carry out restoration and improvement works.

B4.5.33 The incentive package emphasises education and awareness as a priority measure in the WHS and to support it with various technical assistance schemes that include:

- Free Heritage Information Kit;
- Discount Heritage Paint Scheme where it can bring in local paint manufacturers to assist building owners in the heritage site to buy appropriate paints for their buildings;
- Building Materials Sponsorship Scheme to be developed under the WHO's watch and coordinated by the WHO;
- Skills Training Scheme where the WHO would identify skills required and work with relevant agencies to train local craftsmen and artisans including heritage tourist guides, and skilled workers. The WHO could work with the Construction Industry Development Board (CIDB) or with the state skills development centre to develop skills training courses;
- Registration Scheme for contractors, builders, painters, artisans, etc to create a pool of skilled workers who are able to undertake heritage conservation works in the WHS; and
- Technical advisory scheme where the WHO, using its access to a pool of experts, shall provide extension services to help building owners comply with the guidelines and technical requirements of restoration. The service can be provided free or at a nominal fee to the public.

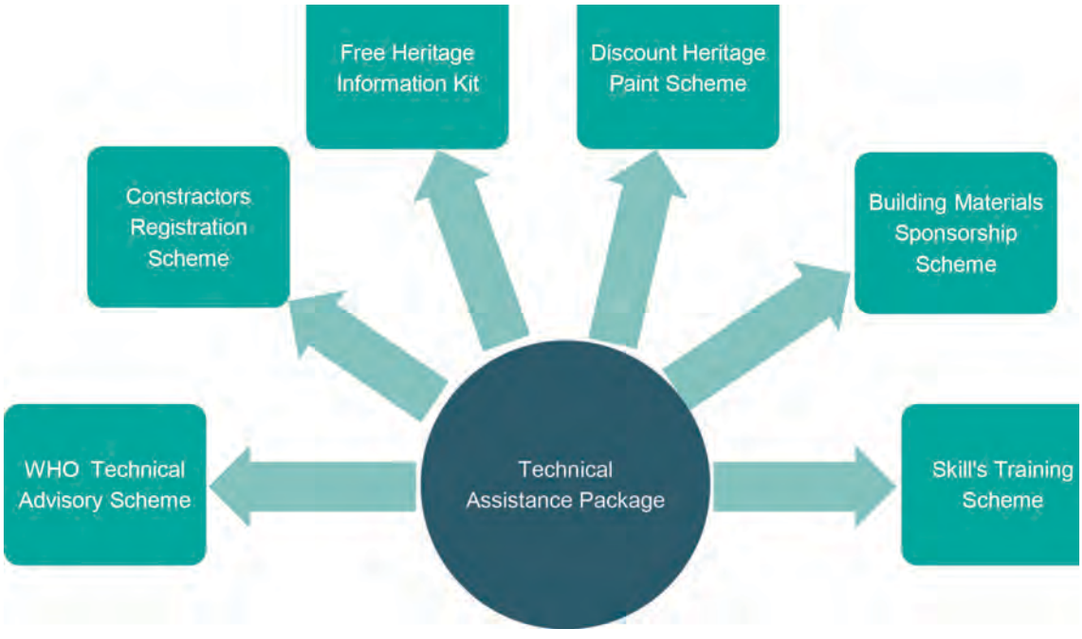


Figure B4.4: Technical Assistance Incentive Package

B4.6 Framework for Managing Finances of the WHO

B4.6.1 The WHO needs a framework to effectively manage the money it receives and raises. In this way, it can direct funds to where they are needed most. The WHO would have two accounts which are managed separately (Figure B4.5).

Management Account

B4.6.2 The management account is to cover the operating expenses of the WHO and it is kept separate from a trust account where it keeps money to implement the CMP programmes and fund heritage conservation. The management account is for its daily and operating and administrative expenses.

Heritage Trust Account

B4.6.3 For conservation works and CMP programmes, it has a heritage trust account. Any surpluses from its management account can be transferred into its Heritage Trust account. The CEO of the WHO is responsible for the management of both accounts and for ensuring that the funds are managed separately. Both accounts are audited by external accounting firms and the WHO will adhere strictly to the principles of transparency and accountability in managing these accounts.

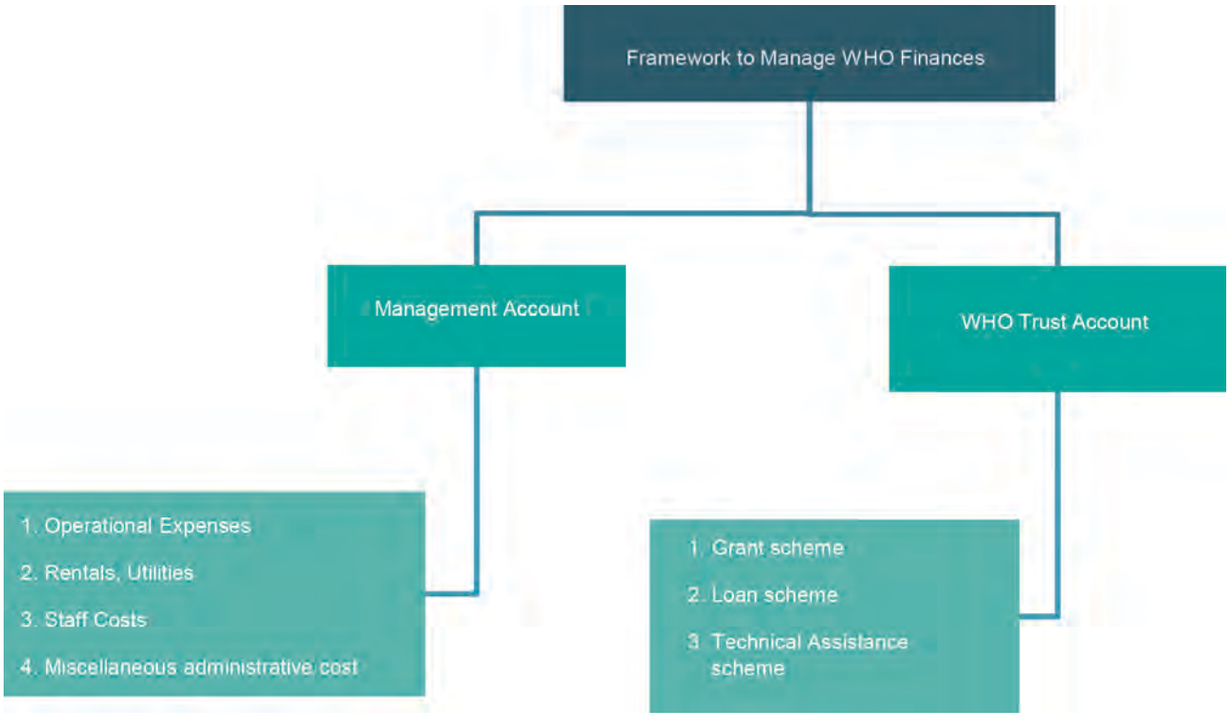


Figure B4.5: Framework for Managing WHO Finances

B4.7 Making Available Financial Resources for WHS Incentive Programme

B4.7.1 The WHS incentive programme requires funding to be operational. Some of the grants and incentives that are already provided by public agencies and private corporations for heritage conservation in the WHS are expected to continue, unless they are terminated or have achieved their purpose and are now closed. The World Heritage incentive programme would attempt to integrate with them, where appropriate. As most of the proposed incentives proposed are under the WHO's management, the agency would require financial resources to implement them. For the WHO, government support is crucial. It needs financial support from both federal and state governments, and a strong working relationship with the local authorities to carry out its work in the WHS.

The main sources of financial support for the WHO are (Table B4.5):

a) Government Contributions or Appropriations

B4.7.2 These contributions are to be channelled mainly into the WHO management account to enable it to carry out its operational and management functions. Surpluses from the management account can be transferred into its trust accounts for CMP programmes and other heritage schemes operated by the WHO. The possible sources are:

- State contributions or appropriations; and
- Federal contributions or appropriations through the Ministry of Information, Communication and Culture.

b) Government Grants

B4.7.3 Government grants are provided by the federal or the state governments or through selected federal ministries for specific purposes, linked to area improvement and tourism. The WHO and the local authorities are both implementing the CMP programmes and should be entitled to apply for grants from various federal ministries or their state governments for financial assistance. For example, if the programmes had tourism-related schemes or projects, they can apply for grants from Ministry of Tourism or if the programmes are focused on area improvements, they can apply for grants from the Ministry of Housing and Local Government.

B4.7.4 Similarly, state governments in the WHS can also award grants to their respective WHO to help them in heritage conservation. Under its draft heritage enactment, the state government of Penang has proposed a state heritage fund. If the state heritage fund is established, it can extend a grant to help the WHO. The same approach can be used for Melaka.

B4.7.5 Another possible source of grant is from the National Heritage Fund. The establishment of a National Heritage Fund is provided under Part V of the National Heritage Act 2005. Among its allowed expenses is payment of expenses incurred on conservation and preservation in conservation areas that are owned by the federal government or otherwise, and the provision of grants and loans. The establishment of the National Heritage Fund would be beneficial for the WHO as they can seek financial assistance, either grants or loans from the National Heritage Fund.

Table B4.5: Hierarchy of Heritage Funds and Funding Sources

Heritage Fund	Funding Source	Propose New Funding Source
Federal level - Heritage Fund	1. Approved Government contributions from Consolidated Fund; 2. Donations, gifts, grants; 3. Approved levy under the National Trust Act; 4. Interest from investments of fixed deposit; 5. Repayment of loan provided the under National Trust Act; 6. Credit in the Fund; 7. Approved Borrowings by the Federal Government; and 8. Monies or property.	1. % share of revenue from gaming tax; 2. % share of service tax; and 3. Corporate donations & gifts (tax exemptions).
State level- Heritage Fund	1. Approved Government contributions from State Consolidated Fund; 2. Federal government contributions; 3. Donations, gifts, grants; 4. Approved levy under proposed state heritage enactment; 5. Repayment of loans; 6. Approved Borrowings by State Government; and 7. Money or property of the Heritage Commission.	1. State Heritage Charge as a levy provided under the proposed State Heritage Enactment. The charge is imposed on hotels within the WHS as a start. Charge to be imposed on 3-star hotels and upwards. Proposed rate of RM 3 to RM5 per room per night. Grants from national Heritage Fund.
WHS level- WHI Heritage Trust Account	1. Approved state contributions; 2. Donations, gifts, bequests; and 3. Membership fees.	1. Approved federal contribution; 2. Grants from national Heritage Fund and state heritage fund; 3. Allocation of State Heritage Charge on Hotels; 4. Grant from federal ministries (Ministry of Information, Communication and Culture, Ministry of Tourism, & others, where relevant); 5. Think City Sdn Bhd (GTGP); and 6. Income-Generating Schemes.

Sources: (1) National Heritage Act 2005
(2) Comprehensive Development Plan (January, 2011)

B4.7.6 Grant money received by the WHO are to be placed under a trust account to ensure that their use is dedicated for heritage programmes and schemes and not for administrative expenses.

c) Grants and Contributions from Government-Linked Agencies and Corporations

B4.7.7 The WHO and the local authorities implementing the CMP's programmes should be entitled to access grants and contributions from government-linked agencies and corporations. One example is the grants from the Think City Sdn Bhd for George Town which can be used to finance partially or fully the costs of selected projects under the CMP.

d) Other Sources of Funds

B4.7.8 Although government funding is vital, it is also important for the WHO to be financially self-reliant by looking for ways to generate its own income.

- Income-generating project: A possible way is to develop income-generating scheme where it can earn some revenue.
- Appeal scheme: Another way is to raise money through an appeal scheme, either on annual basis or periodic basis. Through its trust account, WHO can seek donations from individuals and corporations.
- Gifts and Bequests: The WHO should also be allowed to receive gifts and bequests of buildings or other monies for the WHS.
- Membership fees: The public can opt to join the WHO as members and pay subscriptions

e) New Funding Sources

B4.7.9 The search for funds for heritage conservation should be done at all levels of the government. Heritage funding, unlike economic and social development, does not always receive top priority in the national or state budget. Finding additional funding is a challenge for all authorities involved.

B4.7.10 New sources for the National Heritage Fund at the federal level, the National Heritage Fund may want to seek additional sources of funds in addition to the government's allocations and contributions. The National Heritage Act 2005 indicates that a levy can be introduced for heritage funding. In the event that introducing a new levy is not viable, allocations from certain federal revenue sources may help to provide more funding. Some possibilities to consider are a percentage share of revenue from gaming taxation or a percentage of the service tax.

B4.7.11 State Heritage Charge at the state level, the proposed state heritage enactment of Penang also outlines the types of funding for the proposed state heritage fund including the possibility of using a new levy. It is proposed that the state government may introduce a heritage charge on hotels in the state to help fund the state heritage fund.

B4.7.12 As a start, it could impose the heritage charge on hotels within the WHS. The money raised could be redirected to the WHO heritage trust to use be used as grants for heritage conservation. The charge can be imposed on hotels of 3-star to 5-star and above within the WHS. The hotels are to collect the charges on behalf of the state and remit to the state heritage fund. The rate could be RM3 per room per night for 3-star hotel, rising to RM5 per room per night for hotels of 5-star and above. Payments are to be itemised in hotel bills to ensure that hotel guests are aware of such charges. A small percentage of the charge can be given to hotels to cover administrative costs. The state government undertakes to remit the charges collected to the WHO trust account for use in the WHS.

B4.8 Setting up a the WHO Heritage Trust Account

a) Key Principles of the WHO Trust Account

B4.8.1 The proposed WHO trust account is created based on three key principles, i.e. (i) to promote and encourage active participation in conservation and preservation in the WHS, (ii) to have sustainable financial resources and (iii) to ensure that monies collected are managed in a transparent and responsible manner for the benefit of the WHS.

b) Preliminary Steps

B4.8.2 The WHO can start the process of establishing a Heritage Trust by setting up a working committee to look further into it, together with a budget and a time frame. A budget of RM50,000 would be sufficient to cover the preliminary costs of setting up the heritage trust within a maximum time frame of 12 months. Some of the tasks to be resolved quickly are (i) to identify the projects and schemes under the CMP that the WHO can implement and to carry out financial projections to determine the required amount of funds, (ii) to request government funding that could go into the trust account, (iii) to identify potential trustees from the private sector, (iv) to identify potential donors to start an appeal scheme, (v) to decide on whether the CEO is to undertake fund-raising or appoint another person to do this task and (vi) to seek tax exemptions from the Inland Revenue Board.

c) Management of the WHO Heritage Trust

B4.8.3 Trustees and their responsibility

The proposed trust is to have a panel of trustees where there is a mix of government and non-government representation, including private sector representation. Private sector representation is encouraged, especially for the purpose of fund raising. Among the trustees, there must be a combination of technical, financial and management expertise. The trustees have fiduciary responsibility to manage and safeguard the assets of the trust. A set of by-laws and regulations are to be established to guide how the trust is to be administered and the procedures for extending financial and non-financial assistance.

B4.8.4 Manager/Management

The Chief Executive Officer (CEO) of the WHO will be the manager of the proposed trust fund. To assist the CEO, there has to be a Financial Advisory Committee comprising 3 members, with at least 2 members having expertise in fund and financial management. To process applications for grants, loans and other incentives, the trust can refer to the WHO Technical Review Panel for assistance.

B4.8.5 Accounts of Trust

The proposed trust is to establish different accounts to hold and manage the funds collected. Money from the different accounts can be used in various ways to provide financial support to its incentive programme.

B4.8.6 The trust account is subdivided into different trust accounts as follows:

a) Endowment Trust Account where money it receives are deemed as capital to be invested and only earnings from these investments are used to fund its heritage programme. The capital remains intact as the long-term asset of the trust fund.

b) Revolving Trust Account where money it receives are used to finance the heritage programme but care is taken to ensure that the revolving fund does not dry up. This means that the account has to be topped up through repayment, income earned, donations and surpluses from management account.

c) Sinking Trust Account where the monies are to be used for a specific purpose, after which the account for that purpose will be closed when the allocated fund has been used up and/or the task is completed.

B4.8.7 Among the three, the endowment trust account is more difficult to establish as it requires a large contribution from a donor, whether government (federal or state) or private donation. The sum would likely be in a range of RM10 million or more in order to make a substantial impact, i.e. to have the investment yields an attractive annual return for the trust. The annual earnings can then be put into a revolving account. The contribution or donation is considered a capital to be kept intact. To safeguard the capital, the trustees would need to identify a responsible fund manager to manage the funds and provide stable income flows.

B4.8.8 The revolving trust account is easier to set up but it entails annual top-ups to enable the trust to sustain its programme in the WHS. Annual surpluses from the WHO management account can be transferred to the revolving account. The trust can seek annual contributions from the federal and state governments for its revolving account. Such contributions can be grants from federal ministries or donations from private corporations and individuals. The WHO can also place revenue earned from income-generating schemes into the revolving account. The allocation from the proposed state heritage charge can be a regular income source for the revolving trust account.

B4.8.9 The sinking trust account involves using a financial allocation for a specific task and to close the account after the monies have been used and the task achieved. A sinking trust account can be set up to keep grants obtained from organisations such as the Think City. The grants can be earmarked for a specific purpose and when the task is completed, the account for that activity is closed and the excess, if any, is transferred to the revolving account.

B4.9 The WHO Sources of Funds, Financing Objectives, and Financial Accounts

B4.9.1 Table B4.6 summarises the WHO sources of funds, its various financing objectives and the accounts where it keeps the funds received. The table shows that the WHO would likely channel a substantial portion of what it receives into its trust account to fund heritage conservation and its activities proposed under the CMP.

Table B4.6: WHO -Sources of Fund, Financing Objectives and Financial Accounts

Sources of Funds to WHO	Financing Objectives	Time Frame	WHO Account		
			Management	Trust Fund	
Federal Contributions	Operating and Administrative expenses (staff costs, office administration, travel expenses, expert costs and other operating costs	Annual	√	√	Endowment (if large enough). Any surpluses to be transfer to Trust Fund
State Contributions		Annual	√	√	
Membership fees		Annual	√	√	
Federal Ministries' Grants	WHO Incentive Programme on tangible and intangible activities	Annual	-	√	Revolving
Grants from national/ state Heritage Funds	WHO Incentive Programme on tangible and intangible activities	Annual	-	√	Revolving
State Hotel Charge	WHO Incentive Programme on tangible and intangible activities	Annual	-	√	Revolving
Donations (corporate & individual), gifts, bequests	WHO Incentive Programme on tangible and intangible activities	Annual	-	√	Revolving or Endowment (if gifts are substantial)
Income-generating	• Operating and administrative expenses • WHO Incentive Programme	Annual	√	√	Revolving
Private Grants	WHO Incentive Programme on tangible and intangible activities	Annual	-	√	Sinking

Source: Comprehensive Development Plan (January, 2011)

B4.10 Conclusions

B4.10.1 The provision of incentives for heritage conservation in the WHS is closely tied to the availability of financial resources to the proposed agency undertaking the conservation programmes. Although there are existing incentives in the WHS, the impact on the WHS is not apparent as the private sector and the local communities have yet to demonstrate active participation.

B4.10.2 One limitation is an absence of a concerted incentive programme to which the public and community can easily access. Financial resources to support an incentive programme are relatively weak. There is a need to focus incentives onto one authority or agency that is able to bring to work closely with the local communities. Such an agency would likely be a local body that is also very familiar with the WHS. As the WHO is proposed as the organisation best suited to manage the WHS, it is also important to provide them with access to financial resources.

B4.10.3 A number of funding sources have been identified for the WHO. They range from federal a state government contributions, to grants from various federal ministries and different organisations. New sources of funds are also identified. An important one would be the proposed State Heritage Charge on hotels in the WHS. When introduced and transferred to the WHO, it would be one of its stable sources of revenue to fund heritage programmes. Heritage conservation requires financing and it will not be easy to compete with other development needs in the federal or state budgets. Finding alternative and new financial sources is crucial for heritage funding, whether at federal, state or local level. The proposals here indicate possibilities and they are not exhaustive. Upper most in these proposals is flexibility. The WHO should have the flexibility and space to adapt and change the funding model to suit their needs at different points in time in the future.



PART C

Development Guide Plan for George Town World Heritage Site

C1 Introduction to the Development Guide Plan for George Town

C1.1 Purpose of the Development Guide Plan

Planning for heritage in the George Town World Heritage Site (WHS) aims to ensure that the significant elements of the past are appropriately managed and respected by new development. Heritage conservation does not preclude change but rather respond to it. This Development Guide Plan (DGP) provides a framework for the control of new development or redevelopment and for conservation of both tangible and intangible heritage of George Town. It aims to:

i) Establish the framework and guiding principle for detailed planning on heritage;

ii) Ensure that development within the WHS is planned and constructed with the basic understanding of heritage significance and that level of change should respect its heritage significance;

iii) Enhance the townscape elements of the city in a manner that it celebrates and enriches the Outstanding Universal Values that make George Town as WHS.

The plans in this DGP are important references and guides for all developments and conservation works in the WHS. This includes not only works related to the repair, conservation, enhancement and compatible developments of the heritage buildings in the WHS, but also works related to the overall built environment of the WHS such as drainage improvement works, traffic management, pedestrian connectivity, improvement to public spaces and other physical works within the WHS.

C1.2 Reference to the Plans in the Development Guide Plan

The following plans are to be referred by all conservation and development proposals prior to proceeding with the design, submission and implementation of any proposal.

i) **Activity Zones Map** and its related Non-Permissible Use Schedule - **Figure C2.5**;

ii) **Socio-cultural Topography Map** which describes the various cultural enclaves and clusters that are distributed within the WHS including information on cultural buildings such as temples, clan houses and associations, markets and trade associations - **Figure C2.1**.

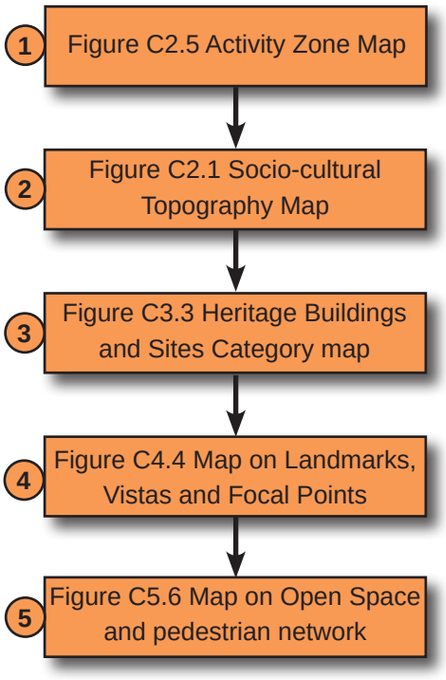
The above maps are to be referred to when deciding on the type of activities or uses for heritage buildings and non-heritage buildings in the WHS. The map are then to be overlaid with the following maps to further assess the requirements/ guidelines/ restrictions to be integrated or provided within the overall scheme or proposal.

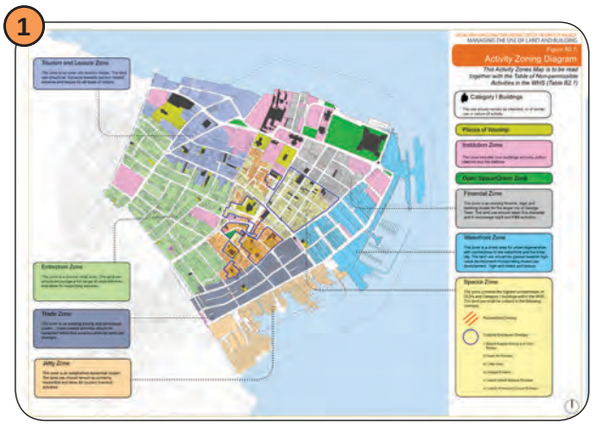
i) **Heritage Buildings and Sites Category Map** which provides information on the categorisation of buildings in the WHS - **Figure C3.3**;

ii) **Map on Landmarks, Vistas and Focal Points** which provides information on selected vistas and views to be protected within the WHS - **Figure C4.4**; and

iii) **Map on Open Space and Pedestrian Network** which provides information on the proposed measure for improvement in the green spaces and pedestrian connectivity in the WHS - **Figure C5.6.**

Figure C1.1: Overlays of Plan



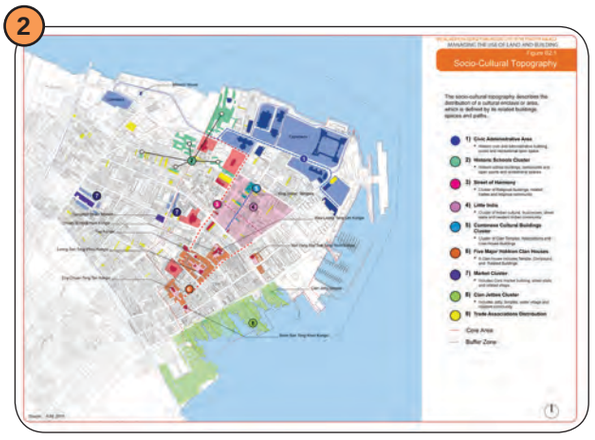


Activity Zone Map
Refer to Figure C2.5 Page C2-8



Map on Landmarks, Vistas and Focal Points
Refer to Figure C4.4 Page C4-5

2



Socio-cultural Topography Map

Refer to Figure C2.1 Page C2-3

3



Heritage Buildings and Site Category Map

Refer to Figure C3.3 Page C3-3

5



Map on Open Space and Pedestrian Network

Refer to Figure C5.6 Page C5-6

C2 Managing the Use of Land and Building

Managing growth and change in a WHS is challenging. It requires the understanding for the protection of the OUVs and the need to accommodate for new economic opportunities that emerge in today's cities but could potentially be a threat to the authenticity and integrity of the WHS.

The intricacy of the multi-cultural historic urban landscape necessitates a control on the use of land and building that takes account of the sensitivity of change to cultural landscape of the George Town WHS. Thus, control on use of land and building in the WHS requires a process that is unlike any other areas outside the WHS.

C2.1 Understanding the Cultural Landscape of George Town

Prior to undertaking any decisions on the use of land and building, an understanding and consideration of the living cultural heritage of the locality or enclave in which the site or building is located is critical. This living heritage of George Town is depicted in the Living Heritage Topography Maps which are made up of the following components:

i) Socio-Cultural Topography (Figure C2.1);

ii) Socio-Economic Topography (Figure C2.2);

iii) Residential Topography (Figure C2.3); and

iv) Restaurants and Food Stalls Topography (Figure C2.4).

Living heritage topography maps reveal the layering of urban structures and built environment as expressed in the historical and modern townscape. These maps display the dominant patterns, spatial distribution and range of human activity in relation to the built environment. These maps also facilitate a thorough understanding of the interconnectivity of activities with the built environment. Together they form a representation of the dynamics of the living cultural landscape of the George Town WHS.

The maps serve as a critical tool in identifying the cultural significances and the manifestations of the OUVs of the site. They also facilitate the formulation of the land use control mechanism.

C2.2 Profile of Existing Activities in the WHS

C2.2.1 A Mixed-Use City

Figure C2.3 shows the distribution of the residential component of the WHS of George Town. The residential land use data on residential is categorised into full residences and mixed-use residences. As of current, there are two dominant residential neighbourhoods within the WHS; surrounding the enclave of Lebuh Acheh Mosque and beyond the Kuan Im Temple. Generally, the rest of the WHS is of mixed-use character, containing a mix of residences and commercial (or often both).

There has been a reduction in the living population of the WHS in the decade. According to land use data, the residential component in 2010 makes up 13.94% of the land use or 21.07 hectare. This is a reduction of 4% from the year 2005, or 12.1% from the year 2000. It is therefore imperative to the conservation of the OUVs that residential activity is promoted.

(Source: George Town Land Use and Population Survey, Geographia, 2010)

C2.2.2 Clustering of Economic Activities

Commercial use dominates the WHS. Patterns of activities emerge from the analysis of the land use, as illustrated in Figure C2.2.

Clothing and Textile

A high concentration of clothing and textile related businesses are clustered around Lebuh Pasar and its perpendicular streets. This area is also known as Little India. Lebuh Cintra and Jalan Pintal Tali contains another cluster of clothing and textile related business.

Finance

Finance related activities are concentrated along Lebuh Pantai, Lebuh Bishop and Lebuh Gereja. Aside from financial related services, the cluster also includes activities such as money changers and brokers.

Hotels

Hotels are generally located along Jalan Penang, Lebuh Chulia and Love Lane. Boutique hotels are the fastest emerging activity in the WHS, and its growth may need to be contained within select zones as to not devalue the OUVs.

Wholesale, Storage and Distribution

The WHS also contains a strong clustering of wholesale, storage and distribution activities. Traditionally these activities were conducted in the godowns between Pengkalan Weld and Lebuh Pantai. These have now gradually expanded inward towards the inner city.

Food and Beverage

Food and beverage related activities are dominant activities in the WHS, as illustrated in Figure C2.4. Their locations are fairly dispersed. Figure C2.4 also shows the location of food stalls.

C2.2.3 Clustering of Cultural Activities

The Socio-Cultural Topography (Figure C2.1) describes the various cultural enclaves and clusters that are distributed within the WHS.

The cultural clusters encompasses several neighbourhoods of distinctive characters, largely falling within the Core Zone of the WHS.

The Historic Civic-Administrative Area has important public buildings, cultural venues and recreational open space. The Historic Schools Cluster consists of educational buildings, mostly within large green spaces.

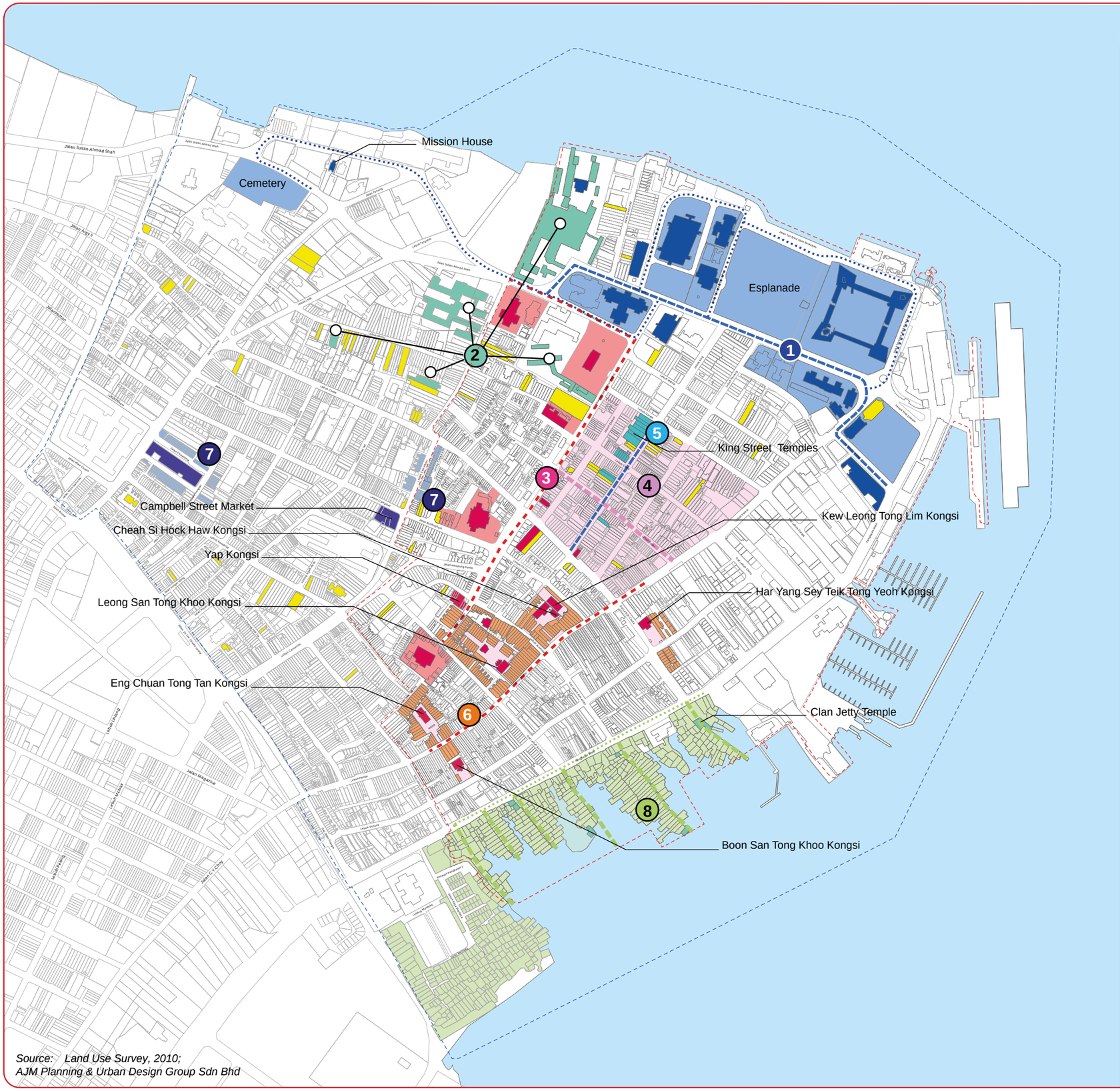
Little India is a culturally vibrant area for ethnic retail and commerce, it has a significant degree of mixed use, due to the presence of migrant workers.

The Street of Harmony along Jalan Masjid Kapitan Keling, which has various religious institutions lined up along an axis, is richly endowed with spiritual values and cultural diversity.

Lebuh King likewise has many cultural associations. In the Mosque and Waqaf Precinct, mosques are surrounded by trust properties occupied by communities of faith. The Five Big Clans Temple Complex similarly consists of clan temples surrounded by community housing and trust properties.

Figure C2.1

Socio-Cultural Topography



The socio-cultural topography describes the distribution of a cultural enclave or area, which is defined by its related buildings, spaces and paths.

1 **Civic Administrative Area**
- Historic civic and administrative building, public and recreational open space

2 **Historic Schools Cluster**
- Historic school buildings, compounds and open sports and recreational spaces

3 **Street of Harmony**
- Cluster of religious buildings, related trades and religious community

4 **Little India**
- Cluster of Indian cultural businesses, street stalls and resident Indian community

5 **Cantonese Cultural Buildings Cluster**
- Cluster of Clan Temples, Associations and Clan House Buildings

6 **Five Major Hokkien Clan Houses**
- A Clan House includes Temple, Compound and Related Buildings

7 **Market Cluster**
- Includes Core market building, street stalls and related shops

8 **Clan Jetties Cluster**
- Includes jetty, temples, water village and resident community

9 **Trade Associations Distribution**

Core Area

Buffer Zone

Source: Land Use Survey, 2010;
AJM Planning & Urban Design Group Sdn Bhd

NOT TO SCALE

Figure C2.2

Socio-Economic Topography

The socio-economic topography described the distribution of a cultural enclave or area, which is defined by its related buildings, space and paths.

1) **High End Hotel Cluster**
- 3-5 Star Hotels, Boutique Hotels

2) **Budget Hotel Cluster**
- Budget Hotels

3) **Fashion & Textile Cluster**
- Fashion clothing, textile and related activiti

4) **Financial Cluster**
- Legal and banking activities. Includes financial services, insurance, money changers and lenders, pawnshop and stock exchange

5) **Import-Export, Transport & Storage**
- Freight forwarding cargo and logistics
- Import / export / distribution
- Transport, trucking and removals
- Food and beverage distribution, general storage

6) **Waterfront Cluster**
- Jetties, ferry, port, godown and mechant houses

7) **Gold and Gems Trade Cluster**

8) **Hardware Trade Cluster**

9) **Creative Industries**
- Media, marketing, graphic design services, printing and publications
- Paper suppliers, sign board makers

Core Zone

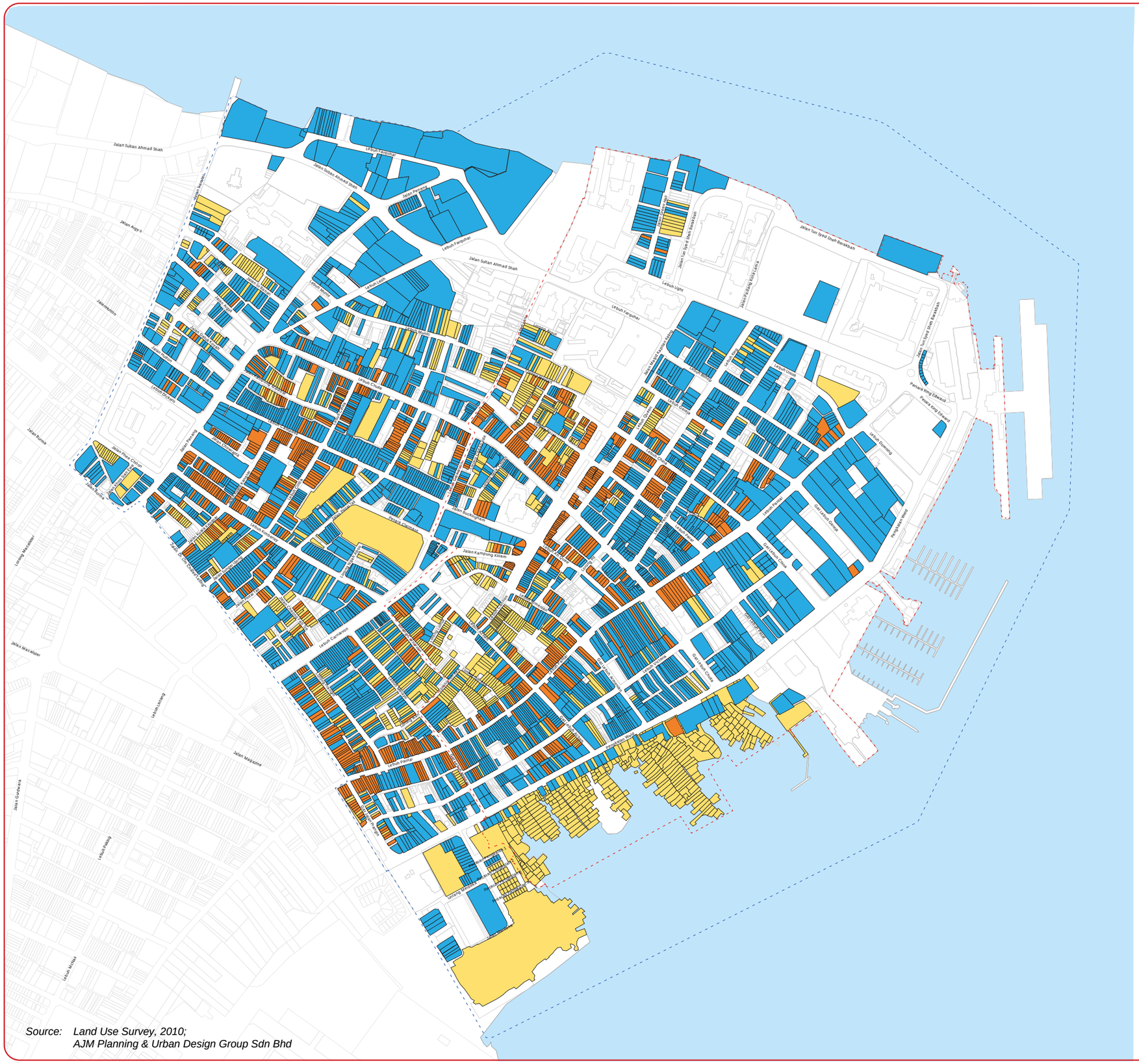
Buffer Zone

NOT TO SCALE

Source: Land Use Survey, 2010;
AJM Planning & Urban Design Group Sdn Bhd

Figure C2.3

Residential Topography



100% residential properties

Mixed-use residences

100% commercial properties

Core Zone

Buffer Zone

Source: Land Use Survey, 2010;
AJM Planning & Urban Design Group Sdn Bhd

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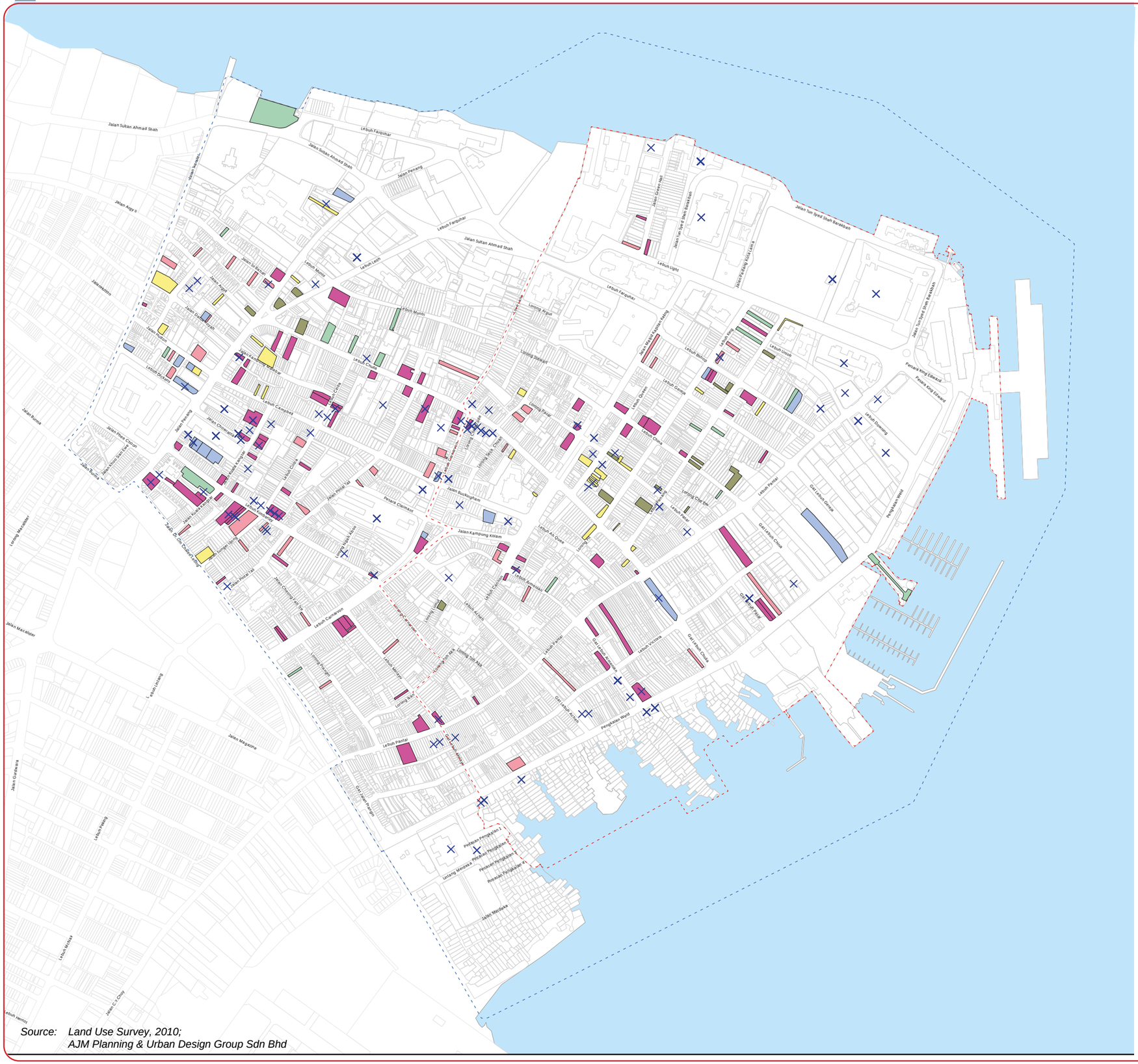
Figure C2.4

Restaurants and Food Stalls Topography


Jalan Sultan Ahmad Shah
Lebuh Farquhar
Jalan Penang
Jalan Yap Ah Loy
Jalan Yap Ah Shak
Jalan Yap Ah Shak
Jalan Tun Syed Sheh Barakbah
Lebuh Light
Jalan Pulau Tikus Lama
Jalan Tun Syed Sheh Barakbah
Lebuh Leith
Lebuh Monts
Lebuh Farquhar
Lebuh Muntri
Jalan Sri Bahari
Jalan Angsana
Jalan Dato Sagor
Jalan Hujan
Jalan Kebun Teh
Lebuh Dickens
Lebuh Campbell
Lebuh Cintra
Lebuh Chulia
Lebuh Queen
Lebuh Leith
Lebuh Light
Lebuh Union
Lebuh Bishop
Lebuh Carnarvon
Lebuh Victoria
Lebuh Pantai
Lebuh Penang
Jalan Chowrasta
Jalan Kapitan Keling
Lebuh Cintra
Lebuh Queen
Lebuh Chulia
Lebuh Pantai
Lebuh Pasar
Lebuh Tek Soon
Lebuh Tek Soon
Lebuh Ah Quee
Lebuh Acheh
Lebuh Carnarvon
Lebuh Victoria
Lebuh Melayu
Lebuh Armenian
Lebuh Penang
Lebuh Pantai
Lebuh Farquhar
Lebuh Light
Lebuh Victoria
Lebuh Melayu
Lebuh Armenian
Lebuh Acheh
Lebuh Ah Quee
Lebuh Chulia
Lebuh Pantai
Lebuh Pasar
Lebuh Penang
Lebuh Light
Lebuh Victoria
Lebuh Melayu
Lebuh Armenian
Lebuh Acheh
Lebuh Ah Quee
Lebuh Chulia
Lebuh Pantai
Lebuh Penang
Lebuh Farquhar

C2.3 Controlling the Use of Land and Building

In managing the WHS and ensuring its sustainable development, it is necessary to protect its Outstanding Universal Values, namely:

OUV 1: Layered history, plural society and cultural-religious diversity, hereinafter simply referred to as 'cultural diversity';

OUV 2: Living heritage, both tangible and intangible, hereinafter referred to as 'living heritage'; and

OUV 3: Built townscape, especially townhouses and shophouses, herinafter referred to as 'built heritage'.

Cultural diversity (OUV 1) is itself an intangible heritage which is embodied and embedded in living heritage (OUV 2) and built heritage (OUV 3).

In so far as cultural diversity is reflected in built heritage, it has to be recovered and protected with the tools for protecting built heritage, as well as through action plans. The control of Land and Building use through zoning is an important tool to protect and enhance these OUVs, in particular OUV 1 and OUV 2.

C2.3.1 Use of Category I Buildings and Sites

For Category I buildings and sites, the use should remain as originally intended. Any adaptation to the use must be of similar use or nature of activities and have minimal impact on the cultural significance of the place and requires the preparation of a Planning Permission. The submission shall include a Heritage Impact Assessment (HIA) which include a cultural impact.

C2.3.2 Single-Use Activity Zones

For these zones in the WHS, the described use must be retained:

i) Institution Zone;
ii) Open Space/ Green Zone; and
iii) Places of Worship.

C2.3.3 Mixed-Use Activity Zones

For the purpose of controlling the use of Land and Buildings, the WHS of George Town is segmented into 7 mixed-use Activity Zones:

i) Waterfront Zone;
ii) Financial Zone;
iii) Trade Zone;
iv) Jetty Zone;
v) Enterprise Zone;
vi) Tourism and Leisure Zone; and
vii) Special Zone.

With the exception of the Jetty Zone, the other zones are generally **mixed-use zones**, meaning the use of land for either 100% Commercial, 100% Residential and Residential-with-Commercial are allowed. The Jetty Zone should retain its dominant residential component, with allowance for limited tourism related activities and sundry shops within the residential premises. Refer Figure C2.5 for the Activity Zoning Map.

Any change of land and building use shall require the application for Planning Permission and subject to MPPP's requirements.

C2.3.4 Schedule of Non-permissible Activities in the WHS

Refer Table C2.1 for a schedule describing the list of non-permissible activities within the WHS of George Town, and exceptions to the list in accordance with each Activity Zone.

TABLE C2.1: Schedule of Non-permissible Activities

PERMISSIBLE ACTIVITIES	
1	The WHS is a mixed-use zone with residential and commercial activities allowed. They are generally allowed in all zones with exception to some activities listed below as controlled and/ or restricted activities.
NON-PERMISSIBLE ACTIVITIES	
1	**Swiftlet Farming**
2	**Budget Hotel**
CONTROLLED AND/ OR RESTRICTED ACTIVITIES	
1	**Foreign Fast Food Outlets** • Can be considered in the Waterfront Zone, Tourism & Leisure Zone and Financial Zone subject to compliance to technical requirements. • Existing licensed premises prior to the SAP can remain in WHS. Any proposed expansion shall comply with technical requirements. • This restriction is aimed to protect and promote the growth of traditional/ local food establishment and homegrown food; in line with OUV 2 requirement.
2	**Entertainment Outlets** • Existing licensed premises prior to the SAP can remain in WHS. Any proposed expansion shall comply with technical requirements. • New premises can be considered in: - o Upper Penang Road o Penang Road o Hotels o Shopping malls
3	**Industry** • All existing licensed industries can be allowed to remain in WHS. Any proposed expansion shall comply with technical requirements. • All new industries are not allowed; except traditional trade/ cottage industry. • Traditional/ cottage industry refers to activities related to original local culture and products such as the making of Songkok, woodcarving, coffee, noodles, etc.
4	**Motor Vehicle** • Refers to sales and repair of motor vehicles. • Existing licensed premises prior to the SAP can remain in WHS. Any proposed expansion shall comply with technical requirements. Existing activities are required to adopt best environmental practice. • New establishments can be considered in the Trade Zone, Jetty Zone and Enterprise Zone subject to compliance to technical requirements.
5	**Printing** • Existing licensed premises prior to the SAP can remain in WHS. Any proposed expansion shall comply with technical requirements. Existing activities are required to adopt best environmental practice.
6	**Recycling** • Refers to collection, storage and sale of scrap items and recyclable materials such bottles, papers, metal etc. • Existing licensed premises prior to SAP can remain in WHS. Any proposed expansion shall comply with technical requirements. • New establishments/ premises shall not be allowed.
7	**Petrol Station** • Only existing premises allowed to remain in the WHS. • New developments shall not be allowed.
8	**Wholesale, Storage and Distribution** • Existing licensed premises prior to the SAP can remain in WHS. Any proposed expansion shall comply with technical requirements. • New premises can be considered in the Trade Zone and Enterprise Zone subject to compliance to technical requirements.
9	**Construction Materials** • Existing licensed premises prior to the SAP can remain in WHS. Any proposed expansion shall comply with technical requirements. • New premises can be considered in the Trade Zone and Enterprise Zone subject to compliance to technical requirements.
10	**Hotel – Boutique and Star-rated** • Existing premises that exist prior to the SAP can remain and subject to compliance to technical requirements. • New premises can be considered subject to compliance to technical requirements in the following zones:- o Waterfront Zone o Trade Zone o Tourism & Leisure Zone

C2.4 Special Zone

This zone has the highest concentration of significant cultural sites and Category I buildings within the WHS. The area thus warrants the strictest form of land use control as it contains a complex layering of cultural, socio-economic, religious and residential morphologies.

Special Zone is generally a **mixed-use zone**, meaning the use of land for either 100% Commercial, 100% Residential and Mixed-Commercial-and-Residential are permitted, subject to the requirements and prescriptions of the Overlays.

The Overlays attempt to reveal these cultural, socio-economic, religious and residential morphology within the planning of land use. The Overlays prescribe the encouraged activities for the respective areas within the Special Zone.

Figure C2.5 illustrates the methodology of the generation of the Overlays for the Special Zone.

C2.4.1 Residential Overlay

The dominant activity in these areas is Residential, and thus shall remain so. Commercial activities within these neighbourhoods shall enhance the cultural significance and OUVs of the site.

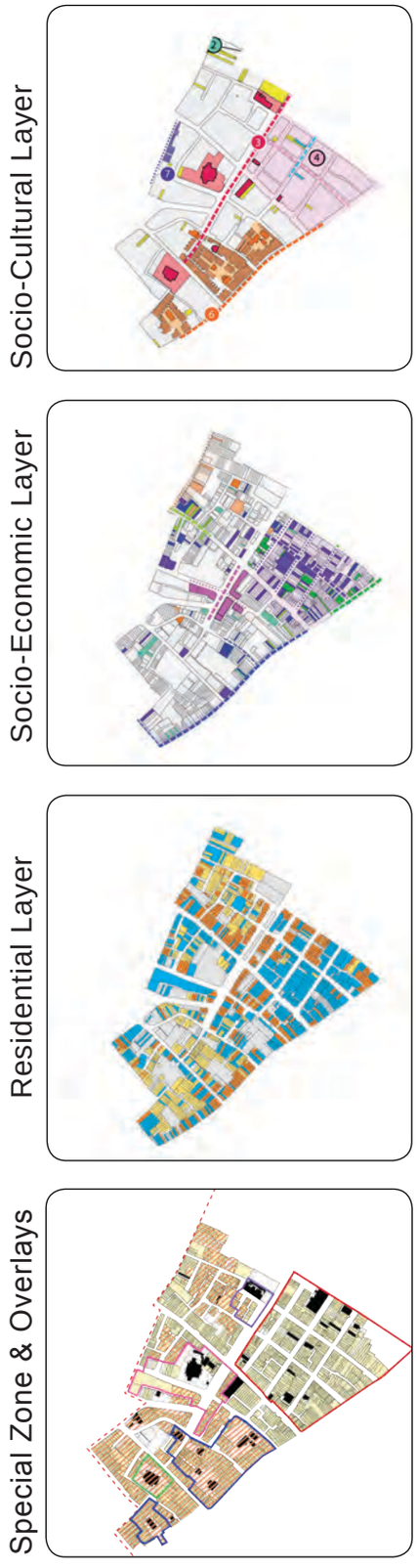


Figure C2.6: The generation of the Overlays for the Special Zone

C2.4.2 Cultural Enclave Overlays

Five Cultural Enclave Overlays are identified. They are:

i) Masjid Kapitan Keling and Gold Bazaar;
ii) Kuan Im Enclave;
iii) Little India;
iv) Kongsi Enclave;
v) Lebuh Acheh Mosque Enclave; and
vi) Lebuh Armenian Cultural Enclave.

The following pages outlines the encouraged activities for each of these enclaves.

i) Masjid Kapitan Keling and Gold Bazaar Enclave

Recommended activities:

- Activities relating to gold and gem trade.
- Indian Muslim restaurants.
- Activities supporting the mosque and the Muslim community services.

ii) Kuan Im Enclave

Recommended activities:

- Retail of prayer paraphernalia, idols and charms.
- Chinese vegetarian restaurants.
- Activities supporting the temple and its users.

iii) Little India

Recommended activities:

- South and Northern Indian restaurants.
- Textiles and related trade.
- Worker's accommodation.
- Cultural products and services.

iv) Kongsi Enclave

Recommended activities:

- Activities supporting the temple and its users.
- Residential or Commercial-with-Residential.
- Compatible arts and culture related activities.

v) Lebuh Acheh Mosque Enclave

Recommended activities:

- Activities supporting the mosque and the Muslim community, preferably Haj related.

vi) Lebuh Armenian Cultural Enclave

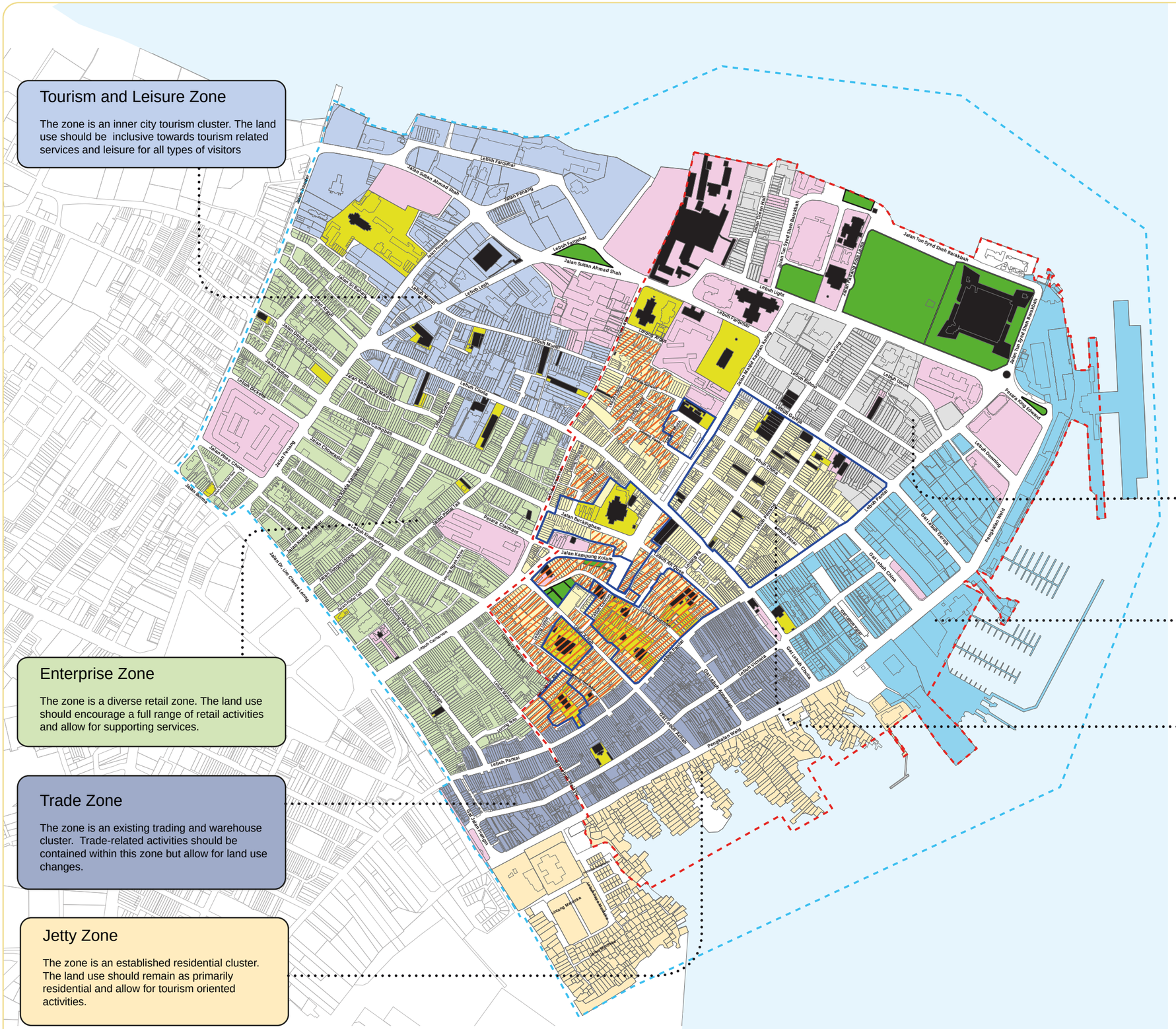
Recommended activities:

- Cultural related activities.

Figure C2.5

Activity Zoning Diagram

This Activity Zones Map is to be read together with the Table of Non-permissible Activities in the WHS (Table C2.1)


Lebuh Farquhar
Jalan Sultan Ahmad Shah
Jalan Penang
Lebuh Leith
Lebuh Light
Jalan Tun Syed Sheh Barakbah
Jalan Tun Syed Sheh Barakbah Bawah
Lebuh Union
Lebuh Dumbing
Lebuh Pantai
Jalan Dr. Lim Chwee Leong
Jalan Kampung Kolam
Lebuh Acheh
Lebuh Victoria
Pengkalan Weld
Lebuh Carneron
Lebuh Cintra
Lebuh Kimberley
Lebuh Chulia
Lebuh Campbell
Lebuh Buckingham
Lebuh Armenian
Lebuh Penang
Lebuh Pasar
Lebuh Gereja
Lebuh Ah Quee
Lebuh Ah Kong
Lebuh Ah Boey
Lebuh Ah Yeoh
Lebuh Ah Tai
Lebuh Ah Toh
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C2.5 **Water Body**

Any form of land reclamation on the water body area designated by the Core Area and Buffer Zones of the WHS is not permitted.

The construction of any structures on the water body area may be considered for approval, subject to planning permission which includes a Heritage Impact Assessment Report and other technical requirements.

C3 Protecting the Built Cultural Heritage

C3.1 Identification and Listing of Heritage Buildings

C3.1.1 Categorisation of Built Cultural Heritage

The buildings and sites within the WHS are identified according to four categories encompassing both ***conservation*** and ***compatible development.***

Figures C3.1 and C3.2 describe the categorisation of buildings in the WHS of George Town.

No	Building Name
1	Fort Cornwallis
2	Queen Victoria Memorial Clock Tower
3	Penang City Hall
4	The Penang State Museum Board Building
5	Kapitan Keling Mosque
6	Lebuh Acheh Malay Mosque
7	St. George Church
8	Penang High Court Building
9	Leong San Tong Khoo Kongsi

Table C3.1: List of Gazetted Category 1 Heritage Building under National Heritage Act (as of year 2012)

Protection, conservation & adaptation:

● Category I:

(a) Buildings, monuments, objects and sites of exceptional interest;

(b) Buildings and monuments declared as ancient and gazetted formerly under the Antiquities Act 1976 now under the National Heritage Act (2005); and

(c) Buildings and monuments Registered as National Heritage under the National Heritage Act (2005) (Table C3.1).



Example of Category I: City Hall, Esplanade

● Category II:

(a) Buildings, objects and sites of special interest that warrant every effort being made to preserve them.



Example of Category II:

Ensemble of shophouses, Jalan Sri Bahari

Figure C3.1: Categories of Built Cultural Heritage: Protection, Conservation and Adaptation

Compatible development:

- Infill:

(a) Existing empty land or temporary structure where compatible re-development is permitted.



- Replacement:

(a) Existing building without any significant value where sensitive re-development is permitted.



Figure C3.2: Categories of Built Cultural Heritage: Compatible Development

Analysis on Categorisation of the WHS:

In the WHS of George Town, there are 82 buildings, gateways, cemeteries and sites categorised as Category I. This amounts to 1.64% of the total number of identified buildings and sites. The majority of Category I buildings and sites are located in the core zone (62 out of 82), nine of which have been under the Gazetted National Heritage Act.

Category II consists of 76.54% of the total number of buildings and sites, that is 3771 buildings. It is the most prominent category as it makes up the majority of buildings in the WHS. The distribution of Category II buildings and sites is approximately equal in both the Core and Buffer Zones.

Meanwhile, there are 573 infill sites identified, which consists of existing empty land or temporary structures. This corresponds to 11.43% of the total number of buildings and sites in the WHS area. They are mainly located along the waterfront between Beach Street and Weld Quay.

Replacement buildings, on the other hand, make up 587 of the total, or 11.71%.

Table C3.2 below describes the number of identified buildings and sites in the WHS of George Town. Refer to Figure C3.3 for the map of categorisation.

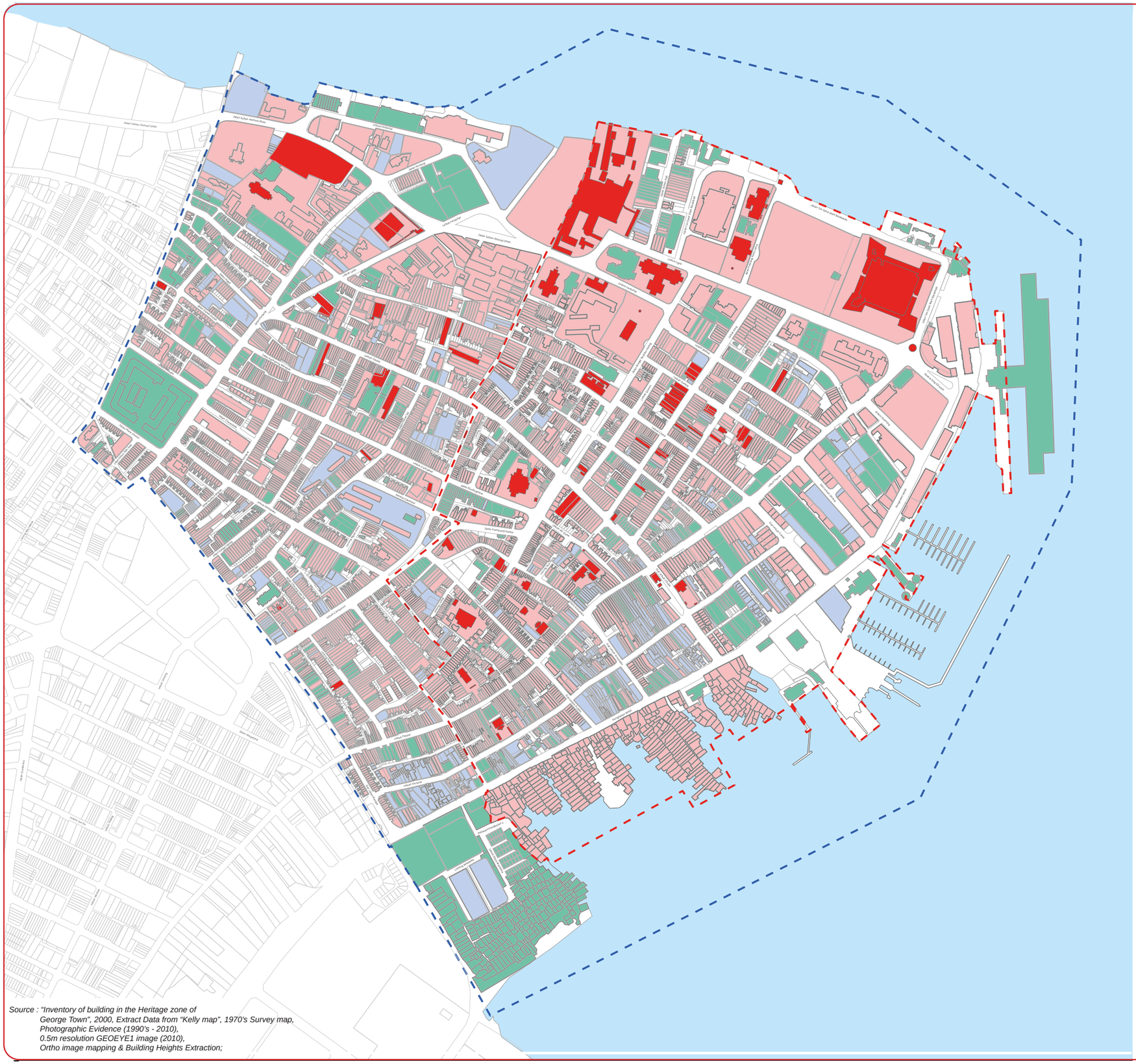
Category	Number of buildings and sites	%
Category I	82	1.66
Category II	3771	76.54
Infill Development	573	11.43
Replacement	587	11.71
Total	5013	100.00

Table C3.2: Identified Buildings and Sites in George Town WHS

** These figure does not include building from clan jetties up to Lintang Merdeka and Jalan Merdeka.*

Figure C3.3

Buildings and Sites Categories



Buildings and Sites Category :

- Category I
- Category II
- Infill
- Replacement
- Core Area
- Buffer Zone

Source : "Inventory of building in the Heritage zone of George Town", 2000, Extract Data from "Kelly map", 1970's Survey map, Photographic Evidence (1990's - 2010), 0.5m resolution GEOEYE1 image (2010), Ortho image mapping & Building Heights Extraction;

NOT TO SCALE

C3.1.2 Types of Buildings

A list of architecture types available in George Town is outlined below:

1. *Shophouses;*
2. *Bungalows;*
3. *Mosques;*
4. *Churches;*
5. *Chinese temples;*
6. *Hindu temples;*
7. *Administration buildings;*
8. *Commerce and trade buildings;*
9. *Godowns and offices;*
10. *Water villages (clan jetty); and*
11. *Residential Blocks.*

Refer to *Appendix A: Heritage Buildings Form and Styles in George Town World Heritage Site* for a description on the form and styles of buildings.

The shophouse constitutes the majority of the building forms within the WHS.

C3.1.3 Styles of Buildings

The early architecture is an amalgamation of cross cultural values, ideas, traditions of immigrants and indigenous builders, and the adaptation to the availability of building materials, skills, transportation, as well as the appropriateness to the tropical climate. By the 1900s European architectural and engineering professionals came to Penang and brought with them new technologies and building forms influenced from the western architecture movement.

The basic shophouse styles are defined as:

1. *Early Penang Style;*
2. *Southern Chinese Eclectic Style;*
3. *Early Straits Eclectic Style;*
4. *Late Straits Eclectic Style;*
5. *Art Deco Style; and*
6. *Early Modern Style.*

Figure C3.4 below illustrates the six main shophouse styles in Penang. For a description and explanation of each of these styles, please refer to *Annexure A: Heritage Buildings Form and Styles in George Town World Heritage Site.*

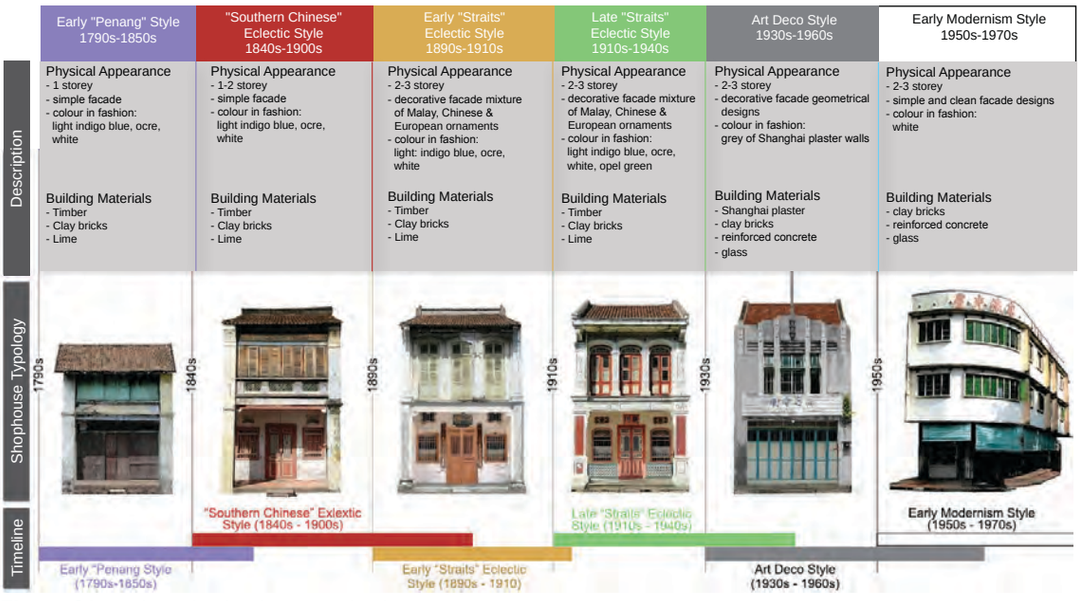


Figure C3.4: Six main shophouse styles in Penang

FIGURE C3.5: Types of Buildings, George Town

1. *Shophouses*
2. *Bungalows*
3. *Mosques*
4. *Churches*
5. *Chinese temples*
6. *Hindu temples*
7. *Administration buildings*
8. *Commerce and trade buildings*
9. *Godowns and offices*
10. *Water villages (clan jetty)*
11. *Residential blocks*

1.


2.


3.


4.


5.


6.


7.


8.


9.


10.


11.


C3.2 Guidelines for the Conservation Area and Heritage Buildings

All the buildings and sites within WHS are subjected to the Guidelines for the Conservation Areas and Heritage Buildings, covering all aspects of conservation works as well as all compatible developments within the WHS.

Refer to the **Part D: Guidelines for the Conservation Areas and Heritage Buildings** for more detail on the conservation principles, procedures for repair/ building/ planning permissions and the guidelines on the allowable works on all heritage buildings, and controls on signage and advertisement within the WHS.

C4 Protecting Vistas, Enclaves and Streetscape

The built heritage of George Town does not simply consists of individual buildings, it includes the ensemble of buildings and streetscape elements, and the way they are clustered and oriented to form the historic urban fabric of the city. The protection of vistas, enclaves and streetscapes are therefore essential towards the preservation of this fabric.

C4.1 Protecting Panorama and Waterfront Vistas

The hills and the Straits remain strong topographical features that frames and identifies George Town's sense of place. The roofscape and skyline, and the prominence of certain landmarks are significant in the way the historic city is perceived and read.

It is imperative that this waterfront vista remains uninterrupted from any development projects within the WHS.

Figure C4.1 and C4.2 shows the panorama of George Town from the Straits of Malacca, then and now.

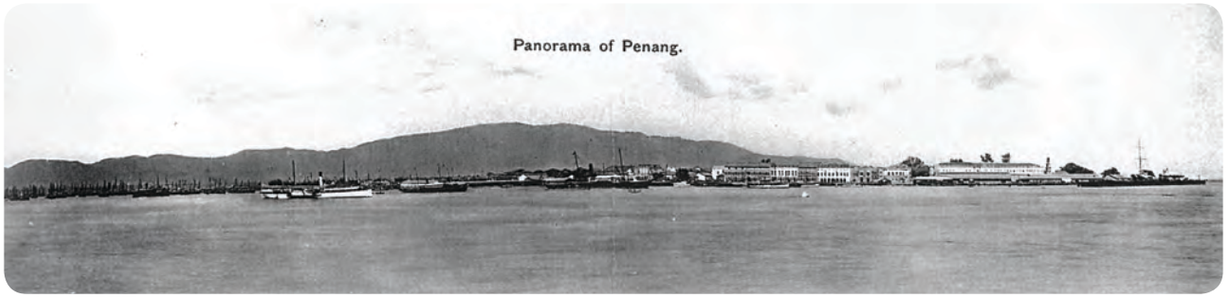


Figure C4.1: Panorama of George Town in the early 20th century



Figure C4.2: Panorama of George Town today

B4.2 Protecting Landmarks and Vistas

Street level views also frame important vistas and focal points. For example, the minarets of Acheen Street and Kapitan Keling Mosques, the church towers of St. George's and the Assumption's, as well as the clock towers of the FMS Railway building (Figure C4.3), all define important landmarks and wayfinding elements for their corresponding streets.

B4.2.1 Landmark Buildings

George Town WHS has a number of landmark buildings and vistas of historic and cultural importance. Table C4.1 provides a list of these significant landmark building.

It is important to understand how proposals for compatible development on infill sites and replacement buildings as well as conservation works on heritage buildings will impact views towards these landmarks.

Table C4.1: List of Landmarks Buildings

Landmarks		
L1 Queen Victoria Memorial Clock Tower 	*L2* Town Hall, Esplanade 	*L3* City Hall, Esplanade 
L4 High Court, Lebuh Light 	*L5* Cheong Fatt Tze Mansion, Lebuh Leith 	*L6* St. Francis Xavier Church, Jalan Pantai 
L7 Benggali Mosque, Lebuh Leith 	*L8* Kuan Im Temple, Jalan Masjid Kapitan Keling` 	*L9* Masjid Kapitan Keling, Jalan Masjid Kapitan Keling 
L10 Acheen Street Malay Mosque, Lebuh Acheh 	*L11* Church Street Pier, Pengkalan Weld 	*L12* FMS Railway Clock Tower, Gat Lebuh Chulia 

An assessment on the visual impact shall need to be undertaken and addressed in details. This assessment is to be included as part of the required Heritage Impact Assessment (HIA) and subject to review by the Technical Review Panel.

L13 Lebuh Pantai Fire Station, Lebuh Pantai 	*L14* Fort Cornwallis, Jalan Tun Syed Sheh Barakbah 	*L15* St. George's Church, Lebuh Farquhar 
L16 Church of Assumption, Jalan Farquhar 	*L17* Sri Mahamariamman Temple, Jalan Masjid Kapitan Keling 	*L18* Nagore Shrine, Lebuh Chulia 
L19 Boon San Tong Khoo Kong Si, Lebuh Victoria 	L20 Leong San Tong Khoo Kongsi, Cannon Square 	L21 Dewan Sri Penang, Lebuh Light 
L22 Teow Chew Association, Lebuh Chulia 	L23 (a) Seh Ng Chia Soo, Lebuh King 	L23 (b) Wu Ti Meow, Lebuh King 
L23 (c) Toi San Nin Yong, Leuh King 	L23 (d) Tua Pek Kong, Lebuh King 	L23 (e) Heong San Hoay Kuan, Lebuh King 

C4.2.2 Street Level Vista (SLV)

The street level vista is a view of a certain significant monument or building that can be seen from a distance. These monuments or buildings have their own values in terms of their usages and heritage. They can also act as landmarks for people to use as a guidance or as an orientation to their required destinations.

Each of these views has their specific characteristics that contribute to an appreciation of Penang at a certain level. Therefore, these views must be protected and to be considered in any form of development in the future.

Street level views also frame important vistas and landmark buildings. For example, the minaret of Acheen Street Malay Mosque, Masjid Kapitan Keling and the clock tower of the FMS Railway building (Figure C4.3), all define important landmarks and wayfinding elements for their corresponding streets.

Table C4.2: List of Street Level Vistas (SLV)

Street Level Vistas		Reference to Landmark
SLV 1	Lebuh Light	*Clock Tower (L1)*
SLV 2	Lebuh Pantai	*Clock Tower (L1)*
SLV 3	Gat Lebuh Gereja	*Church Street Pier (L11)*
SLV 4	Lebuh China	*Kuan Im Temple (L8)*
SLV 5	Jalan Masjid Kapitan Keling	*Masjid Kapitan Keling (L9)*
SLV 6	Lebuh Ah Quee	*Masjid Kapitan Keling (L9)*
SLV 7	Jalan Masjid Kapitan Keling + Lebuh Cannon	*Masjid Kapitan keling (L9)*
SLV 8	Junction of Lebuh Armenian and Lebuh Cannon	*Acheen Street Mosque (L10)*
SLV 9	Lebuh Chulia	*Lebuh Pantai Fire Station*
SLV 10	Lebuh Chulia (Pengkalan Weld)	*Lebuh Pantai Fire Station*
SLV 11	Esplanade (Padang Kota Lama)	*Penang City Hall (L3)*
SLV 12	Esplanade (Padang Kota Lama)	*Town Hall (L2)*
SLV 13	Jalan Sultan Ahmad Shah	*Cheong Fatt Tze Mansion (L5)*
SLV 14	Inner road towards Catholic Church	*St. Francis Xavier Church (L6)*
SLV 15	Lebuh Leith	*Benggali Mosque (L7)*
SLV 16	Lebuh Carnavon	*Masjid Kapitan Keling (L9)*
SLV 17	Lebuh King	*The 5 Temple (L23)*
SLV 18	Jalan Masjid Kapitan Keling	*Dewan Sri Penang (L21)*
SLV 19	Lebuh China	*FMS Railway Clock Tower*



Figure C4.3: Streetscape of Lebuh China, George Town showing the FMS Railway Clock Tower as landmark

Table C4.2 provides a list of street level views and vistas to be protected and Figure C4.4 identifies them in the map format. The map forms an important piece of information to be refered to by all proposals in the WHS. The following vista Management Guidance identifies key features within each view.

Table C4.3 List of Sea View Vistas (SVV)

Sea View Vistas		**Reference to landmark**
SVV 1	Ferry view	*George Town*
SVV 2	Lee Jetty	-
SVV 3	Sea view of Boon San Tong Khoo Kongsi	-
SVV 4	Tan Jetty	-
SVV 5	Chew Jetty	-
SVV 6	Lim Jetty	-
SVV 7	Penang Yatch Club and Jalan Tun Syed Sheh Barakbah	-
SVV 8	Sea view from Jalan Padang Kota Lama	*Waterfront views*
SVV 9	Jalan Tun Syed Sheh Barakbah	*Waterfront views*
SVV 10	Jalan Green Hall	-
SVV 11	Sea view from Gat Lebuh Leith	*Waterfront views*
SVV 12	Sea view from Lebuh Farquhar	-

Figure C4.4

Landmarks, Vistas and Focal Point

Landmark:

1. Queen Victoria Memorial Clock Tower
2. Town Hall
3. City Hall
4. High Court
5. Cheong Fatt Tze Mansion
6. St. Francis Xavier Church
7. Benggali Mosque
8. Kuan Im Temple
9. Masjid Kapitan Keling
10. Acheen Street Malay Mosque
11. Church Street Pier
12. FMS Railway Clock Tower
13. Lebuh Pantai Fire Station
14. Fort Cornwallis
15. St. Georges Church
16. Church of Assumption
17. Sri Mahamariamman Temple
18. Nagore Shrine
19. Boon San Tong Khoo Kongs
20. Leong San Tong Khoo Kongsi
21. Dewan Sri Penang
22. Teow Chew Association
23. The 5 Temple
    (a) Seh Ng Chia Soo
    (b) Wu Ti Meow
    (c) Toi San Nin Yong
    (d) Tua Pek Kong
    (e) Heong San Hoay Kuan

Street Level Vista (SLV)

Sea View Vista (SVV)

Waterfront

Core Area

Buffer Zone

Perlindungan pemandangan dari Feri

Perlindungan pemandangan laut dari persisiran pantai

U
NOT TO SCALE

Source: Land Use Survey, 2010;
AJM Planning & Urban Design Group Sdn Bhd

Vista Management Guidance

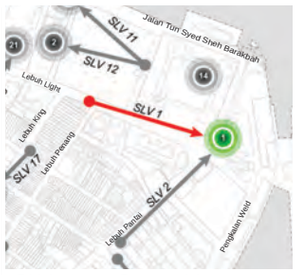
SLV 1: Queen Victoria Memorial Clock Tower from Lebuh Light

Description of View

The Queen Victoria Memorial Clock Tower is one of the most recognisable icons in George Town. The vista of the clock tower can be seen from the shoplots opposite the Esplanade.

The clock tower can be visible above the trees where there is no obstruction at the foreground or background of the view.





SLV of the Queen Victoria Memorial Clock Tower from Lebuh Light (left) and its location (above)



Artist impression

1. The view is sensitive to taller buildings in the background or obstructions in the foreground of the tower.
2. There should not be any other buildings that are higher than the clock tower. The tower should be recognised from a distance. This view should be protected.
3. Vegetation in the foreground, if not controlled, could block the view of this vista.

Vista Management Guidance

SLV 2: Queen Victoria Memorial Clock Tower from Lebuh Pantai

Description of View

The Queen Victoria Memorial Clock Tower can also be seen near the junction of Lebuh Bishop. The road here is almost alligned with the tower.





SLV of the Queen Victoria Memorial Clock Tower from Lebuh Pantai (left) and its location (above)



Artist impression

1. The view is sensitive to any building or obstruction in the background of the tower.There should not be any other buildings that are higher than the clock tower at the background.
2. The tower and the gable end of the godown should be recognised from a distance. This view should be protected.
3. There should not be large signage (advertising or directional) that will block or distract the view of the clock tower.

Vista Management Guidance

SLV 3: Church Street Pier from Gat Lebuh Gereja

Description of View

The Church Street Pier terminates at a straight line visual axis along Gat Lebuh Gereja and can be seen as far back from the intersection between Gat Lebuh Gereja and Lebuh Pantai. Existing low rise buildings on both side of Gat Lebuh Gereja provides symmetrical framming of view looking into the Church Street Pier.





SLV of the Church Street Pier from Lebuh Gereja (left) and its location (above)



Artist impression

1. There should not be any building or any type of construction in the background of the view.
2. Shop signage should not block or distract the current view. The colour of the buildings and signage should not contradict with the current situation.
3. New developments along the Gat Lebuh Gereja have to respect the historic skyline of the existing view.

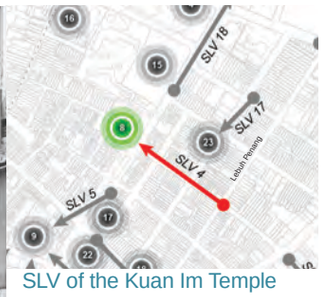
Vista Management Guidance

SLV 4: Kuan Im Temple from Lebuh China

Description of View

The terracotta roof of Kuan Im Temple terminates the view from Lebuh China. The skyline is clear with no tall buildings at the background and the foreground is of a typical heritage streetscape in the WHS.





SLV of the Kuan Im Temple from Lebuh China (left) and its location (above)



Artist impression

1. The skyline of the Kuan Im Temple is clear. There should be no other buildings higher than the temple in the background.
2. Gable-End wall on the left side of the view should not be blocked by any future increase in height of the adjacent building.

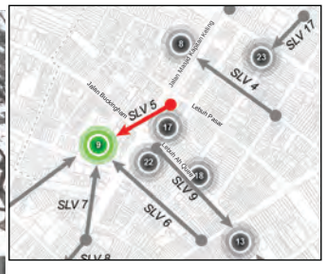
Vista Management Guidance

SLV 5: View of Minaret Masjid Kapitan Keling from Jalan Masjid Kapitan Keling (Pitt Street)

Description of View

The towering minaret of the Masjid Kapitan Keling is visible from many directions. It is highly visible from mid-way of Jalan Masjid Kapitan Keling and particularly as one stands at the intersection of Jalan Masjid Kapitan Keling and Lebuh Pasar. The background of the view is clear of taller buildings, with the minaret dominating the skyline.





SLV of the Masjid Kapitan Keling from Jalan Masjid Kapitan Keling (left) and its location (above)



1. The view is sensitive to any increase in heights of existing heritage buildings and replacement building at the background and foreground.
2. Shop signage should not block or distract the current view. The colour of the building and signage should harmonise with the current situation.
3. Vegetation in the foreground, if not controlled, could reduce visibility toward the vista and quality of the view.

Vista Management Guidance

SLV 6: View of Masjid Kapitan Keling from Lebuh Ah Quee

Description of View

The minaret of Masjid Kapitan Keling looking from Lebuh Ah Quee forms a strong visual focal and wayfinding element.





SLV of the Masjid Kapitan Keling from Lebuh Ah Quee (left) and its location (above)



Artist impression

1. The background and skyline should be clear from any structure taller than the existing buildings in the foreground.
2. Buildings in the foreground must be sensitive to the minaret in terms of height and colour as well as the whole setting of Lebuh Ah Quee.

Vista Management Guidance

SLV 7: View of Masjid Kapitan Keling from the junction of Lebuh Cannon and Jalan Masjid Kapitan Keling

Description of View

The minaret of the Masjid Kapitan Keling is highly visible from a short distance at the intersection of Jalan Masjid Kapitan Keling and Lebuh Cannon. The existing visual of the background is clear from any structure or buildings.





Street level vista of the Masjid Kapitan Keling from Jalan Masjid Kapitan Keling (left) and its location (above)



1. The view is sensitive to the structures or buildings in the background that may be visible from this point.
2. Whilst it is highly unlikely that there will be new buildings in the foreground, the view from this position shall need to be monitored from time to time.
3. The vegetation in the foreground, if not controlled, could reduce the quality of the view.

Vista Management Guidance

SLV 8: View of Acheen Street Malay Mosque at the junction of Lebuh Armenian, Jalan Masjid Kapitan Keling and Lebuh Cannon

Description of View

The Acheen Street Mosque is historically and architecturally important as it reflects the earliest Muslim community in Penang comprising of the Malays, Indian Muslims, Arabs and the Achehnese. The minaret of the mosque can be clearly visible from the intersection of Jalan Masjid Kapitan Keling and Lebuh Armenian.





SLV of the Acheen Street Malay Mosque at the junction of Lebuh Armenian (left) and its location (above)



1. The view is sensitive to any building or obstruction in the background of the mosque's minaret. Buildings erected in the background shall not dominate the background in terms of height, design and colour.
2. Tree growth shall need to be monitored and trimming may be required should the view be totally covered from this view position.
3. Height extensions of existing buildings in the immediate foreground shall need to be sensitive to this street level view.

Vista Management Guidance

SLV 9: View of Lebuh Pantai Fire Station from Lebuh Chulia

Description of View

The white and red colour of the fire station dominates the view from this view position. This view of this vista is further accentuated by the fact that its background is characterised by low-rise buildings.





SLV of the Lebuh Pantai Fire Station from Lebuh Chulia (left) and its location (above)



Artist impression

1. Development in the background should be sensitive in protecting this street level view looking from this view position.
2. Shop signage should not block or distract the current view.
3. Colour of the signage and buildings along Jalan Chulia should not contradict or disturb the fire station as the main focal point from this area.

Vista Management Guidance

SLV 10: View of Lebuh Pantai Fire Station from Lebuh Chulia (near Weld Quay)

Description of View

The Lebuh Pantai Fire Station terminates street level view from this view position. Roof profile and detail of existing heritage buildings on both sides of the Lebuh Chulia is significant within this street level view. The view towards this vista is however affected by MWE building located far distance in the background.





SLV of the Lebuh Pantai Fire Station at Lebuh Chulia near Pengkalan Weld (left) and its location (above)



1. The view of the background and foreground is sensitive to any building higher than the existing height of heritage building at the foreground.
2. Vegetation in the foreground, if it is not controlled, could reduce the quality of the view.

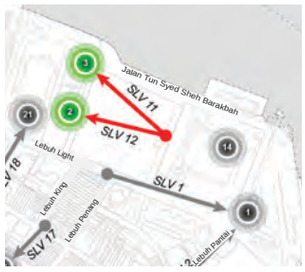
Vista Management Guidance

SLV 11 & 12: View of Penang City Hall and Town Hall from the Esplanade

Description of View

This is a wide panoramic view in which both buildings form focal points from this position. The foreground is dominated by open space and the background of this view is clear from tall buildings higher than the current skyline.





SLV of the Penang City Hall and Town Hall from the Esplanade (above) and its location (right)



Artist impression

1. The view is sensitive to developments in the background, including those buildings located far in the distance and beyond the WHS boundary. Developments need to ensure that this skyline is protected and enhanced.

2. Vegetation near to these buildings, if not controlled, could reduce the visibility of the two focal points and the quality of the overall skyline. The height of the trees should be almost equal with the height of these buildings.

Vista Management Guidance

SLV 13: View of Cheong Fatt Tze Mansion from Jalan Sultan Ahmad Shah

Description of View

The colour of the Cheong Fatt Tze Mansion dominates the view from this view position..





SLV of the Cheong Fatt Tze Mansion from Jalan Sultan Ahmad Shah (left) and its location (above)



Artist impression

1. Signage should not distract or block the view of the mansion.
2. The colour of other adjacent buildings (background and foreground) should not overwhelm the mansion as the primary focal point to the area.
3. Vegetation especially near the focal point, if not controlled, could reduce the quality of this view.

Vista Management Guidance

SLV 14: St Francis Xavier Church from Jalan Penang

Description of View

This is a short distance view of the St. Francis Xavier Church from Jalan Penang. The church building terminates the view from this position; the view is accentuated by the vegetation aligning both sides of the lane going towards the church.





SLV of St. Francis Xavier Church from Jalan Penang (left) and its location (above)



Artist impression

1. Signage should be simple in terms of the design and colour (to promote this vista). The size should also harmonise with the surrounding conditions.
2. There should be no structures such as an arch that will block the view from Jalan Penang.
3. There should not be any other stalls or temporary buildings that will block or disturb the view of the church from Jalan Penang.

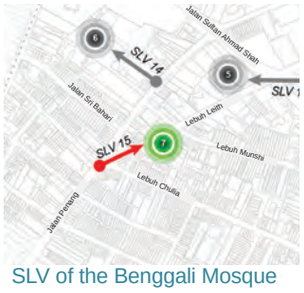
Vista Management Guidance

SLV 15: View of Benggali Mosque from junction of Lebuh Leith

Description of View

The minaret of the Benggali Mosque can be partly seen from this view position. The white colour of the building its background provides a contrast to the minaret.





SLV of the Benggali Mosque from the junction of Lebuh Leith (left) and its location (above)



Artist impression

1. The view is sensitive to an extension or an increase in height of the adjacent heritage building in the foreground.
2. Signage should not distract or block the view towards the mosque's tower.

Vista Management Guidance

SLV 16: View of Masjid Kapitan Keling from Lebuh Carnarvon

Description of View

Another view of the Masjid Kapitan Keling can be seen at Lebuh Carnarvon. However, the golden dome is the only component of the mosque that can be seen clearly. The mosque itself has been block by the MARA Complex and Hotel An-Nur Ancasa.





SLV of the Masjid Kapitan Keling from Lebuh Carnarvon (left) and its location (above)



Artist impression

1 View is sensitive to height of surrounding buildings, both in the foreground and backgound of the view.

Vista Management Guidance

SLV 17: View of the five temples from the junction of Lebuh King and Lebuh Bishop

Description of View

The five temples can be recognised from the junction of Lebuh King and Lebuh Bishop. From this view point, the unique shape of the gable-end or roof of these temples are clearly visible. The skyline is clear, with no tall buildings in the background and foreground of the view.





SLV of the five temples from the junction of Lebuh King and Lebuh Bishop (left) and its location (above)



Artist impression

1. Developments in the background should be sensitive in protecting this street level view looking from this view position.
2. The skyline of the five temples is clear. There should be no other buildings higher than the temples in the background.

Vista Management Guidance

SLV 18: View of Dewan Sri Penang from Jalan Masjid Kapitan Keling

Description of View

The Dewan Sri Penang can be visible from Jalan Masjid Kapitan Keling. The building can be recognised from the junction with Lebuh Gereja. The background is clear from any tall buildings. However, the foreground is partly blocked by the vegetation.





SLV of Dewan Sri Penang from Jalan Masjid Kapitan Keling (left) and its location (above)



Artist impression

1. The skyline behind Dewan Sri Penang is clear. There should be no other buildings higher than the auditorium at the background.
2. Shop signage should not block or distract the current view. The colour of the signage and buildings along Jalan Masjid Kapitan Keling should not contradict or disturb Dewan Sri Pinang as the main focal point from this area.
3. The vegetation in the foreground, if not controlled, could reduce the quality of the view.

Vista Management Guidance

SLV 19: View of the FMS Railway Clock Tower at Gat Lebuh China

Description of View

The FMS Railway Clock Tower can be recognised from the junction of Lebuh Pantai and Gat Lebuh China. The skyline is clear with no tall buildings in the background and foreground of the view.





SLV of the FMS Railway Clock Tower from the junction of Gat Lebuh China and Lebuh Pantai (left) and its location (above)



1. Whilst it is highly unlikely that there will be new buildings at the foreground, the view from this position shall need to be monitored from time to time.
2. The vegetation in the foreground, if not controlled, could reduce the quality of the view.

C4.2.3 Sea View Vista (SVV)

SVV is a panoramic view towards or from the sea to a certain location or area. Each of the panoramic views has its significant view towards the area providing extra appreciation of the beauty of Penang from a bigger picture.

The panoramic view looking inwards from the ferry and outwards towards the sea needs to be protected and enhanced. Public access from the streets through the jetties should be allowed.

SVV 1: Ferry View - George Town



The ferry ride provides a beautiful view of George Town and Penang Island in a bigger picture. The skyline of George Town is magnificent with Penang Hill located perfectly at the background providing a significant value to this view.

SVV 2: Lee Jetty



The Lee Jetty provides a magnificent view towards the sea. The buildings, house design and the environment of the surrounding areas creates a feeling of living in a fishing village.

SVV 3: Sea View from Boon San Tong Khoo Kongsi



There is a potential SVV from this area. Therefore, for future development to this area, the axis line from the Boon San Tong Khoo Kongsi to the sea should be cleared and protected. There should be no construction of any buildings along this axis.

SVV 4: Tan Jetty



The view from the Tan Jetty is magnificent. The setting of this provides a beautiful scenery with the fishing boats and the jetty to the sea that seems to go on infinitely. The Penang Bridge is visible from this area.

SVV 5: Chew Jetty



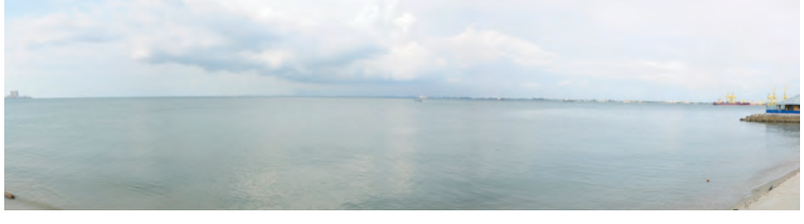
The Chew Jetty is the biggest of the waterfront settlements in George Town. The view provided from this jetty is spectacular as there are fishing boats, ferries, sea ports (Butterworth) and Penang Bridge that can be seen from this area. The view is more spectacular during the night time.

SVV 6: Lim Jetty



This jetty is the nearest jetty to the Raja Tun Uda Ferry Terminal. Even though the view from this jetty is limited due to the existence of the ferry terminal, it still provides a beautiful view of the sea and the other clan jetties adjacent

SVV 7 to SVV 12



The vistas from the Penang Yatch Club (SVV7) until Lebuh Farquhar (SVV12) provides a beautiful view towards the sea. The view is unique as it is clean from any permanent structure that might disturb the view. The views in this area are spectacular especially during the sun rise.

There should not be any structure in the water that will block these panoramic clear views of the sea. The public access should be provided especially from the public streets towards the waterfront areas.

C4.3 Protecting the Terracotta Roofscape

The pitched-roof terracotta roofscape is an essential component of the historic urban fabric of the WHS of George Town and its Outstanding Universal Values. It is essential for the conservation of this area that the preservation of this pitched-roof terracotta roofscape is supported.

Any development in the WHS must be roofed in terracotta tiles, and maintain the pitched roof character. Existing flat roofs, should they not be replaced, it is recommended to be converted to green roofs garden.

Figure C4.5 shows an aerial vista of the terracotta roofscape.



Figure C4.5: Terracotta Roofscape, George Town

C4.4 Heights

The townscape of the WHS as a manifestation of the OUVs is closely linked to the visual legibility of the important landmarks and the continuity of its roofscape. The control of height is a necessary measure to ensure the importance of protecting vistas, townscape and historic streetscape are in no way compromised.

Increase in height of all heritage buildings in the WHS (Category II) and the allowable height for Infill and Replacement sites may be built to a maximum of 18 metres from ground level to the roof eave. Such increase in height shall be considered at the merit of each application where the extension of height reflects the authenticity of the OUVs of the WHS.

The height of Category I buildings must be maintained.

Refer to Chapter D5 for guidelines on height for Category II building guideline

C4.5 Historic Streetscape

The character of some of the streets in the WHS which are still intact must be protected and enhanced. This includes both the tangible and intangible elements within the streetscapes of the WHS.

C4.6 Street Elevations

The dominant building type in the WHS, i.e. the shophouse is designed to form row. The facade composition of compatible Infill and Replacement developments must respect the scale and rhythm of the surrounding heritage buildings, as well as ensuring the continuity of the street elevation.



Figure C4.6: Street Elevation

C4.7 Corner Sites

For a shophouse on a corner site, both the front and the side are considered the street façade and should maintain the continuity of both street elevations.



Figure C4.7: A corner building

Among the buildings constructed on a compound layout are the St. George Church, the High Court, the Kuan Im Temple, Kapitan Keling Mosque and the mansions on Light Street and between the Convent and the Esplanade.

Any extensions to a heritage building on a compound must retain the spatial character of the compound.



Figure C4.8: Traditional cobbled pathways from Weld Quay to Lebuh Pantai, once pounded by the feet of coolies and labourers - for the loading and unloading of cargo of the vibrant trans shipment port. These pathways support the local OUVs of the site

C4.8 Protecting Historic Compounds, Boundary Walls, Gateways, Pathways and Street Furniture

Compounds, enclaves, boundary walls, gateways, pathways and street furniture constitute this historic urban structure.

The existence of these elements should be researched and warrant every effort to be protected and conserved.

As the town grew more intensively, rows of shophouses were built on the available land fronting the street edge, eventually concealing the earlier buildings and their compounds. The Chinese Kongsis illustrate this morphology (Figure C4.9), where the temples were set within an open space and surrounded by shophouses.



Figure C4.9: The Khoo Kongsi enclave, showing the temple, stage, related buildings and compound

C4.9 Protecting Historic Street Edge & Drains

In the older parts on George Town, the drain edge is of clay brick. But in the extensive engineering works of the 1890s in George Town, the drain edge used engineering brick, usually made in the potteries next to coal mines.

C4.9.1 Historic Drains is an Example of Sustainable Urban Design

The built landscape was designed to use the climatic conditions, with the materials at hand. Terracotta tiled roofs, cooled the upper rooms and channelled rainwater to the open drain below, creating a cooling curtain of water. Internally, rain flowing from the roofs sloping into the air-well was collected in the granite reservoir, and would drain through the property and into the open drain in the street. The open drains allowed for evaporation and cleared quickly, any blockage easily seen. This is a typical streetscape designed to suit tropical climates.

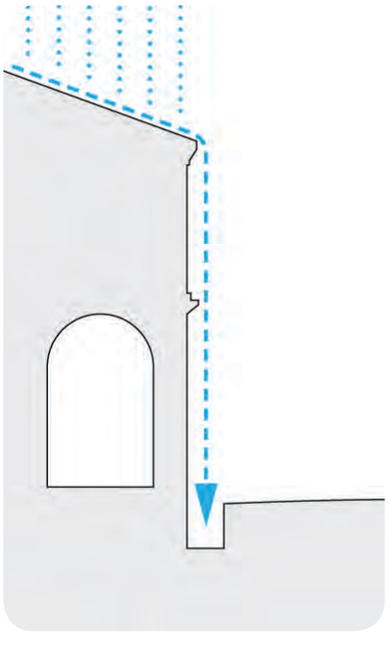


Figure C4.10: Gutterless traditional tiled roof channels water into the historic street drains



Figure C4.11: View of Lorong Stewart shows the clean open drain today, with the gutterless V-shaped terracotta roof

To avoid flooding, the buildings were raised up by a step or two. This also meant that the internal outlet was higher and this avoided back up from the drain during heavy rains. The drain was crossed by a 'bridge' of granite slabs opposite the central door of the buildings. On top of the slabs, or sometimes forming the bridge, were granite steps.

The open street drains should be maintained as much as possible, and the practice of new developments incorporating open drains should be encouraged when possible.

C4.10 Back Lanes

C4.10.1 Back Lane Waiver

Within the WHS, the back lane waiver can be considered on a case by case basis during the application process for planning permission or building plan submission.

C4.10.2 Previously Surrendered Land

In the case of land which has been surrendered to the state authority before WHS listing and is now identified as of heritage value, it is advisable for the landowner to make application to the state authority to buy-back the land in order to protect the authencity and integrity of the heritage building.

C5 Enhancing Public Realm

C5.1 Objective and Strategies

C5.1.1 Objective

It is an objective of the SAP to make the streets of George Town pedestrian priority, to provide adequate public open spaces and to improve connectivity for the comfort of all non-private vehicle user especially the pedestrian. This relates closely to the management of access and circulation, which is addressed in Chapter C6 of this document.

This chapter proposes a series of place making and public space improvement programs towards the enhancement of the public realm.

C5.1.2 Shared Streets

The streets of George Town are traditionally shared spaces, with changing patterns of activities (Figure C5.1 and Figure C5.2). These practices, performances and rituals create the richness of the culturally eclectic landscape of the historic settlements. Figure C5.4 maps out the Festival Routes and Performance Space Topography of the George Town WHS.

The temporary public use of the street should be maintained and encouraged.

The use of five-footways and street space for outdoor seating and merchandise displays while maintaining adequate pedestrian access is allowed (Figure C5.3).



Figure C5.1: The street of George Town as a multi-use, cultural space. Illustration by Tan Yeow Wooi



Figure C5.3: Example of a streetscape that is pedestrian priority and incorporating a public arts program. This is potentially applicable for the Jalan Masjid Kapitan Keling upgrade



Figure C5.2: Artist's illustration of the shared street concept

Public-Private-People Partnerships (PPP)

The success of the public realm masterplan is highly dependant on the collaborations between the local authority, local community, other government agencies, non-governmental organizations, business community and the private owners, as possibility of the acquisition of empty land for park space is limited. It is advised that the public-private-people partnerships are pursued in the upgrading of certain privately owned public spaces and parks (such as St. George's Church Park). This partnership includes collaborating with stakeholders in the aspect of planning, project funding, implementation, management and maintenance of the public spaces.

C5.1.3 Strategy for Enhancing Public Realm

i) **Improvement and Better Utilisation of Public Spaces**

The George Town WHS is a compact city with little public land resource for provision of larger open space. However, its waterfront setting and historic urban pattern and typology offer great opportunities for the creation of public urban spaces. Initiatives to improve existing public open spaces and to better utilise areas with potential as urban plazas/ parks shall be investigated and suitable 'place-making' programs shall be undertaken from time to time. Such places includes linear spaces within road reserves and compounds of key civic and private buildings.

ii) **Public Space Connectivity**

The public spaces shall be connected to each other for pedestrian usage. Connection shall be enhanced by improving pedestrian facilities with priority given to main pedestrian spine linking various nodes within the WHS and areas outside the WHS.

The priority pedestrian spine are along:

i. Part of Jalan Penang linking Komtar to Lebuh Campbell;
ii. Lebuh Campbell/ Lebuh Buckingham;
iii. Lebuh Carnarvon
iv. Lebuh Acheh/ Gat Lebuh Acheh
v. Jalan Masjid Kapitan Keling
vi. Lebuh China linking the Special Zone of WHS the transport node near Church Street Pier;
vii. Part of Lebuh Light linking Jalan Masjid Kapitan Keling to Jalan Padang Kota Lama;
viii. Jalan Padang Kota Lama linking the WHS to the waterfront area.

In an effort to green the city and to reduce carbon emission, greening program shall be continuously identified and undertaken.

GTWHI shall spearhead the investigation and the planning of the place making and greening programs. The implementation shall be in partnership with the relevant stakeholders such as private sector, public agency and community group.

Figure C5.4

Festival Routes and Performance Space Topography



Festival Routes:

Thaipusam Hindu Festival
1st Day of Thaipusam
3rd Day of Thaipusam
Chariot House, Penang Street ↔ Outside WHS

Navarathri Gujerati Festival
Festival Procession
Sri Mahamariamman Temple ↔ Fort Conrnwallis

Nine Emperor Chinese Festival
9th Day of the 9th Chinese Lunar Calendar
Tao Boo Keong Temple → Yeoh Jetty

Tua Peh Kong
Poh Hock Seah Temple ↔Outside WHS

Chingay
Giant Flag Carrying in December
Outside WHS → Esplanade

Start Point

End Point

Stage and Altars:

Ghost Month Chinese Festival
Placement of performance stage and altars

Festival Routes in the Past:

Dondang Sayang
15th Day of 1st Chinese Lunar Calendar
Outside WHS → Esplanade

NOT TO SCALE

iii) **Nodes Connectivity**

Three main nodes that bring in the highest number of pedestrians into the WHS are (1) KOMTAR, (2) the ferry/ bus/ taxi terminals on Weld Quay and (3) Swettenham Pier bringing a high volume of tourists from the cruise ships. All these nodes are proposed to be connected to the pedestrian network.

iv) **Waterfront Connectivity**

The strategy of public connectivity also includes the linkage from the waterfront (Weld Quay in particular) into the inner city, with the aim to facilitate pedestrian movement within these two areas. A water taxi route is also proposed to connect key areas along the waterfront. Please refer to Chapter C6 on Managing Access and Circulation for more details.

Figure C5.6 describes the connectivity between the open spaces and pedestrian network. A series of placemaking/ landscape and streetscape upgrades are proposed, aiming to improve connectivity of movement to, from and within the WHS of George Town.



v) **Pedestrian Priority Street**

The pedestrian priority street is an urban design approach which seeks to minimise conflict between vehicle traffic and pedestrians by giving priority within the road space to pedestrian users.

Principally, the implementation of the pedestrian priority streets in the George Town WHS is to promotes walking rather than driving. At the same time, priority for the public mode of transportation rather than private transportation shall also be implemented. Other measures to further promote walking include in improving pedestrian facilities and comfort such as expending pedestrian realm through targeted lane reduction and/ or sidewalk widening.



Figure C5.5: An example of pedestrian priority streets that has been implemented in Madrid
(Source: http://www.quest-project.eu/index.php?id=25&pid=2)

Figure C5.6

Open Space and Pedestrian Network, George Town


Perkuburan Protestant
Friendship Park
Padang Kota Lama
Kota Kubu Cornwallis
Lebuh Armenian Park
Jalan Sultan Ahmad Shah
Lebuh Farquhar
Lebuh Light
Lebuh Chulia
Lebuh Pantai
Lebuh Armenian
Gat Lebuh Armenian
Gat Lebuh Chulia
Gat Lebuh Melayu
Gat Lebuh Ah Quee
Pengkalan Weld
Jalan Kampung Kolam
Jalan Burmah
Jalan Masjid Kapitan Keling
Jalan Tun Syed Sheh Barakbah
Jalan Padang Kota Lama
Jalan Penang
Jalan Green Hall
Jalan Stewart
Jalan Scotland
Jalan Argyle
Jalan Dato Koyah
Jalan Muntri
Jalan Kampung Melayu
Jalan Dickens
Jalan Phillips
Jalan Chowrasta
Jalan Pasar Lama
Jalan Pintal Tali
Jalan Kuala Kangsar
Jalan Gurney Utama
Jalan Gurney Satu
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C5.2 Proposed Public Realm Programs

The proposed public realm programs are divided into six types as below and illustrated in Figure C5.8:

A) Parks and Urban Plazas;
B) Main Pedestrian Spine;
C) Back Lanes;
D) Waterfront Promenade;
E) Potential Green Space; and
F) Five-Footways.

It is essential upon the detail design and documentation of any landscape programs or any intervention to public spaces, that a Heritage Impact Assessment (HIA) is conducted, on case by case basis; to assess the impact of new interventions or developments on the existing historic urban cultural landscape.

The objectives of these programs are:

i) To increase green public open space in the city;

ii) To have streets that promote safe, comfortable, convenient and barrier free connectivity for all road users with primary consideration for pedestrian;

iii) To green the WHS through planting;

iv) To reinstate the vibrancy of the waterfront, and to reconnect it with the inner city; and

v) To revitalise back lanes as important and safe pedestrian access-way.

Annex B in this SAP provides further details on the Planning and Design Guide for public realm for the following areas:-

A) The North Seafront;
B) The East Seafront;
C) The Clan Jetties; and
D) Jalan Masjid Kapitan Keling.
Please refer to annexure B: Figure A1.

Any development proposals or implementation actions within the areas mention above will need to make reference and conform to the outlined planning and design guide.



C5.2.1 Program (A): Parks and Urban Plazas

Proposed programs for the park and urban plaza are divided into two categories:

a. Public parks

These are existing parks and open spaces in the WHS. The parks are:

- Fort Cornwallis;
- Esplanade;
- English Garden;
- Friendship Park; and
- Lebuh Armenian Park.

Some of these parks have already been improved. However, further improvement shall be studied to enhance their facilities for better utilisation as public space.

Activities that are ancillary to the function of the parks can be considered. However, such activities shall not be more dominant than the function of the park for public recreational use and amenity.

b. Urban Plaza

These are compounds of Category I buildings in the WHS which are of significant size; where the compound can be shared with the general public as public urban spaces such as plaza and green spaces.

Their potential and possible arrangement for public use shall be studied in partnership with the private owners, the communities, the GTWHI and the MBPP.

The proposed place making and urban plaza program can be grouped into two (2) key areas i.e.:

i. Area 1: Masjid Kapitan Keling - St. George's Church

Potentially, a linear urban plaza can be created between these two key anchor buildings. The area is proposed to be the main area for the public node in the GTWHS, incorporating stops for the proposed tram (Figure C5.7).



Please refer to Annexure B: Figure D2 for detailed planning proposal of Jalan Masjid Kapitan Keling

Figure C5.7: Area 1 - Masjid Kapitan Keling to St. George's Church

Figure C5.8

Proposed Public Realm Programs


A1
A2
A3
A4
A5
A6
A7
A8
A9
A10
C1
C2
C3
C4
C5
C6
C7
C8
C9
C10
C11
D1
E1
Lebuh Farquhar
Jalan Penang
Jalan Sultan Ahmad Shah
Jalan Tun Syed Sheh Barakbah
Lebuh Light
Lebuh Chulia
Lebuh Pasar
Lebuh Bishop
Lebuh Union
Lebuh Gereja
Lebuh Acheh
Lebuh Armenian
Lebuh Victoria
Lebuh Cannon
Lebuh Ah Quee
Lebuh Aceh
Lorong Argus
Jalan Masjid Kapitan Keling
Jalan Dato Koya
Jalan Hujan Panas
Jalan Sri Bahari
Jalan Dato Kapitan
Jalan Pangkor
Jalan Tun Syed Sheh Barakbah
Jalan Gereja Hall
Jalan Tun Syed Sheh Barakbah
Lebuh Carnarvon
Lebuh Buckingham
Lebuh Campbell
Lebuh Melayu
Lebuh Penang
Lebuh Cintra
Lebuh Cannon
Lebuh Ah Quee
Lebuh Aceh
Lebuh Armenian
Lebuh Victoria
Lebuh Pasar
Lebuh Bishop
Lebuh Union
Lebuh Gereja
Lebuh China
Lebuh Light
Lebuh Farquhar
Lebuh Chulia
Lebuh Penang
Lebuh Melayu
Lebuh Buckingham
Lebuh Campbell
Lebuh Carnarvon
Lebuh Acheh
Lebuh Cannon
Lebuh Ah Quee

ii. Area 2: Lebuh Acheh, Lebuh Armenian and Lebuh Armenian Park

This area includes two well known historic buildings, the Acheen Street Malay Mosque and the Khoo Kongsi. This area is nearer to the future public transport node, and will eventually provide better access to these unique heritage buildings (Figure C5.8).

A multi-faceted approach to planning, design and management of public spaces using 'place-making approach' shall be utilised. This capitalises on a local community's assets, inspiration and potential, and ultimately creates good public spaces that benefit the general public and community.

The planning, funding, implementation, management and maintenance shall be a collaborative partnership between the public body, local communities, owners and the private sector.

Performance Criteria for Parks and Urban Plaza

- Parks to simply consist of turf and large tree canopy coverage;
- Trees preferable to shrubs;
- Supporting activities must be supporting and ancillary to the function of the parks as public space and recreational amenity;
- Incorporation of underground water retention where possible;
- Minimally designed new street furniture and lighting;
- Promotes universal access principles;
- Promotes efficient water use;
- Recovers, re-uses and generally minimises the amount of natural resources used;
- Possible incorporation of historic street furniture, either restored or authentically reconstructed; and
- Possible incorporation of 'urban farming' and biodiversity such as place based heritage plants and mangrove.

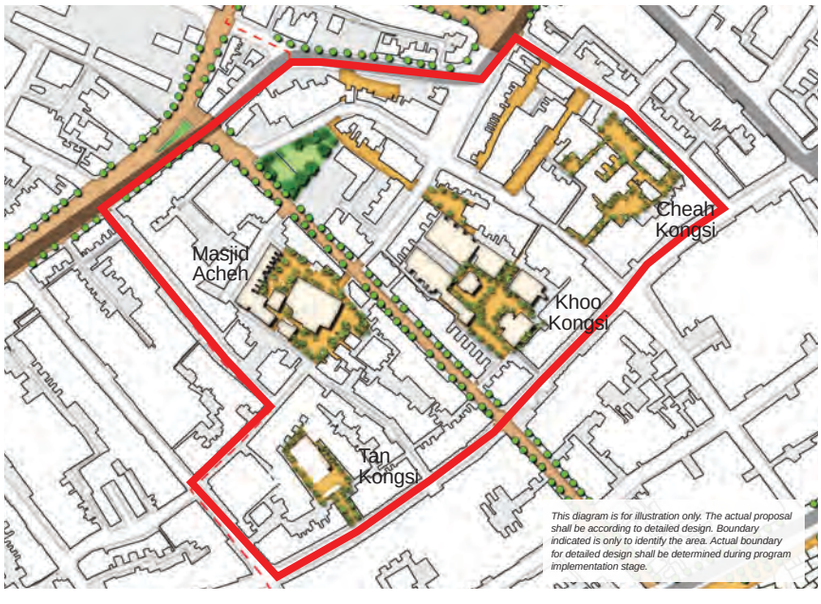


Figure C5.9: A Lebuh Acheh, Lebuh Armenian and Lebuh Armenian Park

C5.2.2 Program (B): Main Pedestrian Spine

Shared streets is an important characteristic of the city of George Town. Thus, it should be the aim in any design of the streetscape that pedestrian use is prioritised. Some of the main vehicular-use streets may benefit from the additional of sidewalks and incorporation trees along the streets.

Whilst all streets in the George Town WHS are to be pedestrian priority, the following streets are considered as main pedestrian spine. These streets link the core and the most significant part of the WHS to major nodes (both activities and transport) within the WHS and outside the WHS.

The main pedestrian spine are:

i. Part of Jalan Penang linking Komtar to Lebuh Campbell;
ii. Lebuh Campbell/ Lebuh Buckingham;
iii. Lebuh Carnarvon;
iv. Lebuh Acheh/ Gat Lebuh Acheh;
v. Jalan Masjid Kapitan Keling;
vi. Lebuh China linking the Special Zone of WHS the transport node near Church Street Pier;
vii. Part of Lebuh Light linking Jalan Masjid Kapitan Keling to Jalan Padang Kota Lama; and
viii. Jalan Padang Kota Lama linking the WHS to the waterfront area.



Figure C5.10: Current condition of the road for pedestrian within the George Town WHS

Performance Criteria for Pedestrian Priority Street

- A cautious approach in the design of streetscapes, of changing as much as necessary but as little as possible;
- Design of streetscape to take into consideration the community use of the street, including festival use (Refer Figure C5.3 for routes of festivals);
- Ground material to ideally remain as asphalt or a porous material that is easily maintained;
- The provision of sidewalks only when necessary;
- Use permeable and breathable sidewalk material;
- Consistent colour palette for the entire WHS;
- Street trees preferable to shrubs;
- All new streetscape programs to adhere to universal access principles;
- Possible integration of street design with landscape and storm water management system;
- Recovers, re-uses and generally minimises the amount of natural resources used;
- Minimally designed new street furniture and lighting;
- Possible incorporation of street markers along heritage trails to increase legibility and wayfinding;
- Possible incorporation of historic street furniture, either restored or authentically reconstructed;
- Street level has been raised over the years with layers of asphalt; these should be scraped off and reduced to original profile; and
- High curb with zebra pattern should be eliminated.

C5.2.3 Program (C): Five-Footway

The unique design of the heritage buildings in the GTWHS with its five-footway design provides the key supporting elements that will support the use of pedestrian priority streets. Many of the five-footways however, are obstructed or blocked either by shops displays, physical barrier or motorcycles that are parked haphazardly.

Measures to clear the five-footways from obstructions and towards the continuation of pedestrian network shall be undertaken through enforcement as well as other initiatives.

Figure C5.11: Five-footway shows the obstruction at the five-footways in the GTWHS.

Performance Criteria for Five Foot Way

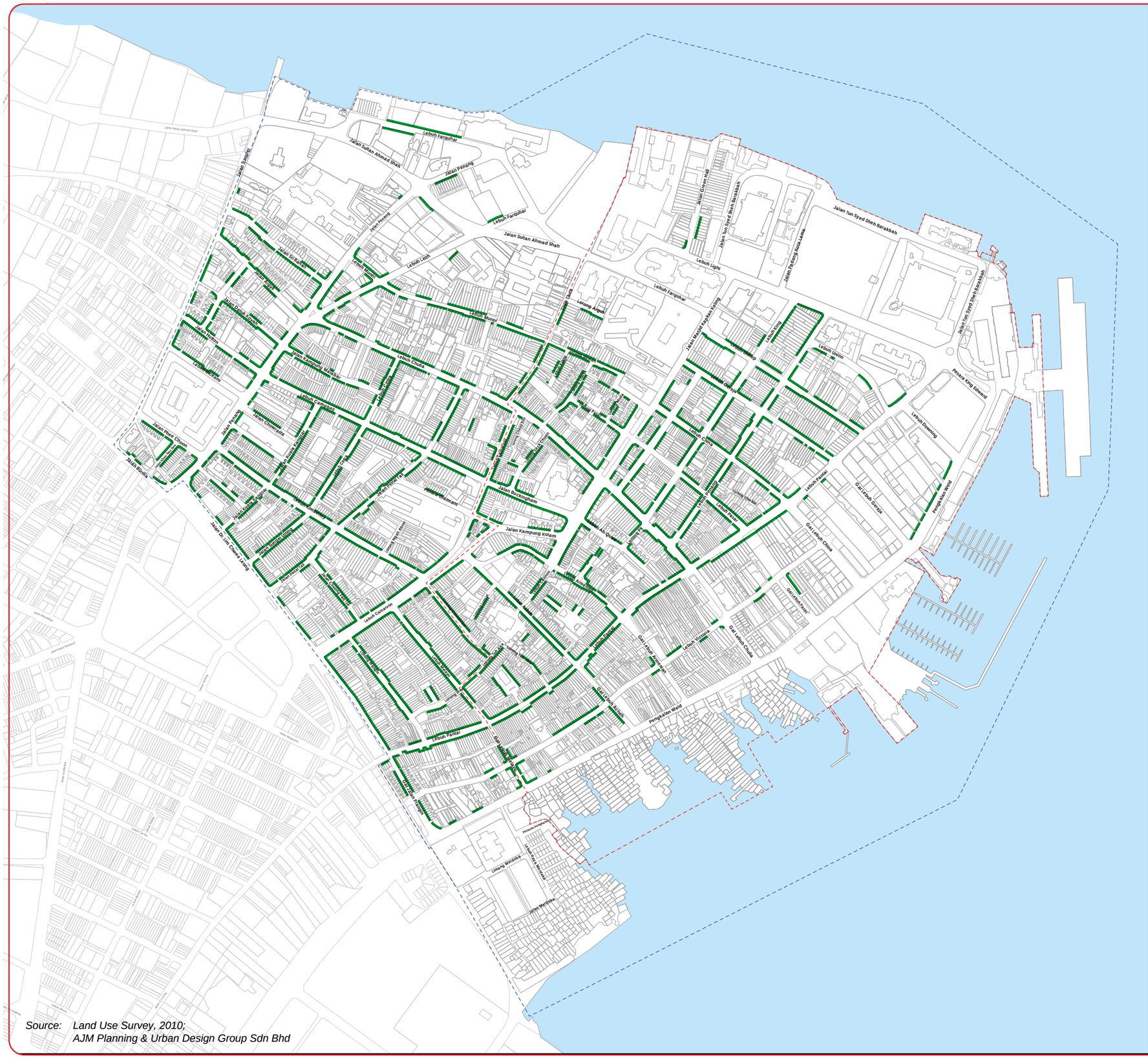
- The five-footway should be cleared from any type of obstruction or barrier.
- The pathway should be in good condition with the consideration of the users' safety, convenient and comfortable.



Figure C5.11: Some of the five-footways are obstructed by moveable objects or fixed structure

Figure C5.12

Existing Five-Footway



Source: Land Use Survey, 2010;
AJM Planning & Urban Design Group Sdn Bhd

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NOT TO SCALE

C5.2.4 Program (D): Back Lanes

When the earliest streets were created, buildings were built back-to-back with no back lanes. In the early 1900s when road widening took place together with suburban growth and redevelopment of the urban areas, back lanes were created. These were either part of redevelopment or created by cutting back the kitchen areas of back-to-back housing. There are areas where back-to-back still exist.

The back lane will be upgraded and beautified with appropriate softscape and hardscape. The condition of these back lanes will be enhanced as to provide a walkable path for users. Lighting and landscaping will be implemented for safety and comfort (Figure C5.13 to Figure C5.17).



Figure C5.13: Landscaping and lighting of back lane



Figure C5.14: Active back lane are safe and conducive for street activities

The proposed back lane programs are as follows:

i. 'Line Clear' back lane;
ii. Back lane from Lebuh Armenian to Lebuh Cannon;
iii. Back lane from Lebuh Armenian to Lebuh Ah Quee;
iv. Back lane from Lebuh Ah Quee to Lebuh Armenian;
v. Back lane of Lorong Cheap Side;
vi. Back lane from Lebuh Queen to Lebuh King;
vii. Lorong Che Em;
viii. Back lane from Lebuh China to Lebuh Gereja;
ix. Back lane from Lebuh Bishop to Lebuh Union;
x. Back lane of Lorong Argus; and
xi. Back lane of Jalan Masjid Kapitan Keling to Lebuh King.

(Refer Figure C5.18)

Involvement of local communities is important in the implementation of this program. This will be in the aspect of planning, design, funding and maintenance.

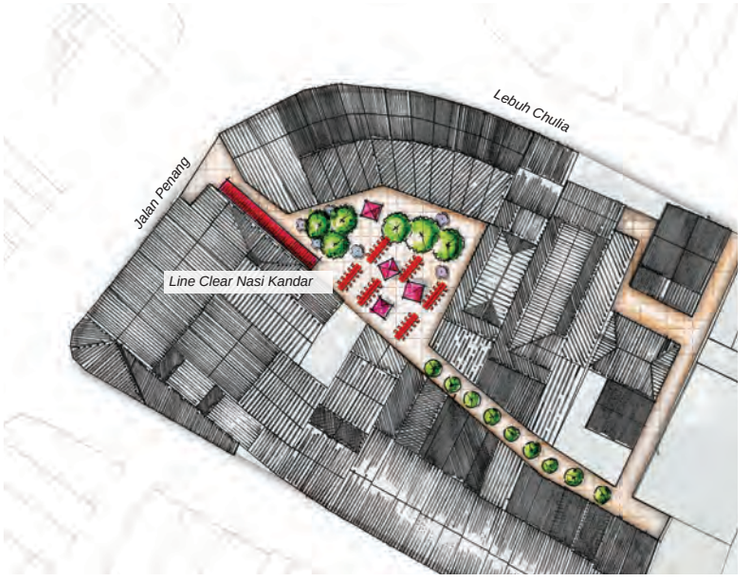


Figure C5.15: Artist impression of the back lane program at the 'Line Clear' back lane

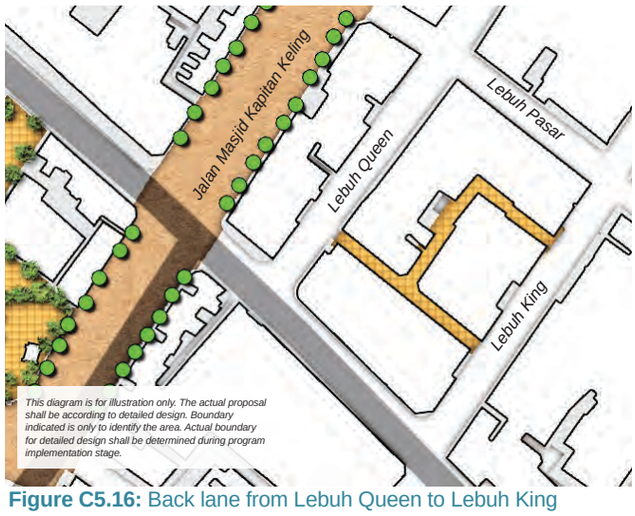


Figure C5.16: Back lane from Lebuh Queen to Lebuh King

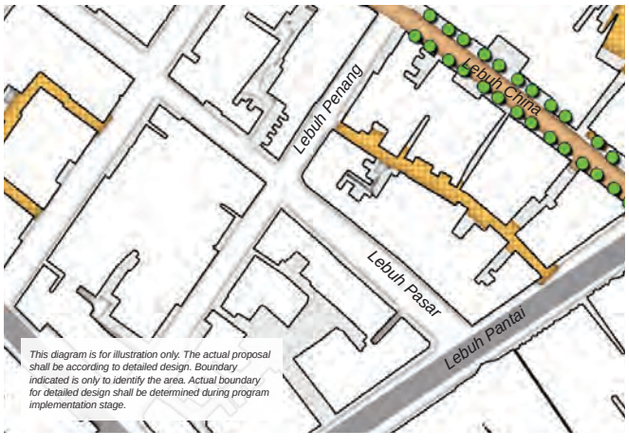


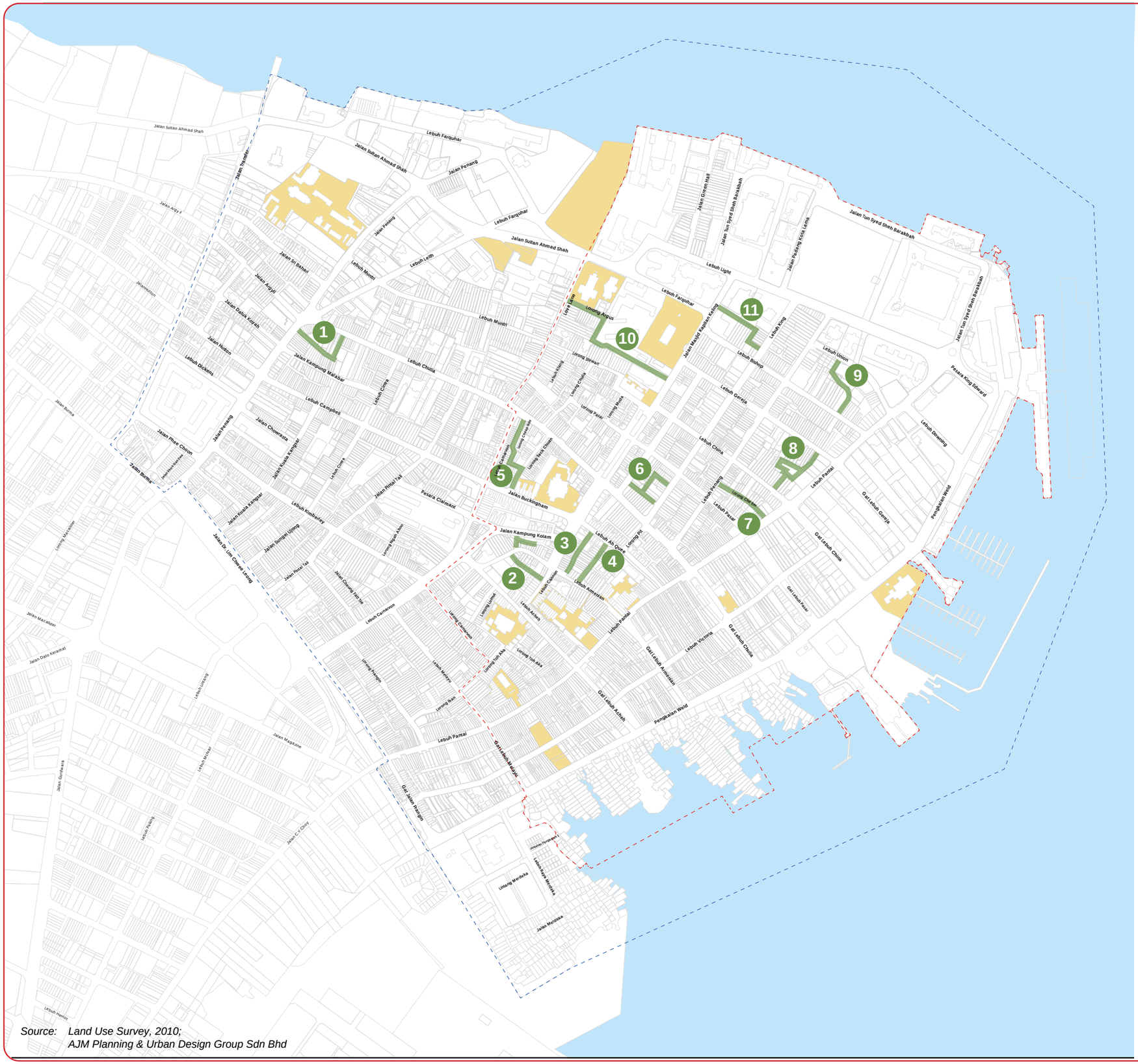
Figure C5.17: Lorong Che Em

Performance Criteria for Back Lanes

- A cautious approach in the design of streetscapes, of changing as much as necessary but as little as possible;
- Design of streetscape to take into consideration the community use of the street;
- Ground material to ideally remain as asphalt or a porous material that is easily maintained;
- Lighting of back lane to not be attached to heritage buildings;
- Preferred location of lighting to be on the ground, e.g. a hidden fluorescent wash lighting; and
- Possible landscaping of back lanes.

Figure C5.18

Proposed Upgrading of Back Lanes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Jalan Penang
Jalan Tun Syed Sheh Barakbah
Lebuh Light
Lebuh Leith
Lebuh Munti
Jalan Argyll
Jalan Kampung Makhar
Lebuh Chulia
Lebuh Campbell
Lebuh Cintra
Jalan Chowrasta
Jalan Thye Choon
Jalan Kuala Kangsar
Jalan Pintal Tali
Jalan Buckingham
Jalan Kampung Kolam
Lebuh Kimberley
Jalan Sungai Ujong
Lebuh Cannon
Lebuh Armenian
Lebuh Pantai
Lebuh Victoria
Gat Lebuh Chulia
Gat Lebuh Armenian
Gat Lebuh Acheh
Pengkalan Weld
Lebuh Bishop
Lebuh King
Lebuh Union
Lebuh Georgia
Lebuh China
Lebuh Pasar
Lebuh Pantai
Gat Lebuh China
Gat Lebuh Pasar
Gat Lebuh Gereja
Lebuh Downing
Jalan Masjid Kapitan Keling
Lorong Argus
Lorong Selawat
Lorong Cheap Side
Lorong Back Cheap
Lorong Market
Lorong Pasar
Lorong Che Em
Lorong Pil Ah Quee
Lorong Ah Quee
Lorong Yah Aka
Lorong Buh
Lorong Pinang
Lorong Cannon
Lorong Lumut
Lebuh Acheh
Lebuh Ah Quee
Jalan Masjid Kapitan Keling
Jalan Sun Syed Shah Barakbah
Jalan Padang Kota Lama
Jalan Green Hall
Jalan Penang
Jalan Farquhar
Jalan Sri Stahel
Jalan Datuk Kelana
Jalan Hutton
Lebuh Dickens
Jalan Thye Choon
Jalan Burma
Jalan Sultan
Jalan Kuala Kangsar
Jalan Sungai Ujong
Jalan Pekan Tai
Jalan Cheang Tatt Yin
Lebuh Cameron
Jalan Dr Lim Chwee Leong
Jalan Macalister
Jalan Dato Keramat
Lebuh Noordin
Jalan Magazine
Jalan Gudwara
Lebuh Muntri
Lebuh Transfer
Lebuh Hendon
Jalan C.Y. Choy
Jalan Merdeka
Lebuh Merdeka
Lebuh Tenggala
Lebuh Aceh
Lebuh Ah Quee
Lebuh Pasar
Lebuh Pantai
Lebuh Victoria
Gat Lebuh Acheh
Gat Lebuh Ah Quee
Gat Jalan Perlabuh
Pengkalan Weld
Lebuh Downing
Gat Lebuh Gereja
Gat Lebuh China
Gat Lebuh Pasar
Gat Lebuh Chulia
Gat Lebuh Armenian
Lebuh Union
Lebuh Bishop
Lebuh King
Lebuh Georgia
Lebuh China
Lebuh Pantai
Lebuh Pasar
Lebuh Ah Quee
Lebuh Armenian
Lebuh Cannon
Lebuh Acheh
Lebuh Pantai
Lebuh Victoria
Gat Lebuh Acheh
Pengkalan Weld
Gat Lebuh Ah Quee
Gat Jalan Perlabuh
Lebuh Merdeka
Jalan

C5.2.5 Program (E): Waterfront Promenade

There is high potential in reinvigorating George Town's waterfront that reflects the continued evolution of the city from its status as a port town to a world class waterfront development.

The waterfront demands a coherent framework that links together the conservation of the physical and cultural fabric, connectivity to the inner city and revitalisation in the form of new activities that adapt to the historic built environment. The promenade provides the structure that integrates all these elements together, and a pedestrianised linkage connecting them (Figure C5.19).

The waterfront areas shall also be linked to water taxi network. This will be coordinated with the implementation of an overall public transport and master plan prepared by the state government (refer Chapter 6).

Public-Private-People Partnerships between the Local Authority and investors are an essential component to ensure the integration of the waterfront development with the public realm. This partnership includes collaborating with stakeholders.



Figure C5.19: A waterfront development that integrates new functions and the historic built form



Figure C5.20: Waterfront promenade programs

Three waterfront promenade programs are proposed. They are however interconnected to one another (Figure C5.20). The programs are defined as follows:

For North and East Seafront planning proposals, please refer to Annexure B: Figure A2 & B2

C1. Green Hall-Esplanade Waterfront Promenade

To construct a waterfront promenade connecting Green Hall along the Esplanade and Fort Cornwallis (Jalan Tun Syed Sheh Barakbah) towards the godowns near Swettenham Pier. The program should be integrated with any proposals for the Esplanade and Fort Cornwallis as a PPP Partnership (C5.21).



Figure C5.21: Green Hall-Esplanade Waterfront Promenade

C2. Upper Weld Quay Waterfront Promenade

To construct a waterfront promenade connecting the godowns of Swettenham Pier, along upper Weld Quay towards the marina and bus/ ferry/ taxi station. It is imperative that the promenade is integrated with any development along the waterfront and is made public accessible (Figure C5.22).



Figure C5.22: Upper Weld Quay Waterfront Promenade

Please refer to Annexure B: Figure B1 - B3.3 for detailed proposals

C3. Clan Jetties Waterfront

The Clan Jetties provide a unique waterfront setting for WHS. Its existing setting and form with individual jetties protruding into the water shall be preserved as part of the OUVs. Proper pedestrian access shall be provided along Weld Quay. Such linkages shall required removal of some of the existing activities within the road reserve along the Weld Quay (Figure C5.23).

Performance Criteria for Waterfront Promenades

- Integration with the inner city and all redevelopment programs;
- Publicly accessible;
- Adheres to universal access principles;
- Possible integration with landscape and storm water management system;
- Recovers, re-uses and generally minimises the amount of natural resources used;
- Possible incorporation of street markers along heritage trails to increase legibility and way-finding;
- Minimally designed new street furniture and lighting; and
- Possible incorporation of historic street furniture, either restored or authentically reconstructed.



Figure C5.23: Clan Jetties Waterfront Promenade, (1) Ong Jetty, (2) Lim Jetty, (3) Chew Jetty, (4) Tan Jetty, (5) Lee Jetty, (6) Mixed Clan Jetty and (7) Yeoh Jetty

Please refer to Annexure B: Figure C2 for detailed proposals for the Clan Jetties

C5.3 Festivals, Events, Tours and Film Locations

C5.3.1 Traditional Cultural Festival

The historic centre of George Town has been the heart for many celebrations. Some have their origins in traditional celebrations, such as the Chingay Parade and the Dondang Sayang singers during Chap Goh Meh. Refer to Figure C5.4 for a map of Festival Routes and Performance Spaces Topography.

Other celebrations have become traditional over time – such as the New Year Celebration of the Gregorian calendar and the Merdeka countdown.

The purpose of this chapter is to guide the use of the WHS for gatherings of a large number of visitors or for location of filming.

Performance Criteria for Traditional Cultural Festival

- The closure of roads should take precedence;
- The carrying capacity of the festival should prioritise local participation above visitors; and
- Additional stage sponsored events supporting the festivals must fall in with the meaning and significance of the festivals.

C5.3.2 Contemporary Culture Festivals and Events

George Town is attracting contemporary festivals and events. The performance criteria describes the required guidelines pertaining to the use of the WHS for the Contemporary Culture Festivals and Events.

Performance Criteria for Contemporary Culture Festivals and Events

- Application of permits from the MBPP is required;
- GTWHI is to be notified prior to any events or festivals being organised;
- The organiser will need to ensure that traffic is managed and organised;
- The setting up of any stages shall not affect the existing plantings and street furniture;
- Community consultation and participation – even if the celebration is not of their culture;
- Manufacture of sets off site, delivered to site for fast assembly;
- No fixing of items to the heritage buildings without the permission of the occupier;
- Banners, decorative lighting to use existing poles and not be placed across the road, restricting bomba access;
- Road closure to be on the event day only and using easily removable barriers; and
- Bomba access should be maintained at all times and not be blocked with temporary structures.

C5.3.3 Heritage Tours

From time to time a Heritage Site may be used as a venue for entertaining large groups of visitors. The performance criteria describes the required guidelines pertaining to the use of the WHS for Heritage Tours.

Performance Criteria for Heritage Tours

- The carrying capacity of the site must be considered; and
- Tour buses are only allowed to drop off passengers and not allowed to park within the WHS.

C5.3.4 Film Locations

This section describes the required guidelines pertaining to the use of the WHS for film locations. This is to ensure that filmmakers, local communities and building owners can all benefit from such events taking place within the cultural landscape.

Performance Criteria for Film Locations

- All film location companies are to inform the GTWHI before confirming the location of their shoot;
- GTWHI should ensure that not only the owners of the buildings have agreed to the shoot but that the remaining cultural landscape and communities are not compromised;
- The film company must walk through the site with GTWHI to explain the location and equipment to be used and to receive advice as to how to avoid damages to the area;
- Approval may not automatically be granted if:
  a. the filming method is likely to cause any damage to the WHS; and
  b. the road has been or will be closed for more than 5 days during the year due to other festivities;
- The film company should carry sufficient insurance against damages to the heritage buildings;
- A heritage repair deposit must be lodged with GTWHI so that in the event of damage, there are sufficient funds to affect good repairs;
- Heritage buildings may be repainted to suit filming, but the materials used must be approved by GTWHI and repainted with the original colours and materials on completion of the filming by the film company or a local contractor;
- Compensation is to be paid to all residents and businesses for the duration of the filming and extended to businesses affected by road closure even if the filming is not directly on their doorstep;
- The building and striking of the film set is to take place during reasonable hours, avoiding the disturbance to any cultural practices of the community; and
- Further compensation should be paid for night filming.

C6 Managing Circulation and Access

C6.1 Issues on Access Management

C6.1.1 Québec Decision, July 2008

Upon the inscription of 'Melaka and George Town, Historic Cities of the Straits of Malacca' in the city of Quebéc, the WHC has requested that the State Party:

i) Submit a comprehensive conservation plan dealing with all the buildings and its schedule for implementation in both cities;

ii) **Develop measures for decreasing motor traffic;** and

iii) Improve the definition of key indicators for monitoring the architectural heritage components.

These requests were reiterated during the 33rd session of WHC in June 2009.

The growing problem of traffic congestion is singled out as a main issue in the World Heritage Sites. Congestion of the roads can be attributed to the high built up area of the George Town WHS and to the national trend of increasing dependency on the private vehicles. Correspondingly, there are limited opportunities for road upgrading to cater for its increasing capacity.

C6.1.2 Regional Issues

George Town remains an important centre for financial and cultural activities. There is however, a lack of an integrated public transportation system connecting the city and the entire Island of Penang. In positioning George Town as the hub of the Northern Corridor Economic Region and towards a new economic model for the state, it is imperative that the transportation system is improved.

Presently, there is inadequate public transport alternative to convince private vehicle user to shift mode to public transport. Focus group consultations with the local communities point out towards the inadequacy of the existing public transportation system is the reason for low patronage of public transport system. A mere 11.28% of employees and 3.64% of the residents of the WHS use the buses as their mode of transportation to work. In contrast, 51.87% of employees and 42.05% of residents travel to work by private cars. It must be noted that almost 70% of the trips made into the WHS originates externally. The above data are based on the George Town Land Use and Population Survey Report, May 2010. It is important that this percentage of trips by private vehicles be taken care of in order to improve the overall accessibility of public transportion mode.

Presently, the state government is embarking on a Penang Transport Masterplan for the whole state of Penang. The main objective of the study is to relieve traffic congestion and to improve public transport services for the state. The masterplan has been completed and submitted to the SPC for further

review and decisions. The success of the management of traffic and improvement of public transport services in Penang Island will require the integration of the WHS public transport system and access management proposal to be integrated with this comprehensive masterplan.

C6.1.3 Local Issues

A focus group consultation conducted on October 28, 2010 identified local issues pertaining to the management of circulation and access in the WHS. The following list describes the findings from the session:

i) High volume of external private vehicles during festive seasons;

ii) Needs to address reliability of public transportation system;

iii) Suggestions for smaller and more frequent bus services;

iv) Heavy vehicles should not be allowed in the WHS;

v) Proper lay-bys for buses;

vi) Clan Jetty residents' requests for the possibility of a water taxi across Clan Jetty for tourists;

vii) Traffic needs to be diverted from the waterfront;

viii) Location of bus stops should tie in with activities;

ix) Enforce truck loading/ unloading hours;

x) Consider the possibility of providing a transport hub to transfer goods from heavy lorries to smaller lorries;

xi) Development intensity should be managed based on the traffic generated which reflect the Level of Service (LOS) of surrounding roads;

xii) Identify tourist bus stops as they are an obstruction; and

xiii) Residents should park for free.

Some of the local issues within the George Town WHS area are similar for the whole of George Town such as heavy congestions, inadequate parking space that resulted to illegal parking and double parking. Within the George Town WHS area, along Lebuh Chulia between Jalan Penang and Jalan Masjid Kapitan Keling double parking resulted to congestions and interruption to bus services that ply along these roads.

C6.2 Access Management Objectives

The key objective for access management for the George Town WHS area is reducing private vehicles in the area. Thus, the access management strategy is reducing private vehicle dependency by developing and promoting alternatives to private vehicles (i.e. provision for high quality public transport system), enhancement of pedestrian network that support the public transport system and demand management of private vehicles.

The Penang Transport Masterplan has proposed the core public transport network developed around the principle of providing a network of high quality Primary and Secondary core routes. These will be provided through the use of tram, bus rapid transit and catamaran technology. This core network will be complemented by a supporting network of feeder bus services and other public transport routes.

In all, there are 15 core public transport routes proposed within the Penang Transport Masterplan. Of the 15 routes, 5 of the routes connect to Weld Quay which is one of the strategic network hub within the Penang Island. Weld Quay is one of the multi-modal stations that serve for ferry services and tram station. Furthermore, two routes serves within the George Town WHS area namely CAT orbital Loop and George Town – North Coast Line. Other core routes passes by to the western boundary of George Town WHS area along Jalan Dr Lim Chwee Leong.

The Core Public Transport Network will be accessed via stations located along the alignment of each route. Each station will have multifunctional role, catering for both local accessibility and for more strategic forms of accessibility. Table C6.1 summarises the various roles that core public transport network stations will be required to perform.

Within the George Town WHS area, only 4 types of public transport station roles are applicable, as mentioned in figure C6.1.

The MBPP has also proposed a tram system within the George Town WHS area. The proposed tram will travel along Jalan Penang, Jalan Sultan Ahmad Shah, Lebuh Farquhar, Jalan Masjid Kapitan Keling, Lebuh Chulia, Weld Quay, Gat Lebuh Chulia, Lebuh Pantai, Lebuh Light, Masjid Kapitan Keling, Lebuh Carnarvon, Lebuh Mcnair dan Jalan Magazine. A tram depot is proposed at the corner of Lebuhraya Tun Dr Lim Chong Eu/ Gat Lebuh Nordin.

Table C6.1: Public Transport Network Station Types

Category	Designated Function
International Hubs	Providing accessibility between the Core Public Transport Network and international travel routes.
Inter-state Hubs	Providing accessibility between the Core Public Transport Network and inter-state (long distance) public transport services (i.e. to destinations outside Penang State).
Strategic Network Hubs	Providing strategic accessibility between the one Core Public Transport Network and another.
Intermediate Network Hubs	Providing more local accessibility between the one Core Public Transport Network and another.
Local Area Hubs	Providing accessibility between the Core Public Transport Network and neighbouring local areas (via feeder bus services and/ or Park and Ride Facilities).
Local Stations	Providing accessibility between the Core Public Transport Network and immediate neighbourhood (i.e. mainly catering for pedestrian access).

Source: Penang Transport Masterplan

In addition to the land based public transport system, the masterplan also proposed ferry services connecting Weld Quay to Butterworth, Weld Quay to Queensbay and Weld Quay to Gurney Quay.

Figure C6.1 shows the Penang Transport Masterplan and the MBPP proposed tram routes within the George Town WHS.

It is impossible to achieve the above objective in a short period of time. It is envisaged with proper planning and implementation of certain goals ultimately the reduction of motorised vehicle within the George Town WHS can be achieved. Thus, the strategy has been group into Short and Medium-term and Long-Term Objectives.

C6.2.1 Short and Medium Term Objectives (2013 – 2020)

i) Improve pedestrian network within the George Town WHS so that pedestrian network are continuous, safe, comfortable and convenient;

ii) Addressing local issues relating to heavy vehicles and residents parking;

iii) To encourage public transport travel by improving public transport services;

iv) To maximise the existing transport network;

v) To adopt universal access principles and providing priorities to pedestrian at identified pedestrian corridor; and

vi) To promote transport policies and improvements which minimise environmental impact.

C6.2.2 Long Term Objectives (2020 – 2030)

i) To achieve the targeted public/ private modal split so as to shift to more sustainable mode of transport such as public transport, walking and cycling;

ii) Application of Road Traffic Management proposals;

iii) Make the WHS fully universal accessible; and

iv) Full integration of the inner city with the waterfront.

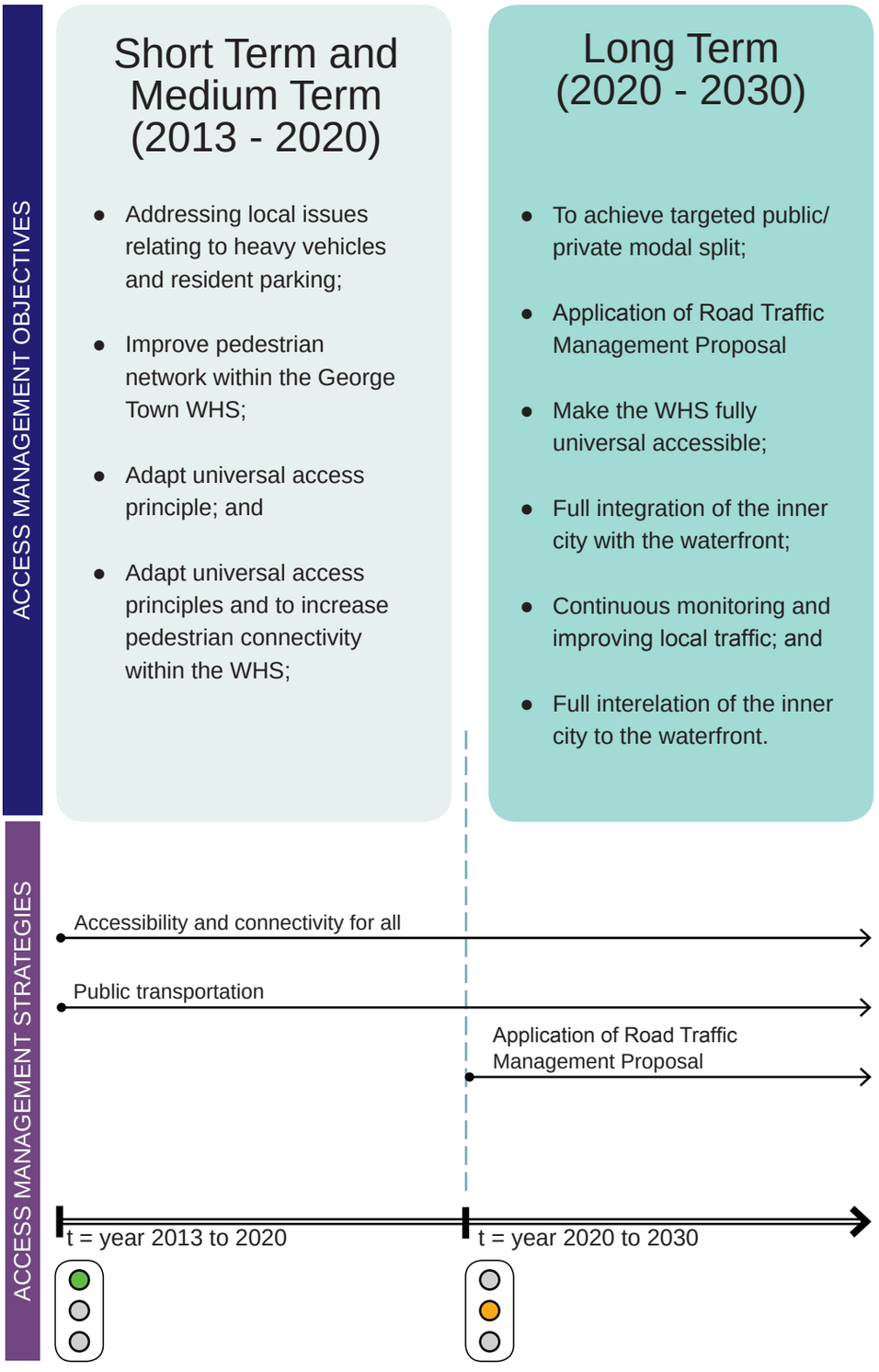
Figure C6.2 describes the Short and Medium-Term and Long-Term strategies.

Figure C6.1

Penang Recommended Transport Masterplan Strategy and the MPPP Proposed Tram Route


1
2
3
4
5
6
Jalan Sultan Ahmad Shah
Lebuh Farquhar
Jalan Sultan Ahmad Shah
Jalan Yap Ah Shak
Jalan Tun Syed Sheh Barakbah
Jalan Dr Lim Chwee Leong
Jalan Dr Lim Chwee Leong
Lebuh Chulia
Lebuh Campbell
Lebuh Pantai
Lebuh Farquhar
Lebuh Leith
Lebuh Light
Lebuh Pasar
Lebuh Penang
Lebuh Carnarvon
Lebuh Victoria
Lebuh Pantai
Lebuh Muntri
Lebuh Dickens
Lebuh Cintra
Lebuh Queen
Lebuh Cecil
Lebuh Kimberley
Lebuh Armenian
Lebuh Ah Quee
Lebuh Acheh
Lebuh Union
Lebuh Bishop
Lebuh King
Lebuh Downing
Lebuh Farquhar
Lebuh Light
Lebuh Leith
Lebuh Muntri
Lebuh Chulia
Lebuh Campbell
Lebuh Cecil
Lebuh Kimberley
Lebuh Armenian
Lebuh Ah Quee
Lebuh Acheh
Lebuh Victoria
Lebuh Carnarvon
Lebuh Pantai
Lebuh King
Lebuh Bishop
Lebuh Union
Lebuh Downing
Lebuh Pasar
Lebuh Penang
Lebuh Farquhar
Lebuh Light
Lebuh Leith
Lebuh Muntri
Lebuh Chulia
Lebuh Campbell
Lebuh Cecil
Lebuh Kimberley
Lebuh Armenian
Lebuh Ah Quee
Lebuh Acheh
Lebuh Victoria
Lebuh Carnarvon
Lebuh Pantai
Lebuh King
Lebuh Bishop
Lebuh Union
Lebuh Downing
Lebuh Pasar
Lebuh Penang
Jalan Sultan Ahmad Shah
Jalan Yap Ah Shak
Jalan Tun Syed Sheh Barakbah
Jalan Dr Lim Chwee Leong
Jalan Dr Lim Chwee Leong
Jalan Sri Bahari
Jalan Aggrs
Jalan Dato Keramat
Jalan Hutton
Jalan Kampung Malabar
Jalan Chowrasta
Jalan Pasar Malam
Jalan Penang
Jalan Pasar
Jalan Masjid Kapitan Keling
Jalan Pintal Tali
Jalan Buckingham
Jalan Tun Syed Sheh Barakbah
Jalan Tun Syed Sheh Barakbah
Jalan Dr Lim Chwee Leong
Jalan Dr Lim Chwee Leong
Jalan Sultan Ahmad Shah
Jalan Sultan Ahmad Shah
Jalan Sri Bahari
Jalan Aggrs
Jalan Dato Keramat
Jalan Hutton
Jalan Kampung Malabar
Jalan Chowrasta
Jalan Masjid Kapitan Keling
Jalan Pintal Tali
Jalan Buckingham
Jalan Penang
Jalan Pasar
Jalan Pasar Malam

FIGURE C6.2: Access Management Objectives and Strategies



Source: Special Area Plan: Georgetown

C6.3 George Town WHS Access Management Proposals

Based on the Short and Medium-Term and Long-Term strategies, the following are the access management proposals for the George Town WHS for the different years:

C6.3.1 Short And Medium Term Proposals (2013 – 2020)

i) Improvement of pedestrian network as follows:

a. Removal of obstructions on five-footways, particularly on roads with heavy vehicular traffic;

b. To provide signalised pedestrian crossing at Weld Quay near Gat Lebuh China;

c. Lebuh Carnarvon and Jalan Masjid Kapitan Keling pedestrian network upgrading;

d. Lebuh Leith and Lebuh Farquhar pedestrian network upgrading; and

e. Gat Lebuh Acheh pedestrian network upgrade.

ii) Addressing local issues relating to heavy vehicles and residents parking.

a. Proposed time restrictions to heavy vehicles within the George Town WHS area;

b. Proposed residents parking permits along on-street parking where the residents live; and

c. Undertake detailed study for heavy vehicles within George Town WHS area.

iii) To encourage public transport travel by improving public transport services;

a. Proposed two bus routes within George Town WHS area with a 10 minute intervals each.

- Route 1 - Orbital Route (KOMTAR, Jalan Magazine, Weld Quay, Lebuh Light, Jalan Sultan Ahmad Shah, Jalan Penang and back to Jalan Magazine near KOMTAR)

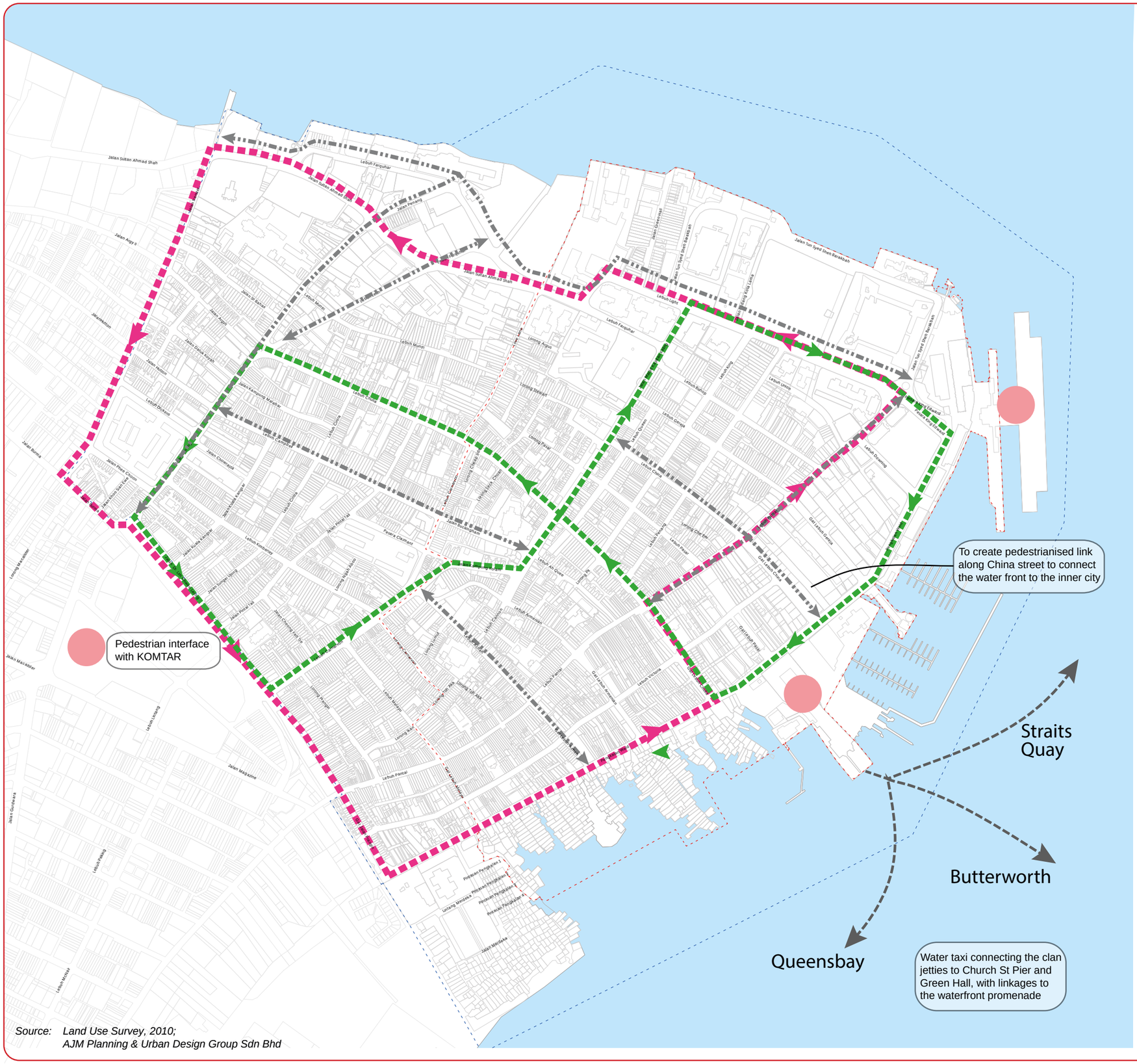
- Route 2 – Internal Route (proposed figure 8 routes starting KOMTAR, Jalan Magazine, Jalan Carnarvon, Jalan Kapitan Keling, Lebuh Light, Weld Quay, Lebuh Chulia, Jalan Penang and back to KOMTAR, Jalan Magazine; and

b. Integration of George Town WHS access arrangement proposal with the Penang State Masterplan.

Figure C6.3 summarises the Short and Medium-Term proposals.

Figure C6.3

Short & Medium Term Proposal



- Orbital Bus Route
- Inner Bus Route
- Proposed Water Taxi Route
- Proposed Pedestrian Network Improvement
- Nodes
- Core Zone
- Buffer Zone

Source: Land Use Survey, 2010;
AJM Planning & Urban Design Group Sdn Bhd

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C6.3.2 Long Term Proposals (2020 – 2030)

i) To achieve the targeted public/ private modal split so as to shift to more sustainable mode of transport such as public transport, walking and cycling by:

a. Upgrading primary public transport corridors to mass transit system as proposed by Penang Transport Masterplan;

b. Within the George Town WHS, the proposed two bus routes in the short-medium term to be upgraded to a tram system;

c. Proposed integration of pedestrian network between the inner city and the George Town WHS's waterfront;

d. Proposed water taxi along the George Town WHS's waterfront promenade connecting the clan jetties to Church St Pier and Green Hall; and

e. Propose cycling routes along George Town WHS's waterfront promenade.

ii) Application of the Road Traffic Management proposals such as:

a. Implementation of Electronic Road Pricing, Parking Management, High Occupancy Vehicles and Heavy Vehicles management.

Figure C6.4 summarises the Long-Term proposals

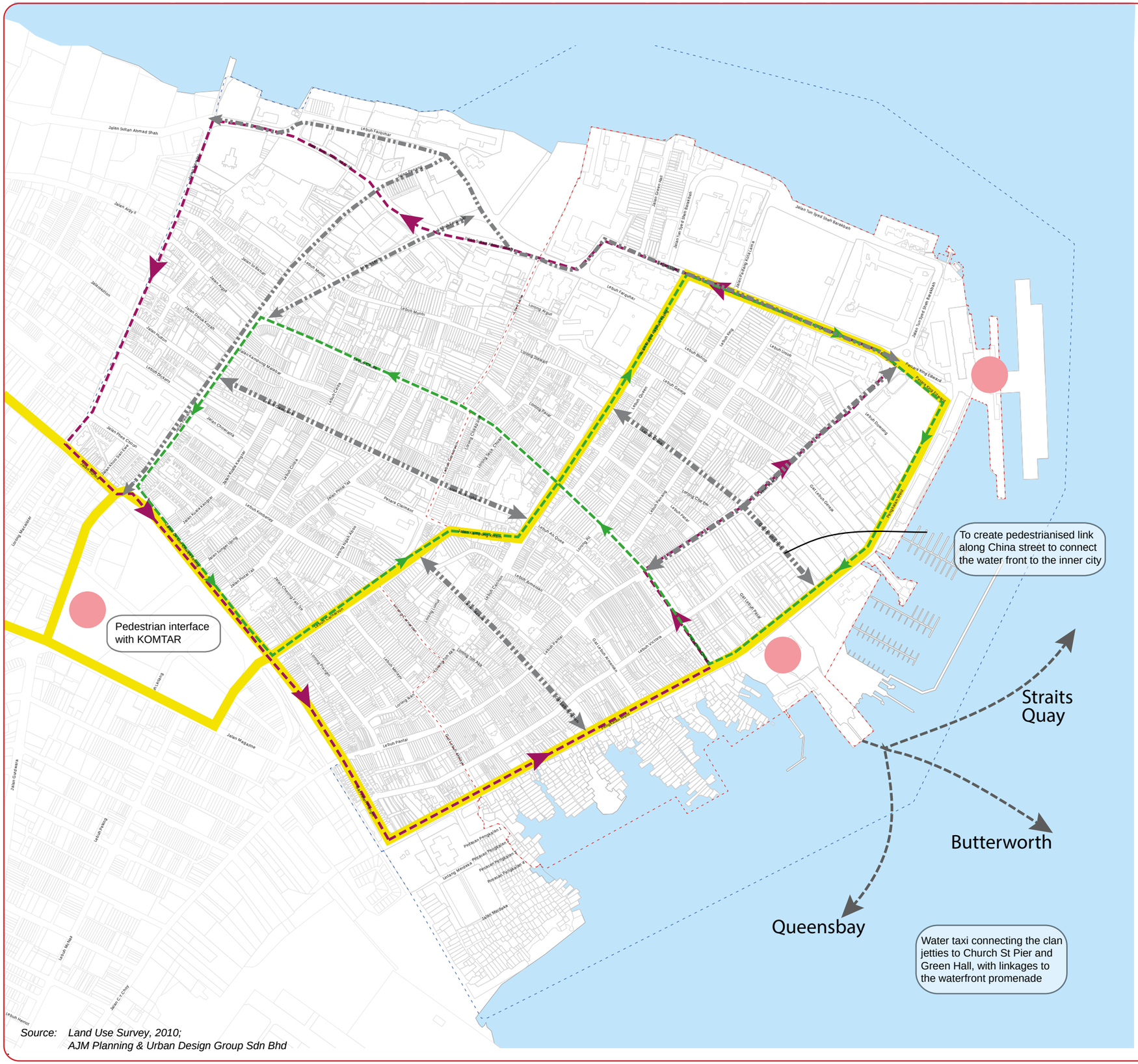
Having reviewed the Penang Transport Masterplan (PTM) and MBPP tram proposals, the WHS has a slightly different tram proposal routing in comparison to Penang Transport Masterplan and MBPP tram proposal. Generally, the WHS proposal of an orbital routes follows the same concept as the CAT Orbital route proposed by the Penang Traffic And Transport Masterplan. However, the WHS proposal extends further to the north using Jalan Transfer and Jalan Dr Lim Chwee Leong to the west. In comparison to the PTATM, which uses Jalan Penang to the north and Jalan Magazine to the west. Furthermore, the proposal uses the current traffic circulation without the need to change existing traffic circulation to incorporate the tram system. With the WHS proposed tram routes and transit stops, the majority of the George Town WHS area accessible within a 5 minutes walking distance. The proposal by the PTM and the MBPP left the northern area of Lebuh Chulia from Jalan Kapitan Keling to Jalan Penang without transit coverage. Figure C6.5 (2) summarises the WHS proposed tram routes.

SPECIAL AREA PLAN: GEORGE TOWN, HISTORIC CITIES OF THE STRAITS OF MALACCA

MANAGING CIRCULATION AND ACCESS

Figure C6.4

Long Term Proposal



Penang Traffic and Transport Masterplan

- Core Public Transport Routes Corridor

Orbital Tram Route

Inner Tram Route

Propose Water Taxi Route

Propose Pedestrian Network Improvement

Nodes

Core Area

Buffer Area

Source: Land Use Survey, 2010;
AJM Planning & Urban Design Group Sdn Bhd

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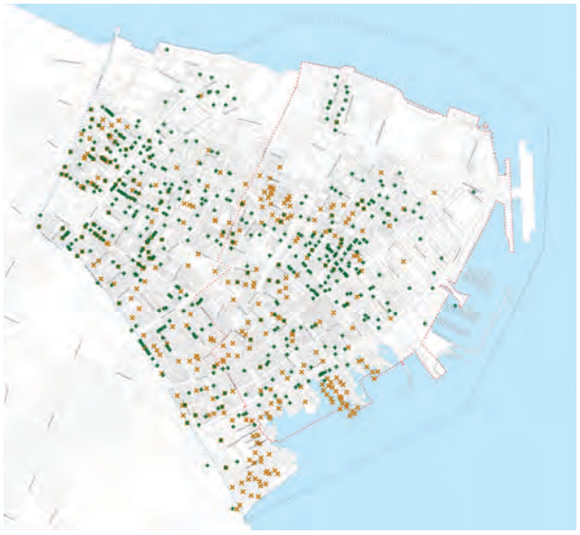
Figure C6.5: Proposed CAT Routes and Stops (Phase 1)



1. Sustainable travel to work patterns maps out the employees (+) and residents (x) of the WHS who commute using sustainable modes (walk, cycle, public transport).



2. Two routes are proposed. The routing aims to optimise the catchment of users of sustainable transportation methods and the main nodes (KOMTAR, Cruise Pier and Jetty Terminal).



3. Proposed location of transit stops to maximise pedestrian shed coverage and near to existing transit stops. A pedestrian shed of 380m or 5 minutes is utilised.



4. Location of transit stops to leverage on connectivity of existing and proposed pedestrian routes.

C7 Improving Urban Infrastructure

The objective of the management of urban infrastructure is towards a systematic and practical infrastructure and utility systems for the WHS of George Town. It is essential that all relevant agencies and utility providers work together with the custodians of the WHS (Department of National Heritage, the World Heritage Office and the MBPP) to ensure that these objectives can be implemented within the expected time frame of 5 to 10 years.

C7.1 Sewerage

C7.1.1 Current Situation

The existing sewerage system used in the WHS of George Town are (i) sewerage treatment system, (ii) pumping main system and (iii) individual septic tank.

The sewerage is channelled to Jelutong Sewerage Treatment Plant (STP) via existing sewerage pipes. There are two pumping stations within the WHS, Pump PEG001 on Lebuh King and Pump PEG126 at Lorong Ngah Aboo. Indah Water Konsortium Sdn. Bhd. (IWK) is responsible maintaining the sewerage system in this area.

B7.1.2 Issues

i) In certain areas, individual septic tanks and pour flashes are still being used and maintained by the owners of premises;

ii) There are sewerage pipe laid through the private land. Should any damage or blockage occur, the land owners would have to conduct their own maintenance;

iii. The existing manhole are located in narrow spaces and therefore difficult to maintain; and

iv. Clan Jetty is a critical area for sewerage management, because there are no proper Sewerage Treatment System. The sewage is channeled directly into the sea, which is both a hygiene and water pollution issue for the WHS (Figure C7.1).

B7.1.3 Proposed Solutions

i) For all new developments within the WHS of George Town, developers must connect the sewerage pipe of the development to an existing sewerage treatment plant;



Figure C7.1: Clan Jetties

ii) The authorities must enforce that the individual land owners of premises to connect to the existing pipe line;

iii) Alternatively, the existing individual septic tank may be changed to the more sustainable sewerage system. One example is the Biokube; and

iv) For the Clan Jetties, a vacuum system should be implemented and pumped into an existing manhole, which is then channelled into Jelutong's STP. Another solution would be to treat with the Biokube system and discharge as grey water.



Figure C7.2: Catchment areas and discharge

C7.2 Drainage

C7.2.1 Current Situation

i) The drainage system in the WHS is managed by two agencies; Jabatan Pengairan dan Saliran Timur Laut (JPS) and the Local Authority (MBPP). The river and the monsoon drains are maintained by JPS, while the town drainage system is maintained by MBPP;

ii) JPS has constructed a retention pond at Jalan Tar (area marked as S-10 in Figure C7.2) to alleviate the issue of flooding during the high tide and heavy rain. The pumping system is used to pump the water out from the pond; and

iii) Most of the run-off water is channelled towards the Prangin Canal (Figure C7.3) and into the retention pond (Figure C7.4). Part of the water from the WHS is channelled directly into the sea as indicated by PN 1 to 8 and PS 1 to 8.



Figure C7.3: Prangin Canal



Figure C7.4: Existing retention pond near the WHS

C7.2.2 Issues

Flooding is a major issue in the WHS of George Town. Lebuh Acheh and Jalan Pintal Tali have been identified as flood prone zones during heavy rain. The flooding is due to the following:

i) High built up area

The water catchment area is reduced due to a high built up area and impermeable roads, thus leading to a high quantity of surface water runoff.

ii) High tide effect

The sea water level increases during high tide, leading to higher level of the river. This further contributes to the issue of flooding especially during heavy rain in the lower ground areas.

iii) The small and narrow drainage system

The existing drainage system is too small to cater for the water runoff.

iv) Clogged drains

The drainage system does not function to its capacity due to stuck rubbish.

C7.2.3 Proposed Solutions

i) The design of new public parks and open spaces must incorporate, where possible, a stormwater management system such as an on-site detention (OSD) system. This requirement is exempted for archaeological sites. Figure C7.5 indicates the proposed OSD locations in the WHS;

ii) The drainage system needs to be maintained and upgraded from time to time to suit the development and land use. However, the historic street engineering drains must be maintained;

iii) Any new development proposals when necessary must incorporate a retention pond and rain water collection system as per the Stormwater Management Manual (MASMA);

iv) A study on the existing drainage system must be conducted, towards a master plan proposal to alleviate this situation;

v) The drains must be maintained regularly by the Local Authority; and

vi) The use grease traps for restaurant is mandatory.

Figure C7.5

Proposed OSD Location for Sub-catchment Area

Proposed On Site Detention Location

Core Zone

Buffer Zone

Source: Land Use Survey, 2010;
AJM Planning & Urban Design Group Sdn Bhd

C7.3 Water Supply

C7.3.1 Current Situation

The water supply for George Town area is managed by Perbadanan Bekalan Air Pulau Pinang Sdn. Bhd. (PBA). The upgrading and replacement of the current pipes are in progress.

C7.3.2 Issues

i) Improper connection of water supply; and

ii) Obstructive location of water meter, and exposed hosing that affects the visuals of the heritage streetscape.

C7.3.3 Proposed Solutions

i) Close supervision is required during the installation of pipes and water meters to ensure that their placement do not obstruct pedestrian safety; and

ii) PBA should relocate obstructive water meters to suitable locations. Placement of a water meter along the pillars of heritage buildings is recommended (Figure C7.6). Alternatively, the water meter may be boxed up (Figure C7.7).



Figure C7.6: Suitable meter location (along column)

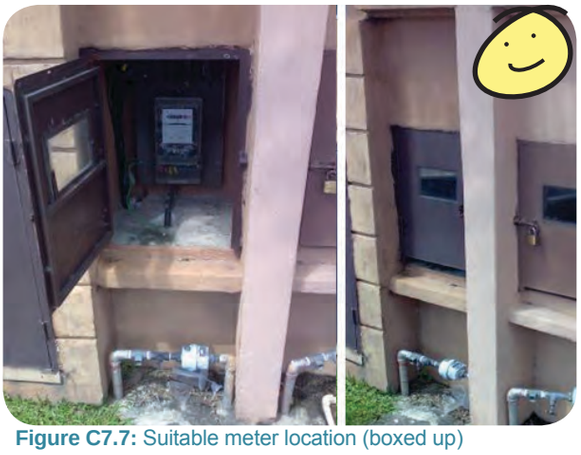


Figure C7.7: Suitable meter location (boxed up)

C7.4 Fire Prevention System

C7.4.1 Current Situation

Currently, the fire hydrant is connected to the underground pipe which shares water with the domestic supply. Fire hydrants are located by the road side.

C7.4.2 Issues

i) The pipes are shared between domestic supply and the fire hydrants, thereby reducing water pressure in peak hour use;

ii) Inappropriate decorative lighting, hung from lighting pillars and crossing the road creates problems in terms of accessibility for fire trucks and large vehicles;

iii) The fire hydrants on the roadside are exposed to vehicles and accidents;

iv) The Bomba underground water valves are covered and blocked; and

iv) Building signage blocking the openings of windows are fire hazard.

C7.4.3 Proposed Solutions

i) To maintain the pillar hydrant pressure, the pipes should be separated from domestic supply;

ii) Installation of decorative lighting across street light pillars is not allowed;

iii) The installation of underground pillar hydrant is required to avoid damage caused by vehicles;

iv) The Bomba underground water valve should be exposed and uncovered; and

v) The implementation and enforcement of building guidelines on signage and advertising.

C7.5 Telecommunication

C7.5.1 Current Situation

There are two types of telecommunication connections, the antennas from the telecommunication tower and the underground cables and cabinets.

Most of the telcos have their own separate antennas, i.e. TM, Celcom, Digi and Maxis. This creates unsightly views to the urban fabric of the area.

Installation of telecommunication tower and antenna is not allowed on Category I and Category II Heritage Buildings. Any installation application shall comply to the MBPP requirement.

C7.5.2 Issues

i) The antennas are an eyesore and obstructs views. There is also the associated health issues arising from the waves from the telecommunication towers;

ii) Antennas are erected without following specified guidelines especially on building rooftops; and

iii) Telecommunication cabinet obstructs traffic and walkway.

C7.5.3 Proposed Solutions

i) To construct a centralised tower that should be erected away from residential areas;

ii) To impose guidelines on the telcos to share infrastructure resources; and

iii) Relocate telecommunication cabinets to more suitable areas such as back lanes and should be camouflaged.

C7.6 Electrical Supply

C7.6.1 Current Situation

Electrical supply is obtained from TNB. The cables were laid underground and over head. The electricity is supplied from the TNB substation to the premises.

C7.6.2 Issues

i) Cables are not installed properly, for instance exposed power outlets, untidy wiring across building exterior and untidy connections;

ii) Feeder pillars obstruct walkways and are too close to the road carriageway which may obstruct vehicular traffic;

iii) Meters are exposed, untidy and sometimes blocking the aesthetic of heritage buildings; and

iv) Distribution boards is exposed and untidy.

C7.6.3 Proposed Solutions

i) Cables should rearranged and laid on a tray or conduit and located behind pillars and transoms or truss beams of buildings. Alternatively, cable can also be laid in the back lanes or underground;

ii) To relocate feeder pillar to a safe and more suitable place that does not disrupt the historic streetscape, such as in back lanes (when possible) or embedded into buildings (Figure C7.8); and



Figure C7.8: Proposed feeder pillar on back lanes when possible



Figure C7.9: Solution: Meter mounted on walls and hidden from view

iii) To relocate meters and distribution boards, either hidden from view or in a way that does not block important architectural features (Figure C7.9), such as in back lanes (when possible).

C7.7 Roads

C7.7.1 Current Situation

The roads are maintained by the Local Authority (MBPP). They are typically resurfaced without excavating the old road surface, thus increasingly the road levels after every resurfacing work.

C7.7.2 Issues

i) Existing road level higher than building level; and

ii) Existing road level and walkway at the same level.

C7.7.3 Proposed Solutions

i) A comprehensive study on the road network must be undertaken for the WHS. This study must consider the roadside drain level as well as the main drains to determine the discharge point and level. It is then possible to determine the optimum road level to ensure that the road level will be lower than the building level; and

ii) Road surface materials should consider the use of more previous materials and encourage slower speed traffic.



PART D

Guideline for the Conservation Area and Heritage Building in George Town World Heritage Site

D1 Introduction

D1.1 Preamble

"Development is the engine of an urban economy but heritage and identity will always be the soul of the city."

Christopher Pound

Penang Island's built, natural and living cultural landscapes are all reflections of the Island's rich history of both indigenous and migrant populations. Each brought with them the traditions of their homelands, which over time fused, adapted and intermingled to suit the new land. This history, mirrored in the living cultures of today, their traditions and architecture, is the island's identity.

The built environment echoes the beliefs and needs of its builders and the early settlers, and is rich in cultural meaning. So closely tied are the tangible and intangible cultures, that it is hard to separate them. A granite step, brings with it the belief of solidity and permanence, a 'Datuk' shrine heralds the presence of a Chinese community, a call for prayer creates a human pathway of worshipers towards a mosque and a broken coconut outside a doorway, marks the ridding of egos of the Hindu community on their auspicious days for prayer.

The tangible and the intangible are intertwined - each celebrates the other, each creates the whole. These guidelines therefore, intend to support this cultural integrity, to highlight its values and recognise its significance in the fast changing world.

D1.1.1 Intent of Guideline

The function of these Guidelines for the Conservation Areas and of Heritage Buildings is to regulate the development and use of land in the World Heritage Site (WHS) of George Town. They have to take into account the State Government's objective of promoting sustainable economic growth and make provisions for development to meet the economic and social needs of the community. The Guidelines are also required to preserve the built and natural heritage.

The Guidelines reflect the State Government's aspiration of developing the historic centre of the city of George Town as a truly "Intelligent and Sustainable Heritage City". Its sets out the State Government's policy on planning and development issues and provides guidance to MBPP on the operation of the planning and development systems. This regulation is material to decisions on planning applications. It is also material to decisions on repair, conservation, maintenance, alteration, extension and compatible development issues.

The Guidelines provide a full statement of the State Government's policy for the protection of heritage buildings, conservation areas and other elements of the historic environment. It explains the role played by the planning and building systems and the supporting role of the GTWHI in their protection. It superseded the Regulations for Conservation Areas and Heritage Buildings 2009.

D1.1.2 Who uses these guidelines?

This guidance is for officers of public authorities, existing and potential property owners and tenants, contractors, developers, investors, related professionals, students and all members of the public with an interest in the repair, conservation, enhancement, and compatible development of George Town's built and natural heritage.

D1.1.3 Why conserve?

The protection, conservation and enhancement of conservation areas, enclaves and buildings provides an enriching experience for those who live in, work in or visit them, creating a sense of belonging, stability and connection between future and past generations, community, landscape and cultures from distant lands.

Penang Island's tangible and intangible testaments to its entrepreneurial forefathers, both indigenous and migratory, are expressions of the Island's unique identity and experience. They are irreplaceable records, which provide a resource of inspiration for the present and future generations. They present an example of sustainable, low carbon building practice and way of life - a knowledge bank for the present and future generations.

The State Government has committed itself to the concept of sustainable development - of not sacrificing what future generation will value for the sake of short term and often-illusory gains. The State Government wishes to preserve the historic environment, which by it nature is irreplaceable. Once lost, heritage buildings cannot be replaced and they can be robbed of their special interest as surely by unsuitable alteration as by outright demolition. They are irreplaceable assets.

It is fundamental to the State's policies for environmental stewardship that there should be effective protection for all aspect of the historic environment. The physical survivals of the State's past are to be valued and protected for the State's sake, as a central part of the State's cultural and historical heritage. They are irreplaceable records, which contribute, through formal education and in many other ways, to the State's understanding of both the present and the past. The presence of the buildings adds to the quality of our lives, by enhancing the familiar and cherished local scene and sustaining the sense of local distinctiveness, which is an important aspect of the character and appearance of the city of George Town. The historic environment is also of immense importance for leisure and recreation.

D1.2 Conservation Principles for Heritage Buildings and Landscapes

In accordance with Article Two of the BURRA CHARTER (1999), which is the retention of the cultural significance of a place, the State Government's fundamental conservation principle for all heritage buildings in Penang Island 'is a cautious approach of changing as much as necessary but as little as possible' (Burra Charter 1999).

Buildings to be conserved shall be retained, restored or preserved in accordance with this regulation. In the event that the original structural elements need to be repaired or replaced, their features shall be retained. Selective replacement may be considered only when absolutely necessary. Total reconstruction is totally and strictly prohibited.

No building or structure shall be altered or demolished if there is any conceivable way of preserving it in its original or current condition. Adaptive reuse of heritage buildings is recommended and encouraged to generate new life into such buildings in line with the "Intelligent and Sustainable Heritage City" concept.

When upgrading and adapting a building for new use, the existing structure should be retained by strengthening and repairing the structural elements. Any alteration or strengthening to structural elements should be done in the most sympathetic and unobtrusive way possible, using original methods and materials whenever possible, or if not, matching with materials of similar properties. If a building is deemed unsafe, it should be made safe, following original methods and materials.

The preservation and conservation on activities on heritage assets and new compatible developments in the WHS shall need to adhere to and be carried out to achieve the vision and conservation objectives set out for George Town WHS. The vision, principles and objectives are spelled out in Part B, Chapter 1 of this SAP.

Refer Chapter 1, Part B
Pages B1-1 to B1-10

D1.3 Terms and Definitions

Adaptation means modifying a *place* to suit the existing use or a proposed use.**

Architectural Significance means buildings that demonstrate unique cultural practices related to architecture and/ or examples of developments in building technology.

Associations mean the special connections that exist between people and place.** *Associations* may also include social or spiritual values and cultural responsibilities for a place.

Authenticity means that an object is made or done in the traditional or original way, or in a way that faithfully resembles the original. Within a cultural landscape authenticity goes on to describe the genuineness of the landscape in that it reflects the traditions, beliefs and ways of being of communities existing there. A landscape created by the users for the users.

Buffer Zone refers to a protected area directly outside the Core Zone of a WHS.*

Conservation means all the processes of looking after a place - to retain its *cultural significance*.** *Conservation* is based on a respect for the existing *fabric*, *use, associations and meaning*. It requires a cautious approach of changing as much as necessary but as little as possible.

Conservation areas are areas where the entire street or enclave is of significant Heritage Value.**

Core Zone means the main heart of the UNESCO WHS.*

Compatible use means a use, which respects the cultural significance of the place. Such a use involves no, or minimal, impact of cultural significance.**

Cultural Impact Assessment (CIA) means a cultural mapping and assessment study in order to assess the impact of new building use and new building development on the existing community. To be included in the HIA.

Cultural Landscapes mean environments that reflect a purposeful relationship between man and the built and natural environment in response to cultural traditions and belief. A sense of place.

Cultural Significance means aesthetic, historic, scientific or social value for past, present or future generations. It is embodied in the place itself, its fabric*, setting, use, associations, meaning,* records *related places,* and *related objects.***

Dilapidation Report means a report on the condition of a building or object.

Dossier refers to the documents submitted to UNESCO during the application and nomination process to be a WHS.*

Fabric means all the physical material of the place, including components, fixtures, contents, and objects.** *Fabric* includes building interiors and sub-surface remains, as well as excavated material*. Fabric* may define spaces and these may be important elements of the significance of the *place.*

Heritage Significance means a building, object or landscape that reflects cultural and architectural significance that is of value to the overall cultural landscape of the site.

Heritage/ Historic Buildings refer to buildings with architectural and cultural significance.

Heritage Impact Assessment (HIA) is a report that describes compatible development and new use projects and assesses their impact on the OUVs of the site.* The HIA also includes a Cultural Impact Assessment.

Integrity means the quality of being true to the original material, form, use, purpose and cultural significance.

Interpretation means all the ways of presenting the cultural significance of a place.** Interpretation includes treatment of the built fabric.

Maintenance is the continuous protective care of the fabric and setting of a *place*, and it's to be distinguished from repair. Repair involves *restoration* or *reconstruction.*** e.g. regular inspection, cleaning of gutters.

Meaning denotes what a *place* signifies, indicates, evokes or expresses.**

Outstanding Universal Value (OUV) refers to the UNESCO criteria for inscription as a WHS.

Place means site, area, land, landscape, building or other work, group of buildings or other works, and may include components, contents, spaces and views.**

Preservation means maintaining the *fabric* of a place in its existing state and retarding deterioration.**

Reconstruction means returning a place to a known earlier state and is distinguished from *restoration* by the introduction of materials (new or old) into the fabric.** New material may include salvaged and recycled material.

Related object means an object that contributes to the *cultural significance* of a place but is not at the *place*.**

Related place is a place that contributes to the *cultural significance* of another *place*.**

Restoration means returning a *place* to a known earlier state by removing accretions of by reassembling existing components without the introduction of new material.**

Setting means the area around a place, which may include the visual catchments.**

Use means the function of a *place*, as well as the activities and practices that may occur at the *place*.**

* from the HIA Guidelines JWN 16.4.2010
** adapted from the Burra Charter 1999, The Australian Charter for Places of Cultural Significance.

D2 Works & Activities Requiring Approvals

D2.1 Introduction

This chapter outlines the approval requirements for areas within the WHS that support the built cultural landscape.

This chapter is divided into the following sections:

- Legal Provision;
- Repair, Planning and Building Control Procedure; and
- Supporting document required for submission.

D2.2 Legal Provision

The legal provision for the control of works and activities in the WHS is provided by the followings:

Development Plan

i) The Penang State Structure Plan;

ii) Draft Penang Island Local Plan;

iii) MBPP's Planning and Development Control Policy Plan No.: MBPP/PN-020(PL/PP); and

iv) Conservation Management Plan (CMP) and Special Area Plan (SAP) Melaka and George Town Historic Cities of the Straits of Malacca.

Acts of Parliament

i) National Heritage Act 2005 (Act 645);

ii) Local Government Act 1976 (Act 171);

iii) Town and Country Planning Act 1976 (Act 172); and

iv) Street, Drainage and Building Act 1974 (Act 133).

By-laws

i) Uniform Building By-laws 1984;

ii) Municipal Council of Penang Island (Advertisement) By-law 2000;

iii) Municipal Council of Penang Island By-laws 1998; and

iv) Licensing By-laws.

For detail explanation on Legal Provision, refer to Part B3(section B3.3).

D2.3 Repair, Planning & Building Control Procedure

D2.3.1 Getting the right advice and helping the process through

In all cases, before undertaking either the:

i) Purchase of a property or site, and/ or; and

ii) Preparation of a concept design proposal of a property or site.

It is advisable to understand the cultural landscape of the WHS – the OUVs, and what opportunities this offers for conservation and compatible development. Relevant bodies that should be referred to are the MBPP's Department of Heritage Conservation and GTWHI.

The application process is sometimes delayed due to incomplete submissions. In order to speed the pathway for approval, it is important to submit proposals that have:

i) Complied with the guidelines of this SAP;

ii) Compiled plans, elevations, sections and visuals that match; and

iii) Complied with the requirements of the relevant reports - Heritage Impact Assessment/ Dilapidation Reports - where applicable.

D2.3.2 Repair Works

Before repair work can be carried out to any building and heritage objects, approval or a permit must be obtained from the MBPP's Department of Heritage Conservation. The permit is a form describing repair works to be carried out that do not increase the overall area of the building and do not involve additional structure.

a) Works requiring repair permits

i) Repair and maintenance works such as plumbing, fixing roof, leakage and re-wiring works;

ii) Re-roofing of a building or any parts of a building;

iii) Re-plastering and/ or repainting of part of a building;

iv) Putting back original materials where missing for front facade and roof;

v) Change of material for any part of the building;

vi) Clearing works related to burnt/ dilapidated building, either partly or fully and/ or removal of overgrown plants; and

vii) Installation of temporary protective/ safety measures or fencing/ hoarding on buildings/ sites.

For all type of works considered as repair works, particularly Category I Buildings, advice and assistance from the MBPP's Department of Heritage Conservation or GTWHI should be sought prior to permit request.

b) Requirements for the application

i) Consent from the property owner;

ii) Certified copy of land-title, quit rent receipt and assessment receipt;

iii) Photographs of existing building conditions;

iv) A brief written description of the works to be carried out including the materials to be used; and

v) Photographs of the site before and after works.

Application for repair works can be submitted by the owner, contractor, licensed draughtsman, engineer or architect.

The given permit is to be displayed outside the building before works commence.

c) Repair works involving the closure of public space/ right-of-way

For any repair works involving the closure of public space/ right-of-way, consent from MBPP must be obtained.

d) Site Inspection and enforcement

i) MBPP will carry out inspections of the site:
- During the repair permit application process;
- During the repair works period;
- Upon completion of repair works; and

ii) Stop-work orders will be issued for any non-compliance of the repair permit. Remedial works are to be carried out immediately, failing which legal action shall be taken.

e) Notification of completed works

The applicant shall notify the MBPP, together with photographic evidence of completed works.

D2.3.3 Planning Control

The Planning Permission is obligatory in accordance to the Town and Country Planning Act 1976 and is required for:

i) New development projects on Infill sites;

ii) New development projects replacing existing building listed as Replacement;

iii) Demolition of parts or whole of a heritage building, Category 1 heritage object and non-heritage building;

iv) Extension of buildings or any part of a building;

v) Construction of new structures or buildings in Category II sites;

vi) Increase in height of a building or any part of the building;

vii) Change of use or activity of the building or land as specified in Chapter B3 - Controlling the Use of Land and Building of this document; and

viii) Roofing works involving changes to the existing roof profile and structures.

The Heritage Impact Assessment (HIA) is to be submitted together with the application (refer section C2.3.1).

D2.3.4 Building Control

The Building Plan Application is required under the Street, Drainage and Building Act 1974 (Act 133). Building plans, measured drawings and other documents considered necessary to support such application is required for:

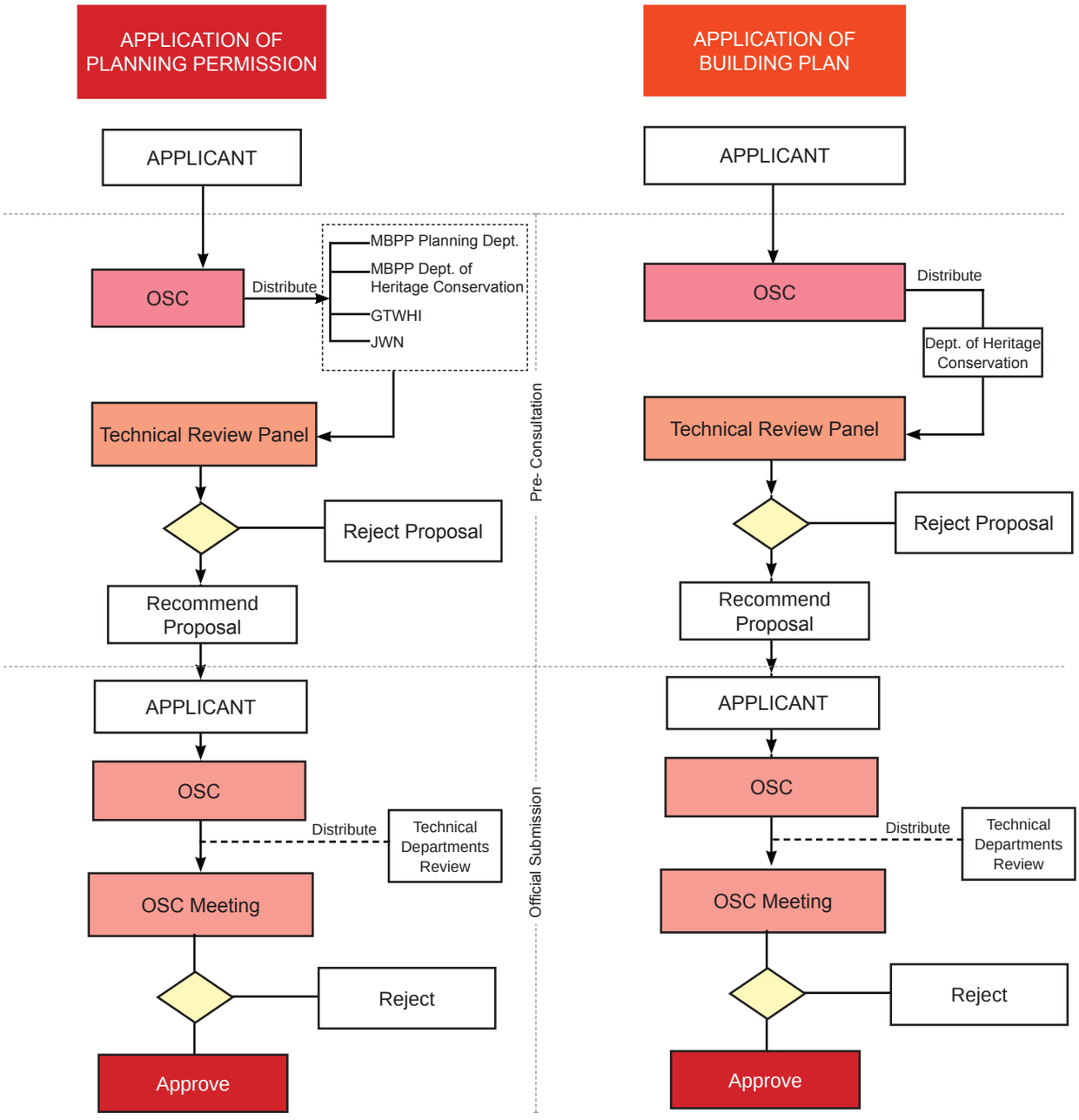
i) Erection of new building;

ii) Extension of building or part of a building;

iii) Increasing the height of an existing building or part of a building;

v) Alteration of building or part of a building; and

iv) Restoration works of a building or part of a building.



JWN - Department of National Heritage
GTWHI - George Town World Heritage Inc
OSC - One Stop Centre

Figure D1.1: Flow chart for the application of planning permission and application of building plan to MPPP

D2.4 Supporting Documents Required for Submission

D2.4.1 Heritage Impact Assessment

A Heritage Impact Assessment (HIA) is required for all Planning Permission Applications. It is part of the general documentation and is an assessment of the proposed project site, and its potential impact on the authenticity of the OUVs of the WHS.

The HIA must be prepared by a qualified person and to be submitted to MBPP.

The Department of National Heritage has prepared a manual for writing the HIA, available from the MBPP's Department of Heritage Conservation or the GTWHI office, and should be used as a template.

The HIA should include:

i) Impact Assessment

It means the assessment of the impact the new development will have on the heritage building(s) on the site and neighbouring areas, both during the construction stage and after, when the project is completed. It should include:

- Visual impact;
- Environmental impact;
- Traffic impact;
- Socio-cultural impact;
- Skyline impact;
- Roofscape impact;
- Sound impact;
- Tourism impact; and
- Hardscape and softscape impact.

ii) Mitigating Measures

It means a description of the measures to be taken to either reduce or avoid the negative impacts to the heritage buildings on the site, the neighbouring buildings and the OUVs in general.

D2.4.2 Dilapidation Report/ Building Condition Survey Report

A Dilapidation Report/ Building Condition Survey Report is a description of the condition of the heritage building or buildings and monument or object to be repaired/ conserved/ adapted.

The Dilapidation Report/ Building Condition Survey Report is to be submitted as part of the documentation for repair works and Building Plan Application as required by the MBPP.

A Dilapidation Report should contain a detailed drawing, photographic survey of the building condition and materials. In certain cases, an engineer's report on the building integrity may also be required.

Refer to Dilapidation Report manual prepared by the Department of National Heritage.

D2.4.3 Progress Report – for work in progress

Progress report is a record of works that takes place during the conservation, repair, alteration, extension and construction works.

The Progress Report is a photographic record of the building taken during the work in progress. The MBPP may request for progress reports to be submitted as and when required.

D3 Conservation Practice

D3.1 Introduction

This chapter is concerned principally with works that affect the special interest and character of the cultural landscape and buildings of heritage significance in the WHS.

D3.1.1 Protection, Conservation and Adaptation

The restoration, conservation, repair, maintenance, adaptation or reconstruction works on Category I and Category II heritage buildings shall follow the guidelines as stated in:

i) Chapter D4 - Category I;

ii) Chapter D5 - Category II; and

iii) Annexure A - Heritage Buildings of George Town.

D3.1.2 Compatible Development (Infill or Replacement)

Guidelines for Infill and Replacement are site-specific depending on whether the proposed development is located within a row of an ensemble of heritage buildings or within a row of buildings of mixed architectural style or on an independent site. The guidelines may vary in terms of height control depending on the street character and the importance of significant values of each area. The guidelines for Infill and Replacement are listed in Chapter D6 Infill and Replacement.

These principles must be adhered to by any conservation works in the WHS of George Town.

The specific aspects covered in this chapter are:

- Authenticity & Interpretation;
- Compatible Building Use;
- Reversibility & Adaptation;
- Dismantling;
- Fire Protection;
- Demolition; and
- Alterations and Extension.

D3.2 Authenticity & Interpretation

D3.2.1 What is authenticity, why is it so important?

The protection of the ‘authenticity’ or ‘genuineness’ and integrity of a cultural landscape, demonstrates a respect and depth of understanding of both the tangible – the built culture — and the intangible – the living culture — and how the intertwining of the two creates the value of the site, place or setting the OUVs.

In eclectic cultural landscapes such as George Town and Melaka, the connectivity between the two sites is also part of the OUVs of the WHS. Loss of this authenticity through mismanagement, misinterpretations and attempts to ‘package’ the cultural landscape, as a marketable ‘commodity’ will lead to its eventual loss.

The ‘authenticity’ of the cultural landscape is reflected in objects of historic significance, materials, location and orientation of a place, buildings use and daily rituals and performances within the place and setting. The aim of conservation,

therefore, is to retain, support and value the cultural significance of a place (Burra Charter Article 2.2) and both its historic and current heritage significance.

In order to conserve and protect the authenticity of the built landscape it must first be understood, and its values recognised. Thus:

"it is the architects job to learn the pertinent values (of a host culture) before starting work"

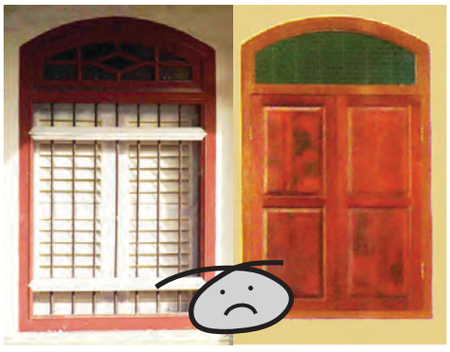
Herb Stovel, former Director of ICOMOS Heritage Settlement Programme

This advice refers to all stakeholders of the cultural landscape.

The forefathers of the eclectic communities that live within or visit the island of Penang, brought with them traditional design ideas, methods of construction and decoration, use, foods, belief systems and other customs from their places of origin. These were adapted to suit the local climate and conditions of the land. It is both the culture of the past and the culture and tradition of the present that create the ingredients for the 'authenticity' of the cultural landscape.

Figure D3.1: Misinterpretation vs The Original – the Authentic

Misinterpretation



Ground floor shutters, under the five-foot-way should be solid not louvered (left) and inside the bars not outside (right). In Melaka shutters are outside the bars, but not in Penang.



Entrance doors under the five-foot-way. The outer door is a carved door with ventilation slots or decorative carving.

The **solid doors**, together with an auspicious message are always on the inside of the doorframe – so when they open, the door and the auspicious message face into the house. (Left) The solid door is mistakenly on the outside.

Planters block the original open five-foot-way steps to the street.

The Original – the Authentic



D3.2.2 How do we know what is authentic and what is not?

Understanding the written and unwritten 'rules' that guided the early settlers in order to 'read' and understand the cultural landscape, is helpful. Each culture has its own form of Feng Shui or Vashtu Shastra, which has guided the creation and use of the built cultural landscape.

Understanding the age of a building and what technologies were on the island at the time of its building gives an indication of what is original and what has been added later.

As each building, place or site is different, GTWHI aims to help in this identification process though its resource centre, temporary exhibitions, talks and workshops. Comparing each building, place or site with old maps and drawings, for example will give a good indication of what is original and what is a later addition.

D3.2.3 Why is research important?

By researching the past as much as possible, maintenance and repairs will be better understood and new building work can be designed to be more compatible with the cultural landscape.

George Town was built on a large swamp, on a beachfront and on reclaimed land. The heritage buildings were created using materials to suit the local climate and conditions.

D3.2.4 Where do I get help with research?

Original Building Plans:
Property owners may request a search for the original building plans from the MBPP (for a fee). Although what is drawn may not necessarily be the same as what was built, they give a good indication as to the traditional materials and structural design.

Other research resources and data

The GTWHI's office is developing a resource centre for design styles and traditional ways of building as well as a Knowledge Bank for research purposes. Published postcard collections, and copies of historic maps can be found in the GTWHI's library or website of Visions of Penang archive online.

The National Archives of Malaysia, Singapore and the UK are all helpful resources for researchers.

National Archives Malaysia
http://www.arkib.gov.my/home

Penang Library
http://www.penanglib.gov.my/

National Library Singapore - newspaper cuttings
http://newspapers.nl.sg/

National Archives Singapore
http://picas.nhb.gov.sg/picas/public/internetSearch/index.jsp

NAS - access to archives online
http://www.a2o.com.sg/a2o/public/search/index.html
http://www.a2o.com.sg/a2o/public/html/

GTWHI website
http://www.gtwhi.com.my/
- will be regularly updated as new archives come online, including historic maps

Jabatan Warisan Negara
http://www.heritage.gov.my/

Municipal Council of Penang Island
http://www.MBPP.gov.my/

Example of Research - How to Reinstate a Façade to its Original Design?

- **Step 1:** Is the building a part of a group?
  This one is the middle of a group of five.

- **Step 2:** Do its neighbours have more or less the same design?
  This ensemble all have low walls on the first floor, column-to-column windows and pitched roof.





- **Step 3:** Check the Shophouse Style sheets and see if a neighbour is similar in design
  This will tell you all the features and materials typical of the shophouse style.



- **Step 4:** Check old maps and surveys to understand how and when the shophouses were built
  The Kelly Town survey 1891-3 shows the group of five shophouses, confirming that these shophouses were built as one design.

  Kelly maps without the watermark are available from JUPEM, KOMTAR

D3.3 Compatible Building Use

The best use will very often be the use for which the building was originally designed and the continuation or reinstatement of that use should certainly be the first option when the future of that building is considered. But not all original uses will now be viable or necessarily be appropriate. The nature of uses can change over time, so that in some cases the original use may now be less compatible with the building than an alternative.

A compatible or adaptive reuse of heritage buildings may be permitted by the MBPP to ensure the survival of such buildings.

Approval of new use however, must take into consideration the suitability of the use within the cultural landscape. Inappropriate use may cause loss of authenticity of the cultural landscape – the OUVs of the WHS.

A Heritage Impact Assessment will be required for change of use application to ensure that the new use reflects the authenticity of the OUVs (refer section D2.4 on HIA).

D3.4 Reversibility & Adaptation

D3.4.1 Reversibility of new works

New extensions or any other permitted alterations to the original form should be reversible, so that future owners may revert to the original authentic form with minimum damage involved in the process.

Category I buildings should retain their authentic and original form according to the significance of the building, and related buildings/ enclave e.g. a mosque, temple or clock tower.

Category II buildings may, together with conservation works be adapted for:

i) A continuation of existing use, with the addition of modern conveniences not found in the original form e.g. toilets, electricity, piped water etc.; and

ii) A new use, which is compatible with the existing form and with permitted additions to the built fabric.

C3.4.2 Reversing past misinterpretations

Over the years of development and modernisation, alterations have been made to the built landscapes. Some changes are ‘lightweight’ cosmetic changes that can be reversed to rediscover the ‘authentic’ design, e.g. glass louvered windows replaced ‘authentic’ timber-louvre shutters. Other changes have caused accidental damage, e.g. cement render used instead of traditional lime plaster, or the covering over of the historic drains and ditches.

Reversing this trend should be a considered option when repairing, conserving, altering and/ or extending a heritage building, site or landscape.

D3.4.3 Using the right materials

The right materials should be used for any maintenance or repair processes as to protect the building from any further damages in the future. Choosing the wrong materials can cause damage to a

property and in the case of a shophouse, can potentially harm the party wall, causing damage to its neighbours.

- Find out what original materials were used;
- Check what damage the replacement materials have done – if any; and
- Remove with care and revert to the original.

Further consultation and advice can be obtained from the MBPP's Department of Heritage Conservation and the GTWHI.

D3.5 Dismantling

In the process of conservation works or approved changes required for the building to have a new use, there are two guidelines to follow:

1. Conservation work should use the original or matching materials, where possible; and
2. Sections being removed to make way for authorised changes and/ or additional areas are better dismantled than demolished and original materials salvaged if possible.

Dismantled items can be:

- Used in other areas of the property if in good condition;
- Recycled if matched with the original material and in good condition. e.g. old timbers may be used to repair remaining ones; and
- Sold to others wishing to restore/ conserve.

When buying materials dismantled from another building, it is important to purchase from a source that has not acquired the items through dismantling another heritage property without the relevant approvals.

D3.6 Fire Protection

D3.6.1 Residential use buildings

If a heritage building is being restored and retained as residential use, the fire regulations apply regarding a protected separation from the neighbouring building.

- **Early shophouses** were designed with an undivided roof, covering many units (Figure D3.2); and
- **Later shophouses** were designed with a firebreak wall separating each unit (Figure D3.3).



Figure D3.2: Shophouses with an unbroken roof tiling



Figure D3.3: Shophouses with the party wall visible above the roof tiles

It is important to maintain the authenticity of the roofline of the shophouses. A new fire division for these buildings without a visible firewall should not show above the roofline.

D3.6.2 Commercial use buildings

All commercial properties, either heritage buildings or modern buildings must follow the relevant legal requirements for fire protection.

Change of use from Residential to Commercial will require that the buildings follow the regulations for commercial fire protection. However, if the change of use requires too many physical changes that are not reversible, the use may not be suitable.

D3.6.3 Mixed use buildings

Business owners, living above the shophouse or place of business (single occupancy), represents a traditional use of the shophouse. In this instance, the living quarters on the upper floors would not be separated by a fireproof division.

If a building is divided for separate tenancies, commercial and residential, then a fireproof division and means of escape must be provided, during the renovation/ conservation process. See the requirements in the **Uniform Building By-Laws Part VII.**

D3.6.4 Fire protection materials – Reversibility

Fire protection is to aid the escape of people, through a building to the point of exit, in the case of a fire. The principles of Reversibility must be referred to in the selection of fire protection materials.

- **Protecting floors for commercial buildings**

If the floor is of timber construction then a fire protective barrier may be required between floors, according to the requirements in the **Uniform Building By-Laws Part VII**.

The protective barrier should:

i) NOT be of a material that cannot be removed at a later date should the building revert to residential and/ or that may cause damage during removal (see Section D3.4 Reversibility and Adaptation); and

ii) NOT add additional weight to the existing structures, beyond their capacities.

Using a concrete slab on top of the original timber floor structure is only permitted for bathroom areas, and should not be considered as a method for fire separation.

The following are suggested protective layer:

i) A fire rated ceiling board; and

ii) A fire retardant paint suitable for timbers.

- **Protecting walls**

If a new fire protected partition wall is required, it should be of a fire rated material that does not add weight beyond the capacity of the original floor structure, and can be removed without damage to the original fabric of the building.

- **Fire protective doors**

Fire protected doors may be required on both new and existing openings. Certified fire doors must be installed, removing the original doors with care and stored for later reinstatement should the use of the building be reverted to residential use.

Existing openings in Heritage Buildings usually come with thick hardwood frames, and panelled doors. Every effort should be made to keep the original frames, as well as install the certified fire door frames.

Always discuss the issue of fire escape and heritage building needs, with the Fire and Rescue Department (Bomba), the Department of National Heritage, MBPP's Heritage Department and the GTWHI. The importance of regulations and advice for fire protection in Heritage Buildings has been recognised and is in the process of being evaluated. It is important to check for the latest approved approach that complies with both Bomba and the principle of reversibility.

D3.7 Demolition

D3.7.1 Requirement for Planning Permission

Designation as a WHS imposes control over the demolition of all listed buildings or parts of it within the WHS. Application for planning permission to demolish must be made to the MBPP.

In the conservation area, account should clearly be taken of the part played in the architectural or historic interest of the area by the building for which demolition is proposed, and in particular of the wider effects of demolition of the building's surroundings and on the conservation area as a whole. **The general presumption is in the form of retaining buildings, which makes a positive contribution to the character or appearance of the WHS.**

The MBPP is entitled to consider the merits of any proposed development in determining whether planning permission should be given for the demolition of a non-heritage building in the WHS.

Works involving the destruction of part of the fabric of the building will be regarded as 'demolition' as per the Town And Country Planning Act 1976 and will require planning permission.

D3.7.2 Linking between properties

If an owner of a row of a Category II shophouse wishes to link these properties by creating openings in the structural party walls, approval from the MBPP to carry out such work is required.

D3.7.3 Illegal demolition

As defined in Section 19 (1) of the Town And Country Planning Act, upon the application for planning permission, demolition **shall not take place until planning permission has been granted.** Failure to comply will constitute as illegal demolition.

D3.7.4 Strong justification for demolition

Heritage building controls ensure that proposal for demolitions are fully scrutinised before any decision is reached. The destruction of heritage buildings may be the result of neglect or failure to make imaginative efforts to find new uses for them or to incorporate them into compatible development schemes.

The demolition of any Category I or Category II building should be wholly exceptional and should require the strongest justification. All efforts must be taken to sustain and maintain the existing building.

Planning permission will not be given for the total or substantial demolition of any heritage building without clear and convincing evidence that all reasonable efforts have been made to sustain existing uses or find viable new uses, and these efforts have failed; or that redevelopment will produce for the community that would decisively outweigh the loss resulting from demolition.

Where proposed works will result in the total or substantial demolition of the heritage building, or any significant part of it, the applicant, in addition to the general considerations must address the following considerations:

i) The condition of the building;

ii) The cost of repairing and maintaining it in relation to its importance; and

iii) The value derived from its continue use.

D3.8 Alterations and Extensions

D3.8.1 General principles for alterations and extensions

i) Each heritage building has its own characteristic, which is usually related to an original or subsequent function. This should as far as possible be respected when proposals for alteration are put forward. Marks of special interest appropriate to a particular type of building are not restricted to external elements, but may include anything from the orientation, the plan or the arrangement of window openings to small internal fittings. **Attempts should be made to retain the characteristic of distinct type of building**, especially those that are particular to their area. The use of appropriate material is very desirable;

ii) **Alterations should be based on a proper understanding of the structure.** Some heritage buildings may suffer from structural defects arising from their age, methods of construction or past use, but can still give adequate service provided they are not subject to major disturbances. Repairs should usually be low-key, re-instating or strengthening the structure only where appropriate. New work should be fitted to the old to ensure the survival of as much historic fabric as is practical. Old work should not be sacrificed merely to accommodate the new;

iii) **Information about the history and historical development of a building, object or site, is of value when considering proposed alteration.** This may be gained from the physical evidence in the building itself - lost features in the plaster, rough edges where features have been cut away - which can enlighten the original form or construction. There may also be documentary information, such as early photographs, drawings, written description or other documents relating to its construction or use;

iv) In judging the effect of any alteration or extension **it is essential to have assessed the elements that make up the special interest of the building in question.** They may comprise not only obvious visual features such as a decorative façade or internally, features such as staircases, decorated plaster ceilings or capitals but also the spaces and layout of the building. These elements are just as important in simple buildings as in grander architecture;

v) Subsequent addition to the original design of heritage buildings, including minor accretions, such as porches, balconies, verandahs, door dressings, do not necessarily detract from the quality of building. They are often of interest in their own rights as part of the building's organic history. **Generally later features of interest should not be removed merely to restore a building back to an earlier form**; and

vi) **New building extensions should not dominate the existing heritage building either in scale, material or situation.**

D3.8.2 Permitted alterations and extensions

The original building profile such as features of airwell, forecourt, internal court, rear court, etc. shall be retained and restored. Alteration and/ or extensions to heritage buildings are subject to the MBPP permits and approvals. Unauthorised alteration and addition to the building profile will require the original to be reinstated to the original profile.

For guidelines on alterations and extensions for Category I, please refer Chapter D4.

For guidelines on alterations and extensions for Category II, please refer Chapter D5.

D3.9 Alteration & Extensions to Buildings other than Shophouses

These guidelines have concentrated on the shophouse alterations and extensions. However, there are many different types of buildings within the WHS. In all cases, the way **an extension will affect vistas, views, rooflines and streetscapes will need to be presented in an HIA for consideration.** This is in order to maintain the authenticity of the OUVs. Each application should be discussed with the MBPP's Department of Heritage Conservation and the GTWHI, to assess the possibilities before application is made.

D4 Category I

Definitions:

(a) Buildings, monuments, objects and sites of exceptional interest.

(b) Buildings and monuments declared as ancient and gazetted formerly under the Antiquities Act 1976 now under the National Heritage Act (2005).

(c) Buildings and monuments registered as National Heritage under the National Heritage Act (2005).

D4.1 Introduction

Category I buildings, monuments, objects and sites are important in that they reflect the authenticity of the cultural landscape and therefore the Outstanding Universal Values of the WHS.

For example:

The cultural links between a temple on Armenian Street and its related temple in Tanjung Tokong, and the ceremonial processions carried out between the two sites, are evidence of the cultural significance of the temples, which is still highly relevant to the present Chinese population of Lebuh Armenian and Lebuh Penang. Equally, the architecture of the temple bears evidence of migrant ancestors - craftsmen, sponsors and worshipers of the temple, whose entrepreneurial spirit helped, create the settlement we see today.

In the same way, the Queen Victoria Memorial Clock Tower on Pesara King Edward is not only identified by the MBPP but also under the National Heritage Act. It represents an interesting time in the history of the settlement, under the colonial administration of the British, the hard won wealth and philanthropy of the donor, the art of the architect and the skill of the local craftsmen.

The Cultural, Social and Architectural significance of buildings, monuments and objects, in other words the cultural landscape, is an expression of the Heritage Values of a site, and for that reason they are categorised as Category I.

- Category I - to be conserved as original.
- Repair to be carried out using authentic traditional building methods and materials.Documentations for permitted works:
  i. Repair works approval;
  ii. Dilapidation report;
  iii. Progress report; and
  iv. Maintenance & repair report.

Figure D4.1: Example of Category 1 Building



Kapitan Keling Mosque





Yeng Keng Hotel Gateway

Queen Victoria Memorial Clock Tower

D4.2 Permitted Use

The use should remain as originally intended, when possible. Any adaptation to the use must have minimal impact on the cultural significance of the place and requires the preparation of a Heritage Impact Assessment.

D4.3 Authenticity and Interpretation

Category I buildings and objects must be conserved to retain their original use, form, fabric/ decoration and traditional materials in order to preserve their authenticity, both physical and cultural.

i) Category I buildings should retain their authentic and original forms according to the significance of the building, and related buildings/ enclave/ item. e.g. a temple and surrounding housing.

ii) Research into the object or building form, architectural style, typology, traditional materials, history of the object or building and the search for original building plans, should be undertaken, in order to establish the authenticity.

iii) During the conservation of buildings process, a report of these findings is required by the local authority on submission of drawings, together with a report of the condition of the building, when conservation works are to be undertaken.

Refer Chapter D3 for guide on Authenticity and Interpretation.

D4.4 Research for Historical Data

As Category I buildings and objects as much must be understood about them before works are carried out – even minor repairs.

These may include researching on:

- Traditional construction/ manufacture methods typical of the type and age of the building/ object;
- Original drawings, photographs, paintings and other drawn information;
- Newspaper cutting archives, and archives documentation of the owner or related association etc.;
- Local oral histories; and
- Archeology excavation work.

Refer Chapter D3, Section D3.2.4 on research methods.

D4.5 Heritage Management Plan

A document which explains why a place in significant and how its significance will be sustained. It starts with describing what is there, why it matters, what is happening to it and the principle by which the building will be managed.

D4.6 Permitted Works

Only restoration work is allowed to be carried out in order to reinstate its original character and maintaining its original fabric using similar construction method and materials.

New construction methods will only be allowed for the purpose of re-strengthening the original building structure without disturbing or modifying its original structure or removing any of its original fabric. **It requires a cautious approach of changing as much as necessary but as little as possible.**

Consent from the Department of National Heritage must be obtained prior to any conservation work for the following gazetted National Heritage Buildings:

- Fort Cornwallis;
- Queen Victoria Memorial Clock Tower;
- Penang City Hall;
- The Penang State Museum Board Building;
- Kapitan Keling Mosque;
- Lebuh Acheh Malay Mosque;
- St. George Church;
- Penang High Court Building; and
- Leong San Tong Khoo Kongsi.

D4.7 Requirements for Permitted Works

D4.7.1 Heritage Impact Assessment Report

A Heritage Impact Assessment (HIA) is required for all Planning Permission Applications. It is part of the general documentation and is an assessment of the proposed project site, and its potential impact on the authenticity of the OUVs of the WHS.

The HIA must be prepared by a qualified person and to be submitted to MBPP.

The Department of National Heritage has prepared a manual for writing the HIA, available from the MBPP's Department of Heritage Conservation or the GTWHI office, that should be used as a template.

The HIA should include:

i) Impact Assessment

This means the assessment of the impact the new development will have on the heritage building(s) on the site and neighbouring areas, both during the construction stage and after, when the project is completed. It should include:

- Visual impact;
- Environmental impact;
- Traffic impact;
- Socio-cultural impact;
- Skyline impact;
- Roofscape impact;
- Sound impact;
- Tourism impact; and
- Hardscape and softscape impact.

ii) Mitigating Measures

This means a description of the measures that will be taken to reduce or avoid the negative impacts to the heritage buildings on the site, the neighbouring buildings and the OUVs in general.

D4.7.2 Dilapidation Report

Before any application for a repair works can be submitted, a Dilapidation Report is required for all Category I buildings and should be submitted together with the application. The report should include a description of the:

i. Historical Significance of the Site;
ii. Architectural Significance of the Site; and
iii. Cultural Significance of the Site.

The report should contain a detailed drawing, photographic survey of the building condition and materials. In certain cases, an engineer's report on the building integrity may also be required.

The reports will vary in length depending on the extent of works being carried out.

If major conservation work is to be carried out, full measured drawings should accompany the Dilapidation Report and be used as Tender/ Contract/ Construction Documents. Under the Department of National Heritage's conservation projects for building listed as National Heritage, other reports will be required, such as Historical Architecture Buildings Survey (HABS).

Refer Chapter D2, Section D2.4.2 for Dilapidation Report.

C4.7.3 Repair Works Permit

Before repair work can be carried out to any building and heritage objects, approval or permit must be obtained from the MBPP's Department of Heritage Conservation. The permit is a form describing repair works to be carried out that do not increase the overall area of the building and do not involve additional structure.

For the type of works considered as repair works, advice and assistance from the MBPP's Department of Heritage Conservation or the GTWHI should be sought.

Refer Chapter D2, Section D2.3.2 for more information on the Repair Works permit.

D4.7.4 Progress Reports

A progress report is a record of works that takes place during the conservation, repair, alteration, extension and construction works.

The progress report is a photographic record of the building taken during the work in progress. The MBPP may request a progress report to be submitted as and when required.

D4.8 Periodic Manual and Maintenance

Owners of Category I buildings are required to carry out periodical maintenance and inspection of their properties. The purpose is to provide a maintenance/ repair guide, a check-list of all the elements of a heritage building that may, from time to time, require further maintenance work. It is a record of materials used in the conservation work, their warranties, guarantees and performance (if applicable).

The guide allows the owner, manager or tenant of a heritage property to carry out further works, using appropriate materials suitable for the age and style of a heritage building.

The guide will help avoid future inappropriate repairs, advise on the materials and methods to use and promote the continued wellbeing of the heritage buildings.

D4.9 Guidelines for Conservation Work on Category I Buildings

D4.9.1 Forecourt

Item	Description of original design and building methods	Requirements
1.1 Forecourt/ Courtyard/ Compound	The forecourt is an important setting in which a Category I Building is placed and it should be kept to its original form and used in the manner in which it was intended when built.	• The forecourt may sometimes be identified separately as Category II – the same requirements apply.
1.2 Gate and walls	The original size & ornamentation of the gate and walls shall be retained & restored with original or matching materials.	• Structures that obstruct view such as bus shelters, signboard, phone booth etc. in front of the gate and wall should be avoided.
1.3 Ground	The original flooring material shall be retained and restored with matching materials. Laying of new ground finishes shall be sensitive and sympathetic to the front facade.	• The original material often has significant cultural meaning even the direction of the granite/ brickwork is important. Every effort should be made to understand the cultural significance.
1.4 Drainage	The original drainage from the buildings to the street is an integral part of the Category I Building and Compound design. It should be retained and restored to original.	• The flow of water has a strong cultural significance and should be respected. Additional drainage may be permitted to avoid flooding.

D4.9.2 **Roof**

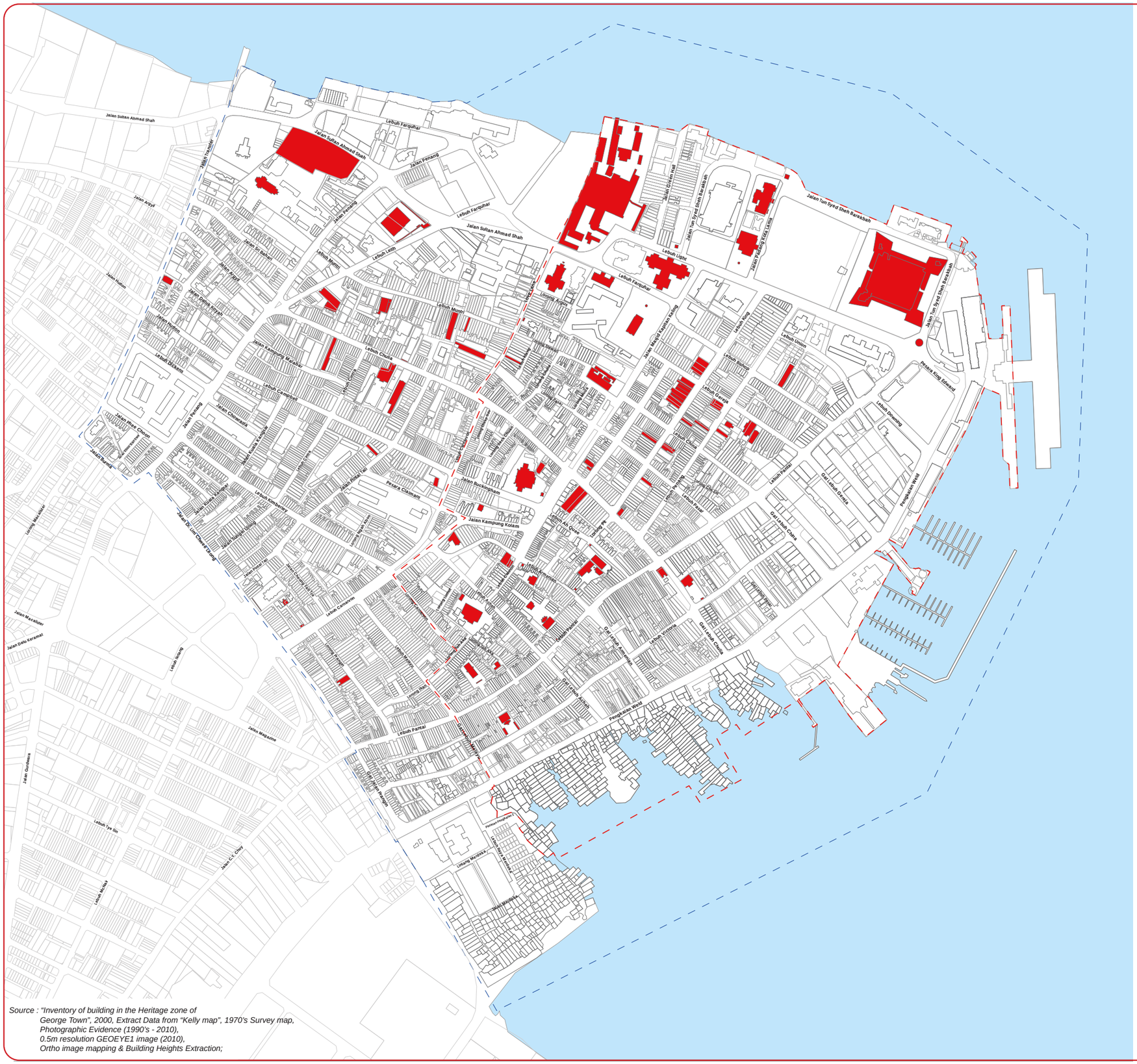
Item	Description of original design and building methods	Requirements
2.1 Tiles All Roofs	The original traditional roofing material, eaves detail and fascia board shall be retained and restored.	• Original installation method and tile profile are to be used.
2.2 Structure Main Roof	The original profile, pitch, height, party wall and eaves projection and internal structure shall be retained and restored.	• The original form should be retained. • Faulty members may be removed and replaced with matching member.
2.3 Jack Roof	The original traditional roofing material, eaves detail, fascia board, ventilation louvres or glass, shall be retained and restored.	• Existing jack roof to be retained. • Roof tiles are to be identical to the main roof. • New jack roof is not permitted.
2.4 Dormer Windows	Not part of original architecture.	• Is permitted if hidden from view and allowing access to the roof for maintenance.
2.5 Roof Eaves	The original eaves, overhang and support features shall be retained and restored.	• Original to be maintained.
2.6 Parapets, gutters & down pipes	The original features, shall be retained and restored.	• New gutters may not be added to existing roofs designed without gutters.

D4.9.3 Building - External and Internal

Item	Description of original design and building methods	Requirements
3.1 Building	Each Category I Building will be unique, culturally and architecturally and must be conserved and restored to maintain its authentic uniqueness.	• Further research into: • The traditional way of a building • The building's architectural, social and cultural history.
3.2 Materials	The original materials used for the walls, columns, windows, doors, railings, floors, staircase and decorative elements, etc, must be conserved, restored or returned back to the original.	• All effort to be made to replace damaged or lost elements with matching size, species, kind or design. • New items are only permitted if they match the performance of the original material.
3.3 Alteration and Extension	The Category I building has a footprint and profile unique to its architectural style.	• No alteration or extension is permitted.
3.4 Utilities and Services	Many Category I buildings were designed before the introduction of electricity. Those that have had electricity installed in the past may require it to be upgraded. Temperatures were controlled through appropriate design elements such as open air-wells and fanlights; these should be conserved and restored. Many Category I buildings were designed before the introduction of plumbing. Water was collected in water tanks and wells, if still part of the building these should be conserved and retained.	• Is permitted if hidden from view and allowing access to the roof for maintenance. • New services required, such as lighting, security, must be installed with care and are unobtrusive and discrete. • Air-conditioning may only be installed if the original options can no longer be used and will be assessed on a case-by-case basis. • Unless part of the original building design, all new sanitary and plumbing should be in and ancillary/ annex building.

Figure D4.2

Category I Buildings and Sites


Jalan Sultan Ahmad Shah
Lebuh Farquhar
Jalan Fenang
Jalan Tun Syed Sheh Barakbah
Lebuh Light
Lebuh Leith
Lebuh Union
Lebuh Bishop
Lebuh Queen
Lebuh Chulia
Lebuh Cannon
Lebuh Pantai
Lebuh Victoria
Pengkalan Weld
Jalan Kampung Kolam
Jalan Buckingham
Jalan Masjid Kapitan Keling
Jalan Penang
Jalan Argyll
Jalan Macalister
Jalan Dato Keramat
Jalan Magazine
Lebuh Tye Sin
Jalan C.C. Chay
Lebuh Acheh
Lebuh Muntri
Lebuh Carnarvon
Lebuh Ah Quee
Lebuh Aceh
Lebuh Pasar
Lebuh Penang
Lebuh Melayu
Lebuh Gereja
Lebuh Duke
Lebuh Ah Kong
Lebuh Ah Quee
Lebuh Armenian
Lebuh Presgrave
Lebuh Kimberley
Lebuh Campbell
Lebuh Dickens
Lebuh Clarke
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Lebuh Ah Ghee
Lebuh Ah Quee
Lebuh Ah Kong
Lebuh Ah Quee

D5 Category II

Definition:

(a) Buildings, sites and objects of special interest that warrant every effort being made to preserve them.

D5.1 Category II Buildings, Places and Sites

Category II buildings, places and sites, make up for the majority of the built cultural landscape of George Town. They are the humble, the vernacular, and they tell of the everyday lives of the eclectic cultural landscape of George Town:

i) They were residences and business premises of those who have lived in George Town for generations. They were built to support the traditional beliefs of the inhabitants and users. The materials used, the position of a stair, the angle of the door, were and are still all relevant to the cultural beliefs of the owners and users;

ii) They are also part of the commercial heart of each urban area, defining its character and relating the heart to human scale;

iii) They represent an architectural identity, that was adapted to suit climatic needs and site conditions, they respected the environment producing zero carbon structures long before the notion was realised for its sustainability; and

iv) They tell of cultural influences in the change, in scale decoration and later materials, each one a piece of an architectural and cultural jigsaw. They are the identity of the Straits of Malacca and the greatest link between its historic cities.

D5.2 Permitted Use

The best use will very often be the use for which the building was originally designed and the continuation or reinstatement of that use should certainly be the first option when the future of that building is considered. But not all original uses will now be viable or necessarily be appropriate. The nature of uses can change over time, so that in some cases the original use may now be less compatible with the building than an alternative.

A compatible or adaptive reuse of heritage buildings may be permitted by the MBPP to ensure the survival of such buildings.

Refer Part C, Chapter C2 on Managing the Use of Land and Building for a schedule of allowable use in the WHS. Advice can be sought from the MBPP's Department of Heritage Conservation and the GTWHI for the type of use that are suitable for these buildings.

D5.3 Authenticity and Interpretation

As **Category II** buildings dominate the streetscape the authenticity of their connection to the street – the **façade** and **five-foot-way** and/ or **compound**, the **original materials used**, the **style of openings and decoration** should be **maintained, restored and conserved**, or if altered at some point in time should be returned back to the original.

Owners are advised to visit the MBPP's Department of Heritage Conservation and the GTWHI office to seek advice regarding:

i) The original form and the authentic appearance or style of the building;

ii) The authentic streetscape;

iii) The authentic roof line, terracotta roofscape, the view from the street and vistas. The authentic streetscape, the terracotta roofscape and roofline, is part of the OUVs for the UNESCO site and therefore any change must be carefully considered; and

iv) The guidelines for conservation and alteration and extension works, traditional ways of building etc.

Refer Chapter D3, section D3.2 for guide to Authenticity and Interpretation.

Refer Exhibit A on the following page on how to reinstate a facade back to its original and authentic design.

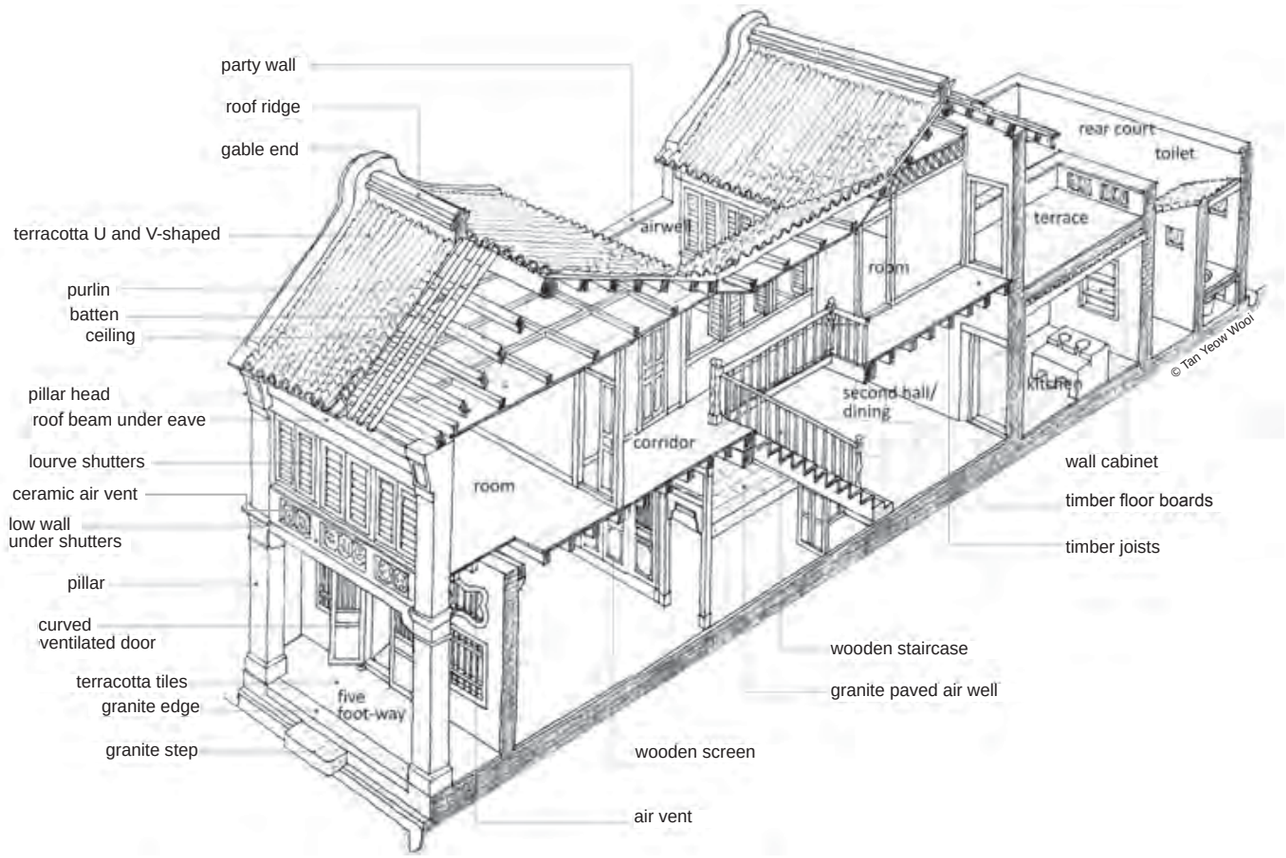


Figure D5.1: Authenticity – shophouse example

EXHIBIT A: How to Reinstate a Facade to its Original Design?

- Step 1: Is the building a part of a group?
  This one is in the middle of a group of five.

- Step 2: Do its neighbours have more or less the same design?
  This ensemble all have low walls on the first floor, column-to-column windows and pitched roof.





- Step 3: Check the Shophouse Style sheets and see if a neighbour is similar in design.
  These will tell you all the features and materials typical of the shophouse style.



- Step 4: Check old maps and surveys to understand how and when the shophouses were built.
  The Kelly Town survey 1891-3 shows the group of five shophouses, confirming that these shophouses were built as one design.

  Kelly maps without the watermark are available from JUPEM, KOMTAR

D5.4 Research for Historical Data

It is advisable to discover as much as possible about the Category II buildings or objects, before a proposal for works is considered.

Research can help in determining the original ground condition, e.g. swamp or stream. The type of foundations used in buildings of the same time period and area and the building materials used at the time of its construction.

Research material include:

- Original drawings from the MBPP archives;
- Photographs, paintings and other drawn information;
- Newspaper cutting archives, and archives documentation of the owner or related association etc.
- Local oral histories; and
- Refer Chapter C3, Section C3.2 for guide to research.

D5.5 Other Objects and Buildings – Category II

Whilst the majority of properties identified as Category II are shophouses, there are also other types of buildings, shophouses and objects of added interest. These include:

D5.5.1 **Category II items or objects**

i) Compounds, boundary walls, gateposts & gates, landscapes, enclaves, granite pathways and sites; and

ii) Historic street furniture, ie granite posts and chains, fountains, lamp-posts, post boxes, tramlines and trolley bus poles, fire hydrants and fire assurance plaques, granite pathway and engineering brick drains, etc.

D5.5.2 **Category II buildings of added interest**

i) Buildings of special interest – historical;

ii) Buildings historically associated with Category I buildings;

iii) Corner buildings of architectural significance;

iv) Rows of buildings of architectural significance; and

v) Dated building of architectural significance.

Category II Items or Objects





Figure D5.2: Items such as cast iron fountains, granite pathways, post box, fire hydrant and old tram pole are identified as part of the authentic built landscape

Category II Buildings of added interest

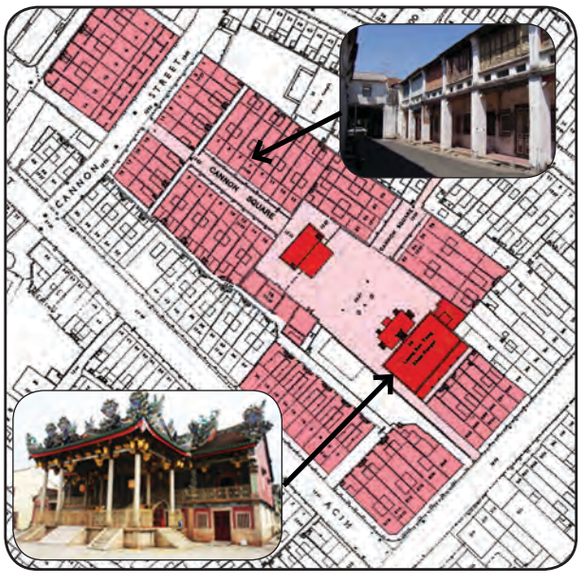


Figure D5.4: The humble category II shophouses surrounding a granite compound create the authentic setting for the Category I Khoo Kongsi Temple and stage. They are all part of the history of the site and of the Khoo clan vistas



Figure D5.3: Dated buildings allow us to clearly date architectural styles, materials and technologies



Figure D5.5: Corner sites are clear landmarks and key buildings in the streetscape, often framing important vistas



Figure D5.6: Rows of buildings, built by the same craftsmen for the same owner with beautiful shard work



Figure D5.7: 120 Lebuh Armenian former base of Dr. Sun Yat Sen

D5.6 Permitted Works

The original building profile such as features of air well, forecourt, internal court, rear court, etc. shall be retained and restored to its original condition. Replacing the existing materials should have similar profile, performance, design, colour and texture or equivalent. It requires a cautious approach of **changing as much as necessary but as little as possible.**

Alteration and/ or extensions to heritage buildings are subject to the MBPP permits and approvals. Unauthorised demolition, alteration and addition to the building profile will require the original to be reinstated to the original profile.

Refer Chapter D2, Section D2.2 for repair, planning & building control procedure.

Refer Chapter D3 on the conservation practices applicable to all heritage buildings.

D5.7 Alteration and Extension

D5.7.1 General Principles

i) Each heritage building has its own characteristic, which is usually related to an original or subsequent function. This should as far as possible be respected when proposals for alteration are put forward. Marks of special interest appropriate to a particular type of building are not restricted to external elements, but may include anything from the orientation, the plan or the arrangement of window openings to small internal fittings. **Attempts should be made to retain the characteristics of distinct type of buildings, especially those that are particular to their area**. The use of appropriate local material is very desirable.

ii) **Alterations should be based on a proper understanding of the structure**. Some heritage buildings may suffer from structural defects arising from their age, methods of construction or past use, but can still give adequate service provided they are not subject to major disturbances. **Repairs should usually be low-key, reinstating or strengthening the structure only where appropriate**. New work should be fitted to the old to ensure the survival of as much historic fabric as is practical. Old work should not be sacrificed merely to accommodate the new.

iii) Information about the history and historical development of a building, object or site, is of value when considering proposed alteration. This may be gained from the physical evidence in the building itself – lost features in the plaster, rough edges where features have been cut away- which can enlighten the original form or construction. There may also be documentary information, such as early photographs, drawings, written description or other documents relating to its construction or use.

iv) In judging the effect of any alteration or extension it is essential to have assessed the elements that make up the special interest of the building in question. They may comprise not only obvious visual features such as a decorative façade or internal, features such as staircases, decorated plaster ceilings or capitals but also the spaces and layout of the building. These elements are just as important in simple buildings as in grander architecture.

v) Subsequent addition to the original design of heritage buildings, including minor accretions, such as porches, balconies, verandahs, door dressings, do not necessarily detract from the quality of building. They are often of interest in their own right as part of the building's organic

history. Generally later features of interest should not be removed merely to restore a building back to an earlier form.

vi) **New building extensions should not dominate the existing heritage building either in scale, material or situation**. There will always be some heritage buildings where any extension would be damaging and should not be permitted.

D5.7.2 Height Extension

In the heritage shophouses, the traditional arrangement at the rear of the building is a single storey terrace with kitchen below or later a single storey jack roof kitchen with open yard. Over the years the yards have been covered over. It is advisable to reinstate the yards or terrace and air-well in order to allow for light, ventilation and escape – returning to the 'green building' concept.



Figure D5.8: A row of shophouses with a rear courtyard that is covered with temporary structures

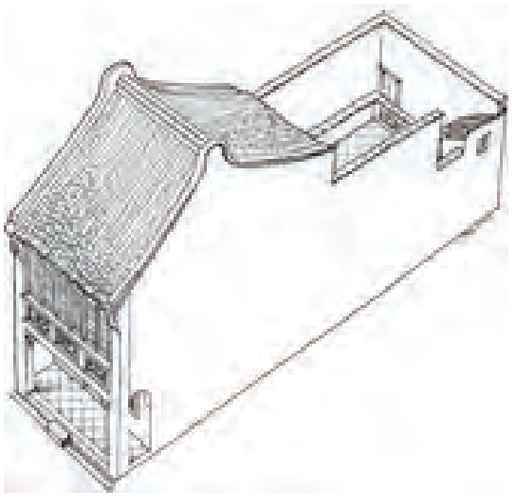


Figure D5.9: A building without an air-well, with an open rear courtyard

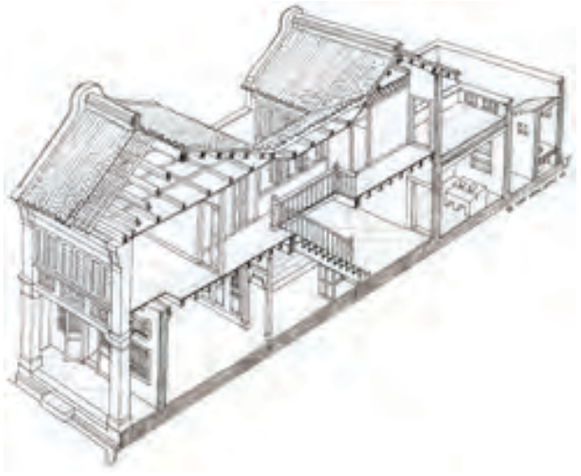


Figure D5.10: A building with an air-well, and with an open rear courtyard

D5.7.3 Extension of rear courtyard and kitchen

In the heritage shophouses, the traditional arrangement at the rear of the building is a single storey terrace with kitchen below or later a single storey jack roof kitchen with open yard. Over the years the yards have been covered over. It is advisable to reinstate the yards or terrace and air well in order to allow for light, ventilation and escape – returning to the 'green building' concept.

The original height of all listed buildings shall be maintained, the rear courtyard open air well should remain open, and the buildings may be increased by one storey in accordance with this guideline, to create an extension.

Extension, increase in height, and additional storey above the permitted height at the rear of building shall be considered based on the merit of each case, application should include an HIA to show the design reflects the authenticity of the OUV of the WHS. In all cases the UBBL should be followed.

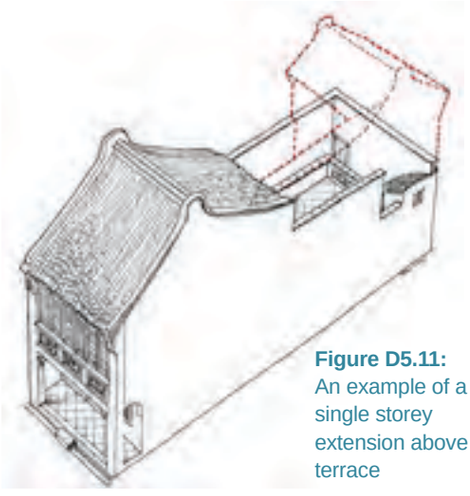


Figure D5.11: An example of a single storey extension above a terrace

Refer Exhibit B for a visual guide on height extensions for Category II

D5.7.4 Buildings backing onto Category I buildings

In some instances the rear of a building may be seen from the compound of, or is adjacent to a Category I building (Figure D5.12). In this case care should be taken to maintain the authenticity and integrity of the Category I site. Extensions to Category II buildings shall be considered based on the merit of each case.



Figure D5.12: Buildings backing onto Category 1 sites

D5.7.5 Extension of buildings with back lanes

The height of any new extension must not block the ventilation or escape of its neighbours. Thus, the traditional external air well and terrace arrangement should be retained or put back if formerly demolished.



Figure D5.13: Buildings with back lanes. New extension should avoid reducing light and ventilation requirements for a neighbouring building

D5.7.6 Back-to-back/ side

If a heritage building has been built back-to-back or back-to-side of a neighbouring house, the possibility of an extension at the rear is limited by the need to provide natural ventilation and light, to comply with the UBBL requirement back lane requirement and to provide an escape in the case of fire.

The need for natural light and ventilation still applies to each building even if the back-to-back houses are owned by the same owner.



Figure D5.14: Back-to-side shophouse arrangement with no back lane, which limits extensions possibilities

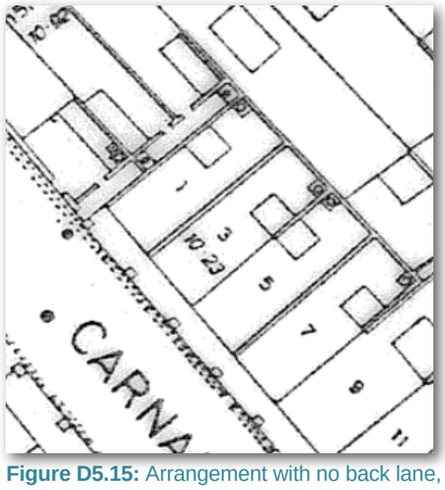


Figure D5.15: Arrangement with no back lane, which limits extensions possibilities

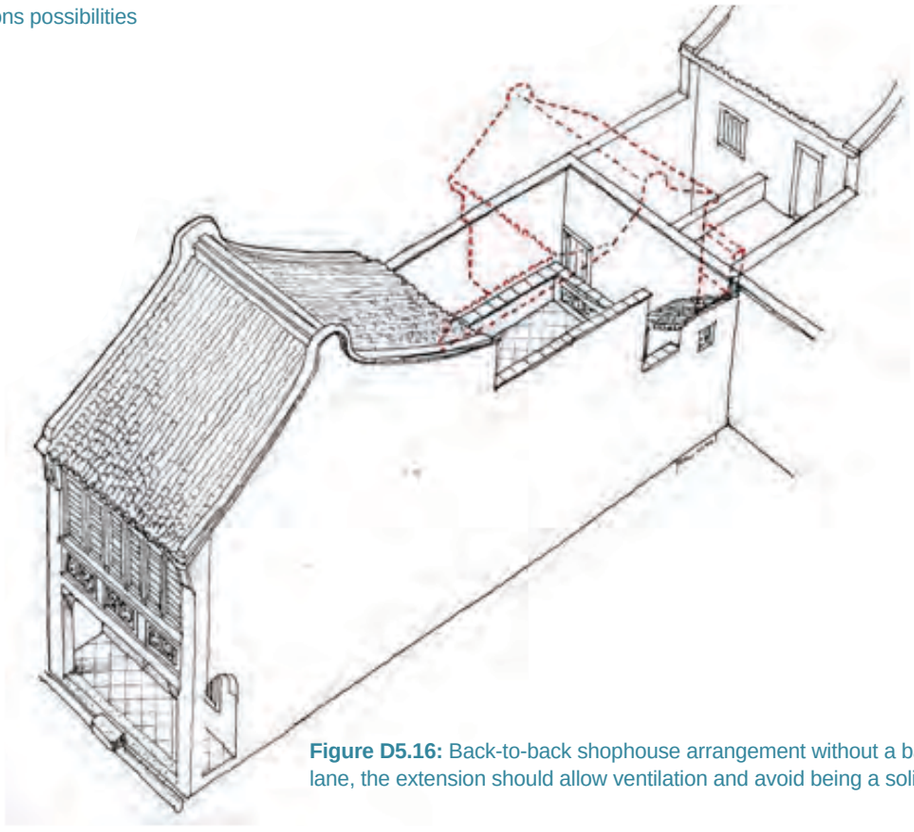


Figure D5.16: Back-to-back shophouse arrangement without a back lane, the extension should allow ventilation and avoid being a solid

EXHIBIT B: Extension for Category II Shophouses

Requirements for extension works on Category II buildings:

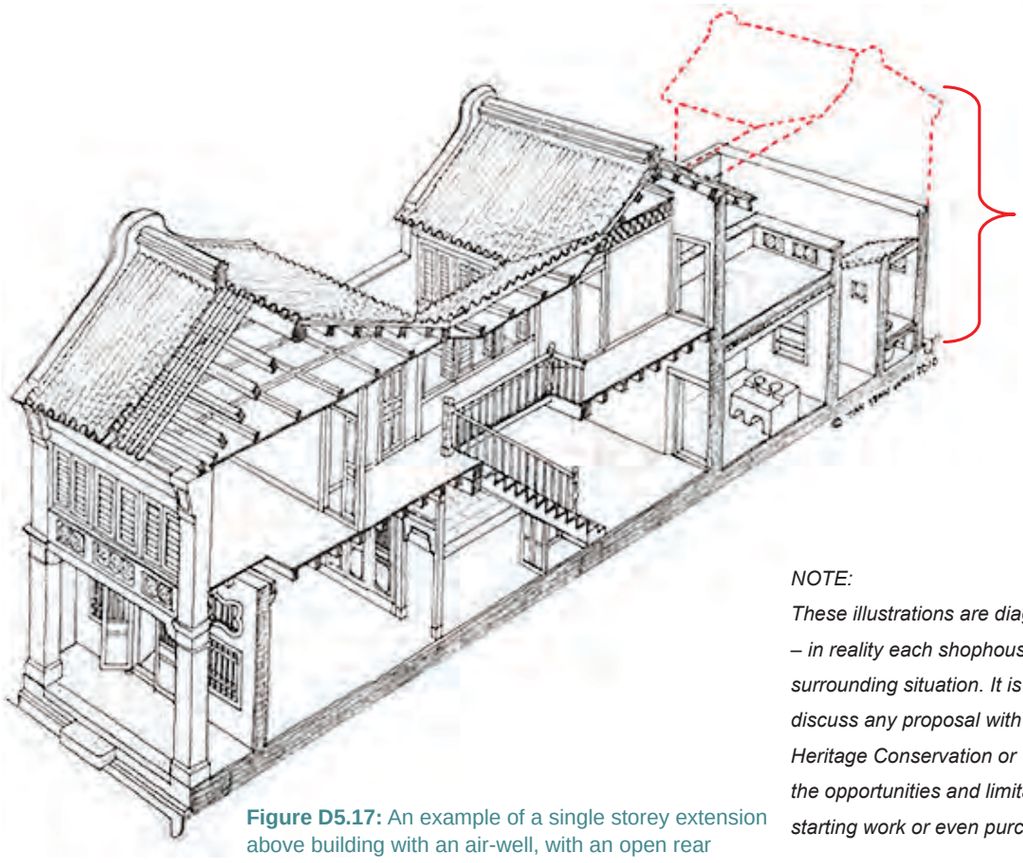
i) Repair Works Approval & Building Condition Report;

ii) Building Plan Approval & Dilapidation Report for major works;

iii) Progress reports;

iv) Planning permission for change of use, increase in height, extension of building, construction of new structures/ building on category II sites; and

v) After completion of works it is advisable to produce a Maintenance & Repairs Reports.



- *The original open rear courtyard converted into air-well;*
- *Additional room created for new bathroom and toilet on first floor balcony ;and*
- *Upgraded toilet and kitchen on ground floor.*

Figure D5.17: An example of a single storey extension above building with an air-well, with an open rear courtyard

NOTE:
These illustrations are diagrammatic sketch examples – in reality each shophouse differs in size and surrounding situation. It is important, therefore, to discuss any proposal with the MBPP's Department of Heritage Conservation or GTWHI in order to assess the opportunities and limitations of each site, before starting work or even purchasing the building.

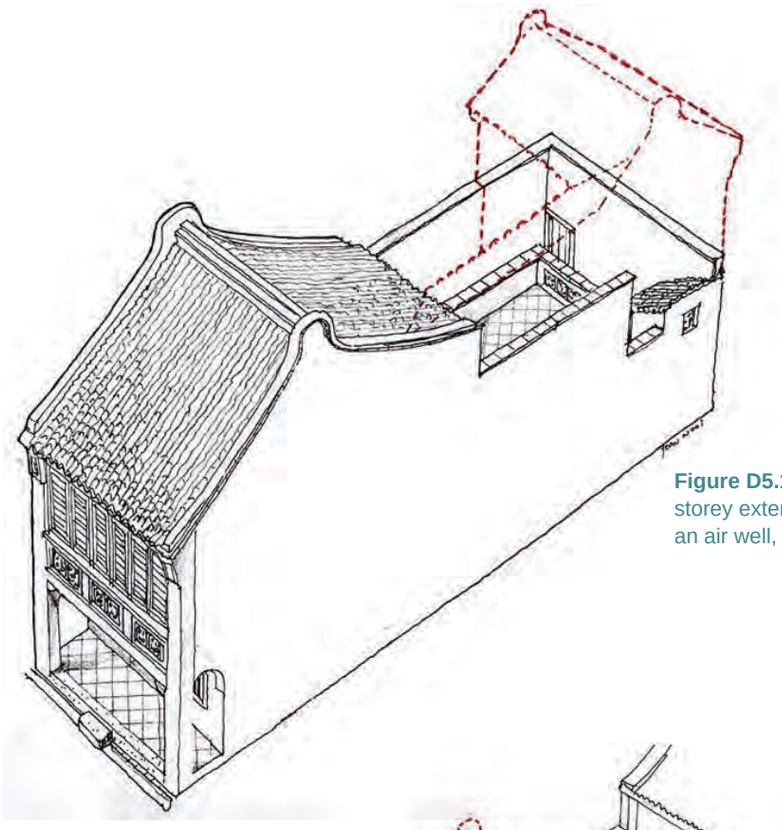


Figure D5.18: An example of a single storey extension above building without an air well, with an open rear courtyard

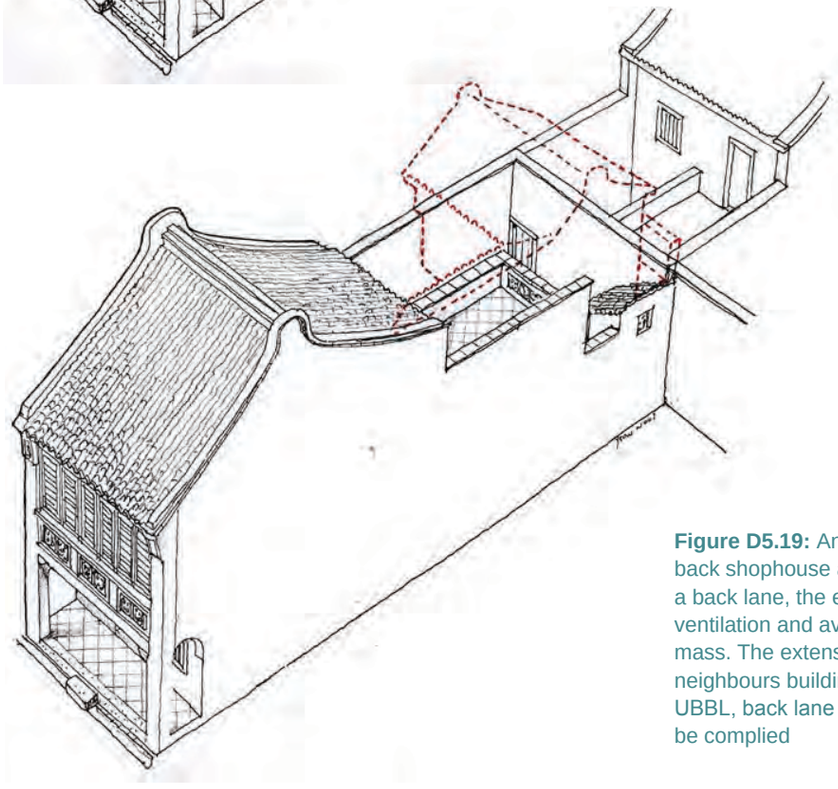


Figure D5.19: An example of a back-to-back shophouse arrangement without a back lane, the extension should allow ventilation and avoid being a solid mass. The extension cannot abut to neighbours building. Requirement of UBBL, back lane and fire escape must be complied

D5.8 Corner Sites

Most shophouses on or adjacent to corner sites do not have the opportunity to gain extra space with an extension, as both the front and the side are considered the street façade.

Tall blank walls should be avoided and for sites adjacent to a corner, the rear extension should not be seen above the roofline.



To avoid loss of vistas:

- Rear extensions should not be visible above the existing historic roofline; and
- Not change the original vista of the street to the loss of authenticity.

D5.9 Protecting Vistas, Enclaves and Streetscapes

The built heritage of Penang does not simply consist of individual heritage buildings, it includes the setting in which the buildings are placed, the way they are clustered and orientated. Equally the traditional materials used for the streetscape, granite, engineering brick, cast iron and indigenous trees all contribute to the OUVs of the site and therefore have heritage significance.

Views, vistas, and roof-scapes are equally important to the overall OUVs in WHS. Alterations, extensions and increase in heights of Category II buildings must take consideration of the above.

Refer Figure D5.22 for Guide on Protecting Vista, Enclaves and Streetscape.

Refer Part C, Chapter C4 on vista and views to be protected.



Figure D5.20: The original vista and original two storey heritage shophouses



Figure D5.21: The original vista lost - extension built before UNESCO listing 7.7.2008

Figure D5.22: Vistas, Enclaves and Streetscapes



Extensions

An example of Vista and Corner Site and a possible solution Core Zone

Corner sites requirements:

i. Should follow the lines of the adjacent heritage building or;
ii. Retain the original building profile; and
iii. Should avoid producing a large blank wall and breaking up the visual roof line.



D5.23: Original corner building on site today - extension built before UNESCO listing 7.7.2008



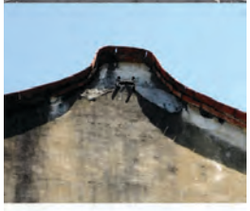
D5.24: Original corner building extended along the street in harmony (artists impression)

D5.10 **Guidelines for Conservation Work on Category II Buildings**

Items	Description of original design and building methods	Requirements
1.0 Forecourt		
1.1 Enclosure	 Bungalows set in a compound or forecourt, with wall and gates. Example: Lorong Stewart bungalow   1900s Terrace/ Shophouses, with forecourt and garden wall and gate. Example: Lebuh Cannon 	• Original materials, design & finishing to be used. • Laying of new ground finishes shall be sensitive & sympathetic to the front facade. • The original size & ornamentation of the wall & gate shall be retained & restored.

Items	Description of design and building methods.	Requirements
2.0 Finishes and colours		
2.1 Exterior/ Walls	Each period of design history had preferred colour schemes. Scraping back to the original base layer will reveal the colour history. The colour and materials for conservation should be chosen from this investigation. (Refer Shophouse styles in Annexure A). Types of Finish: a. Lime Plaster/ Lime Wash - Most buildings in the WHS; b. Shanghai Plaster - Buildings between 1930s – 1960s; and d. Cement Render - Early Modern Buildings.	• The original finishes, shall be retained & restored. • Painting over the original finishes e.g. Shanghai plaster, is not permitted. • The colour scheme or paint used shall match & harmonise with the typical character of the heritage buildings & of streetscape. • If lime plaster/ wash was the original material, then a breathable paint or lime wash shall be used. • Approval from MBPP must be obtained prior to commencing work.
2.2 Exterior Timber Work	Each period of design history had preferred colour schemes. Scraping back to the original base layer will reveal the colour history. The colour and materials for conservation should be chosen from this investigation. (Refer Shophouse styles in Annexure A) Types of Finish: a. Ta Chi, Tong Oil - Traditional Chinese timber work; b. Kampong oil finish - Traditional Malay timber work; c. Timber oil/ stain - Timber work; and d. Oil based paints - Metal or timber work.	• The colour scheme or paint used shall match & harmonise with the typical character of the heritage buildings & of streetscape. • Approval from the MBPP must be obtained prior to commencing work.

Items	Description of design and building methods.	Requirements
3.0 Roof		
3.1 Tiles - All Roofs	The original traditional roofing material i.e. eaves detail. <u>Roof Material Types:</u> a) V or U profile, unglazed, natural colour terracotta tiles. Timber battens run ridge to eaves on horizontal purlins (roof beams) - Shophouses, bungalows, godowns, etc. b) Interlocking clay roof tile, Marseilles (Indian or French). Timber battens run horizontal supported by truss roof system – Bungalows, Lebuh Pantai Office buildings c) Slate roofs - Supported by timber boards, on purlins- Godowns, Church roofs & Lebuh Pantai Offices.	• Original installation method and tile profile shall be retained and restored. • Peranakan tiles are not allowed.  • Marseilles tiles are not suitable for pre-1930s shophouses.
3.2 Structure of Main Roof	The original supporting structure i.e. profile, pitch, height and party wall. <u>Roof Structure Types:</u> a) Horizontal timber purlins (roof beams) installed between load-bearing walls. Acts as brace for the structural party walls. - shophouses. b) Horizontal timber purlins (roof beams) installed above truss or sloping rafters. Acts as a tie for the trusses & rafter.- Shophouses, Godowns, Beach St Offices. Bungalows. c) Timber or Metal Truss System supporting battens for a interlocking clay tile roof or timber boards and slate roofs. - Often used for corner sites, 1900s godowns car showrooms and double-pitched roofs of bungalows etc.	• The original form to be retained & restored. • Faulty members may be removed and replaced with matching member. • New metal trusses are not permitted, unless they match the original. • Metal trusses are not suitable for pre-1930s shophouses.

Items	Description of design and building methods.	Requirements
Roof (cont.)		
3.3 Ridge, Gable and Party wall    	Roof Ridge Types: a) Raised brickwork or brickwork and vent bricks - Shophouses; b) Lime plastered or V tiled over joint- Shophouse, Godowns, Lebuh Pantai Offices, Bungalows; and c) Ridge tiles and finial (Marseilles). Often used for corner sites, double-pitched roofs of bungalows etc.	• The original form should be retained and conserved. • Missing elements to be put back.
	<u>Raised gable end wall/ party wall</u>- Original design features lining of terracotta tiles for gable edge wall. This sometimes include brackets tying the party walls together.  Terracotta tiles for gable end  Brackets tying party walls together	• Gable end wall of high cultural significance/ original is to be conserved.
	<u>Middle Brickwork party wall</u> sometimes raised above the roof tiles, dividing each unit. a) Early Penang Shophouses – not raised party wall – continuous roof with neighbour; and b) Later Penang shophouses – raised party wall – division with neighbour.	• The original middle brickwork party wall is to be conserved.
3.4 Jack Roof	A jack roof is a pitched roof raised above the ridge of an existing roofline. To allow for covered ventilation into the main roof space. Timber structures vary from building to building. Roof tiles are identical to the main roof.	• The original traditional roofing material, eaves detail, fascia board, ventilation louvres or glass, shall be retained and restored. • Existing jack roof to be retained. • New jack roof is only permitted on back extension for natural ventilation.

Items	Description of design and building methods.	Requirements
Roof (cont.)		
3.5 Skylight	Skylight is not original to the architecture of Penang. Glass moulded Marseilles tiles are sometimes found on Marseille tiled roofs.	• Retain original design of shophouse to allows for natural light and ventilation. • Movable skylight on airwell can be considered.
3.6 Dormer Window	Dormer windows are not original to the architecture of Penang. Hidden dormer access doorways, for maintenance are found on larger buildings.	• New dormer window is not permitted for shophouses. • New access dormer doorway can be considered for large buildings if hidden from general view.
3.7 Eaves Roof overhang	Eaves, overhang & support features are specific to each architectural style. Types: a) Stepped terracotta flat tiles, brick corbel brackets at wall junction - traditional shophouse without gutters; b) Exposed battens and fascia board. Brick corbel or timber corbel - shophouse/ bungalow with overhanging roof; and c) RC brackets and ceiling boards with patterned beading (1920s) - buildings after 1920s, shophouses, bungalows and commercial buildings.	• Original form should be retained and restored. • No new eave detail or support may be used.
3.8 Gutters	Gutters and down pipes are not original feature of shophouses. Gutters and downpipes were part of the overall design from the early 1900s.	• Roofs without gutters should remain without. • Gutters on new/ extension area can be considered on a case by case basis. Approval by the MBPP must be obtained.

Items	Description of design and building methods.	Requirements
4.0 Front/ Side Facade		
4.1 Building Facade	The front part of the building with the main doorway and for a corner sites, also include the side of a building. The heritage facades styles are numerous - Refer Annexure A Heritage Buildings of George Town for guides on original shophouse façade styles.	• The original facade shall be retained and/ or restored and original materials should be used as best as possible. • Demolition, alteration and addition to original/ aesthetic front facade is not permitted. • The original masonry, mortar & plaster shall be retained (where possible).
4.2 Upper Facade (under roof)	a) <u>Decorative features</u> types: – below roof beam & first floor beam i) Painted historic stories/ mural; ii) Chien Nien cut and paste porcelain work; and iii) Lime mortar mouldings. Found in 20th century shophouses, masonry bungalows and commercial buildings.	• To be repaired, restored or reinstated, using original materials if evidence.
	b) <u>Upper floor timber shutters</u> types i) Window height shutter - All movable timber louvre shutters; ii) Door height shutters -Two panels of movable louvres + solid panel at the base of each leaf; and iii) Fixed louvre shutters. Refer Annexure A Heritage Buildings of George Town for guides on original shutter styles.	• To be repaired, restored or reinstated using original materials. Missing elements shall follow the original design. • Clear or light tinted glass is permitted for area above shutters if part of the original design.
	c) <u>Balustrades</u> – behind the door height shutters – a balustrade usually of timber, but occasionally of cast iron.	• To be repaired, restored or reinstated, using original materials.
	d) <u>New secondary internal windows</u> (behind shutters) - Original in later designs from 1890s onwards.	• New may be required if the internal space is being air-conditioned or to cut out external noise. • Leaf frame timber size and width to match the leaf frame of the shutters. Clear or light tinted glass is permitted.

Items	Description of design and building methods.	Requirements
4.0 Front / Side Facade (cont.)		
	e) Low wall (spandrel) – types: below shutters, above five-foot-way beam– various types - Shophouses i) Simple indented brickwork, lime plaster mouldings; ii) Indented brickwork with Green Chinese Vent Tiles; iii) Indented brickwork cast iron panels; and iv) Highly decorated with Chien Nien Shard work. Refer Annexure A on Heritage Buildings of George Town for guides on original low wall styles.	To be repaired, restored or reinstated, using original materials. Missing elements shall follow the original design.
	f) Balcony Balcony located in front or side facade are part of the shophouse feature.	• Original to be retained, restored and reinstated.
	g) Canopy/ awning– projecting out from above the five-foot-way beam. Traditional Canopy. In a few cases a terracotta 'V' shaped tiled canopy projected out into the street. The canopy structure was supported on projecting granite corbels. These can still be found but the canopy may be missing. Timber fan canopy. Concrete slab – art deco.	• Original timber and tiled canopy to be retained and restored. • Traditional roofing material to be used. • New canopy can be considered on a case by case basis. Approval from MBPP must be obtained
4.3 Side Façade	Sidewall openings (in flat shophouse wall) In a few cases openings in the sidewalls were part of the original design. i. Drip stone - stepped bricks and terracotta tiles to form a slight projection above the opening; and ii. Timber shutters solid or louvred.	• Original to be retained and restored. • New openings in side wall will be considered based on case merits.

Items	Description of design and building methods.	Requirements
5.0 Five-Footway - Verandah		
	The five-foot-way – it is a recessed area below the first floor of a building that is designated as public space. The entrance to the building is recessed in by minimum five feet, thus creating for this passageway. It is also a culturally significant space, where prayer and thanksgivings are offered to protect the occupants of the buildings.	• Original design of five-footway such as archway and arcades shall be maintained. Any original decorative feature(s) shall be retained and restored. • Should not be blocked with fixed obstructions.
5.1 Walls	a) Decorative wall tiles Originally placed as a dado panel below the two openings either side of the main door. These were installed using lime mortar. Refer Shophouse Style Sheets for types of tiles used: i) Majolica and tube line embossed tiles; ii) Printed Pattern Tiles; iii) 4" x 4" ceramic tiles (Japanese)-Terrace houses circa 1930s; iv) Mosaic, Small tile designed in sheets-Circa 1950s; v) Terrazzo (in situ – rare in the WHS)-Early Modern Buildings; and v) Timber Panel-Early Penang Style.	• The timber panel for Early Penang Style must be kept to its original design. • Existing decorative tiles to be retained and restored. • New dado tiles may be considered on a case-by-case basis.
	b) Wall Materials The five foot way wall finish was lime plaster/ wash, even when the exterior walls were shanghai plaster.	• Existing to be retained and restored.
5.2 Floor	a) Types: see Shophouse Style Sheets Annexure A Heritage Buildings of George Town for when each type was used. i) Granite slab/ sleepers/ blocks; ii) Terracotta tiles in either diamond or 'I' pattern; iii) Encaustic individual tiles of different coloured clays;	• Traditional finishes e.g. terracotta tiles, terrazzo tiles, and mosaic to be restored. • New finishes to follow original. • Floor level to be restored to original level.

Items	Description of design and building methods.	Requirements
5.0 Five-Footway - Verandah (cont.)		
	iv) Cement Tiles with coloured pattern - Terrace houses circa 1920 – 1930s; v) Mosaic, small tile designed in sheets - around 1950s; and vi) Terrazzo - Early Modern Buildings. (in situ – rare in the WHS)	• Gloss ceramic tiles are not permitted.
	b) Granite slab edging marks the street boundary of the five-foot-way.	• Shall be retained & exposed without covering up by other materials.
	c) Granite steps and bridge across drain – original Drain edge – engineering bricks.	• Existing to be retained and restored. If missing, new granite steps to be installed.
	e) Motorcycle ramp next to steps across drain.	• Not original – to be removed. No new ramp is permitted except for disabled access.
5.3 Ceiling	Ceiling to five-foot-way Types: i) Exposed upper floor structure of timber boards & timber joists; ii) Timber strip ceiling come with carved decoration; and iii) Exposed reinforced concrete floor (rare cases).	• Original ceiling profile/ design shall be maintained. Any original decorative feature(s) shall be retained & restored.

Items	Description of design and building methods.	Requirements
6.0 Rear Facade		
6.1 Windows, Doors & Vents	Original openings were simpler than the front facade, but of the same materials. Lime plaster wall finish– even if the front facade was shanghai plaster.	• Original materials should be retained & restored • New openings are permitted and shall be of similar material as the front facade openings.
6.2 Terrace	Refer **Kitchen Roof cover** above Terracotta tiled terrace.	• New habitable space above the terrace is permitted subject to height/ materials and ventilation requirements.
6.3 Rear Boundary Wall	Original decorative wall. The rear load bearing brick and plaster wall with an external opening into the back lane. New Extension – above original kitchen area.	• Original height and decorative feature(s) shall be retained & restored. • New extension to wall is permitted provided it does not impede neighbouring buildings, light ventilation etc.

Items	Description of design and building methods.	Requirements
7.0 Floors		
7.1 Ground Floor	The existing ground floor level and changes in level are traditional to the building types. The traditional floor finishes were designed to breath, though later cement was used as a decorative feature. Refer shophouse style sheets for when each type was used.	• Original levels shall be retained.
	i) Terracotta tiles in either diamond or 'I' pattern; ii) Encaustic individual tiles of different coloured clays; iii) Cement tiles with coloured pattern - Terrace houses circa 1930s; iv) Mosaic, small tile designed in sheets - Circa 1950s; and v) Terrazzo (in situ – rare in the WHS) - Early Modern Buildings.	• Original finishes shall be retained & restored. • Replacement of damaged materials shall match with same or close to if the function of the material matches. • For wet areas e.g. toilets & kitchen, waterproof concrete floor may be used.
7.2 Upper Floor(s)	The traditional timber floors on timber joists acted as part of the original structure of the building, bracing and separating the party walls.	• Original shall be retained & restored.
	a) The existing floor level & original structural members including timber main beams or steel I-beam, timber floor joists & timber floor boards.	• Original shall be retained & restored.
	b) The existing structure of the floor members including timber main beams or steel I-beam, timber floor joists & timber floor boards.	
	c) New use requirements for fire protection of timber floors.	• **Must NOT** be of a material that cannot be removed at a later date. • **Must NOT** put additional weight to existing structures, beyond their capacity.

Items	Description of design and building methods.	Requirements
	d) Addition of toilets first floor internally New support structure, from ground floor must avoid damage to original brick, granite and footings and bakau piles. e) Extension for toilet/ bathroom at rear of building preferred.	• For wet areas e.g. toilets & kitchen, waterproof concrete floor may be used. • Permitted if original structure is not compromised. • Refer 11.0 - Kitchen Courtyard and Air Well.
7.3 Mezzanine Floor	Mezzanine floors are not part of the original layout of the buildings as tall ceilings cooled the naturally ventilated spaces.	• Existing mezzanine floor can be retained or removed.
	New mezzanine floor may be considered subject to existing floor height and compliance with requirements of UBBL.	• Any material except reinforced concrete is permitted. The choice of material used shall be compatible and harmonious with existing structure. • Subject to UBBL.

Items	Description of design and building methods.	Requirements
8.0 Ceilings		
8.1 Ceiling	Ground floor ceilings were usually the exposed timbers of the floor structure above. Cornices below the joists on the ground floor were also a feature. Occasionally they were covered with a ceiling – mainly on the roof floor or in coffee shops on the ground floor. Types: a) Exposed upper floor structure of timber boards & timber joists - Lower floors; b) Timber strip ceiling c/ w carved decoration.- Below roof floor; c) 4' x 4' flat ceiling panels c/ w timber beading - Lower floors; d) Exposed underside of terracotta terrace floor structure; and e) Exposed RC slab floor.	• Original ceiling profile/ design shall be retained. Any original decorative feature(s) shall be retained & restored. • Areas of damage may be replaced with matching or similar material. • New ceiling is permitted but provided that the volume of internal space is maintained and original features such as cornices, arches, capitals & decorative stuccos are not covered. • Installation of aluminium or metal frame is not permitted.

Items	Description of design and building methods.	Requirements
9.0 Walls		
9.1 Party wall	Shophouses share party walls. Commercial buildings that were originally shophouse construction, i.e. Lebuh Pantai also have shared party walls. Bungalows and some commercial buildings and godowns have detached wall. Types of wall: a) Load bearing clay brick – lime mortar and lime plaster; b) Load bearing clay brick – later added RC columns (1900s); c) Concrete beam and post system – infill clay or cement bricks – lime mortar/ plaster (1910s- 1970s); and d) Concrete beam and post system – infill clay or cement bricks – cement mortar/ render (1970s).	• Repair work is permitted but must follow original design, material & construction method. • Material used shall not damage the integrity of the structural wall and cause nuisance to the neighbouring buildings.
9.2 New openings	Openings in the party wall to join units.	• Openings permitted on a case-by-case basis, subject to the stability of building structure. • Total width of opening shall not exceed 50% of the total length of the party wall.
	Internal walls - 90° to party walls – brick load bearing walls come with openings.	• Permission to remove on a case-by-case basis.
9.3 Decorative Features	Masonry Features - Stepped brick and lime plaster cornices, arch architraves, etc. Timber Features – Traditional carved screen, traditional wall cupboards, and ground floor and lattice/ solid partitions come with doors 1st floor.	• Original features shall be retained & restored using traditional or matching materials.

Items	Description of design and building methods.	Requirements
10.0 Air Well Long shophouse buildings with two pitched roofs or more, separated the pitches with an air well, to allow for ventilation and cooling of the spaces below. The air well allows for access to maintain the pitches roof. Below the air well and on the ground floor is a recessed area of granite edging and floor. A drain hole leads to a covered drain usually flowing to the front of the building and the street drain.		
10.1 Size and location	Air well is located after the first pitch roof. Certain buildings have more than one air well.	• The original size and location of the air well shall be retained and restored.
10.2 Floor finishes	The original finishes of granite slab & edging.	• Shall be retained & restored. Replacement of damaged or installation of new materials shall be the same or close to original materials. • Level up the existing floor is not permitted.
10.3 Windows, Shutters & vents – upper floors	The original openings on the first floor around the air well opening. Replacement or installation of new shutters/ walls/ balustrades.	• Shall be retained & restored. • Replacement of damaged or installation of new materials shall be the same or close to original materials. Installation of other modern materials is not permitted.
10.4 Roof cover	Traditionally the air well is open air without a roof cover.	• Lightweight transparent roof covering below eaves can be permitted. • Total cover up is not permitted. • However, an addition of a flat, moveable roof cover, that can be later removed is permitted. • Air well in fill with floors and solid roof is not permitted. - No other above ground structure or slab is permitted within the air well space.

Items	Description of design and building methods.	Requirements
11.0 Kitchen courtyard and air well – rear court The kitchen area was additional to the overall building form – single storey and designed to allow for good drainage and ventilation. There are a few types of back yards/ kitchens.		
11.1 Roof cover	Roof covering for the single storey kitchen took different forms. a) Traditionally under a terracotta terrace (first floor) next to an open air well - Shophouses; b) Under a tiled roof with jack roof for ventilation – next to an air well; and c) Under an reinforce concrete terrace, next to air well.	• New roof of pitch profile over the rear kitchen is allowed subject to the roof height requirement. • Matching roofing material as the main roof shall be used. • Materials such as zinc, asbestos, metal deck & etc. are not permitted.
11.2 Air Well	The kitchen air well/ yard is a sunken floor area lined with granite. Open air allows natural ventilation for both the kitchen and the toilet located in this area. When the houses are back to back, this air-well is important for healthy living. Even the smallest of shophouses would have had an open area at the rear.	• New habitable space above the kitchen is permitted subject to height/ materials & ventilation requirements. • No new structure is allowed within the air well/ open air space. Movable skylight can be considered on a case by case basis
11.3 External Staircase	Existing external staircase. New external staircase is permitted for means of escape.	• Can be retained or removed subject to use of the premises and requirements. • Material used is subject to the requirements of the relevant authorities e.g. Bomba
11.4 Water Closet (WC)	The wc is at the rear in the kitchen area, usually adapted from the original used for night soil collection.	• A new WC should be installed, subject to approval by the MBPP.

Items	Description of design and building methods.	Requirements
12.0 Staircases		
	Original staircase positioning & design with fine craftsmanship.	• Shall be retained & restored. • Traditional material is to be used to repair or make good the original finishes
	Repositioning original timber staircase c/ w brick or granite lower steps.	• Is permitted if necessary for new use on a case-by-case basis.
	Additional new staircase – required for Bomba approval.	• New staircase made of reinforced concrete shall have timber finishes including balusters & balustrades. • The original artistic design of balusters & balustrades are to be retained & reused. • Additional new staircase – required for Bomba's approval.
13.0 Other Features		
13.1 Wells	The Kelly Maps – Often show the position of traditional ground water wells.	• If the well is still in existence, it should make good and make safe the original. • If the well is found in the process of alteration, it should be restore back and/ or make safe.

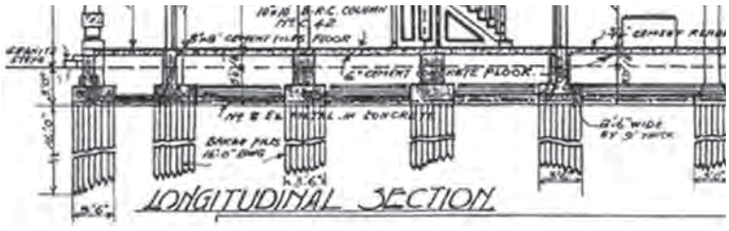
Items	Description of design and building methods.	Requirements
14.0 Mechanical & Electrical Systems		
14.1 Security Surveillance	Closed Circuit Televion (CCTV) surveillance cameras and gear.	• Are permitted - installation of new security devices subject to requirements of suitability, unobtrusive positioning, visually discreet in design and colour. • Must avoid damage to the original building fabric.
14.2 Electrical Conduits	Electrical conduit pipes on the surface of external facade are TNB cable routing and meter. Internal wiring may be either: a) Visible conduit; and b) Wiring in conduit buried in the existing walls.	• Not permitted. • In five foot way or back lane of building. • Channel must be cut to avoid unnecessary damage. • Conduit to be held in place with metal clips, not Portland cement.
14.3 Air-conditioning units	Air conditioning pipes and conduits on the external facade. Air-conditioning pipes on the surface of the rear wall or rear air well.	• Not permitted. • Are permitted and shall be properly encased & neatly laid out.
	Air-condensing compressor unit(s) on front façade. Air-condensing units installation position: a) Shall be located least visible from the exterior; b) Below five foot way on party wall if sufficient headroom - shophouses only; and c) At the rear courtyard/ kitchen area.	• Not permitted. • Can be covered by a frame with suitable design such as timber lattice or metal screen, which harmonised with building rear facade.
14.4 Variable Refrigerant Volume (VRV)	Cooling tower air-conditioners - new installations at ground level. VRV air-conditioning systems for larger buildings require suitable floor space.	• Not permitted. • Permitted, screened and discrete positioning required.

Items	Description of original design and building methods.	Requirements
14.0 Mechanical & Electrical Systems (cont.)		
14.5 Satellite TV Dishes		• To be placed at the rear courtyard if possible. Should not block the view of the front facade.
14.6 Water tanks		• Material such as timber lattice or metal screen which harmonised with building facade is preferred. • Water tank, & other external installations, if any, shall be covered/ screened & placed least visible from the exterior.
14.7 Lift	Installation of lift for extension/ annexed building. The lift shaft shall not protrude from the roof of the new extension.	• Motor-room-less lifts are permitted. The pit must avoid damage to heritage foundations and footings.
14.8 Kitchen Exhaust Fan	Exhaust fan shall be placed at rear kitchen courtyard or back lane.	• Location to be reviewed on a case-by-case basis.
14.9 External Lighting	External decorative/ flood lighting is not part of the original character. Coloured Spot lights or cyclical lights Residential buildings – lanterns or lights in five-footways original. Commercial buildings/ monuments/ places of worship etc. Light fittings, if any, shall be placed at last obtrusive place & in harmonious with the character of building facade.	• Flood lights - Not Permitted. • Not permitted. • Light bulbs fixed to the fabric of the building are not permitted.
14.10 Roof Ventilation Fan		• Not permitted for heritage buildings.
14.11 Solar Panels		• Location on front roof is not permitted.
14.12 Telco Tower		• Installation shall be covered/ screened, camouflage and placed least visible from the exterior.

Items	Description of original design and building methods.	Requirements
15.0 Sanitary, Plumbing, drainage		
15.1 Pipe work	Water supply pipe work to be concealed within walls. Water supply pipe work to be surface mounted – with metal clips.	• Permitted. • Channel cut to avoid unnecessary damage. • Conduit to be held in place with preferably metal clips, not Portland cement.
15.2 Waste pipes	Waste pipes and floor traps to follow regulations as required.	• Design to avoid damage to heritage buildings footings, below ground. • Original floor tiles, raised to accommodate pipes work to be restored back if possible, or replaced with the same material if damaged.
15.3 Drainage	Provide proper drainage at the building perimeter to ensure that water does not splash against building, foundation walls or drain towards the building.	• Landscape to allow for maximum evaporation around heritage buildings where possible. • Internal air well drainage to be maintained - solid concrete water channels to be avoided - allow breath ability to walls.
15.4 Soil vent pipe.	Soil vent pipes should not be placed where they may protrude out through the front roof, visible to the street.	• To follow requirements.

Items	Description of original design and building methods.	Requirements
16.0 Alteration		
16.1 Basement	Below ground basements are not a characteristic of the historic buildings – built on swamp, beach or reclaimed sea.	• New basement is not permitted.
16.2 Swimming pools	Other deep projections into the ground such as swimming pools must avoid displacement of ground water into building walls and neighbours.	• No swimming pools permitted inside the heritage buildings. • Compound swimming pools are permitted, on case-by-case basis.
16.3 Water features	Internal water features may add too much moisture and encourage fungus and harmful growth.	• Internal and external water feature permitted on a case-by-case basis.
17.0 Extension		
17.1 Extension Roof	New pitched roof to rear extension.	• Roof covering materials & pitch to match the main roof in terms of colour, texture, material, profile & internal structure.
	New flat roof – for contemporary extension.	• Permitted only if used as a green roof garden on a case-by-case basis.
	New jack roof.	• Jack roof if allowed for rear extension only.
	New Dormer window.	• Dormer window is not permitted.
	New skylight.	• Skylight is not permitted.
17.2 Extension facade	The new facade may be of traditional (to match existing) or contemporary style.	• Modern material is allowed but shall be designed in harmony & match with the traditional heritage façade & surrounding streetscape in terms of texture, profile, colour & performance etc.

Items	Description of original design and building methods.	Requirements
17.0 Extension (cont.)		
17.3 Extension upper facade	Canopy above second storey opening may be allowed subject to sympathetic and unobtrusive in design manner and in compliance with the requirements of relevant departments.	• Traditional roofing material is to be used. • Materials such as metal, asbestos sheet or PVC are not allowed.
17.4 Upper floor(s)	New concrete floor slabs for extension.	• Permitted - floor finishes shall match the existing in terms of texture, colour & material.
17.5 Finishes	The new block shall be rendered in appropriate subtle colour & finishes which blend & complement the conserved part & does not detract from the character of the surroundings.	• Material, which is similar or close to existing finishes is preferable.
17.6 Footings & piles	The method of excavation works for new footings (piling for over two storey building) All reasonable care & protection shall be accorded to adjacent heritage buildings to ensure retention of their structural stability & integrity.	• Shall be approved by the MBPP before commencement of work. • Traditional construction method to match building is encouraged, but must pass all regulations and authorities requirements.



Detail of typical bakau piling in heritage buildings



Granite below columns



Granite below stepped footing

Figure D5.25

Category II Buildings and Sites

Buildings and Sites Category:

- Category II
- Core Area
- Buffer Zone

Source : "Inventory of building in the Heritage zone of George Town", 2000, Extract Data from "Kelly map", 1970's Survey map, Photographic Evidence (1990's - 2010), 0.5m resolution GEOEYE1 image (2010), Ortho image mapping & Building Heights Extraction;

NOT TO SCALE

D6 Infill and Replacement

D6.1 Introduction

This section is concerned with sites or buildings identified as Infill or Replacement on which permitted compatible developments can take place within the WHS, and their potential impact on the OUVs of the WHS.

However, developments adjacent to listed buildings, or enclaves outside the conservation area will be determined by planning regulations. This chapter is divided into two sections:

6.2 Compatible Development Guidelines for Infill; and

6.3 Compatible Development Guidelines for Replacement.

D6.1.1 Protection, Conservation, Enhancement

The desirability of preserving or enhancing the WHS is a material consideration in the MBPP's handling of development proposals, which are outside the Site but would affect its setting, or views into or out of the area.

All development proposals will be judged for their effect on the character and appearance of the WHS.

While conservation of the two zones (core and buffer of the WHS) whether by preservation or enhancement of their characters or appearances must be a major contribution, this cannot realistically take the form of preventing all new development; the emphasis will generally need to be on controlled and positive management of change. Policies will need to be implemented to allow the area to remain alive and prosperous but at the same time to ensure that any new development accords with the area's special architectural, historic and cultural significance.

The WHS includes gap sites, and a few insensitive buildings that make no positive contribution to or indeed detract from, the character or appearance of the area; their infill or replacement, respectively, should be a stimulus to imaginative, high quality design, and seen as an opportunity to enhance the area.

New buildings should be designed with respect for their context, as part of a larger whole, which has a well established character and appearance of its own. New buildings should not directly imitate early styles.

D6.1.2 Compatible development

The MBPP requires detailed plans and drawings of the proposed new development on infill site, including elevations and 3D views, which show the new development in it's setting, before considering a planning application. Special consideration for such matters as scale, height, form, massing, respect for the traditional pattern of frontages, vertical or horizontal emphasis and detailed design (e.g. the scale & spacing of window openings, and the nature & quality of materials) shall be given. General planning standards and requirement shall be applied sensitively in the interests of harmonising the new development with its neighbours in the WHS.

Planning decisions in respect of development proposed to be carried out in the conservation area must give high priority to the objective of preserving or enhancing the character or appearance of the area. If any proposed development would conflict with that objective, there will be a strong presumption against the grant of planning permission, though in exceptional cases the presumption may be overridden in favour of development which is desirable on the ground of some other public interest.

Whilst the character and appearance of the WHS should always be given full weight in planning decisions, the objective of preservation can be achieved either by development which makes a positive contribution to the area's character or appearance or by development which leaves the character and appearance unharmed.

D6.2 Compatible Development Guidelines for Infill

Definition:

(a) Existing empty land or temporary structure where compatible redevelopment is permitted.

Amongst the shophouses, godowns and other properties in the conservation areas and the WHS, are empty pieces of land. Some of these sites have one or two temporary buildings on them and others are completely empty.

D6.2.1 Permitted Use

For compatible infill development projects within the WHS, care must be taken that the proposed use will not devalue the OUVs of the Site.

Refer Chapter C2 for details on permitted use/ activity

D6.2.2 Authenticity and Interpretation

It is recommended that if an infill site is:

i) Set within a row of heritage buildings or;

ii) Placed amongst other infill sites or adjacent to replacement sites,

The authentic design of the adjacent buildings and the site's history should be studied, in order to propose a design compatible with and interpreting the site and its historic content.

D6.2.3 Research for Historical Data

Within the WHS, the Heritage Impact Assessment (HIA) requires the Historical Significance of the site and adjacent heritage buildings to be researched and documented.

Historic evidence may influence the design of the new proposal and give reference to interesting buildings or events of the past and even buildings previously demolished.

To avoid negative impacts on neighbouring heritage buildings, it is important to understand their construction methods.

These may include researches on:

- Traditional building methods typical of the type and age of the building/ item;
- Historic maps (look out for the word 'swamp'); and
- Local oral histories, place names – (the local name for Jalan Sungei Ujong translates as 'Soft Ground' on the old maps this was a very big swamp.

Refer Chapter D3, section D3.2.4 on research methods.

D6.2.4 Permitted Works

Temporary buildings or sites categorised as Infill Development, located within the WHS do not have intrinsic architectural or heritage significance, although the site may have had in the past.

Temporary buildings on the site may be redeveloped subject to this SAP.

It is important that the redevelopment should be designed to enhance the streetscape, vistas and the character of the adjoining heritage buildings.

Infill development sites may also be considered for use as open landscape or part of development/ part of landscape, providing the overall heritage significance of the site is not devalued. In the same manner as for compatible built development, an HIA would be needed to justify this approach and assess its impact on the streetscape and overall OUVs of the site.

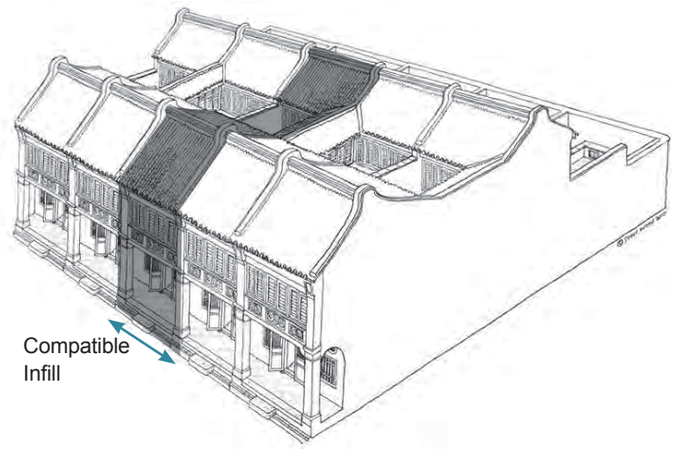


Figure D6.1: Compatible Infill within a row of heritage buildings

D6.2.5 Requirements for permitted works:

i) Planning Permission and Heritage Impact Assessment; and

ii) Building Plan Approval.

Refer Chapter D2 for further details



Figure D6.2: Compatible Infill. The building is the new courthouse building complimenting the historic courthouse building in height, pitch of roof and an interpretation of the architectural style of the original building

D6.2.6 Heritage Impact Assessment (HIA)

Important to the infill development is the Heritage Impact Assessment. The HIA must contain an assessment of the cultural impact taking into consideration the impact of the proposed development onto the cultural cluster in which the site is placed.

It is advisable that the HIA takes place at an early stage, as this will help identify key factors than may influence/ inspire/ forewarn consultants in the schematic design process.

For example: *historic research revealed the progression of reclamation for the land between Lebuh Pantai and Pengkalan Weld, and the types of building built on it. This forewarned the Geotechnical and the C&S engineers as to the challenges of the site and guided the overall design concept at the planning stage.*

D6.2.7 Permitted height

The height of compatible Infill development within the WHS is dependant on the height of the lower adjacent heritage building (Figure D6.3)

Infill sites without adjacent heritage buildings, within the WHS, **may be built to a maximum of 18 meters from ground level to roof EAVE**, **subject to the HIA reports.**

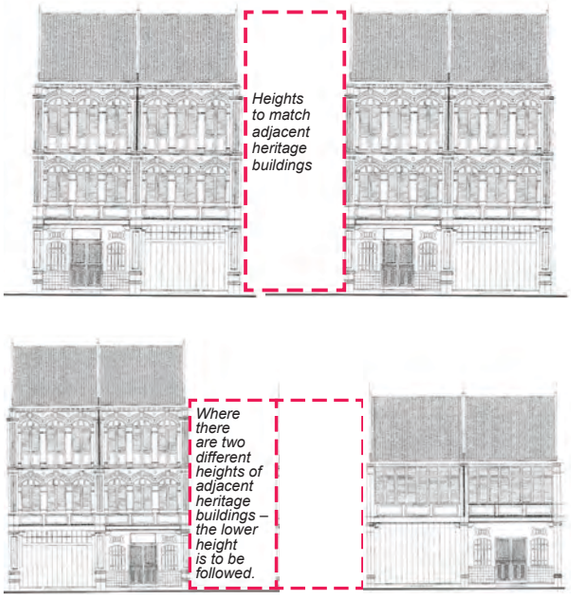


Figure D6.3: Development of infill sites within a row of heritage buildings

D6.2.8 Facade Guidelines for Compatible Infill within a row of Heritage Buildings

The facade composition of compatible Infill development must respect the scale and rhythm of it's surrounding buildings. Infill sites within a row of heritage buildings are subject to these facade guidelines:

i) The infill development must correspond to the number of bays of its neighbouring building (Figure D6.4) or;

ii) The number of bays to correspond to the typical width of the bays of its neighbouring buildings (Figure D6.5) or; and

iii) The reconstruction of the original built fabric following research conducted i.e through historical maps, old photographs, etc.

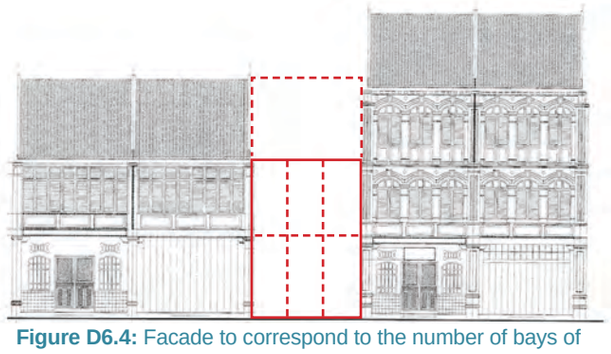


Figure D6.4: Facade to correspond to the number of bays of its neighbouring building

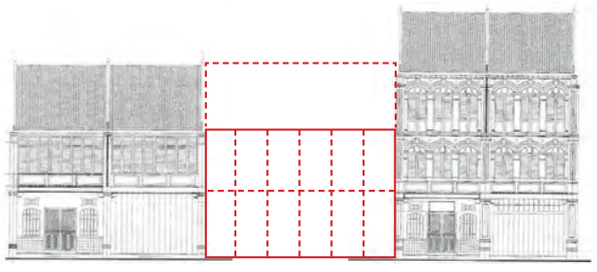


Figure D6.5: Facade to correspond to the typical width of the bays of its neighbouring buildings

D6.3 Compatible Development Guidelines for Replacement

Definition:

(a) Existing building without any significant value where sensitive re-development is permitted.

Buildings categorised as Replacement, located within WHS are buildings, which do not have intrinsic architectural and heritage interest and may be demolished and redeveloped simultaneously subject to these conservation guidelines. The redevelopment should be designed to enhance the streetscape and the character of the adjoining buildings.

For those sites that are placed within the WHS, these Guidelines provide a guide to compatible re-development.

D6.3.1 Permitted Use

For compatible replacement development projects within the WHS, care must be taken that the proposed use will not devalue the OUVs of the Site. The use of the building shall be in accordance to the permissible activities.

Refer Chapter C2 for details of permitted use/ activities.

D6.3.2 Authenticity and Interpretation

Replacement site are:

i) Set within a row of heritage buildings or;

ii) Placed amongst other infill sites or adjacent to replacement sites or; and



Figure D6.6: Rear area – replacement – The new owner of this historic bungalow, empty for may years, was permitted to build a contemporary building following the footprint of adjacent buildings and the height of the neighbouring Bank Negara Building.

iii) A mixed site which includes a building or part building of heritage value and not necessarily to be demolished.

The authentic design of the adjacent buildings and the site's history should be studied, in order to propose a design compatible with and interpreting the site and its historic content.

D6.3.3 Research for Historical Data

Within the WHS, the Heritage Impact Assessment (HIA) requires the Historical Significance of the site and adjacent heritage buildings to be researched and documented.

Historic evidence may influence the design of the new proposal and give reference to interesting buildings or events of the past and even buildings previously demolished.

To avoid negative impact on neighbouring heritage buildings, it is important to understand their construction methods.

These may include researching on:

- Traditional building methods typical of the type and age of the building/ item;
- Historic maps (look out for the word 'swamp'); and
- Local oral histories, place names – the local name for Jalan Sungei Ujong translates as 'Soft Ground' on the old maps this was a very big swamp.

Refer Chapter D3, section D3.2.4 on research methods.

D6.3.4 Permitted Works

Sites identified for replacement and located within WHS do not have intrinsic architectural and heritage significance. These buildings are permitted to be replaced with compatible new development.

Sites that are mixed sites may have intrinsic architectural and heritage significance. For these sites, both Replacement and Conservation guidelines apply.

Replacement sites may also be considered for use as open landscape or part development/ part landscape, providing the overall heritage significance of the site not devalued. In the same manner as for compatible built development, a HIA would be needed to justify this approach and assess its impact on the streetscape and overall OUVs of the site.

It is important that the redevelopment should be designed to enhance the streetscape and the character of the adjoining buildings, as required in the Town and Country Planning Act, 1976 (Act 172).

D6.3.5 Requirements for permitted works

i) Repair Works Approval & Building Condition Report;

ii) Building Plan Approval & Dilapidation Report for major works;

iii) Progress reports; and

iv) Planning permission for change of use.

Refer Chapter D2 for further details

C6.3.6 Heritage Impact Assessment (HIA)

Important to the replacement development is the Heritage Impact Assessment. The HIA must contain an assessment of the cultural impact taking into consideration the impact of the proposed development onto the cultural cluster surrounding the site.

It is advisable that the HIA takes place at an early stage, as this will help identify key factors that may influence/ inspire/ forewarn consultants in the schematic design process.

For example: *historic research revealed the progression of reclamation for the land between Lebuh Pantai and Pengkalan Weld, and the types of buildings built on it. This forewarned the Geotechnical and the C&S engineers as to the challenges of the site and guided the over all design concept at the planning stage.*

D6.3.7 Permitted height

The height of compatible Replacement development within the WHS is dependant on the height of the lower adjacent heritage building (Figure D6.7)

Replacement sites without adjacent heritage buildings, within the WHS, may be built to a maximum of **18 meters from ground level to roof EAVE,** subject to the HIA reports and approval by local authority.

D6.3.8 Facade Guidelines for Compatible Replacement within a row of Heritage Buildings

The facade composition of compatible Replacement development must respect the scale and rhythm of it's surrounding buildings.

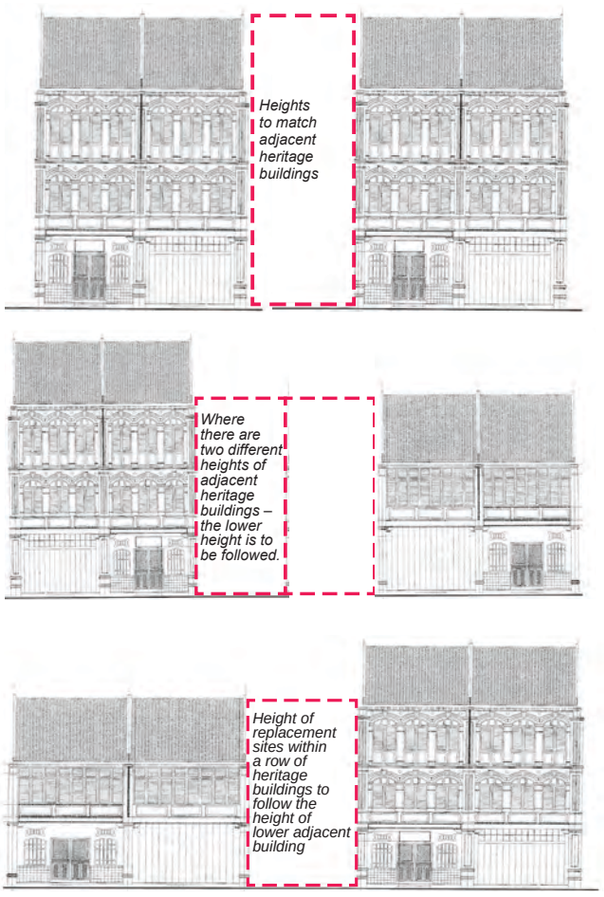


Figure D6.7: Development of replacement sites within a row of heritage buildings

Replacement sites within a row of heritage buildings are subject to these facade guidelines:

i) The Replacement development must correspond to the number of bays of its neighbouring building (Figure D6.8) or;

ii) The number of bays to correspond to the typical width of the bays of its neighbouring buildings (Figure D6.9) or; and

iii) The reconstruction of the original built fabric following research conducted i.e through historical maps, old photographs, etc.

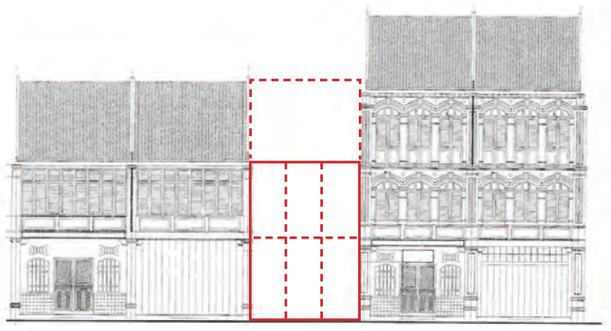


Figure D6.8: Facade to correspond to the number of bays of its neighbouring building

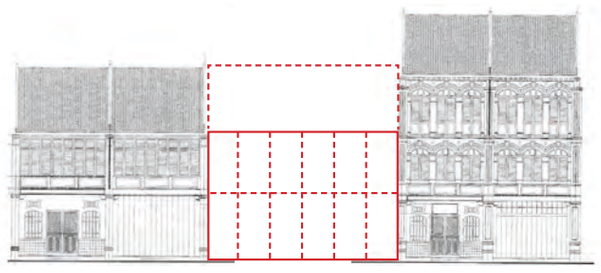


Figure D6.9: Facade to correspond to the typical width of the bays of its neighbouring buildings

D6.4 Guidelines for Compatible Development (Infill and Replacement)

Items	Design	Materials/ Requirements
1.0 External - Roof		
1.1 Roof form and finish	A pitched roof to follow the gradient and roof form of the adjacent heritage buildings, if in a shophouse row, or neighbouring heritage buildings if in other areas. A flat roof – for new buildings is permitted on a case by case basis.	• Roofing material shall be unglazed, natural clay following the traditional profile of the adjacent heritage buildings. • Is permitted if used as a green roof garden after first air-well and subject to case by case basis.
1.2 Projection		• The eave line of the front roof, method of construction and gutter shall be in line with the adjacent heritage building.
1.3 Skylight	Skylight on infill site/ replacement building adjacent to the heritage buildings.	• Skylight is not permitted if the infill/ replacement site is part of a row of heritage shophouses or abutting heritage buildings. • Skylight can be considered for the air well area.
1.4 Jack roof	Jack roof on infill/ replacemenrt building adjacent to the heritage buildings.	• Permitted if the infill is part of a row that already has a jack roof to match with the adjacent heritage building.
1.5 Dormer window	Dormer window on infill/ replacement building adjacent to the heritage buildings.	• Dormer window not permitted for infill and replacement development.
2.0 External - Street Façade		
2.1 Front Facade & side	a) Within a row of heritage buildings - the solid & void expression of adjacent conservation building may be used as a guide in the design of the facade & with emphasis on the vertical & horizontal elements. b) On a corner site - The corner infill building shall reflect the design of a corner heritage building. c) The height of floors shall be coordinated & in parallel with the floor height of adjacent heritage building. In accordance with the Uniform Building By-Laws.	• Surface materials, finishes, texture, colour etc shall be compatible with that of the adjacent heritage building.

Items	Design	Materials/ Requirement
2.2 Five foot way	a) A five-foot-way covered walkway shall be provided on the ground floor at the front of the building and also along the street facade of corner building. The width, height & level of the walkway shall match that of adjoining walkway when the infill/ replacement is in a row of existing heritage building; b) Where there is no adjoining walkway, for example some areas of Lebuh Pantai where the heritage buildings front the pavement without a verandah, the design should follow, the adjacent heritage buildings; c) Where it is not possible to match the walkway level of adjacent building, a ramp in compliance with the requirements of relevant departments shall be provided; and d) The provision of colonnaded covered walkway is subject to evaluation. The size & spacing of the columns shall take cognisance of the existing character of the colonnaded covered walkway of the street blocks in the vicinity.	• Floor finishes & colour shall match the material used in adjacent heritage buildings, if authentic. • For new infill/ replacement buildings adjacent to heritage buildings the five-foot-way width should match the existing heritage building width. • For new infill/ replacement buildings adjacent to heritage buildings the five-foot-way width should match the existing heritage building width.
3.0 External - Rear Façade		
	Compatibility in terms of materials, finish, texture, profile & design with the adjacent heritage buildings is encouraged.	• The use of clear or light tinted glass for openings is prefered. • If the rear facade overlooks a Category I building, the features should match those of the Category II neighbours.

Items	Design	Materials/ Requirements
4.0 External - Party Wall		
4.1 Gable ends	The new building shall not obstruct the original raised gable wall/ party wall (of artistic merit) of the adjacent heritage buildings.	
4.2 Party wall structure	The existing structural integrity of an adjoining heritage building must not be compromised, nor have damage caused by the infill/ replacement development. If the party wall is load-bearing brickwork and it is to be part of the new infill structure, and if new support structure is to be introduced for the infill/ replacement development.	• The materials used in the conservation of the party wall should be compatible with those traditionally used. This will avoid damage to the interior of the adjacent property and the load bearing walls e.g. lime mortar, lime plaster, lime wash or breathable paint (silicate).
5.0 Awning or Canopy (timber awning)		
	The canopy is to follow traditional form.	• Materials of timber frame & roofing similar to that of the main roof is encouraged while the use of modern rigid & colourful canopies may be deemed inappropriate.
	Traditional canopy corbels and timber structure on a neighbouring building should be followed if appropriate.	
6.0 Signage/ Advertising		
		• The signage shall be designed & installed according to the regulations for display of signage in compliance with guidelines for the WHS (See Chapter D7).
7.0 Security		
	Security & protection measures appropriate to the risk are generally acceptable provided that it is visually discreet in design, colour and place in an unobtrusive position.	

Items	Design	Materials/ Requirements
8.0 Gutter		
	Located adjacent/ abutting the heritage building/ in a row of the heritage shophouses.	• Not permitted.
9.0 Basement		
	Due to swamp conditions and high ground water basements were not part of the heritage buildings design.	• Basement and sub-basement is not recommended. However, a basement and sub-basement may be allowed in certain cases subject to site conditions, & provided it does not affect the structural stability of adjacent heritage buildings.
10.0 Air Wells		
	Provision of air well(s) is subject to neighbouring building profile, street characteristic and the length of building.	
	The size & positioning of air well to follow the original air well of adjacent heritage buildings (if any).	
	A flat moveable/ fixed roof cover over the air well is allowed & the height of the cover shall be lower than the EAVE of the main roof.	• Light weight transparent or translucent roof covering is preferable.
	Floor drainage for the open air-well must be considered in the overall design.	

Items	Design	Materials/ Requirements
11.0 Internal - Mechanical and Electrical		
11.1 Exhaust fan	The Exhaust fan shall be placed at the rear façade facing the rear court/ back lane.	• Metal vents are preferably anodized or colour coated.
11.2 Conduits & Pipes	All other utility & conduit pipes except for rainwater down pipes shall not run on the surface of the external front wall. Rainwater down pipes shall lead directly into drains.	
11.3 Air-condensing units	Outdoor air-condensing units shall be located such that they are least visible from the exterior. Water cooling towers to be away from moisture absorbing heritage buildings.	
11.4 Lift shaft	Lifts are to be found in many heritage buildings such as in George Town Dispensary, Public Bank, Lim Leang Teng Mansions and many others, none projected above the roof.	• Lift shaft is not recommended to project above roof, or be visible from any angle from the street. Motor-room-less lifts are recommended. • New lifts installed in heritage buildings, shall not project above the roof.
11.5 Water tanks	Water tanks need to be concealed and screened.	• Not to be visible above roof.
11.6 TV dishes	Satellite dishes on front façade or side if corner building.	• To be placed at the rear courtyard if possible. Should not block the view of the front facade.
11.7 Telco towers	Cell phone towers etc on roof tops or gantries on the side of buildings.	• Not to be visible from the street and camouflaged.

Figure D6.10

Infill and Replacement Buildings and Sites Categories

Buildings and Sites Category :

- Infill
- Replacement
- Core Area
- Buffer Zone

Source : "Inventory of building in the Heritage zone of George Town", 2000, Extract Data from "Kelly map", 1970's Survey map, Photographic Evidence (1990's - 2010), 0.5m resolution GEOEYE1 image (2010), Ortho image mapping & Building Heights Extraction;

NOT TO SCALE

D7 Signage and Lighting

D7.1 Introduction

The traditional signage seen on heritage displays a unique character to the origins of the island's population and their heritage. It demonstrates the skills of the craftsmen, the wood carvers, the plasterers and lantern makers, and should be protected, conserved and encouraged to be used, in both new-use and conservation of heritage buildings.

Because of the special interest of the heritage buildings and the conservation area, advertisements which may have a significant visual impact are not permitted for display on heritage buildings and in the conservation area.

Buildings are often covered in two types of signage or advertising.

- Business Signage - giving the name of the shop/ business; and

- Product Advertising - showing the product sold from the premises.

All signage must be carefully located to avoid obscuring the heritage building, and blocking light and ventilation into the rooms.

D7.2 Traditional Shophouse

In a traditional shopfront, original space for name plaques or signboards should be utilised to the fullest for signage purposes.

i) The width (W) of the name plaque or signboard shall not be more than the width of the door and its height (H) shall be half or less than the width of the door (Figure D7.1); and

ii) Distinctive features of a traditional shopfront such as relief motifs, ornaments, vents, fanlights, relief carvings on timber doors or windows and special finishes shall not be covered by the signage



Figure D7.1: Location and size of traditional shophouse signage

Other Traditional Signage

These signage devices are encouraged:

i) Stonework
Incised stonework (such as the figures of the year in which the building was completed or opened, the name of the building or that of its occupants), embossed lettering, emblems and logos, which is incorporated in the fabric of a building is permitted and shall be preserved;

ii) 3D Individual Letters in Metal
The Early Modern style of architecture saw the use of three-dimensional letters, often bronze, as part of the overall design on the façade. These were not internally illuminated; and

iii) Bamboo Chicks
Bamboo Chicks - blinds are often used as a sun-shading device. For a commercial premises these are ideal places to advertise the business, otherwise hidden behind the shade.



Figure D7.2: Samples of traditional building signage

D7.2.1 Guidelines on Business Signage

i) Horizontal advertisement display shall conform within the central section of the spandrel - or low wall - of the first floor of the premise/ unit;

ii) As per Figure D7.3, the height of advertisement display is determined by depth (H). Length of advertisement display is determined by width (W); and

iii) If it cannot be displayed, it is permissible below the floor beam provided there is a minimum clear height of 2.5 meters (Figure D7.4).



Figure D7.4: Permitted positions of business signage/ advertisement on shophouse without low wall



Figure D7.3: Permitted positions of business signage/ advertisement on the spandrel/ low wall



Figure D7.5: Sign may hang below beam leaving at least 2.5m headroom



Figure D7.6: Sign may attach to main beam

D7.2.2 Façade Advertisement/ Sign Boards

i) Advertisement display shall not obscure or obstruct any window or ventilation opening on the wall of a building (Figure D7.7);

ii) Placing of horizontal advertisement display is prohibited above and beneath roof eave;

iii) Advertisement display shall not project beyond 0.5 metre from the building;

iv) Placing of advertisement display on top of any decorative elements is not permitted; and

v) Placing of advertisement display shall not cover the silhouette of parapet.



Figure D7.7: Signature that obstruct window & ventilation opening

C7.2.3 Projecting Advertisement/ Sign Boards

i) Advertisement display must be affixed so that any part of it must have a minimum clear height of 3.7 metres from the street-way (Figure D7.8);

ii) Projecting advertisement display may only be affixed on end columns;

iii) No advertisement shall project more than 0.8 metre from the façade of a building. (Figure D7.8);

iv) Projecting advertisement display of each floor shall conform within the floor height;

v) Fixed projecting and hanging advertisement shall be hung from a well-designed and detailed metal bracket; and

vi) Projected box type casing advertisement display is not permitted.

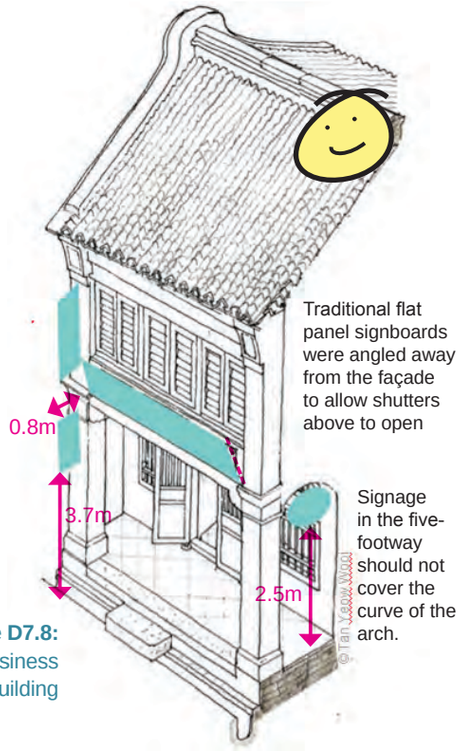


Figure D7.8: Permitted positions of business signage/ advertisement on a heritage building

D7.2.4 Hanging Advertisement/ Sign Boards

i) Hanging signs placed within the five-foot-way should be within the clear width between the column and entrance wall with minimum headroom clearance of 2.5 metres (Figure D7.8);

ii) Hanging signs placed above the arch of five-foot-way should not extend below the arch level; and

iii) Hanging sign placed below the arch must have minimum headroom clearance of 2.5 meters.

D7.2.5 Advertisement Display on Sidewall

i) Advertisement display attached to the sidewall of heritage a building is not permitted;

ii) Advertisement display attached to the sidewall of contemporary infill or replacement building will be considered based on merit;

iii) Advertisement display, which protrudes above the roofline, is not permitted; and

iv) Wall mounted poster panels erected on the walls of a building is not permitted.

C7.2.6 Advertisement on Rooftop

i) Rooftop advertisement display is not permitted on any buildings within the WHS.

D7.2.7 Buildings on a Corner Site with Two Road Frontages

i) Advertisement display on frontage and sidewall of the building is permitted subject to compliance with the dimension and design specified in these guidelines;

ii) Advertisement display may be erected on each frontage;

iii) Only one advertisement may be displayed on each road frontage;

iii) On the first frontage a main advertisement board may be displayed as specified in these guidelines;

iii) On the second wall entrance, advertisement board shall not exceed the width of the entrance opening; and

iii) Not more than one advertisement parallel to a wall and one projecting at right angles from such a wall.

D7.2.8 Advertisement on Columns

i) Advertisement shall not be displayed on columns without the approval from the MBPP.

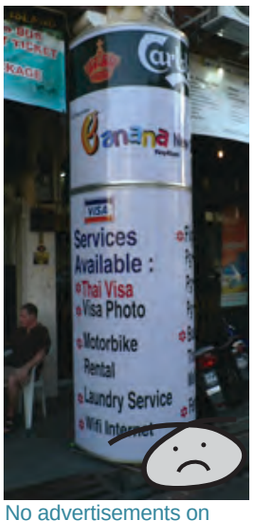
Figure D7.9: Example of Unacceptable Sign Boards and Advertising



Name board and cladding inappropriate



Cladding to columns not permitted



No advertisements on columns.



Original name board location designed with the building – not used



Covering up of windows and façade not permitted

Figure D7.10: Example of GOOD Contemporary sign boards/ Advertising



Small name board does not block windows and sits on the low wall between the columns



Modern shop front, traditional signage



Traditional plasterwork signage – multiple languages



Rediscovered under layers of paint – Jin Beng Coffee shop – retained and repainted



Small signage on the building facade

D7.3 Guidelines on Lighting of Signage & Advertisement

i) Passive Lighting: Spotlights or back illumination of advertisement is permitted. The lighting fixtures shall not be intrusive or obtrusive in nature to the whole building and shall be kept to the minimum; and

ii) Light fittings for signage shall be discreet and have concealed cables and gear.

D7.4 Guidelines on Lighting of Heritage Buildings

i) Illuminating heritage buildings must be carried out with extreme care, to avoid both ugly and damaging installations;

ii) Drilling of holes through walls in order to provide power supply, and the fixing of light fittings, all causes damage to the heritage buildings and should be kept to a minimum;

iii) Once installed and running, the heat build up from lights placed too close to the building is likely to cause damage. Lighting should be considered with this in mind;

iv) Traditionally the lighting would have been at the ground floor entrance, under the five-footway of a shophouse or porch of a bungalow, and internally in shop windows; and

vi) Static and rotational colour lighting is not permitted.

D7.4.1 Possible light arrangements:

- Strings of light bulbs attached to a building e.g. around windows and cornices etc, is not permitted;
- Spot lighting on the building should be kept to a minimum, subject to approval on a case-by-case basis;
- Flood lighting of buildings should be unobtrusive and set within the landscape, not attached to the building; and
- Floodlighting of buildings must be natural white colour.



Figure D7.11: Natural colour of building in daylight.



Figure D7.12: Floodlighting projecting colour onto the building is not permitted (artist impression only)



ANNEXURE A

Heritage Buildings Form and Styles in George Town World Heritage Site

Annexure A
Heritage Buildings of George Town

1.0 Introduction

Although the Malay bungalow was the earliest built form on the Island, its influence can be seen in the evolution of the bungalow architecture, this chapter begins with an analysis of the building form that dominates both Melaka and George Town, the heritage cities on the Straits of Malacca now listed as World Heritage Sites (WHS). This form is that of the 'Shophouse' which line the streets of the urban cultural landscapes.

Researchers to date have worked hard to analyse the influences and styles that these shophouses took on (Figure A1). It is this analysis that has been transferred onto other built forms and is used to describe the styles in which they too were built.

"Turning the eye southward, Georgetown and the harbour are seen. The various styles in the construction of habitations of this small town have a strange effect- the European house, the Hindoo [sic] bungalow, the Malay cottage, the Chinese dwelling and the Burman hut are mingled together without regularity and apparently without plan, the first settlers having each built his residence according to the custom of the country…These various modes of building, by exhibiting the strongest contrast, add considerably to the beauty of the picture."

James Wathen, Journal of a Voyage in 1811 and 1812 to Madras and China, 1811 page 146

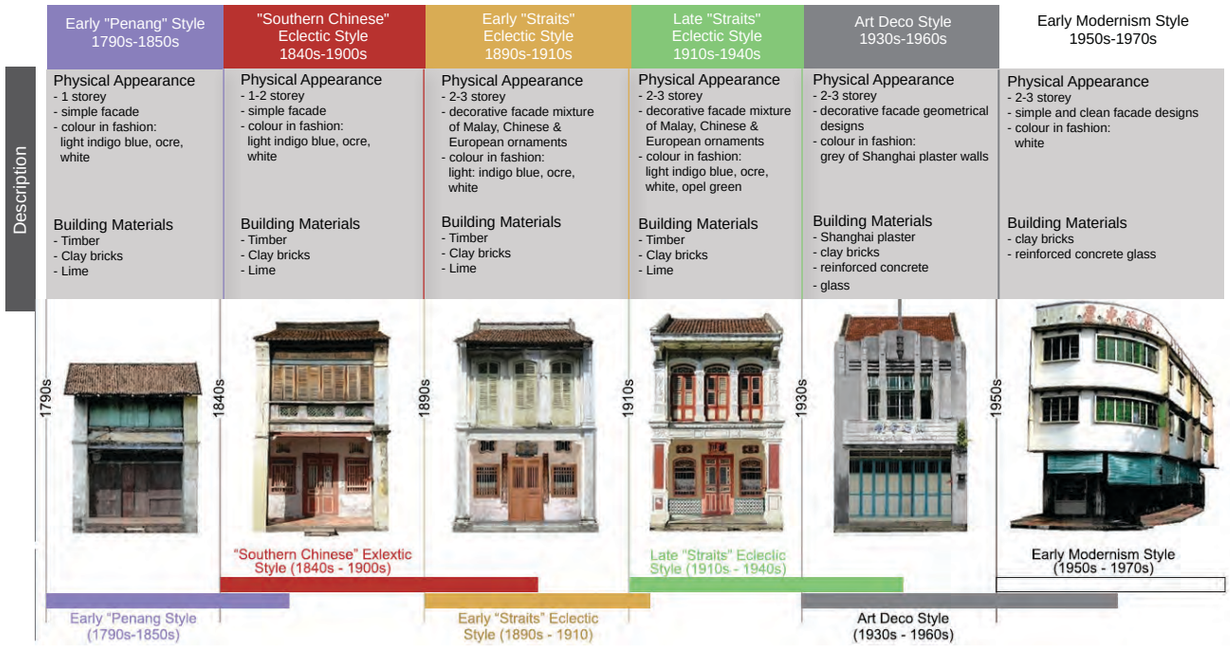


Figure A1: Architectural styles of shophouses

When the same descriptions are used for other forms, the historic time line begins to evolve. There is still much research work to be done in this area, but for now, this document presents the heritage buildings in groups of building form as listed below.

i. Shophouses;
ii. Bungalows;
iii. Residential Blocks;
iv. Godowns;
v. Buildings of Commerce and Trade;
vi. Buildings of Administration;
vii. Places of Worship; and
viii. Jetties.

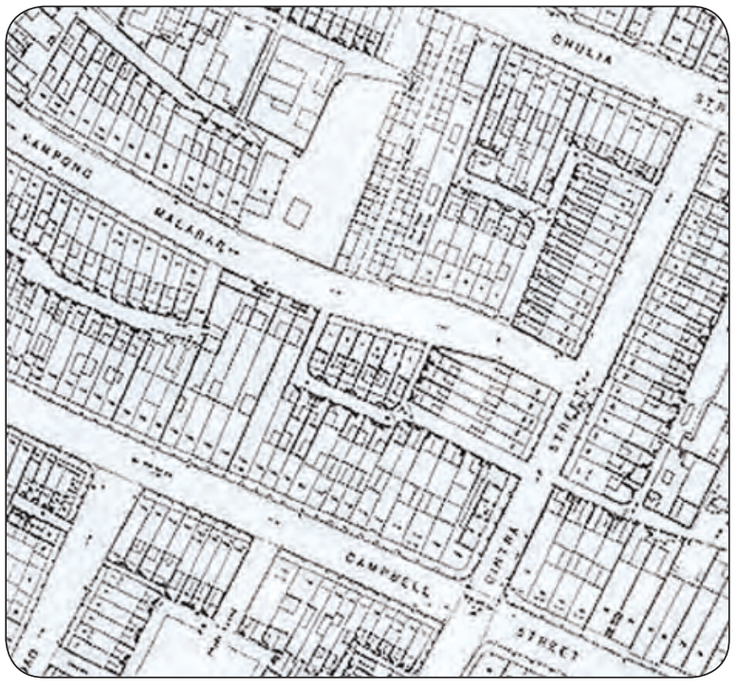
Within the section on each form or building type, there are also visual descriptions of each architectural style. As research continues more collections of images will be assembled of other architectural forms – the car showroom, the hotels, the cinemas for example.

2.0 Shophouse

The shophouse is an urban building form that dominates the built cultural landscape of George Town. Built in rows with shared party walls, they were used as family dwellings (and ancestral worship), stores, commercial premises and mixed use of commercial with the family or workers living above.

They were simple in their design, thick brick walls kept out the mid-day sun. Lime plastered walls and terracotta floors dispersed the cool moisture from the swamps beneath, whilst louvred shutters kept out the glaring sun and allow cooling breezes to take away the warmer air.

The earlier shophouses, later terrace town houses, were small, just one pitched roof with a kitchen at the back under a single-storey terrace, surrounding and open air-well which took away the heat from the charcoal fired stoves.



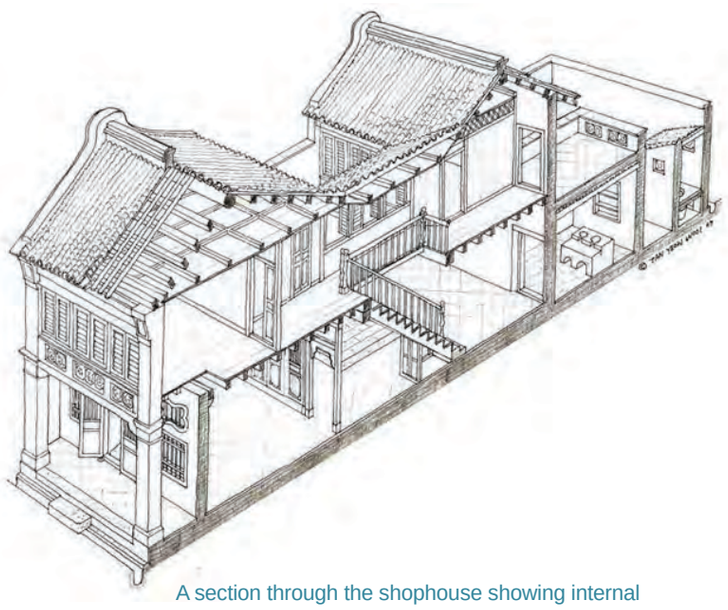
The urban form of shophouse streets

As more land was cleared and the wealth and needs of the owners grew, the shophouses became longer, separating each pitch roof with an air-well to help cool and ventilate the building. Originally built and used by migrant Indian and later Chinese populations, they brought with them the influences from their homelands.

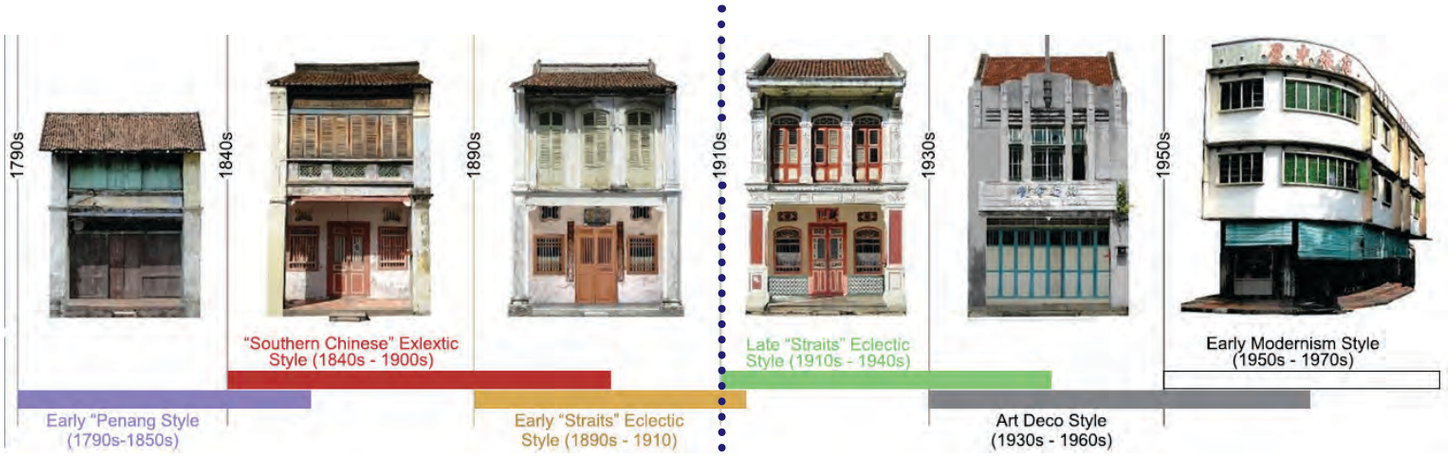
By the 1900s the European architectural and engineering professionals began to migrate from Singapore, Ceylon, India and later Shanghai and Hong Kong, bringing with them new technologies and building forms.

Owners of traditional shophouses, eager to adapt to modern styles, began to refashion their facades in the latest styles, whilst the strict hierarchical use of space within the shophouse remained.

The following pages describe the time line of the six main shophouse styles in Penang and George Town, and their characteristics and features.



A section through the shophouse showing internal configurations and structure
Illustration by Tan Yeow Wooi



Architecture without architect – the age or the artisan and natural materials

Architecture with architect – the age of the architect and industrial imports

The shophouse styles, pre-architect and post-architect

This diagram describes the timeline of the shophouse styles in George Town, in relation to important events globally as well as pertaining to the region and the establishment of Malaysia as an independent nation. The table also traces the introduction of new materials in George Town and the ideology of the constructors.

The eclecticism of the architecture of the shophouses can be contributed to the migrant Indian and Chinese builders, who brought with them the influences from their homelands.

By the 1900s the European architectural and engineering professionals came to George Town and brought with them new technologies and building forms influenced from the western architecture movement.

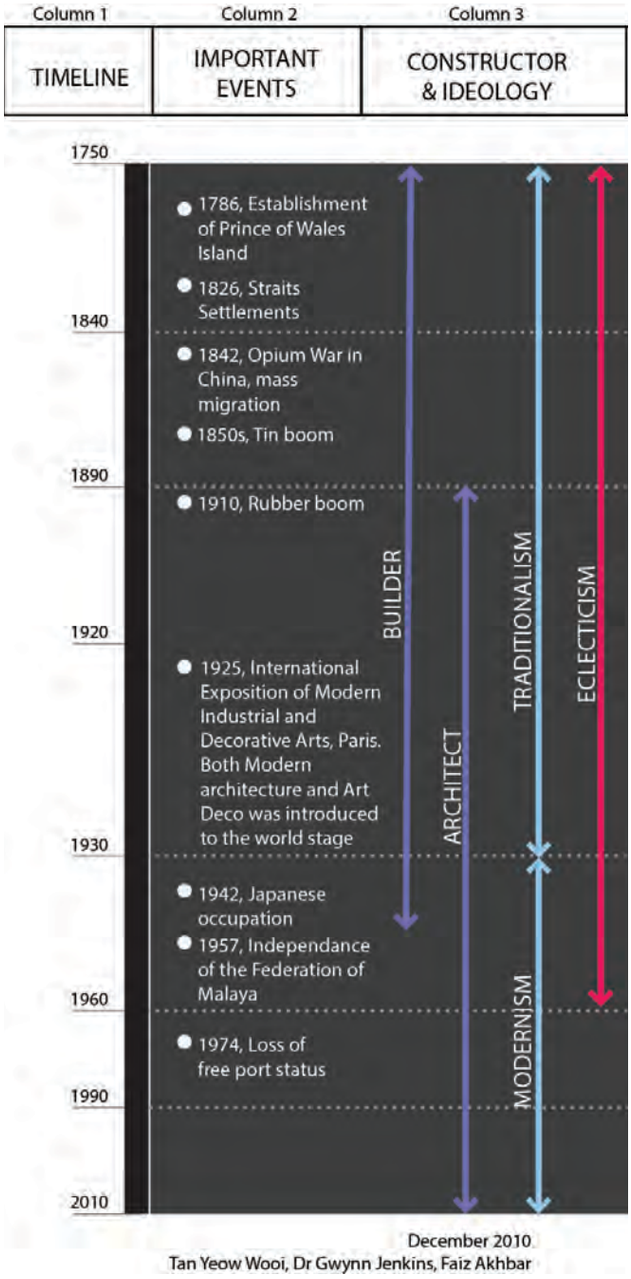
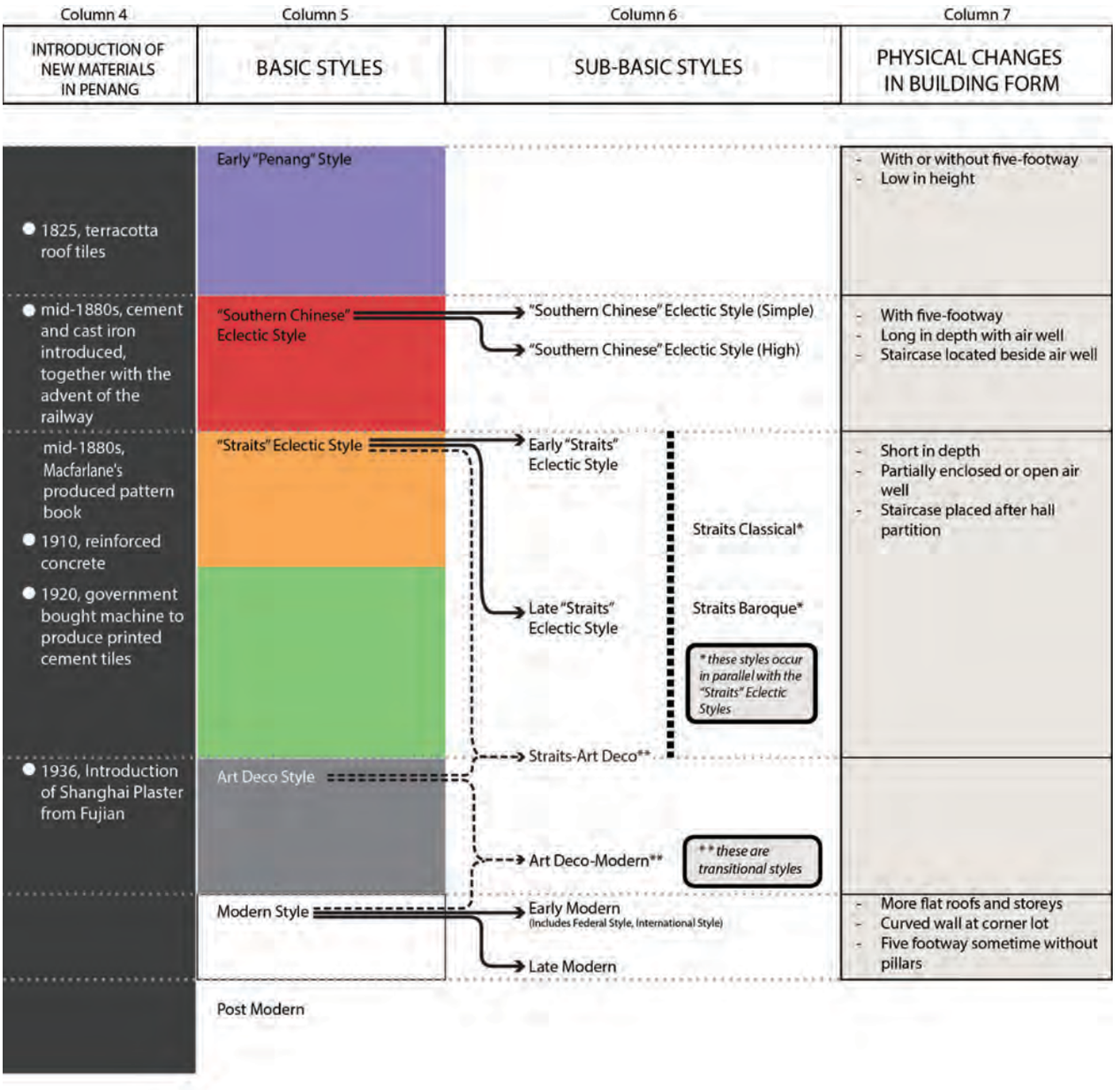


FIGURE A2 **Timeline of Shophouse Styles in George Town**



Architectural Style of shophouse in Penang

Early "Penang" Style

1790s–1850s

UNESCO
United Nations Educational, Scientific and Cultural Organization
HISTORIC CITIES OF THE STRAITS OF MALACCA

General characteristics & structure

- Single or two storey with five-foot way.
- Simple in details and low.
- Lime plaster on structural brick wall and pillars.
- Square pillars supporting slanting beam (*rafter*) with projecting eaves.

Roof

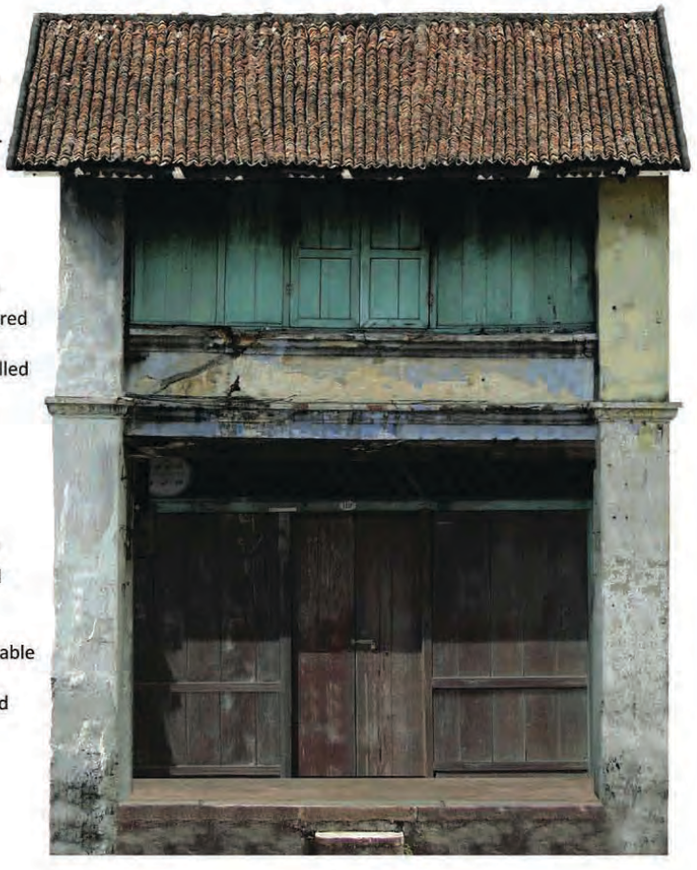
- Terracotta V shape roof tiles, on timber horizontal roof beams (*purlins*) and battens.
- Eave roof beam directly above the window.
- Overhanging pitch roof.

Upper façade

- Continuous row of timber panelled or louvered shutters, pillar to pillar.
- Low wall under window, either timber panelled (earlier type) or brickwork plastered.

Ground floor façade

- Residential- Brick wall with central door and two square window
  or
  Commercial-Vertical timber panels – removable to create large opening.
- Five foot-way granite steps, granite edge and terracotta floor tiles.





Research & Compilation . Tan Yeow Wooi, Dr. Gwynn Jenkins, Janet Pillai Photography . Tan Yeow Wooi Design . Hung Wan Liu

Architectural Style of shophouse in Penang

"Southern Chinese" Eclectic Style

1840s-1900s

UNESCO United Nations Educational, Scientific and Cultural Organization

HISTORIC CITIES OF THE STRAITS OF MALACCA

General characteristics & structure

- Two, sometime three stories with five foot way.
- Taller than Early Shophouse, simple decoration, more decorative by 1900s.
- Lime plaster on structural brick wall and pillars.
- Square pillars ending with Chinese pillar head (*bracket*).



Roof

- Terracotta V shaped roof tiles, on timber horizontal roof beams (*purlins*) and battens.
- Roof beam from pillar to pillar.
- Roof ridge and projecting gable wall at the end of row.

Upper façade

- Decorative panel below roof beam and above shutters, or fixed louvred panels above the louvered shutters, pillar to pillar.
- Low wall under window with typically three indented panels decorated with plastered mouldings or Chinese ceramic or cast iron air vents.

Ground floor façade

- Residential- Brick wall with central carved timber ventilated door and solid inner door in-between two square windows and air-vents above.
  or
  Commercial-Vertical timber panels removable to create large opening
- Five foot-way granite steps, granite edge and terracotta floor tiles.



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Architectural Style of shophouse in Penang

Early "Straits" Eclectic Style

1880s-1910s

UNESCO
United Nations Educational, Scientific and Cultural Organization

HISTORIC CITIES OF THE STRAITS OF MALACCA

General characteristics & structure

- Two, sometime three stories with five foot way.
- Similar height as Southern Chinese Eclectic style,mixed Chinese and European decoration.
- Lime plaster on structural brick wall and pillars.
- Square pillars ending with Chinese pillar heads and later European pillar heads (*capitals*).

Roof

- Terracotta V roof tiles, on timber horizontal roof beams (*purlins*) and battens.
- Eave roof beam from pillar to pillar or hidden.
- Roof ridge and projecting party wall at each pillar.
- Row end wall top with variety of Chinese gables.

Upper façade

- Full height brick wall with three (or two) full-length louvred shutters (*Venetians*), framed with plaster arches and central keystones.

Ground floor façade

- Residential- Brick wall with central carved timber ventilated door and solid inner door, in-between two square windows and air-vents above.
  or
  Commercial-Vertical timber panels removable to create large opening.
- Five-foot-way granite steps, granite edge and terracotta floor tiles, or geometric pattern clay floor tiles.





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Architectural Style of shophouse in Penang

Late "Straits" Eclectic Style

1910s-1930s

UNESCO United Nations Educational, Scientific and Cultural Organization
HISTORIC CITIES OF THE STRAITS OF MALACCA

General characteristics & structure

- Two or three stories with five foot way, sometimes with a compound garden.
- Generally shorter in height, with intensive use of both Chinese and European decoration.
- Lime plaster either on structural brick wall and pillars or Reinforced Concrete (*RC*) construction.
- Square pillars ending with, either Chinese pillar heads (*brackets*), European pillar heads (*brackets*) or capitals.

Roof

- Terracotta V roof tiles with either overhanging eaves and ceiling (*Soffit*) or hidden behind short horizontal brick and plaster decorative wall (*parapet or balustrade*).
- Roof ridge and projecting party wall at each pillar.
- End of gable end with variety of cultural symbol or simplified.

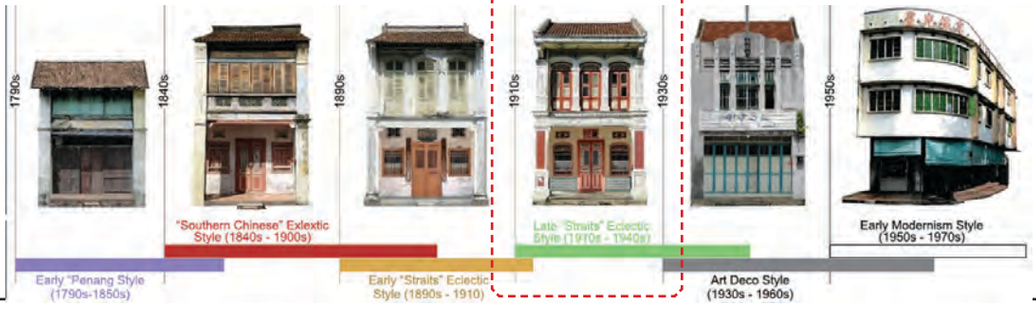
Upper façade

- Full height brick wall with openings.
- Full length louvred window (*shutters, Venetians*) with glass fanlights and internal balustrade.
- Decorative plaster works (*keystones, architrave, pilasters, cornice, garlands with Chinese and European flora*) very 3 dimensional, pierced with air-vents below roof eave.

Ground floor façade

- Residential- Brick wall with central timber ventilated door and solid inner door in-between two timber windows with curved top and air-vents above. Decorated with ceramic (*Majolica*) tiles under window (*dado panel*)
  or
  Commercial-Vertical timber panels – removable to create large opening.
- Five foot-way granite steps, granite edge and terracotta floor tiles or cement tiles.





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Architectural Style of shophouse in Penang

Art Deco Style

1930s-1960s

UNESCO United Nations Educational, Scientific and Cultural Organization

HISTORIC CITIES OF THE STRAITS OF MALACCA

General characteristics & structure

- Two storey with five foot way, and compound garden for residential.
- Same height as Late "Straits" Eclectic. Simplified architectural features with either horizontal or vertical emphasis.
- Shanghai plaster finish over Reinforced Concrete (*RC*) construction of beams & pillars with cement or clay brick infill.
- Pillars & beams deemphasized and incorporated into façade.

Roof

- Marseille / Terracotta V shaped roof tiles fronted by flat RC eave overhang or stepped horizontal wall (*parapet*) with flag staff.

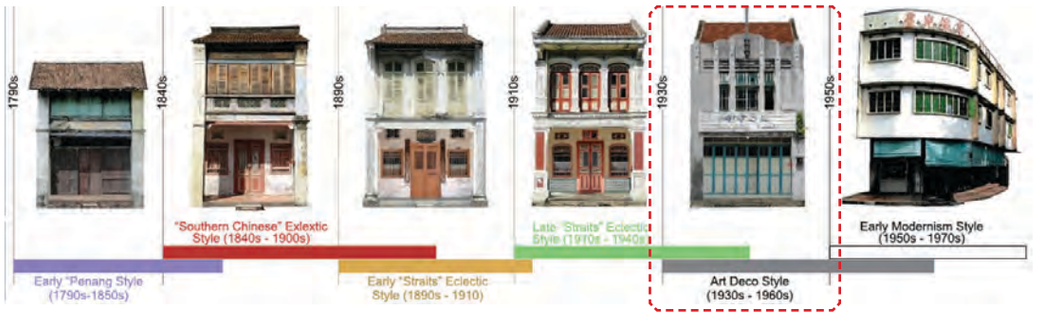
Upper façade

- Brick work with Shanghai plaster finish, decorated with three horizontal or vertical bands and generally dated on centre of parapet walls.
- Windows are arranged in groups, typically three in a bay often with metal frames and sea-green coloured moulded glass.

Ground floor façade

- Residential- plastered brick wall and central timber door with metal and glass decorative ventilation panels in-between timber framed windows with floral design metal grilles. Horizontal air-vents above windows and ceramic tiles below.
  or
  Commercial- metal folding panels with ventilation grill.
- Five-footway granite steps, granite edge/ Shanghai plaster edge and cement tiles.





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Architectural Style of shophouse in Penang

Early Modern Style

1950s-1970s

UNESCO United Nations Educational, Scientific and Cultural Organization

HISTORIC CITIES OF THE STRAITS OF MALACCA

General characteristics & structure

- Two storey for individual shophouse, three storey for corner shophouses, and three storey for row-houses designed to look like one building, -commercial and residential mixed.
- Same proportion as Art Deco- Simplified clean linear functional features, e.g. shading canopies & fins.
- Lime or cement flat plaster finish over Reinforced Concrete (*RC*) construction of beams & pillar with cement or clay brick infill.
- Façade design and structure merged.
- Five-footway sometimes without pillars. (cantilever upper floor)

Roof

- Flat roofs, some with small red clay tiled finish, hidden behind parapet wall sometimes with horizontal metal railings.

Upper façade

- Horizontal and vertical reinforced concrete shading fins. Sea- green glass windows with metal frame, sometimes wrapping in front of internal pillars around corner sites.

Ground floor façade

- Residential shophouses – retained door and windows arrangement with modem materials; metal, glass, mosaic. Walls with slot or port-hole air-vents above window.
  or
  Commercial blocks – simplified square openings between structural pillars.
- Five-footway granite steps, granite edge and printed cement tiles, later mosaic tiles.





Research & Compilation . Tan Yeow Wooi, Dr. Gwynn Jenkins, Janet Pillai Photography . Tan Yeow Wooi Design . Hung Wan Liu

3.0 Bungalow

Before, Johnson arrived on the Prince of Wales Island to write his descriptions above, and indeed before Sir Francis Light established the East India Company Settlement, there were at least 2,000 Malays living in the Datuk Keramat Area on the Island.

Their typical buildings form clearly influenced that of the Europeans, as described above, and that of the Chinese miller, contractor and entrepreneur Loh Amee – whose bungalow artist and voyager James Wathen illustrates in 1811 (right).

The Malayan bungalow was ideally suited to the swampy ground thus became the building form of the urban Malays, the Europeans and later the suburban elite.

"The lowlands of Penang being liable to inundation in the rainy season, the houses of the Europeans are all elevated from the ground, eight of ten feet, or arches or pillars. They seldom consist of more than one floor, are built of wood and thatched over with leaves of trees, &c., the roofs resembling those of cottages in England, having the eaves projecting owner the verandahs in order to throw off the rain into the areas. They are all detached from each other, and surrounded with gardens, and trees of various kinds, that defend them a great degree from the sun."

J Johnson Esq., Feb 1805, *The Oriental Voyager*



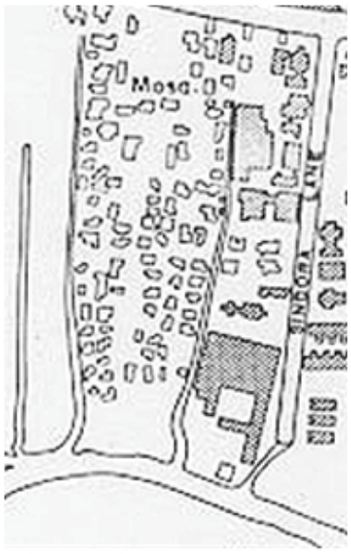
The Early Penang bungalow as depicted by James Wathen in 1811.

3.1 Early Penang Bungalow

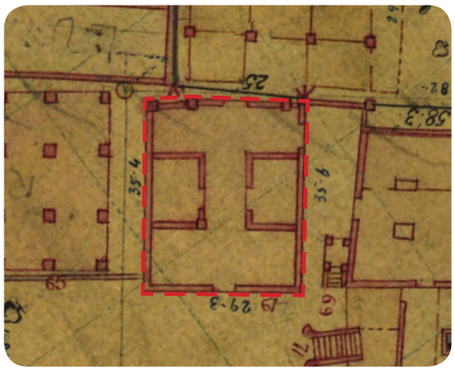
Beautiful bungalow, similar to those found in Bangkok, that were built for the Achenese Settlers – sometimes called Indo Malay Style.



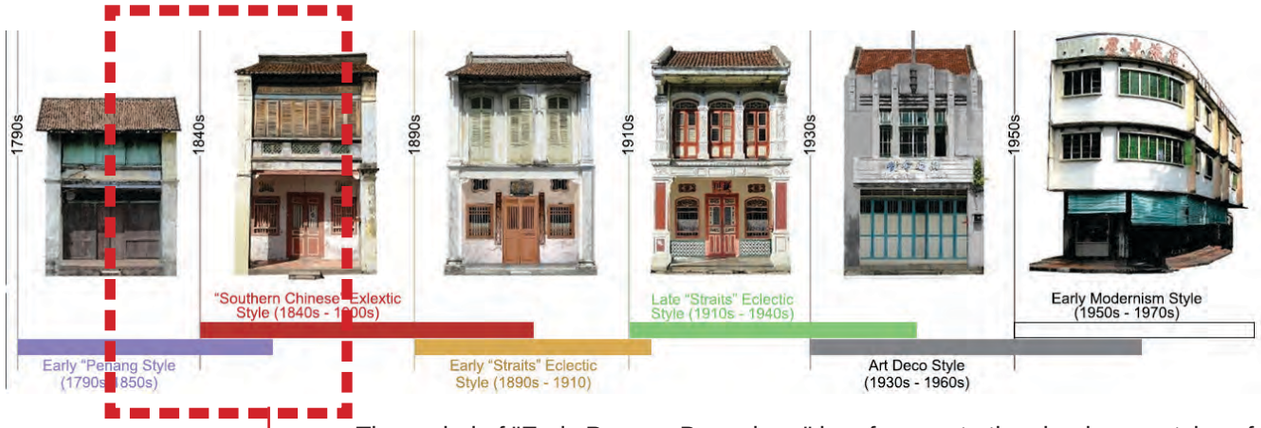
Early Penang bungalow



Typical morphology of a Malay Kampong, (left) each bungalow was built so that air could flow easily and cool each building in turn



Plan of the brick walls of the ground floor of the bungalow, – creating cool places below (from Kelly Map 1891-96). Note the I-shaped plan internally



The period of "Early Penang Bungalows" in reference to the shophouse styles of the same period

3.2 Early Straits Eclectic Bungalow

The Early Straits Eclectic bungalow reflected the new wealth of the owners who built with two floors of masonry and often a projecting porch. The full height shutters on the upper floor were separated into ‘door opening widths’ frames by a simple flat ‘keyhole' escutcheon type boarder.



The Early Straits Eclectic Bungalow



The flat ‘keyhole’ architrave surrounding the shutter fame, complete with keystone, typical of the Early Straits Eclectic Style



Plan of the brick wall layout of the Bungalow – complete with compound, Chinese Gate and out houses (from Kelly Map 1891-96)



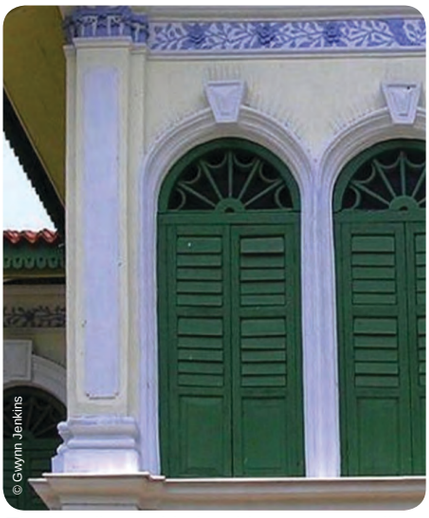
In reference to the shophouse styles of the same period

3.3 Late Straits Eclectic Bungalow

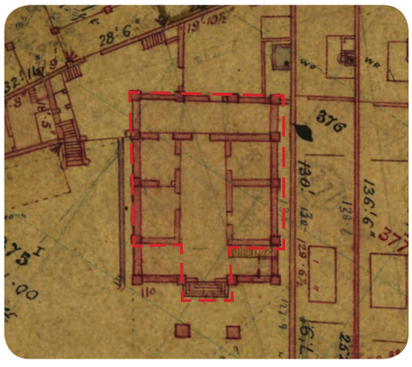
As masons and plasterers became more skilled the bungalows became highly decorated according to each culture – here we see a crescent and star of the Straits Muslims. The plan remained similar to that of the Early Penang Bungalow, with the addition of the Porch or Porte Cochere. The heavily moulded architrave surrounding the shutter frame, complete with keystone, and bands of plaster decoration are typical of the Late Straits Eclectic Style.



Syed Alatas Mansion, a Late Straits Eclectic bungalow.



The heavily moulded architrave surrounding the shutter frame, complete with keystone, and bands of plaster decoration.



Plan of the bungalow, with masonry walls and columns, and the H-shaped plan. The stair is in the bottom right corner, the same as the Early Penang and Early Straits Eclectic bungalows. (Kelly Map 1891-93)



In reference to the shophouse styles of the same period

3.4 Straits-Art Deco Bungalow (early suburbs)

Bungalows (and shophouses) of the Straits of Malacca created a wonderful mixture of Straits Eclectic and Art Deco that is only found in this region, hence the name Straits Art Deco. Influences from Europe brought the use of glass casement windows and reinforced concrete.

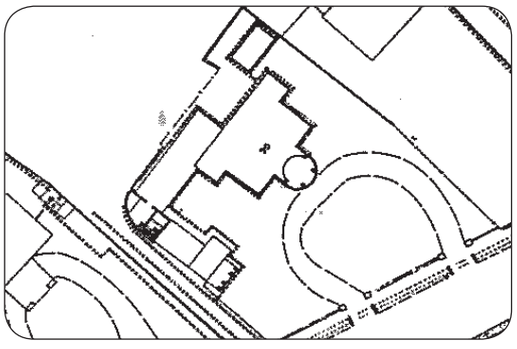
Art Deco Style in its pure form was introduced into George Town through the car showroom and the cinema.



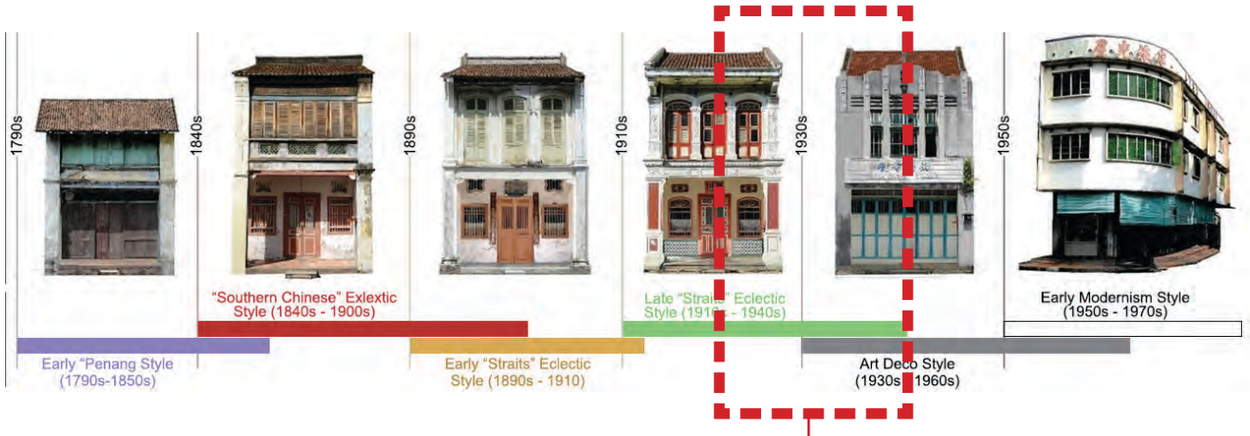
A Straits-Art Deco bungalow (early suburbs) - Leith Street



Timber frame and glass windows.



Plan of the Bungalow on Leith Street - Unlike the Late Straits Eclectic bungalow, it is no longer possible to drive below the porch, instead an open canopy with columns projects out in front of the house and meets the driveway



In reference to the shophouse styles of the same period

3.5 Straits-Art Deco Bungalow (suburban) Influences

The suburban Straits-Art Deco bungalow still used lime plaster. Both glass windows and timber louvre shutters were used in the design and the roof finish used clay V-shaped or U-shaped tiles. The gatepost for this bungalow are later and show the ultra modern 'Shanghai plaster' finish.

The Bungalow became an icon of the suburbs, whist the Straits Deco style continued to be used for facades of George Town shophouses, the suburban bungalow gave the architect many facades to design and the style developed.



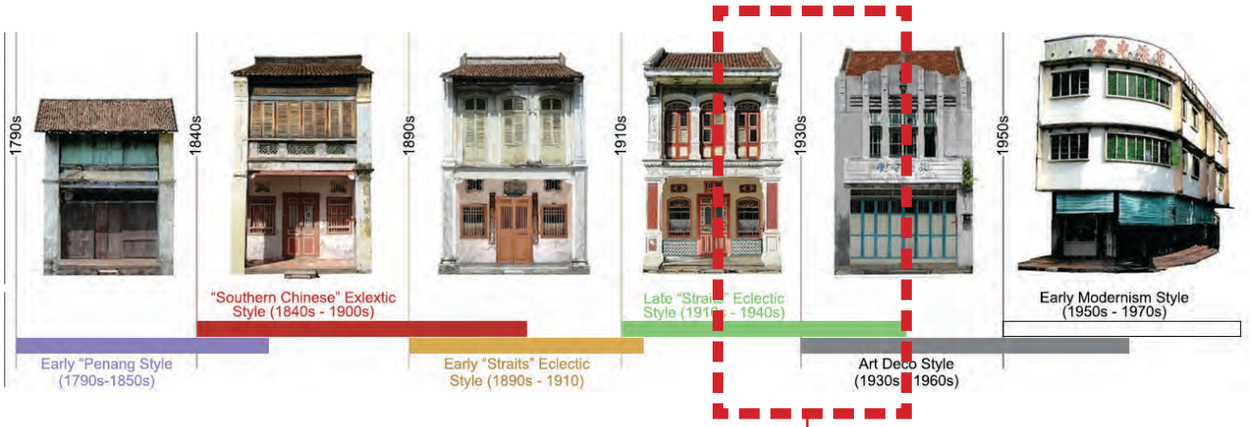
A Straits-Art Deco bungalow (suburban) influences



Mixture of timber shutters and timber famed casement windows



1927 Map of Cantonment Road – shows the rows of bungalows built between the wars – enjoying the mixture of Art Deco and Straits eclecticism in their design



In reference to the shophouse styles of the same period

3.6 Art Deco-Modern Bungalow (suburbs)

The emphasis on the vertical lines of the staircase tower reflects the Art Deco elements. Use of Glass Blocks for light into the central stairwell was typical Art Deco.

The wrap-around corner windows, with columns set back, lean more towards modernism. Again this style is a fusion of both and a move from Art Deco into Pure Modernism.

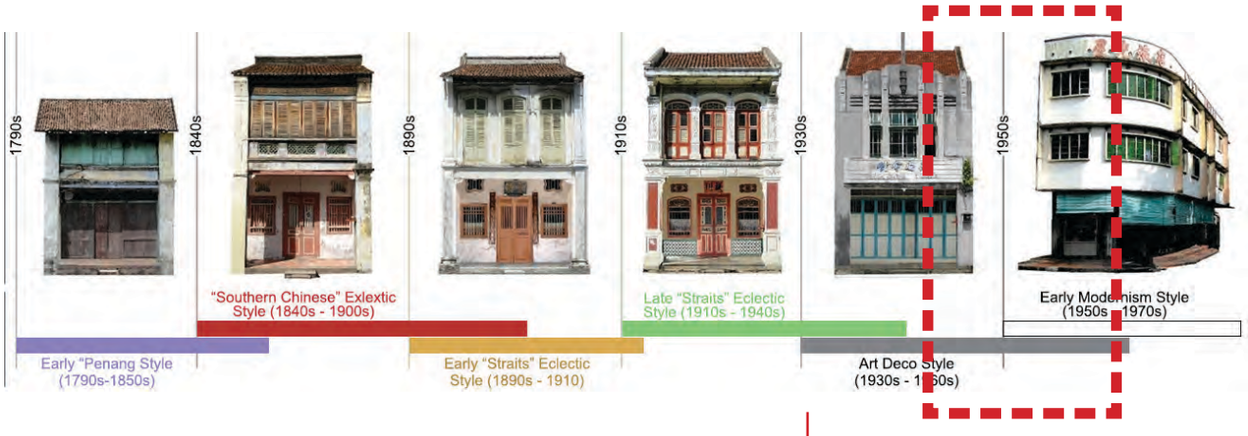
Art Deco's style merged into the Early Modern style, keeping elements of both styles in the design. Suburban bungalows and commercial buildings in George Town demonstrate this style best of all.



An Art Deco-Modern bungalow



Steel casement windows with aqua coloured obscured glass and decorative wrought iron security grille demonstrates a mixture between Art Deco and Early Modern



In reference to the shophouse styles of the same period

3.7 Early Modern Bungalow (Suburbs)

The stair tower of the Early Modern bungalow is still emphasised, but it is no longer symmetrical on plan. Tinted glass openings are shaded with thin horizontal projecting fins. Small porthole openings above the windows, released the hot air from the rooms. Rubble wall skirting to the outside of the house was also a feature.

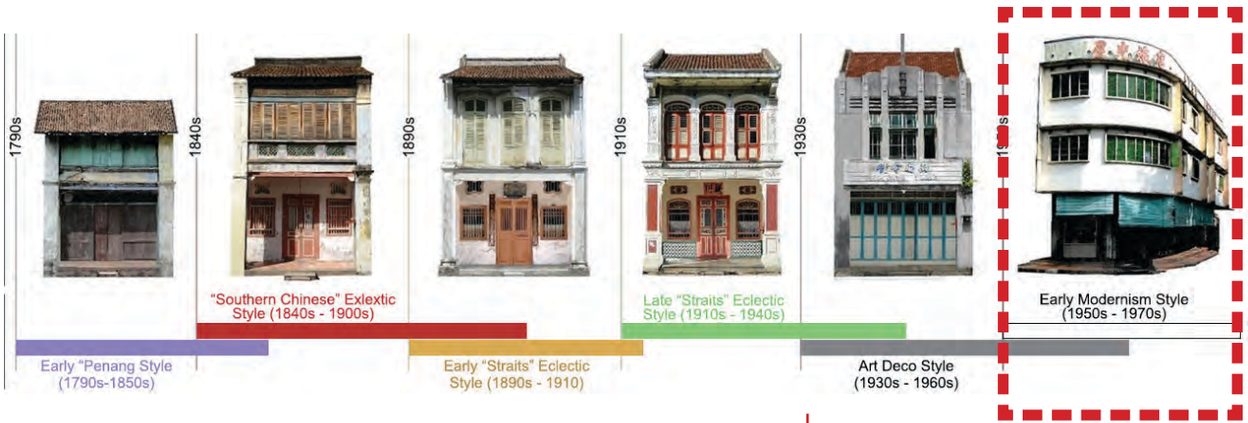


An Early Modern bungalow.





A wonderful example as even the gate and garden wall are Early Modern.



In reference to the shophouse styles of the same period

4.0 Residential Blocks

The residential block came about in the 1930s at the height of the rubber and tin boom.

4.1 Art Deco Lim Leang Teng Mansion

The first such block – the Lim Leang Teng Mansion below included studio and three bedroom apartments on the upper floors, and commercial accommodation on the ground floor. New technologies such as RC construction offered new opportunities to build higher. The Lim Leang Teng mansion was built for the wealthier members of the society, whereas walk-up residential blocks were built from the different socio-economic groups.



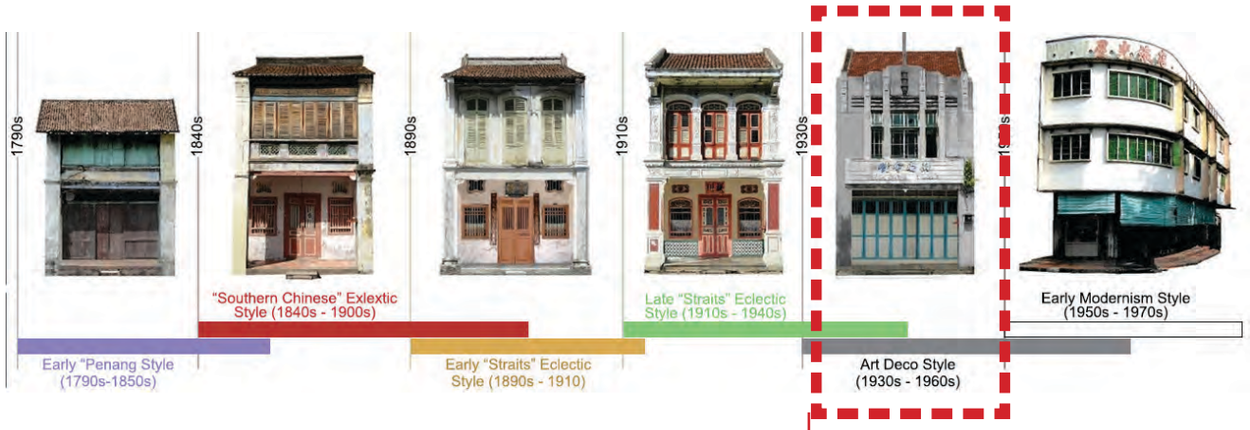
Art Deco Residential Block - The Lim Leang Teng Mansion, 1930s



Stair entrance doorway - rope twisted architrave - door surround is typical of Art Deco



Decorative corner to top floor parapet wall rich in Egyptian motifs, typical of Art Deco Style



In reference to the shophouse styles of the same period

4.2 Art Deco-Modernism - 1931 Jalan Kapitan Keling (Pitt St.)

These walk-up residential apartments were originally built as two floors above a commercial lower floor. Each stair well was ventilated and the ‘towers’ rose above the flat roof parapet. The metal-framed glass windows appear to wrap around the corner (a Modern feature), but the expression of vertical structure (an Art Deco feature) is still visible in between.



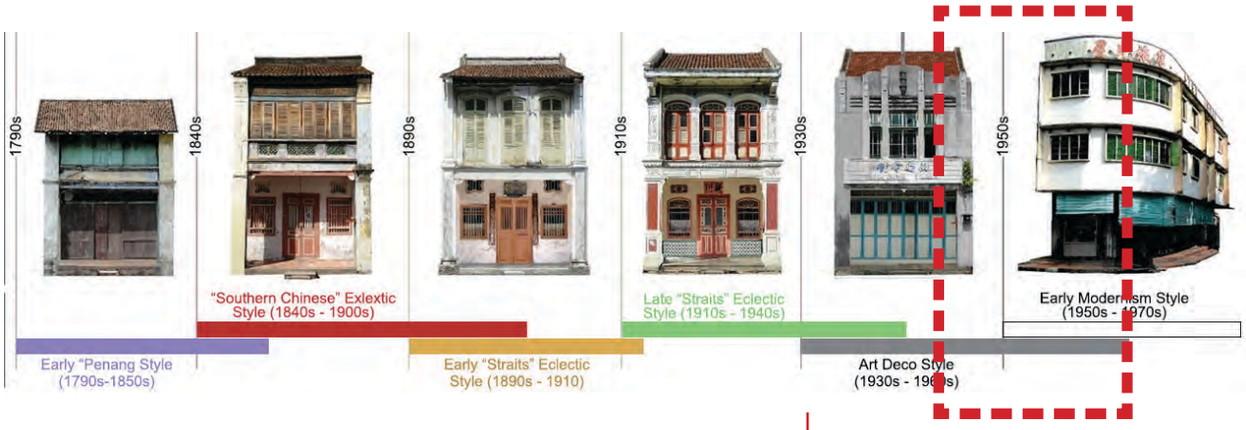
Art Deco-Modern residential block - original skyline



Precast concrete ventilation 'grille' in Art Deco ‘Chevron‘ pattern



Current skyline - the block as it appears today with an extra floor added to its original flat roof



In reference to the shophouse styles of the same period

4.3 Arts and Craft - 1934 Jalan Masjid Kapitan Keling (Pitt St.)

This walk-up residential block, consists of a commercial ground floor and two floors of apartments. These represent the ‘Arts and Craft’ movement, with Spanish influenced arches into the five-footway and doorways, timber windows with both louvres and glass panes. This building also features a mixture of exposed fair-faced brickwork and lime plaster, in addition to precast air-vent 'Chevron' detail to the stairwells.



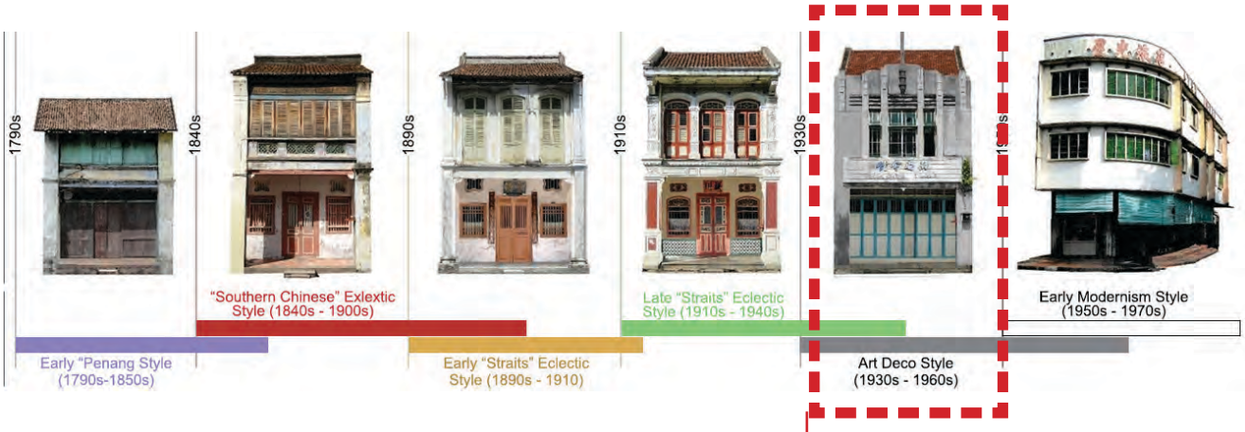
An Arts and Craft residential block on Lebuh Buckingham



Spanish influenced arches along the five-footway







In reference to the shophouse styles of the same period

4.4 Art Deco Modern - Campbell Street

Walk-up residential blocks, commercial ground floor and two floors of apartments. Emphasised stair well, with vertical openings. Introduction of inset balconies (loggia). Metal fram ed casement windows with fixed metal louvre panels and obscured clear glass.



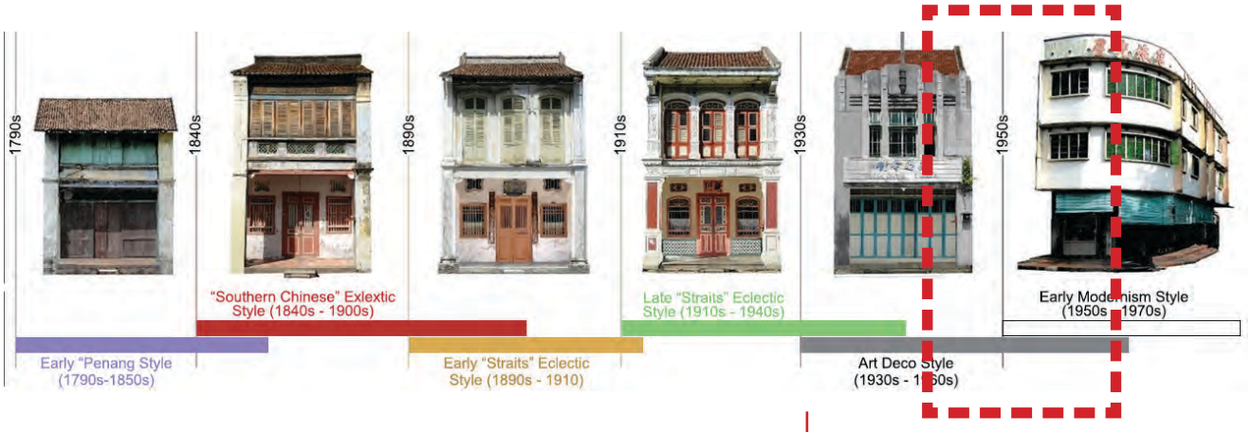
Arts deco Modern residential block on Campbell Street



Metal-framed window with fixed metal louvres



Inset balcony (loggia) additional feature



In reference to the shophouse styles of the same period

4.5 Early Modern (Federal Style) (Chulia St Ghaut)

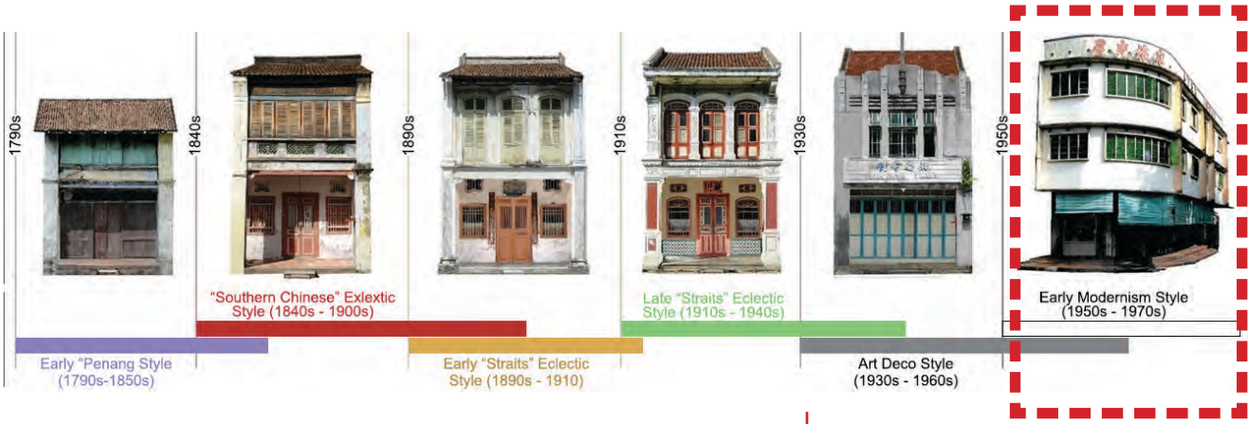
This is a walk-up residential block for firemen fashioned after the Federal Style of government buildings in Malaysia. The open corridor brought the five-footway back, providing shade and community connection. The vertical columns also became fins for shade, and the angled columns (piloti) to the ground floor added a playful 'modern' touch. This design worked with the climate to create greater living comfort.



The fire brigade quarters on Gat Lebuh Chulia



Vertical columns also became fins for shade



In reference to the shophouse styles of the same period

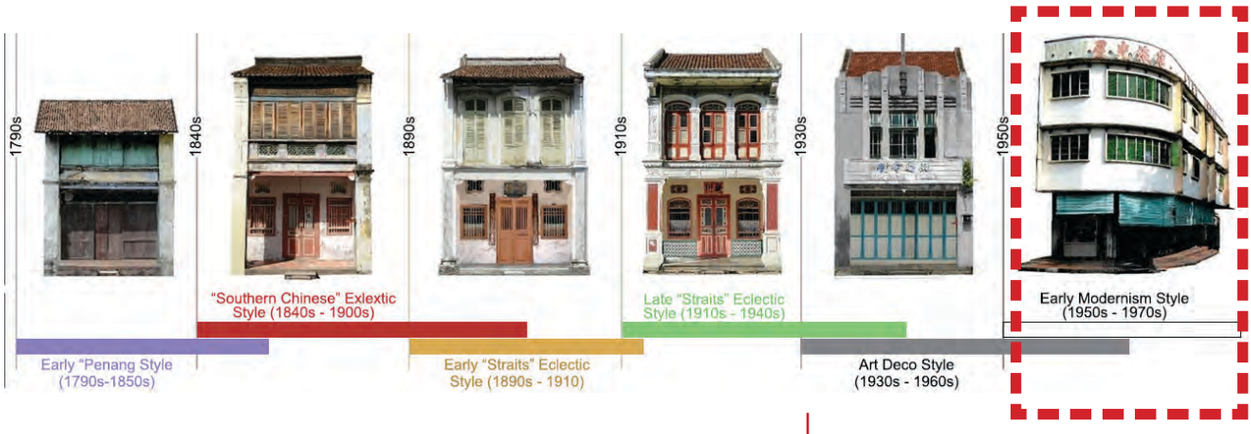
4.6 Early Modern - People's Court

Walk-up residential blocks, commercial ground floor and three floors of apartments.

End stairwell for good ventilation – Open corridor five-foot-way (see right block) for circulation, playful inset balcony and ventilation block wall on the main façade creating a check board look.



People's Court



In reference to the shophouse styles of the same period

5.0 Godowns

Godowns or warehouses were probably the first buildings seen along the coastline looking from ship to the Eastern shore. They were the emblem of the transhipment trade, for storage and safekeeping of goods from around the region and further afield on which fortunes would be made.

In 1801 when Leith encouraged the building on the reclaimed mud flat of Beach Street, reclamation began in earnest for godowns and the administrative offices of the trading companies. Even as early as 1811, the images by Wathen show, the godowns were of solid brick construction. These buildings began to spread further and further out into the sea, until the Administration of the day decided to build Weld Quay as the final line of reclamation.

The godowns continued to stretch huge lengths from Beach Street to Weld Quay until the 1920s when Victoria Street was built and cut many of them in half.



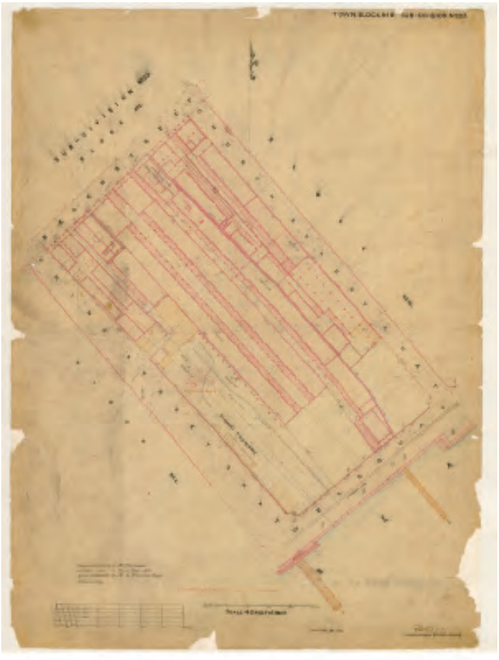
Early Penang Godown 1811

The godowns have been added too, cut in half and changed as new technologies have been introduced over the years.

Once a neglected building form, it is now becoming more appreciated as current research is revealing buildings and techniques of great interest. This research will still continue.



The 1877 map above shows the reclamation works for the construction of Godowns



1891 Revenue Surveys - show Beach Street to Weld Quay and Jetties

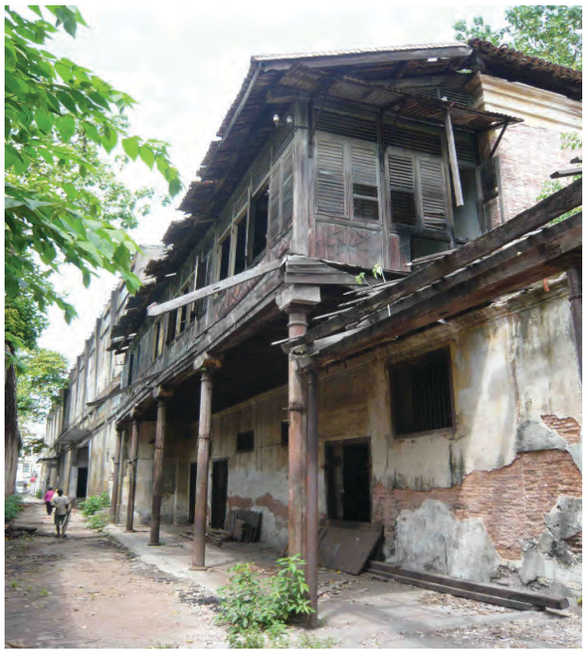


Early Penang Godown - on 1877 map, later cut in the 1920s for Victoria Street, brick, lime mortar and original V-shaped tiled roof





Granite pathways between the godowns - a tough low maintenance surface. These pathways still exist and should be retained as a memory of the past



Godowns - 1877 map and 1891 map - solid brick work, lime concrete floors, lime mortar and lime plaster walls with later addition of 1880s cast iron columns and timber gallery to first floor





Godowns - 1877 map and 1891 map -
Left - godown of solid brick-work, lime concrete floors, lime mortar and lime plaster walls - roof extended out onto masonry pillars, suggested and earlier godown than the one on the top right, which uses iron brackets to support the roof, circa 1880s





1912/ 1914 Godowns on Weld Quay – only the right remains today.



1920s Godowns on Victoria Street – still in active use



Interior of 1920s Godowns on Victoria Street



The first Reinforced Concrete godown to be designed and built in George Town

Art Deco Industrial - 1929

"The godowns are designed to speed up godown work and to eliminate the human element as far as possible. They will be fitted with electrical overhead travelling cranes which are being installed in order to reduce labour to a minimum."

Straits Times 31 August 1929

6.0 Buildings of Commerce and Trade

The influx of European architects and engineers matched the growth of commerce and the design to build prestigious buildings. They took on a more European/ Colonial appearance, seen from Calcutta to Canton. Some were built new and others 'grew' out of existing shophouse architecture.

6.1 Straits Classical

Straits Classical 1892 (Early Straits Eclectic period)
Rusticated base with archways, full height openings with pottery balustrades and alternating curved and triangular pediments, pilasters parapet wall are all typical classical elements. The symmetrical frontage has the central section projecting forward slightly.



Straits Classical 1892 (Early Straits Eclectic period) - Godown warehouse below and Boustead offices above

"It has a frontage on Weld Quay of 95 feet, along which, of course, it provides a five-foot-way. It is built of brick on a cement concrete foundation, which has been previously piled... The roof is of slate: and the beams and columns are of wrought iron in case of settlement of foundation.
The ground floor...floored with granite"

Straits Times Weekly Issue 13 July 1892

Straits Classical 1905 (Late Straits Eclectic period)
Classical architectural elements – the symmetrical pediment columns and archways – but with a tower to one site – suggesting a further eclectic style.

Five-foot way for the tropical streetscape, and originally Chinese temple tile roof.

Built as a bank on the ground floor, with commercial "chambers" above for rental to other businesses – the first office block!



9 Lebuh Pantai, a Straits Classical 1905 (Late Straits Eclectic period) building of commerce for the RBS bank

Straits Baroque 1923 (Late Straits Eclectic period)
Classical architectural elements mixed with other features, notably a pitched roof, better for tropical rain. The chamfered corner and broken pediment were all playful rearrangements of classical design elements.

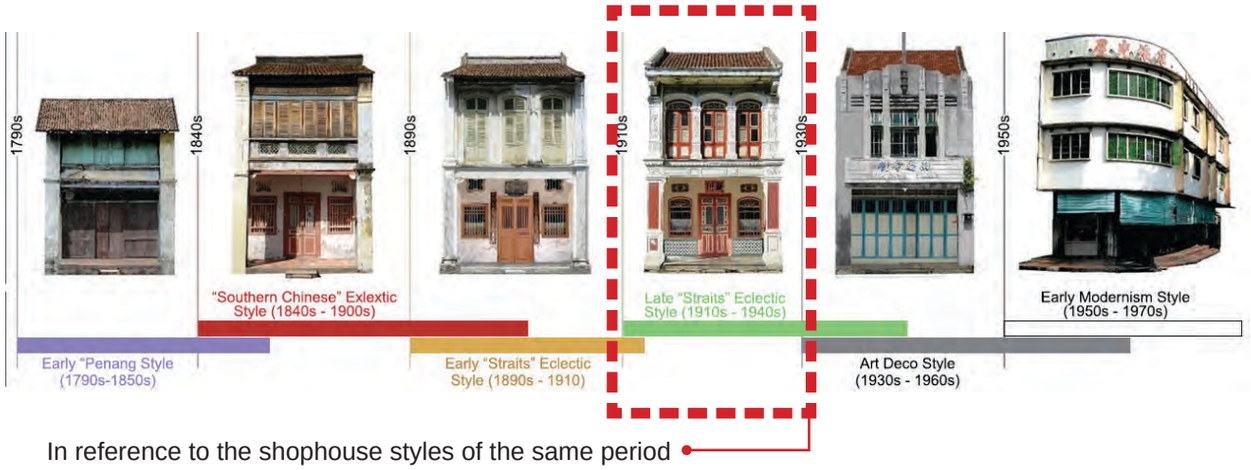
Five-footway for the tropical streetscape and original French Marseilles tiled roof on a truss system.

The windows were still timber louvres with top glass panes.

Built as a Dispensary on the ground floor with George Town Chambers on the upper floors.



Straits Baroque 1923 (Late Straits Eclectic period) - George Town Dispensary and Chambers



In reference to the shophouse styles of the same period

6.2 Buildings of Commerce & Trade

Art Deco 1938

A 1938 Art Deco façade using Shanghai plaster finish, steel framed casement and top hung windows, and simple lines with emphasis on the vertical using flagpole to emphasise the central stair well.

Internal building is a 1880s brick and lime mortar/ plaster three-storey shophouse of the Late Straits Eclectic Style.

Built for OCBC as a bank and office chambers. This building does not feature a five-footway.

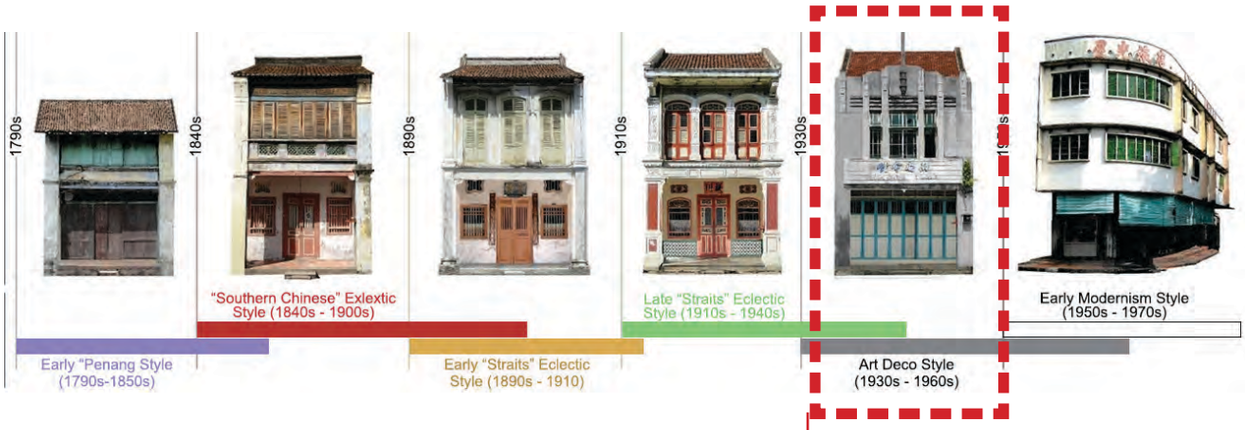


Art Deco 1938





An Art Deco building built for OCBC Bank



In reference to the shophouse styles of the same period

6.3 Art Deco Modern 1930s

Designed and built in the 1930s by one of the Chinese architects/ draftsmen from a European architects office.

Built for a bank with office Chambers above.

The size of the arch suggests reinforced concrete construction. Metal Casement windows with aqua blue obscured glass. The projecting cornice to the third floor is a strong Shanghai Art deco influence.



Art Deco Modern 1930s (with Shanghai Art Deco influences)



In reference to the shophouse styles of the same period

6.4 Early Modern

This Early Modern commercial building was built for the General Produce Agency in Penang Street. An RC construction, it is decorated in Mosaic tiles and used vertical fins across the main office space as sun shading, behind which are glass louvred windows.

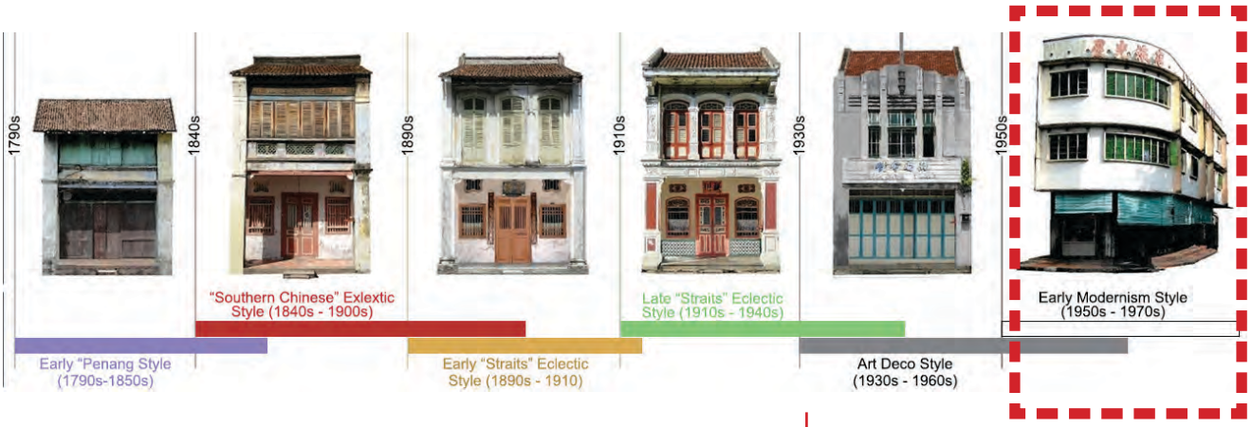
The facade is divided into three bays; the two vertical bays of precast vent panels are the stairwells (left and right).



Early Modern Building



Vertical fins as sun shading



In reference to the shophouse styles of the same period

7.0 Administration

The buildings of the Administration began with the building of Fort Cornwallis, shortly after the arrival of the EIC in 1786. Early buildings took reference directly from the urban layout and building works of Calcutta and Madras, following the architectural styles favoured by the EIC engineers. When the administration changed from that of a trading company to that of a colonial administration, the Public Works Department recruited engineers and assistant architects from the homeland, Britain. Many of these building stand today and are considered under Category I. The research is still ongoing.

7.1 Fort Cornwallis

As the biggest and the most intact fort in Malaysia, Fort Cornwallis was originally built with a nibong (palm trunk) stockade with no permanent structures. In 1804, the fort was rebuilt with bricks and stones by Indian convict labour during Colonel R.T. Farquhar's term as the Governor of Penang. Fort Cornwallis was later completed in 1810 during Norman Macalister's term as the Governor of Penang.



Circa 1786 Fort Cornwallis – sun dried clay bricks, lime mortar and lime plaster load bearing walls



1877 map showing Fort Cornwallis after 90 years

Early survey maps, old photographs and historical records of Fort Cornwallis have shown that the star-shaped fort was packed with buildings and structures including military barracks and offices, as well as a gunpowder magazine, a chapel, a harbour light, flagstaff, cannons, cell rooms, a store and guard houses; some of which still survived and are structurally sound. A 9m wide and 2m deep moat was built around the fort. However, due to the malaria epidemic in the 1920's, the moat was filled in. The harbour light was used to signal incoming ships whilst the flagstaff was used to announce the arrival of mail ships or the decent of the Governor and other dignitaries from Penang Hill.

7.2 Anglo Indian



Government House - Circa 1786
The Anglo Indian Style building has been altered considerably over many years, particularly when it became a convent school in 1852.
It is constructed from sun dried clay bricks, lime mortar and lime plaster load-bearing walls. The openings were timber louvres shutters.





Former Central Police Station and Courts - Early Penang, Circa 1850s (1874 renovated)
It is constructed from clay bricks, lime mortar and lime plaster load-bearing walls. The openings were timber doors with open ventilation fanlights above.
The E-shaped plan and Tuscan columns supporting triangular pediments are typical of courthouse architecture.

7.3 1880 Early Straits Eclectic





The triangular pediment and arched upper porch were added later

A view from the field, shortly after it was completed in 1880. Brick, lime mortar, lime plaster construction with floor tiles similar to the Residency built around the same time. Either side of the porch the inside of the building was open to the elements, creating a verandah way – later used for two new stair cases – the original entrance and grant staircase led from Duke Street.



Tall louvred shutters help ventilate and keep the building cool

7.4 1890 Straits Classical - Courts Administrative Building (The Immigration Department)



The Immigration Department

Rusticated ground floor archway wall, classical parapet with pottery balusters. Constructed from clay bricks, lime mortar and lime plaster load-bearing walls. Possibly designed to have open galleries on two floors creating a sheltered walkway.

7.5 1903 Straits Baroque



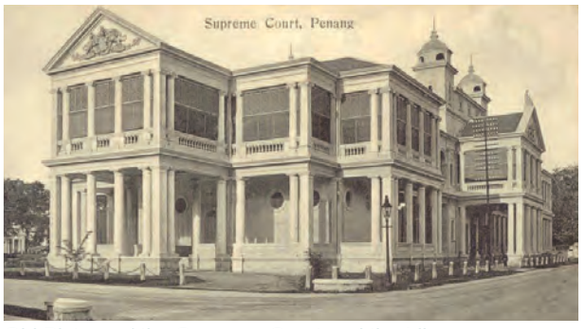
(Above) Old Picture of the City Hall Building and (Below) the present City Hall building



City Hall

Constructed in 1903 from clay bricks, lime mortar and lime plaster load-bearing walls and possibly reinforced concrete structure, the original design of the City Hall was intended to have open galleries on both floors. Today, the timber framed, glazed windows of the projecting wings have been copied for the filling in of the once open galleries.

7.6 1905 Early Straits Eclectic



Old Picture of the Supreme Court and the Library



Current Picture of Supreme Court and Library

Penang High Court and Library

The Penang High Court building and the Library were designed in 190; the Public Works Department commenced construction in 1905. It is constructed from clay bricks, lime mortar and lime plaster load-bearing walls. Originally the walkways between the courts on the first floor were open verandahs. The projecting upper rooms below the triangular pediments were also open, but later timber louvres were added.

7.7 1960 Early Modern



Bangunan Tuanku Syed Putra (State Government Building)

The reinforced concrete (RC) construction building appears to be floating above the long single storey podium building and screened by tall three dimensional vertical louvres.

The set back behind the grid of sun shading of the main facade is a wall of coloured glass and clear glass panels in red and yellow.

The rear and side elevations, show the vertical columns and horizontal beams with recessed in fill panels.



Bangunan Tuanku Syed Putra

8.0 Places of Worship

At the heart of all the communities in George Town are places of worship. Each building has a distinct style relevant to the community and cultures for who it was dedicated. On these following pages is a collection of a few main sites and a brief description. As centres of community as well as examples of unique architectural styles they are identified as Category I buildings. Further research has been undertaken and archives discovered.

8.1 Mosque

Kapitan Keling Mosque

Kapitan Keling Mosque along Jalan Masjid Kapitan Keling was named after Caudeer Mohudeen, the head of the Indian Muslim commtunity credited to have built it around 1800. The name "Kapitan Keling" is used to denote the headman or leader of the South Indian Muslim community. He was the first Superintendent of the mosque, and brought in builders and materials from India. The mosque was remodelled in the year 1916 to its present appearance. The exterior is painted ochre yellow while the interior had white marble floors and a high ceiling. The interior aisles are formed by a series of horseshoe arches, crowned with King Edward's plaques. The façade of the building and its interior are decorated with geometric designs.



Kapitan Keling Mosque, land granted in 1801, mosque remodelled in 1916, restored 2002 sited on Pitt Street, now called Jalan Masjid Kapitan Keling

8.2 Chinese Temple

Kuan Im Temple

Kuan Im Teng, or Temple of the Goddess of Mercy, is one of the most important temples in Penang. Officially known as Kong Hock Keong, it is located along Jalan Masjid Kapitan Keling, formerly Pitt Street, and is one of the oldest Chinese temples in George Town. The temple's architecture takes reference from the Souther Chinese temple architecture from Fujian.

Kuan Im Teng continues to be one of the most popular temples among the Chinese taoist community of Penang, and throngs come to worship here, especially on Temple Days, which fall on the first and fifteenth of every lunar month, and on the Goddess of Mercy's feast days, which are on the 19th day of the 2nd, 6th and 9th months of the lunar calendar.



Hokkien style temple architecture - Kuan Im Temple - dedicated 1802, Pitt Street

8.3 Hindu Temple

Sri Mahamariamman Temple
Situated at Lebuh Queen, Sri Mahamariamman Temple was built in accordance with the saiva agamas with an antechamber, a hall, circumambient dome, surrounding walls and an entrance.



Hindu, Sri Mahamariamman Temple was built in 1833, Queen Street

The complexity of Hindu mythology is reflected in the sculpture gopuram, which is over 23 feet high and features 38 statues of gods and goddesses and four swans over the entrance. It is from this temple that the Navarathri procession starts every year. Built in 1833, this temple is dedicated to the Hindu goddess Sri Maha Mariamman. Historically, it catered to the Tamil community of traders and stevedores originating from South India.

8.4 Church

St. George's Church
St. George's Church is one of the oldest Anglican Church in Southeast Asia, built in 1816 with the help of the EIC during Colonel J. A. Bannerman's term as the British Governor of Penang. It features a Grecian columns and pediments on its front facade, and a rotunda across the main building. The brick structure has a solid plastered stone base, a gable shaped roof for the tropical climate, and an octogonal-shaped steeple.

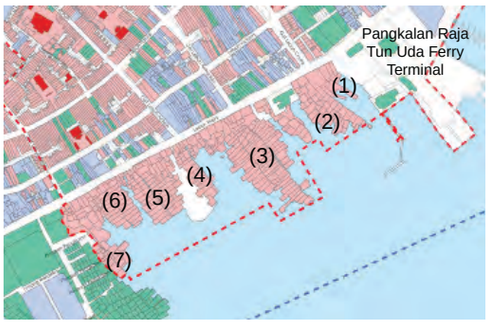


St. George's Church, 1818, EIC Anglo Indian Farquhar Street

9.0 Jetties

Pointing out like fingers into the sea in a fishbone layout, each of the clan jetties represent a major Chinese family clan name. Built on stilts over the water, these jetties have existed for almost a century. Although the architecture has evolved and new materials have been used to build the houses, the general construction method remains the same. These include timber floors, walls, either vertical or horizontal ship-lap planking and in some cases still an attap (thatched) roof.

There are seven jetties in George Town WHS: Ong, Lim, Chew, Yeoh, Lee, Tan and a mixed clan jetty.



Jetties location: (1) Ong Jetty, (2) Lim Jetty, (3) Chew Jetty, (4) Tan Jetty, (5) Lee Jetty, (6) Mixed Clan Jetty and (7) Yeoh Jetty



Traditional timber and attap roof stilt house



Traditional timber and roof stilt houses shown in an old postcard



Lee Jetty.



Tan Jetty



ANNEXURE B

Planning and Design Guide for Public Realm

Annexure B
Planning and Design Guides for Public Realm

1.0 Introduction

Annexure B constitutes an integral part of the Special Area Plan with the aim of providing supplementary guidance for the preparation of detailed development and implementation proposals for the following Priority Areas of the George Town UNESCO World Heritage Site (WHS)

(**Figure 1** - Priority Areas for the Planning and Design Guide). The Priority Areas are:

A. The North Water front,

B. The East Water front - Port Area,

C. The Clan Jetties,

D. Jalan Masjid Kapitan Keling

Any development or implementation proposals for the Priority Areas are subject to the approval of the State Planning Committee (SPC) upon submission of detailed plans. These detailed plans should be based on the requirements of the Special Area Plan (in particular though not exclusive to Part D) and the Planning and Design Guides for Public Realm outlined in this Annexure. No further comprehensive new developments will be permitted in these areas until such detailed plans have been approved in full or in part.



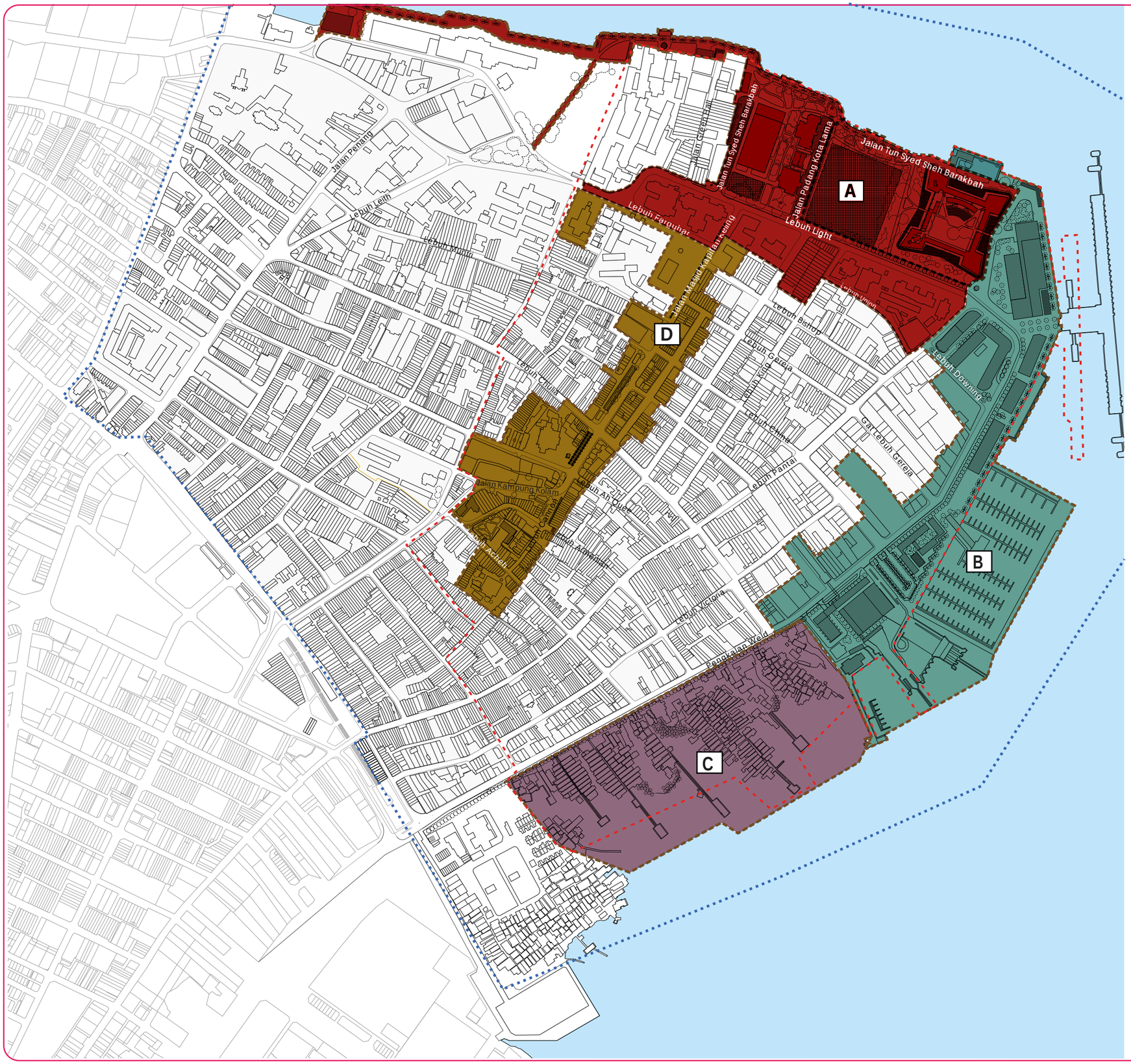
Figure B1.1 : The North Waterfront looking East.

The SAP Part C5-7 notes –

It is essential that upon the detail design and documentation of any landscape programs or any intervention to public spaces, that a Heritage Impact Assessment (HIA) is conducted, based on a case-by-case basis; to assess the impact of new intervention or development on the existing historic urban cultural landscape.

Figure 1

Priority Areas for Planning and Design Guide



Boundary of Sub-Area

Core Zone

Buffer Zone

A The North Waterfront

B The East Waterfront - Port Area

C The Clan Jetties

D Jalan Masjid Kapitan Keling

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The public realm or **historic urban cultural landscape** encompasses both the tangible and intangible cultural heritage of the WHS. These attributes are recognised in the UNESCO Criteria ii, iii and iv, which were acknowledged as George Town's OUV (SAP Part A- Signi□cance). The planning and design of the public realm, therefore, should ensure that the Criteria are respected, and that safeguarding the cultural, social and built heritage takes priority.

The historic value of the site should be the resource on which to build.



Figur e B1.2 : A C lan jetty looking towards the temple and the s ea

2.0 Priority Areas

2.1 The North Waterfront

Signi□cance :

The north waterfront and adjacent areas bear testimony (OUV Criterion iii) to the traditional town plan of an EIC ; the fort, the parade ground, the government house, the church all clearly demonstrate the EIC plan – its values and in□uences (OUV Criterion ii). As the settlement grew new buildings of governance were introduced: the magistrate's court, the courthouse, the town hall and later city hall. And as the settlement grew wealthier, its European 'crust' required areas for leisure. Thus, the cricket pavilion and club, and the cast iron bandstand were erected on the town □eld whilst a promenade was created along the north waterfront, lit by cast iron street lamps and lined with cast iron benches from Ponders End.



Figure B2.1: The esplanade, city hall and bandstand circa 1910

2.1.1 **Figure A1** - The North Waterfront - Existing Conditions - shows the boundary of Priority Area A. It also includes Category I and Category II buildings and features of special significance, as identified in the SAP Part C, Figure C3.3 which, together with buildings and sites categorised as in fill and replacement are subject to the special provisions of the SAP and other planning and design guides recommended in Annexure B.

Figure A1 - also indicates the area footprint (in square meters) of built up and green / open space, as well as that of each category of buildings or site, other structures and road networks.



Figure B2.2 : Detail from an early painting of the North waterfront titled - *View of the North side of George Town, Fort Cornwallis in the harbour of Prince of Wales Island in the Streights (sic) of Malacca.*

2.1. 2 **Figure A2** - identifies Priority Area A's five sub-area boundaries which will be subject to detailed planning. These sub-areas should include the principal design and improvement project components for the North Waterfront as listed;

i. Expanded waterfront walkway including paving, street furniture and public lighting;

ii. New surface car parking;

iii. New underground parking (if allowable following technical review & Heritage Impact Assessment);

iv. Restoration of the Padang Kota landscape and re-instatement of the bandstand;

v. Landscaping of various existing and proposed gardens (Light St Garden, Town and City Hall Garden, etc.);

vi. Improvement and expansion of public buildings (City Hall, Town Hall, Dewan Sri Pinang, State Museum);

vii. Re-instatement of old pathways and relocation of food courts and structures on public space;

viii. Improvement of Fort Cornwallis' presentation and visitor facilities;

ix. Re-organisation of Lebuh Light for pedestrians and public transport.

2.1. 3 **Figure A3.1** to **Figure A3.5** These Planning and Design Guides for each Priority sub-area outline building and open space use, as well as special treatment and other design guides. The sub-areas are:

A3.1 Farquhar Water fron t Promenade;
A3.2 Green Hall Promenade;
A3.3 Dewan Sri Pinang, Duke Street & Town & City Halls ;
A3.4 Lebuh Light and associated streetscape
A3.5 Padang Kota Lama



Figur e B2.3 : The Padang Kota, town eld where the cricket pavilion once stood and the spac e that the Japanese armed forces lled with warehousing and tramlines during their occupati on during WWII

2.1. 4 The recommendations highlighted in the Planning and Design Guides for each Priority sub-area are to be followed during the subsequent preparation of the detailed development or implementation proposal.

It is to be noted that the individual project locations and extent of recommendations shown in **Figure A3.1** to **Figure A3.5** are only **indicative** at this stage, pending further in depth research, in order to protect and enhance the attributes relating to the OUV criteria. This research and analysis will assist in the identi cation and justi cation of project components and locations, following which detailed plans will be drawn and submitted.



Figur e B2.4 : The Town Hall and garden with the working Victorian cast iron Fountain

Figure A1

The North Waterfront

Existing Conditions



Legends

- Boundary of North Waterfront
- Category I
- Category II
- Replacement
- In□II

Signi□cant Landmarks

1. High Court
2. Dewan Sri Pinang
3. Town Hall
4. City Hall
5. Fort Cornwallis
6. Queen Victoria Memorial Clock Tower
- Existing Trees

Footprint

Category I (22,929 sq.m.)

Category II (38,441sq.m.)

Replacement & In□II (11,222 sq.m.)

Built-up Space (72,592 sq.m.)

Green & Open Space (59,440 sq.m.)

Road Network (69,520 sq.m.)



Location of the A1 Development Action Plan

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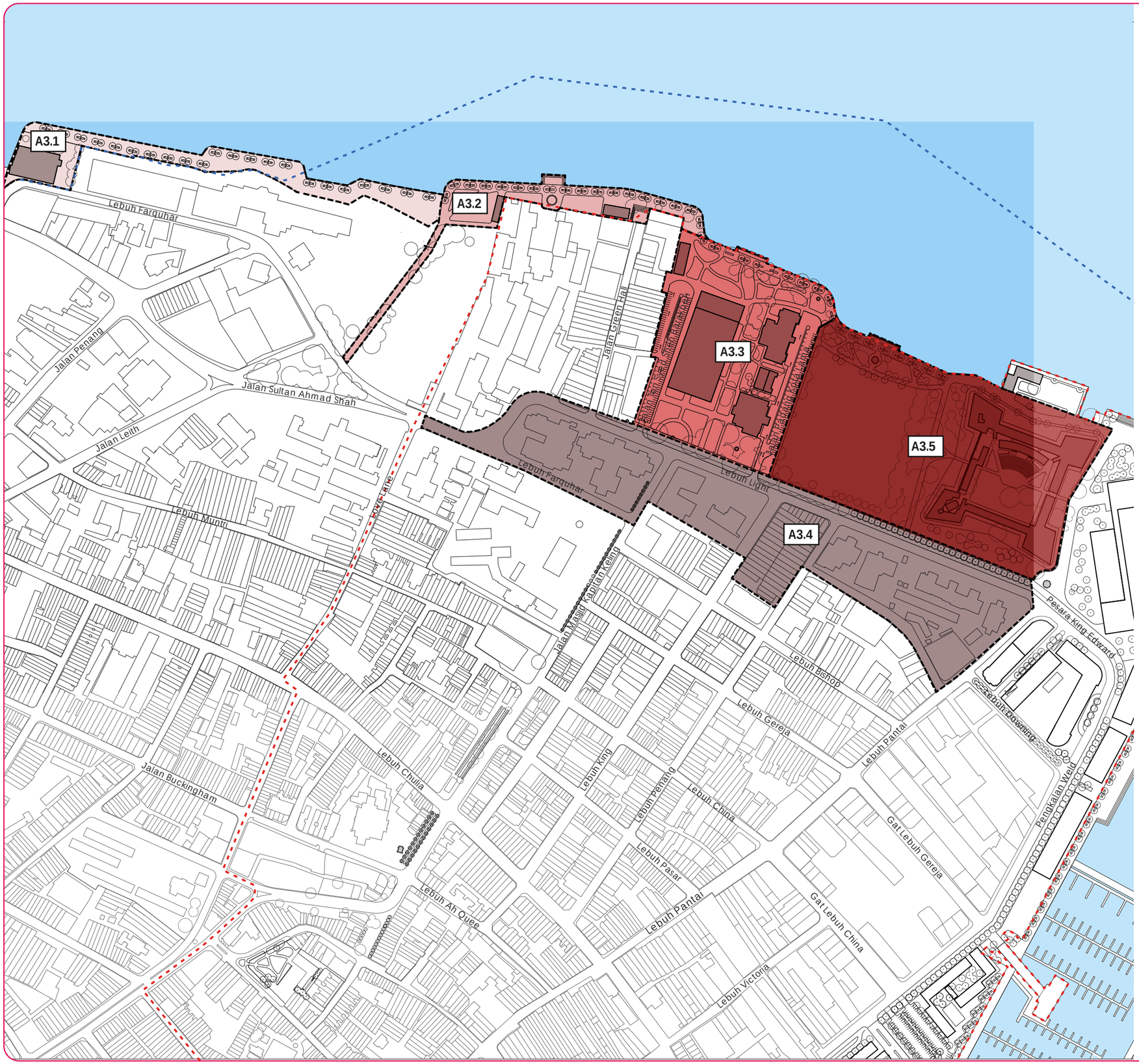
NOT TO SCALE

Figure A2

The North Waterfront

Planning and Design Guide



Core Zone

Buffer Zone

A3.1 Farquhar Waterfront Promenade

A3.2 Green Hall Promenade

A3.3 Dewan Sri Pinang, Duke Street, Town and City Halls

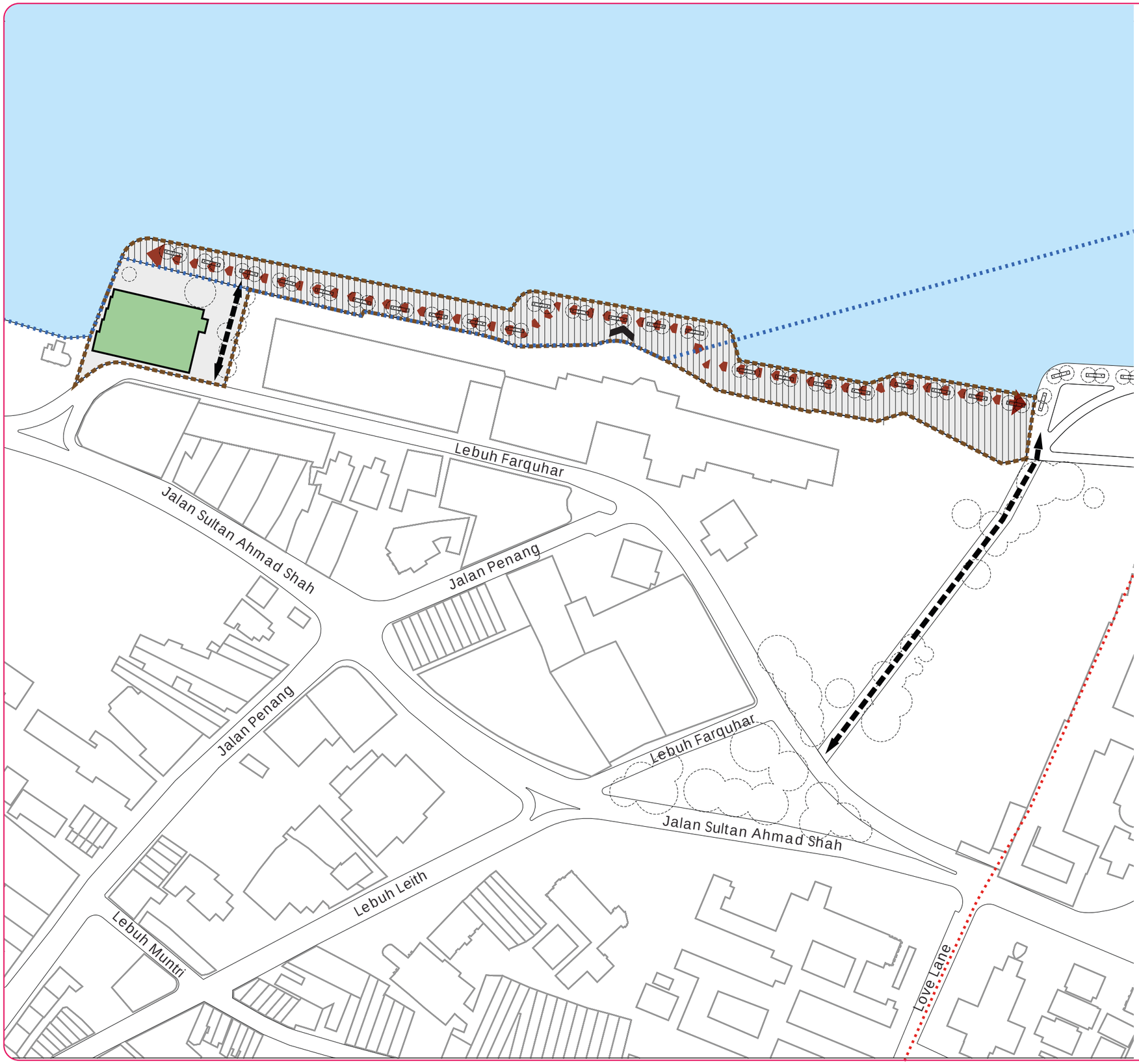
A3.4 Lebuh Light and Associated Streetscape

A3.5 Padang Kota Lama and Fort Cornwallis

Figure A3.1

Farquhar Waterfront Promenade

Planning and Design Guide



Boundary of Sub-Area

Core Area

Bu□er Zone

Existing Building

Replacement

Open Space

Promenade Extension

Continuous waterfront walkway

Viewing platform

Circulation & Access

Seafront Access Routes

U

NOT TO SCALE

Figure A3.2

Green Hall Promenade

Planning and Design Guide



Boundary of Sub-Area

Core Zone

Bu□er Zone

New Buildings

Income-generation (IG)

Open Space

Promenade Extension

Continuous Waterfront Walkway

Water Feature

Soft Landscaping

Viewing Platform

Circulation & Access

Seafront Access Routes

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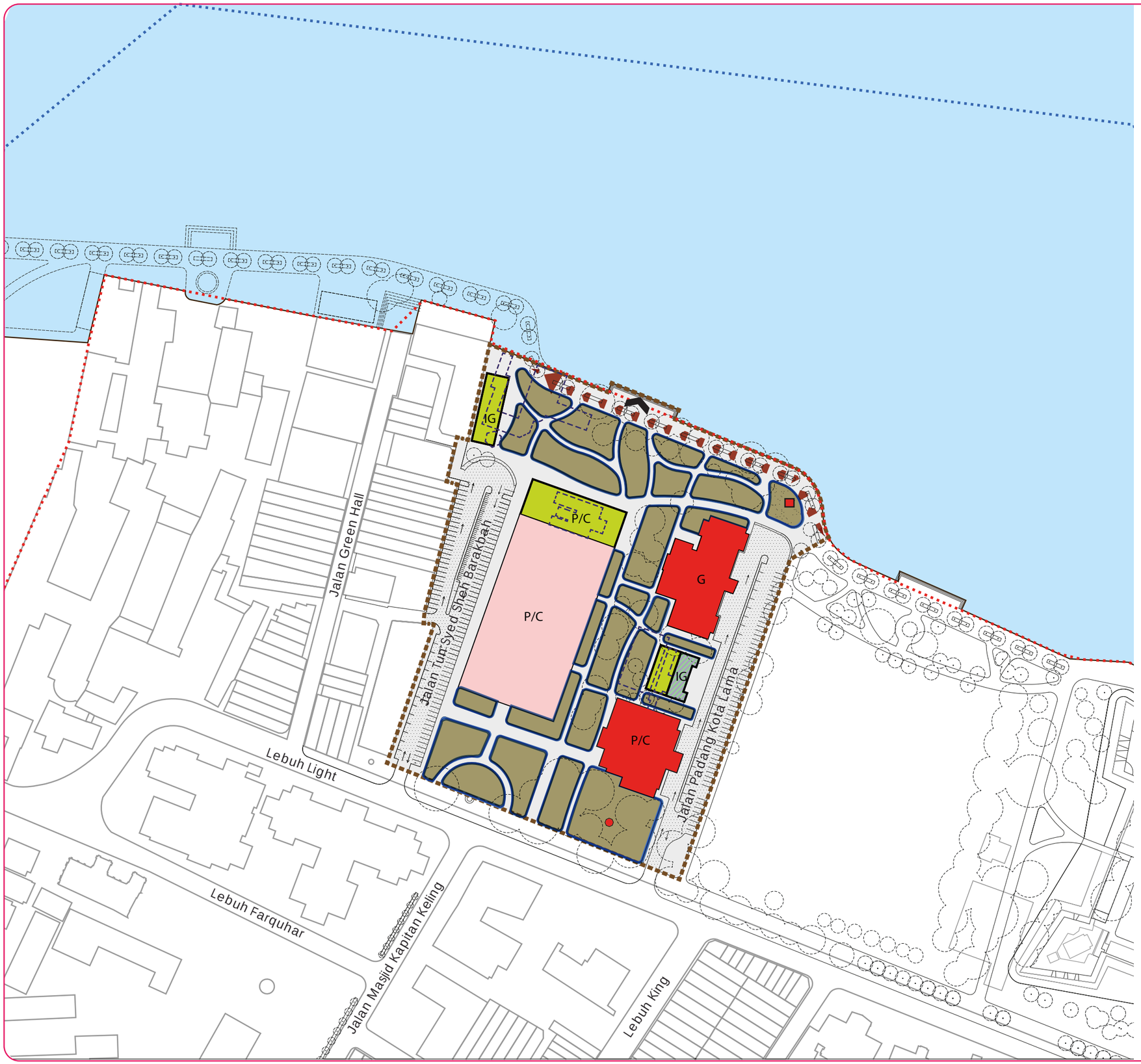
Figure A3.3

Dewan Sri Pinang, Duke Street, Town Hall and City Hall

Planning Design Guide



Boundary of Sub-Area

Core Zone

Buffer Zone

Existing Buildings

Category I

Category II

- Government (G)
- Public /cultural use (P/C)

Building/Structure to be relocated

Adaptive reuse of building
- Income-generation (IG)

New Buildings

- Public use (P)
- Public /cultural use (P/C)
- Income-generation (IG)

Open Space

Promenade Extension

Continuous Waterfront Walkway

Soft Landscaping

Hardscape

Viewing Platform

Existing Category I Water Feature

Car Parking

Surface Parking

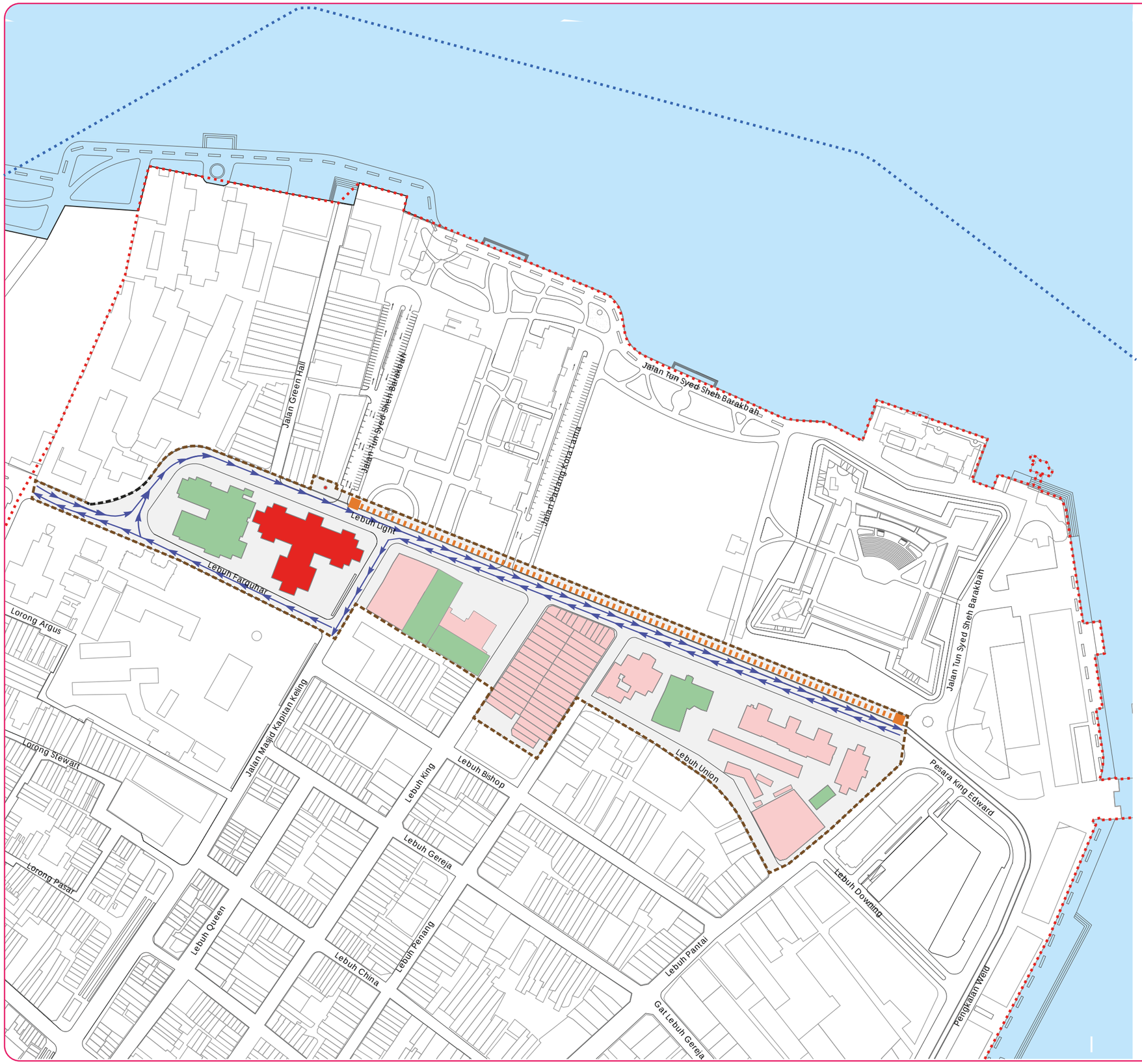
U

NOT TO SCALE

Figure A3.4

Lebuh Light and Associated Streetscape

Planning and Design Guide



Boundary of Sub-Area

Core Zone

Bu□er Zone

Existing Buildings

Category I

Category II

Replacement

Open Space

Public promenade

Circulation & Access

Tra□c Flow

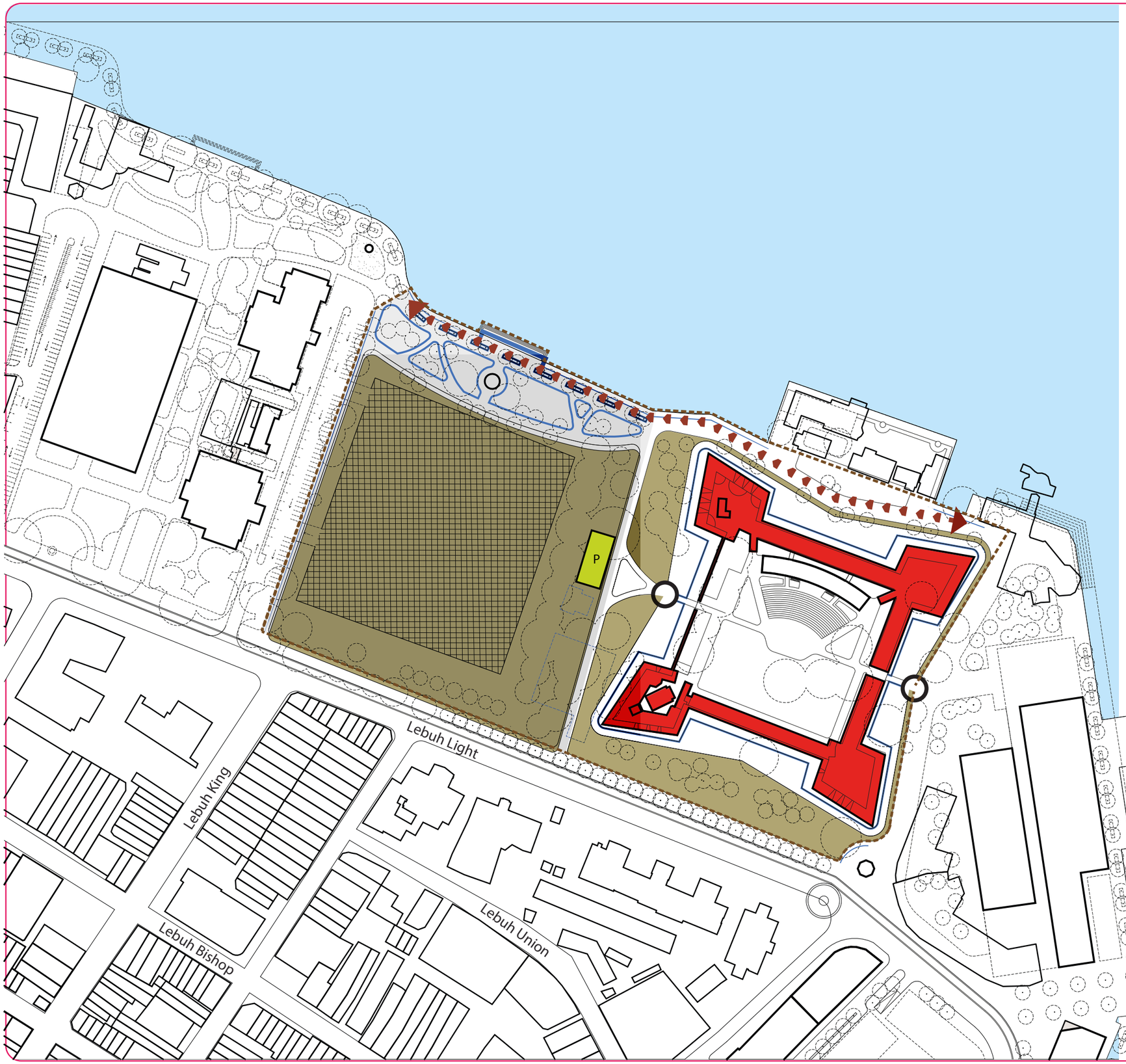
U

NOT TO SCALE

Figure A3.5

Padang Kota and Fort Cornwallis

Planning and Design Guide



Boundary of Sub-Area

Existing Building

Category I

New Building

Public Use (P)

Open Space

Soft Landscaping

Hardscape

Possible Underground Parking

Continous Waterfront Walkway

Access Point

U

NOT TO SCALE

2.2 The East Water front – Area B - Port

Signi□cance :

The east waterfront, which includes the Penang Port and Weld Quay lined with godowns, bears testimony to the *raison d'etre* of the EIC settlement namely trade, and with it the global interchange of goods, values and in□uences (OUV Criterion ii).

First settled in 1786, by 1801 permission was granted to reclaim the east waterfront beach for godowns and wharfs and by the 1860s, the □nger developments of independent landowners were regularised by the building of Weld Quay.



Figure B2.5 : building the southern end of Weld Quay in 1884. The granite quayside still exists below the current road .

Adjacent to the port and Weld Quay were the government o□ces which formed a 'U' shaped block of buildings, establishing a dominant presence through their architectural style and form (OUV Criterion iii).



Figure B 2.6 : The old government o□ces 1937

Goods godowns stretched long distances from Weld Quay to Beach Street where merchants had their o□ces, creating a unique building typology re□ecting the vociferous land / sea re-claimers of the early trading settlement and the success of their enterprise (OUV Criterion iv).



Figure B2.7 : The European godowns, their facades exist today (National Archives UK □kr)

The area between the Government O□ces adjacent to Downing St and Church St Ghaut was principally the European Godown area. Grand monuments to trade were built beginning with the Boustead building in 1892.



Figure B2.8 : No 9 Weld Quay in the Asian area

Further south, the Asian-owned godowns began from Church St Ghaut and continued to the end of the Weld Quay wall, though the more prominent godowns were from Church Street Ghaut to Chulia St. The earliest Asia godown was owned by rice miller and entrepreneur Phuah Hin Leong at 9 Weld Quay

The buildings, their form, plan and setting therefore tell the social and cultural story of the site, their style re□ects the architectural in□uences and the materials used in both construction and decoration re□ected the outstretched arms of industrial nations' s trading networks.

Respect and enhancement of the history of Priority Area B therefore, will safeguard the Criteria ii, iii, and iv, through which the OUV of the site was established .

2.2.1 **Figure B1** - The East Waterfront - Existing Conditions - shows the boundary of Priority Area B. It also includes Category II bu ildings and features of special signi□cance, as identi□ed in the SAP Part C, Figure C3.3 which, together with buildings and sites categorised as in □ll and replacement are subject to the special provisions of the Special Area Plan and other planning and design guides recommended in Annexure B.

Figure B1 - also indicates the area footprint (in square meters) of built up and green / open space, as well as that of each category of buildings or site, in□ll areas or replacement buildings and other structures and road networks.

2.2.2 **Figure B2 -** identi□es Priority Area B's seven sub-area boundaries which will be subject to detailed planning. These sub-areas include the principal design and improvement project components for the East Waterfront - Port and Weld Quay area as listed:

i) Infrastructure upgrading and extension of the wharf at selected locations;

ii) Establishment of a continuous, unobstructed pedestrian promenade along the eastern shoreline in continuity with the promenade along the North Seafront;

iii) Re-organisation of the passenger terminal plaza and functional retro□tting of the associated facility;

iv) Adaptive re-use and expansion of the underused and vacant warehouses structures located along the seafront with the establishment of public and other income generating facilities;

v) Rationalisation of vehicular traffic along Weld Quay in the framework of a general re-organisation of circulation, with expanded car parking, inclusion of a tram system and improved pedestrian movement & crossings between the town and the Port Area;

vi) Completion of a façade improvements scheme and adaptive re-use of the historic structures along weld Quay.

vii) Structural re-conditioning and expansion of the Weld Quay Marina basin and general facilities;

viii) Re-organisation of the Ferry Terminal area with expansion of car parking and introduction of a tram depot and transport hub facilities.



Figure B2.9: Municipal survey showing the godowns stretching from Beach Street to Weld Quay and were later cut in half by the formation of Victoria St in the early 1900s

2.2.3 **Maps B3.1 to Figure B3.7** The Planning and Design Guides for each Priority B sub-area for the East Waterfront – Port and Weld Quay Areas, outline building and open space use, as well as special treatment and other design guides. The sub-areas are:

B3.1 Port Godowns & RMV Navy Reserve

B3.2 Old Government Office area

B3.3 Weld Quay – Quayside Godowns

B3.4 Weld Quay - Downing St to Church St Ghaut & godown streetscape

B3.5 Weld Quay - Church St Ghaut to Chulia St and godown streetscape

B3.6 Marina Area & Church St Pier

B3.7 Ferry Terminal Area

Figure B1

The East Waterfront Port Area

Existing Conditions



Boundary of East Seafront/Port Area

Significant Landmarks

1. Swettenham Pier
2. FMS Railway Clock Tower
3. Church Street Pier
4. Ferry Terminal

Existing Trees

Buildings

- Category II
- Rep lacement
- In□ll

Footprint

Category I

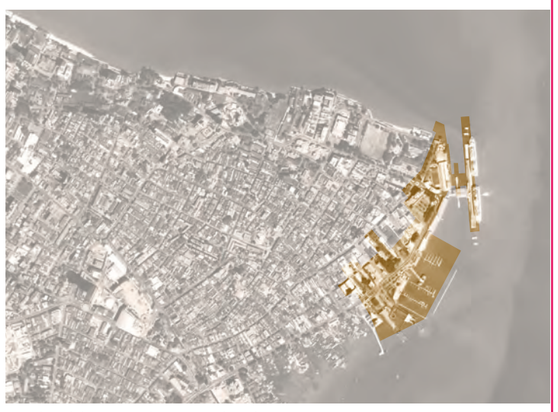
Category II (26,182 sq.m)

Replacement & Infill (37,721 sq.m.)

Built-up Space (63,903 sq.m.)

Green & Open Space(43,111 sq.m.)

Road Network (15,997 sq.m.)



Location of the B1 Develop ment Action P lan

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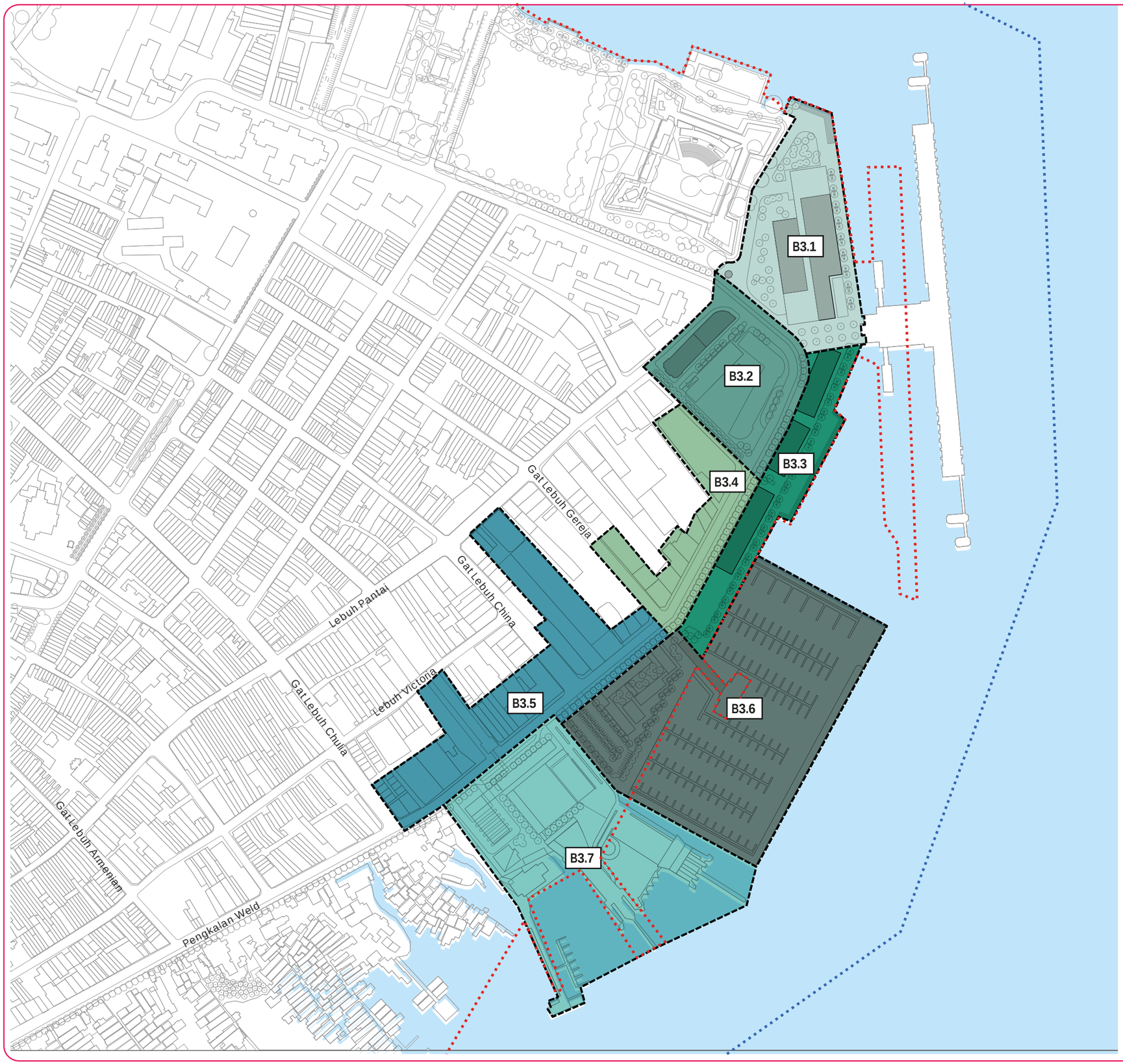
Figure B2

The East Waterfront/ Port Area

Identi□cation of Sub-Areas



Core Zone

Bu□er Zone

Zone Section

B3.1	Port Godowns & RMV Navy Re serve
B3.2	Old Government O□ce Area
B3.3	Weld Quay Godowns
B3.4	Weld Quay -Downing St to Church St Ghaut & Godown Streetscape
B3.5	Weld Quay - Church St Ghaut to Chulia St and Godown Streetscape
B3.6	Marina A rea & Church St Pier
B3.7	Ferry T erminal Area

U

NOT TO SCALE

Figure B3.1

Port Godowns & RM V Navy Reserve

Planning and Design Guide



- Boundary of Sub-Area
- Core Zone
- Buffer Zone

Existing Buildings

- Building/Structure to be replaced
- Adaptive reuse of building
  Public /cultural use (P/C)

New Buildings

- Public /cultural use (P/C)
  Income-generation (IG)

Open Space

- Promenade Extension
- Continuous waterfront walkway
- Water Feature
- Soft Landscaping
- Hardscape
- Viewing Patform

Circulation & Access

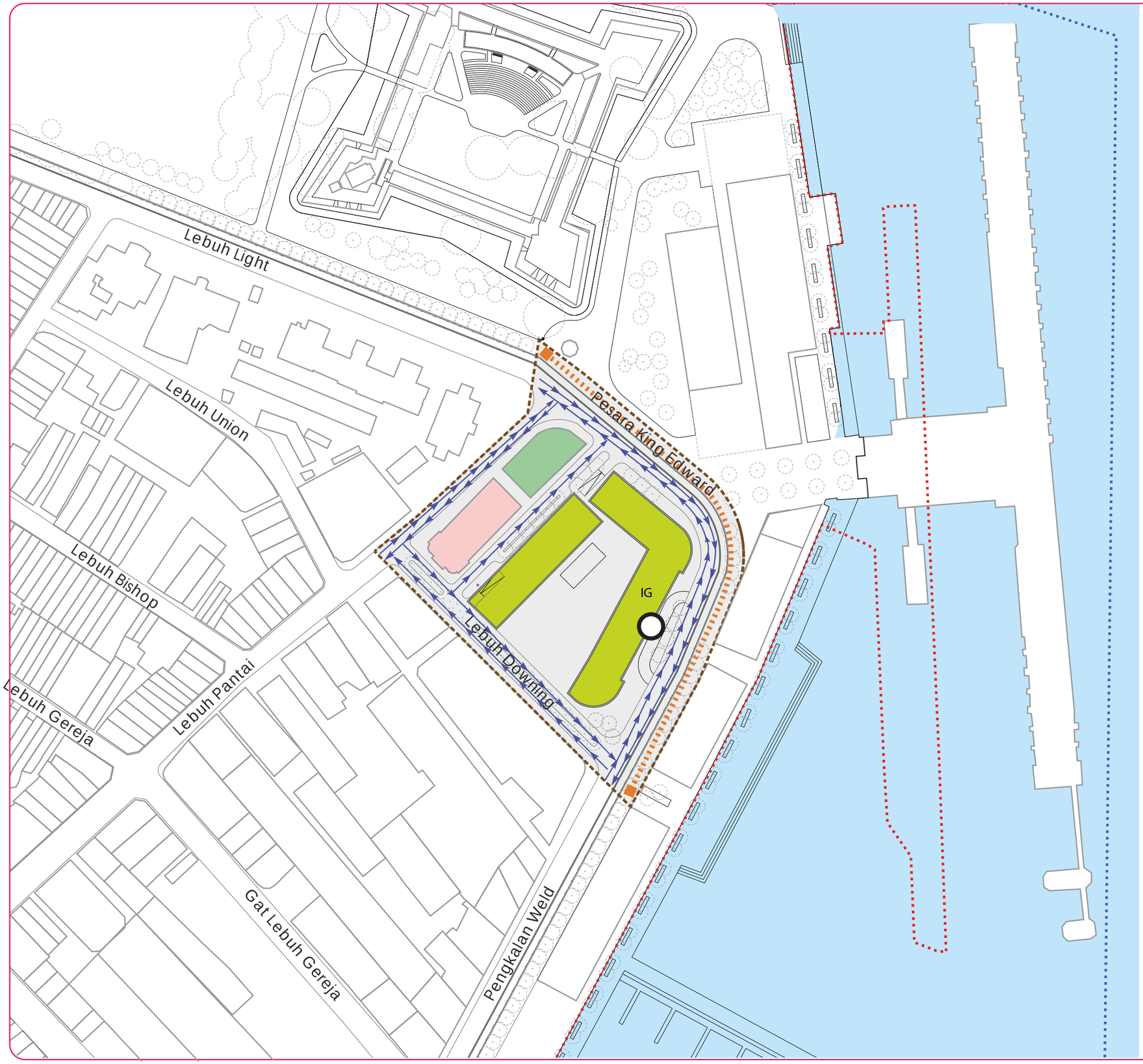
- Principal Access Point
- Building Access Point
- Entry Re-organisation
- Seafront Access Routes

NOT TO SCALE

Figure B3.2

Old Government Office Area

Planning and Design Guide



Boundary of Sub-Area

Core Zone

Buffer Zone

Existing Buildings

Category II

Replacement

New Buildings

Income-generation (IG)

Open Space

Public Promenade

Circulation & Access

Building Access Point

Traffic Flow

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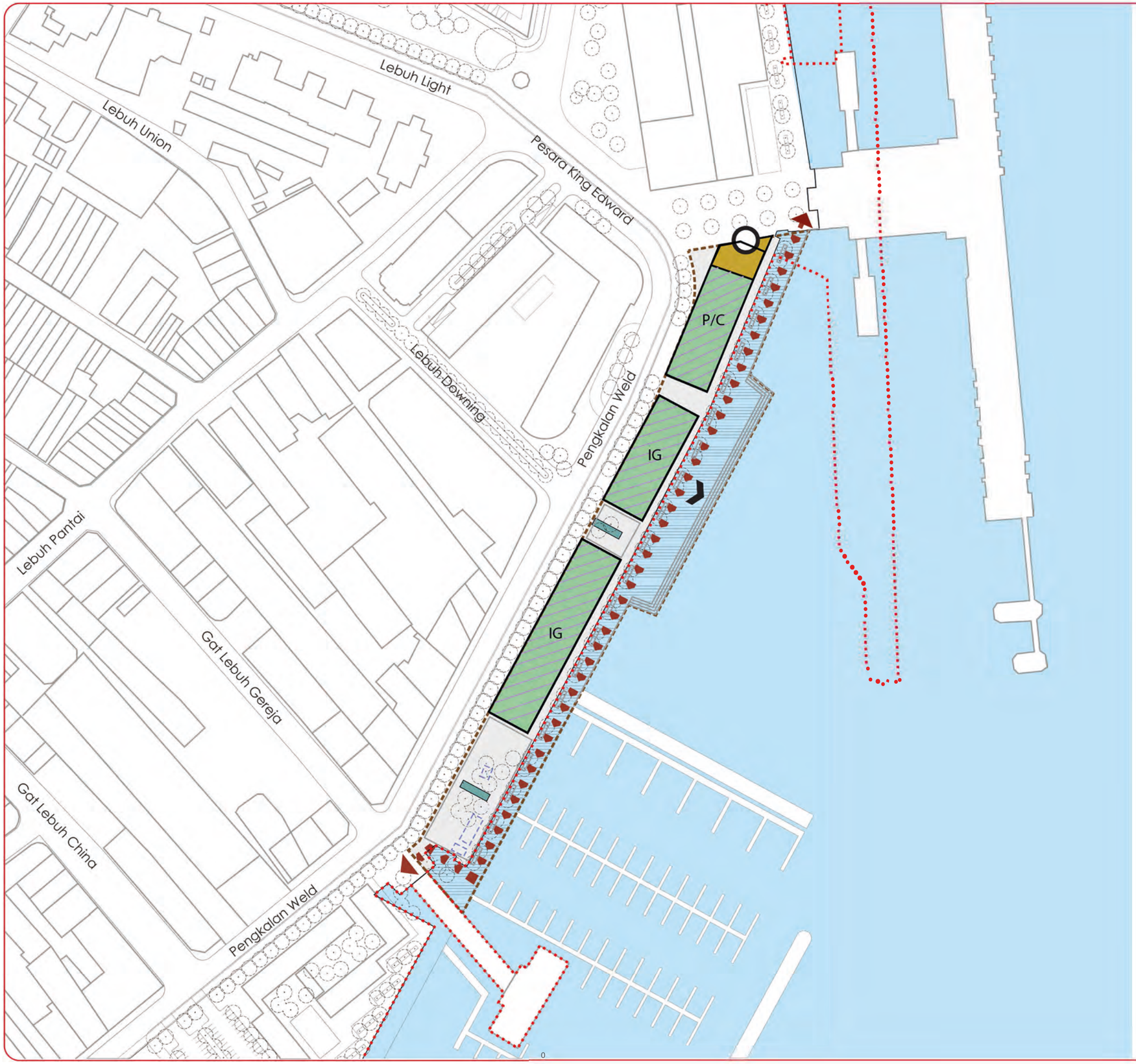
NOT TO SCALE

Figure 83.3

Weld Quay-Quayside Godowns

Planning and Design Guide



Boundary of Sub-Area

Core Zone

Existing Buildings

Building/Structure to be relocated

Adaptive reuse of building
- Public /cultural use (P/C)
- Income-generation (IG)

New Building

Open Space

Promenade Extension

Continuous waterfront walkway

Water feature

Viewing platform

Circulation & Access

Building access point

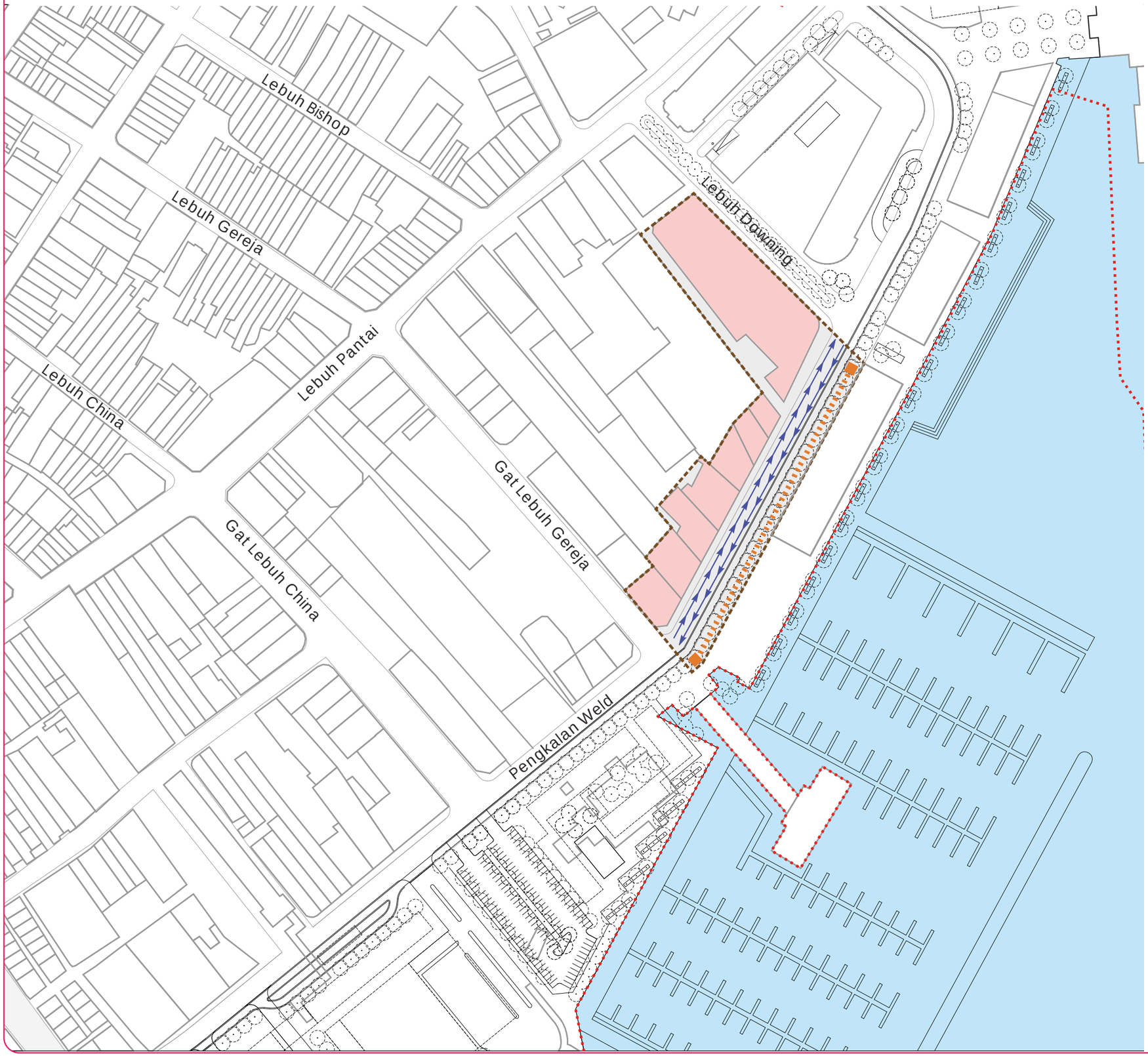
U

NOT TO SCALE

Figure B3.4

Weld Quay - Downing St To Church St Ghaut & Godown Streetscape

Planning and Design Guide



Boundary of Sub-Area

Core Zone

Existing Buildings

Category II

Open Space

Public Promenade

Circulation & Access

Tra□c Flow

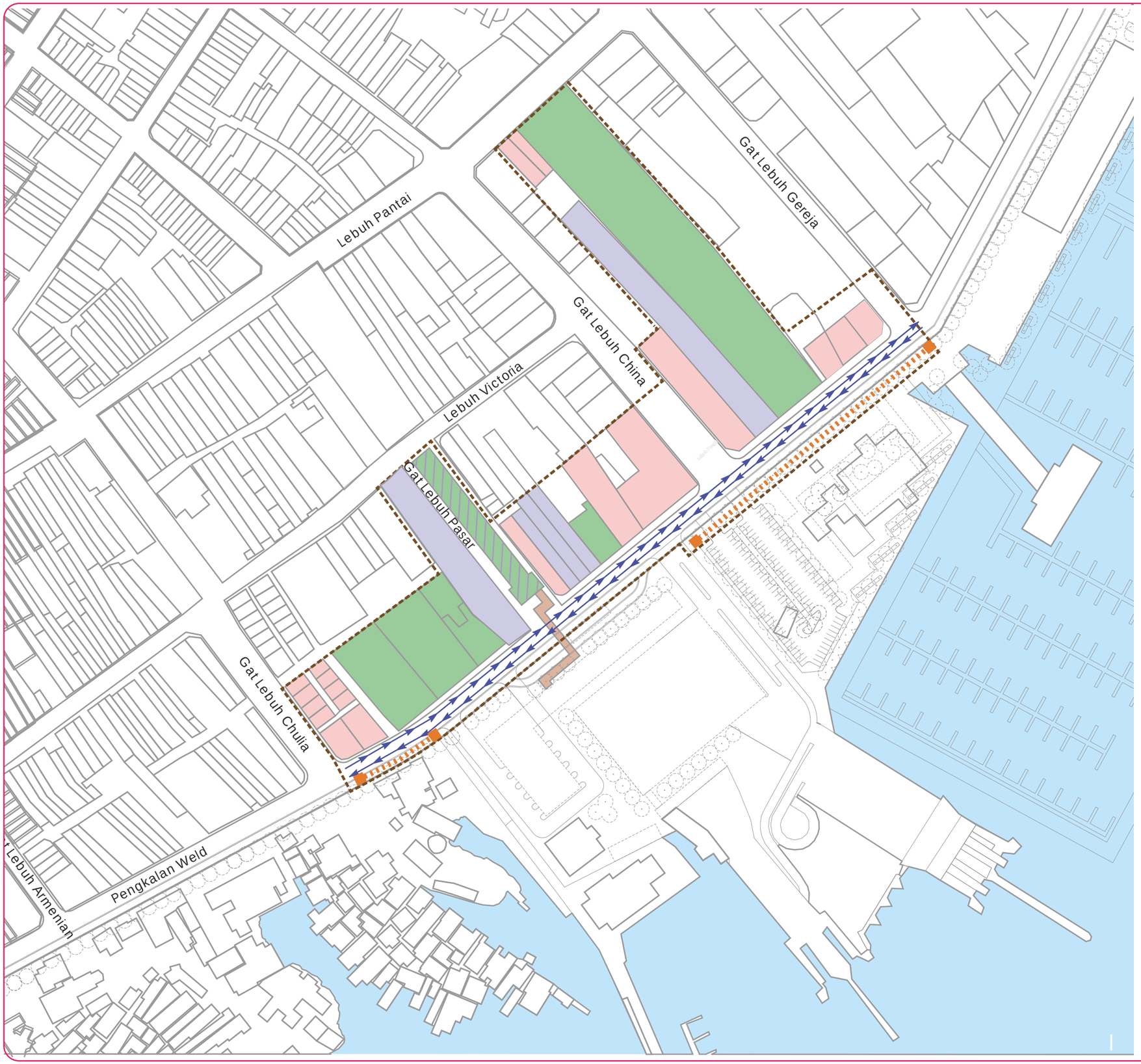
U

NOT TO SCALE

Figure B3.5

Weld Quay - Church St Ghaut to Chulia St & Godown Streetscape

Planning and Design Guide



Boundary of Sub-Area

Existing Buildings

- Category II
- Replacement
- Infill
- Adaptive reuse of building
  - Income-generation (IG)

Open Space

- Public promenade

Circulation & Access

- Traffic flow and/or roadway re-organised

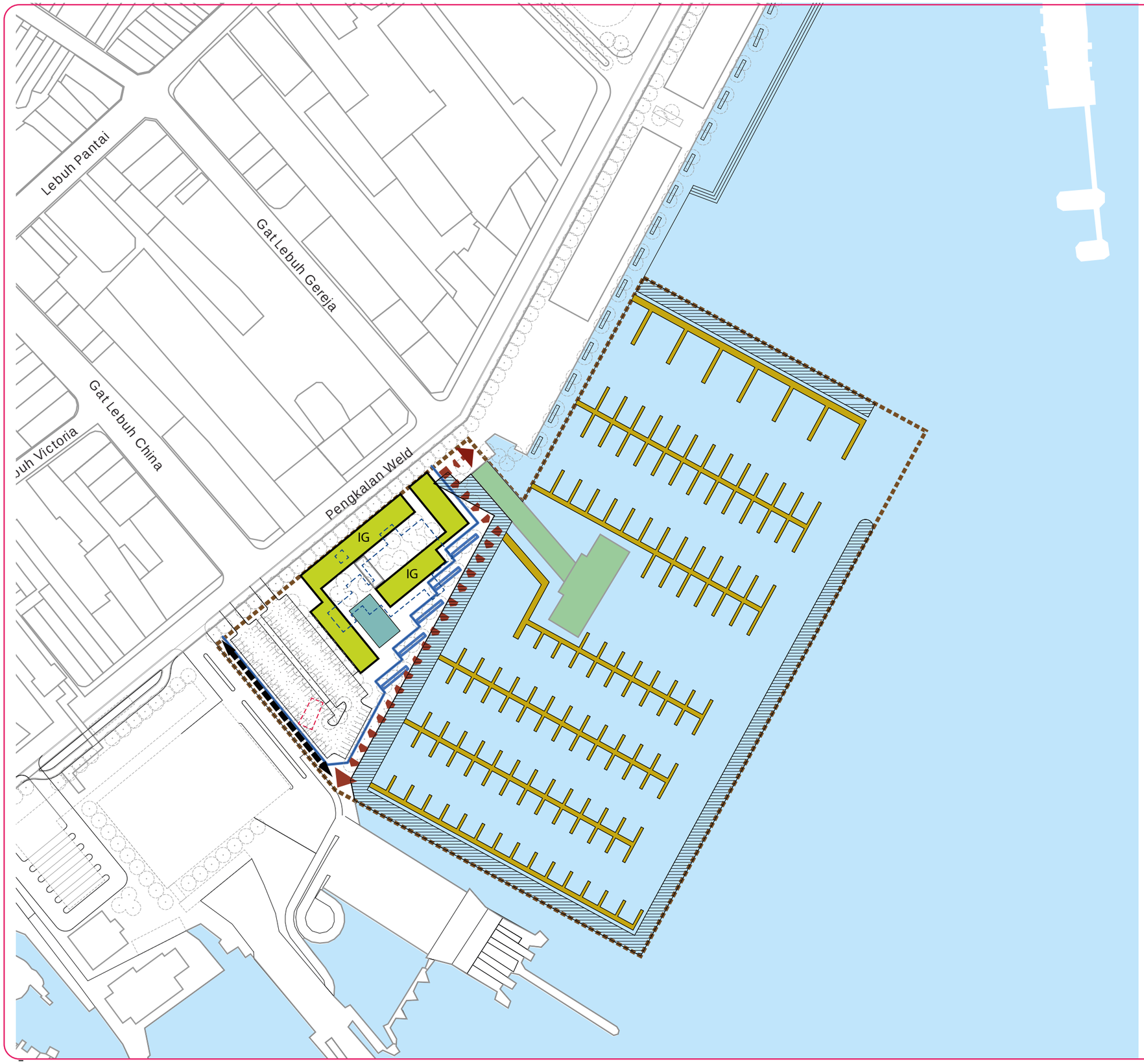
U

NOT TO SCALE

Figure B3.6

Marina Area & Church St Pier

Planning and Design Guide



Boundary of Sub-Area

Existing Buildings

Replacement

Building/Structure to be demolished

New Buildings

Income-generation (IG)

Open Space

Promenade Extension Continuous

Waterfront Walkway

Water Feature

Hardscape

Circulation & Access

Seafront Access Routes

Others

Surface Parking

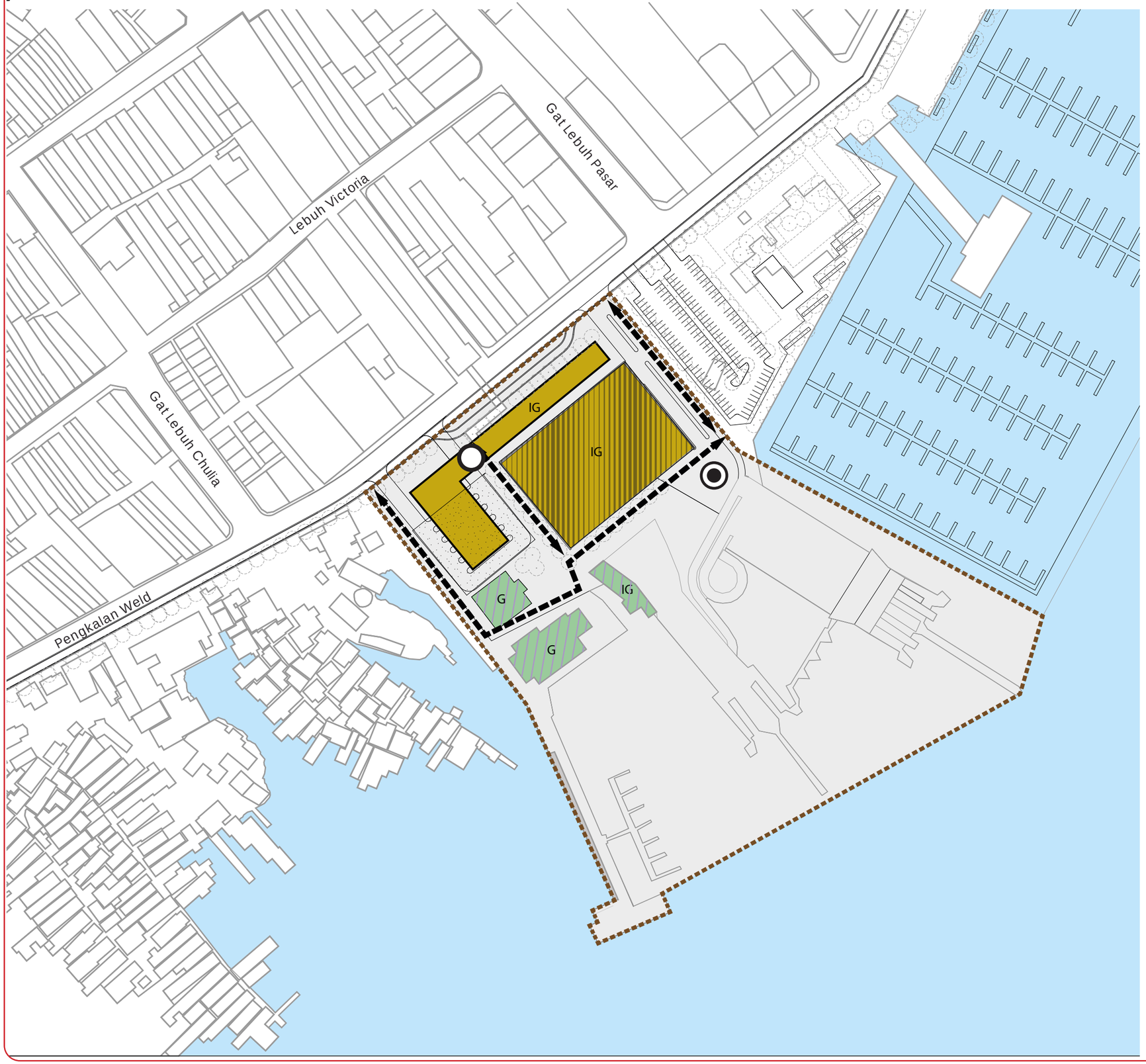
U

NOT TO SCALE

Figure B3. 7

Ferry Terminal Area

Planning and Design Guide



Boundary of Sub-Area

Existing Buildings

Adaptive reuse of building
Income-generation (IG)

New Buildings

Income-generation (IG)

Circulation & Access

Building Access Point Entry

Re-organisation Seafront

Access Routes

Others

Surface Parking

Multi-level Parking Garage

NOT TO SCALE

2.2.4 The recommendations, highlighted in the above Planning and Design Guides for each Priority sub- area, are to be followed during the subsequent preparation of the detailed development or implementation proposal.

It is to be noted that the project location and extent of proposals shown in **Figure B3.1** to **Figure B3.7** are only **indicative** at this stage, pending further in depth research, in order to protect and enhance the attributes relating to the OUV criteria. This research and analysis will assist in the identification and justification of project components and locations, following which detailed plans will be drawn and submitted.

2.3 The Clan Jetties – Area C

Signi□cance:

The clan jetties, each housing members of the same Chinese Clan surname from the same Hokkien villages in China, Project out into the sea.

Originally there were nine clan jetties built on stilt, however, the building of the ferry terminal removed the Lee clan jetty and the building of new high-rise housing in 2006 destroyed the Peng Aun and the Koay jetties - a unique community of Hui Chinese Muslims. Seven jetties now remain, from to south they are the Ong, Lim, Chew, Tan, Lee and Yeoh jetties, there is also an 'mixed surname'jetty to the south.

The timber jetty houses, passed down from father to son, are arranged in a □shbone layout with the jetty walkway built of timber planks serving as the major spine for access and communication.

Typically a temple, housing the seity brought from the clan's home village in China, is sited at the land and sea end of the jetty.Each Clan celebrates its deity's regular festivals and a major festival each year. The Chew jetty is now famous for the eloborate Jade Emperor celebrations. during 8th night of the 1st lunar month. The Lim Jetty celebrates the Hungry Ghost festival during the 7th lunar month and the Yeoh jetty celebrates the Nine Emperor Gods festival.Thus the communities, their deities and almanac of celebrations are an intrinsic part of the criteria from which the OUV was derived.

Each of the jetty clan communities has set up a system of self- management, looking after the tangible jetty and the intangible cultural heritage – the communities, the daily rituals, the festivals and celebrations.

Although many people now work on the island, the jetty communities still retain a commercial link with the sea.

The jetties we see today were formed after the building of the Weld Quay wall in the 1880s. However, early paintings depict timber stilt houses in the1800s.

The clan jetties therefore, demonstrate a signi□cant living cultural landscape re□ected in their history, community, traditional, cultural practises and tangible form. They contribute to the OUV of the George Town WHS recognised in UNESCO, Criterion ii,- their history, in□uences, values and settlement pattern, Criterion iii – their temples and shrines bearing testimony to their religious and traditional beliefs, and Criterion iv – their traditional building typology, supporting their way of life.

2.3.1 **Figure C1 - Existing Conditions – shows the boundaries of Priority Area C – the Clan Jetties. It include Category II buildings and features of special signi□cance to the residential community as identi□ed in the SAP Part C, Figure C3.3 which, together with buildings and sites categorised as in □ll and replacement are subject to the special provisions of the SAP and other planning and design guides recommended in Annexure B.**

Figure C1 – also indicates the area footprint (in square meters) of built up and green /open space, as well as that of each category of buildings or site, in□ll areas or replacement buildings and other structures and road networks.

2.3.2 **Figure C2 –** Planning and Design Guide identi□es Priority Area C's principal design and improvements components proposed for the Clan Jetties, which will be subject to community consultation and detailed panning.

In addition, the list below includes socio-economic initiatives. The latter do not have any speci□c location, but should be intended as general support policies aimed at generating employment and raising living standards in the area.

Altogether, the initiatives are:

i) Sewage and infrastructure upgrading;

ii) Housing rehabilitation;

iii) Creation of a community and exhibit centre;

iv) Access to loans and micro-credit support.

2.3.3 **Figure C2 –** Planning and Design Guide for Priority Area C – the Clan Jetties – outlines building and open spac e use, as well as special treatment and other proposed design guides. The Priority Area C comprise:

1) Lim Jetty
2) Chew Jetty
3) Tan Jetty
4) Lee Jetty
5) Yeoh Jetty
6) Mixed surnames Jetty
7) Interstitial seascape spaces
8) The Weld Quay and foreshore

2.3. 4 The recommendations highlighted in the Planning and Design Guides for Priority Area C - **Figure C2** are to be followed during the subsequent preparation of the detailed development and implementation proposal.

It is to be noted, however, that the project locations and extent of proposed works shown in **Figure C2** are only indicative at this stage, pending in depth research and community consultation, in order to protect and enhance the attributes relating to the OUV criteria and the signi□cance of this site.

The analysis of this research will assist in the identi□cation of project components and locations following which detailed plans well be drawn and submitted.



Figure B2.10 : The jetty walkway serves as a 'spine' for the community.



Figure B2.12 : The view platform for the clan deity bought from their ancestral home in China. Only the deity can look out to sea.



Figure B2.11 : Once a typical clan jetty house form, shiplap timber cladding on a timber frame on stilts, using an *attap* - thatched roof.



Figure B2.13 : Tourism is changing the jetties' *genus loci* , indicating the need for an impact assessment for any new proposal as stated in the SAP

Figure C1

The Clan Jetties
Existing Conditions



- Boundary of Clan Jetties
- Category II
- Repla cement
- Existing Trees

Footprint

Cat egory I

Cat egory II (43,229 sq.m.)

Repla cement & I nfill (82 2,17 sq.m.)

Built-up S pace (44,051 sq.m.)

Green & Open S pace (15,156 sq.m.)

Roa d Net work (7, 934 sq.m.)



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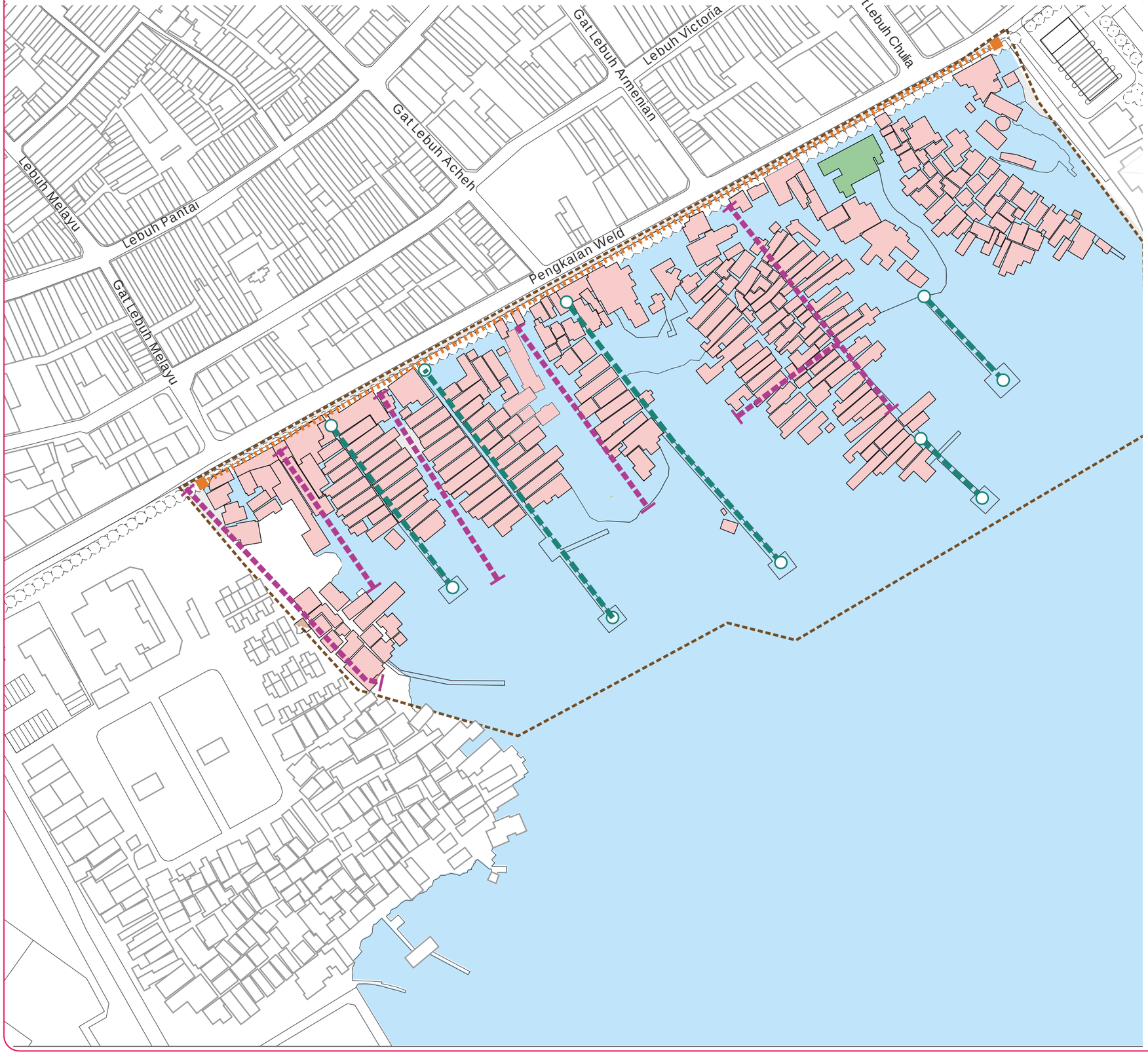
Figure C2

The Clan Jetties

Planning and Design Guide



Boundary of sub-area

Existing Building

Category II

Replacement

Open Space

Public Promenade

Possible Installation of Infrastructure

Circulation & Access

Improved Pedestrian Walkway

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2.4 Jalan Masjid Kapitan Keling – Area D – The Street of Harmony

Signi□cance

No other street within the UNESCO WHS, embraces the **OUV Criterion iii**, in the way Jalan Masjid Kapitan Keling is able to. It is the street where the four major religions of the world are represented in their religious sites – testimony of the peoples, their cultures traditions and religions that settled the island.

The street takes its post national independence name from Masjid Kapitan Keling, the Tamil Muslim Mosque, which was founded in 1801 on land granted by the EIC .

In the same year the Chinese Cantonese / Hokkien temple dedicated to the Goddess of Mercy - Kuan Yin, was founded along the street which was then know as Pitt Street after the British Prime Minister of the day.

At the Southern end, facing the Jalan Masjid Kapitan Kling, Masjid Melayu Lebuh Acheh is a key element in the street of religious sites. Founded in 1808, the Masjid Lebuh Acheh continues its a close relationship with the Masjid Kapitan Keling, as Friday prayers are conducted in one or other mosque on alternate Fridays.

Although already noted in Priority Area A, the Anglican church of St George the Martyr (built 1816-1819) cannot be excluded from the Street of Harmony, as Jalan Masjid Kapitan Keling has more recently been termed, as it heads the street to the north.

Finally, in 1833, the Hindu Mahamariamman Temple was founded on Queen Street, backing on to Pitt Street, completing the Street of Harmony.

Whilst the street forms a spine roughly north to south of the WHS, each religious site represents the tangible and intangible heart of their communities, with related residential and commercial occupations surrounding each site.

On this street it is possible to witness the historical and living, cultural, traditional, and religious makeup of the WHS. Thus it attributes to all three Criteria acknowledge as the OUV of the site.

The religious sites from north to south are:

i) St George's Church (18016-19)

ii) Kuan Yin Temple (1801)

iii) Mahamariamman Temple (1833)

iv) Kapitan Keling Mosque (1801)

v) Acheh Street Malay Mosque (1808)

2.4.1 **Figure D1** - shows the boundaries of Priority Area D the Jalan Masjid Kapitan Keling. It also includes **Category I** and **Category II** buildings and features of special significance, as identified in the SAP Part C, Figure C3.3 which, together with buildings and sites categorised as in fill and replacement are subject to the special provisions of the SAP and other planning and design guides recommended in Annexure B.

Figure D1 - also indicates the area footprint (in square meters) of built up and green / open space, as well as that of each category of buildings or site, other structures and road networks.

2.4. 2 **Figure D2 –** Planning and Design Guide for Area D - the Street of Harmony and Jalan Masjid Kapitan Keling - outlines building and open space use, as well as special treatment and other proposed design guides.

Altogether, the initiatives are:

i) Re-organisation of Jalan Masjid Kapitan Keling for improved traffic flow, safer intersections and dedicated lane for public transport;

ii) Wider walkways with trees, green median and shaded seating at selected locations;

iii) Facade and storefront improvement scheme on both sides of the road;

iv) Establishment of a pedestrian plaza at the south end of Jalan Masjid Kapitan Keling.

2.4. 3 The recommendations highlighted in the Planning and Design Guides for Priority Area D - **Figure D2** are to be followed during the subsequent preparation of the detailed development and implementation proposal.

It is to be noted, however, that the project locations and extent of proposed works shown in **Figure D2** are only indicative at this stage, pending further in depth research, in order to protect and enhance the attributes relating to the OUV criteria. This research and analysis will assist in the identification and justification of project components and locations, following which detailed plans will be drawn and submitted.



Figure B2.14 : The Masjid Kapitan Keling after which the street was named post 1957, National Independence



Figure B2.15 : The view south towards the Masjid Kapitan Keling, showing the "Gold Bazar Beautification" design elements 2004

Figure D1

Jalan Masjid Kapitan Keling

Existing conditions



Boundary of Jalan Masjid Kapitan Keling

Signi□cant Landmarks

1. Church of Assumption
2. St. Georges Church
3. Kuan Im Temple
4. Sri Mahamariamman Temple
5. Masjid Kapitan Keling
6. Masjid Melayu Lebuh Acheh

Existing Trees

Others

- Category I
- Category II
- Repl ac eme nt
- In□ll

Footprint

Category I (5,727 sq.m.)

Category II (26,073sq.m.)

Traditional Structures (1,063 sq.m.)

Other Structures (7,122 sq.m.)

Built-up Space (39,985 sq.m.)

Green & Open Space (18,814 sq.m.)

Road Network (20,451 sq.m.)



Location of the Development Action P lan

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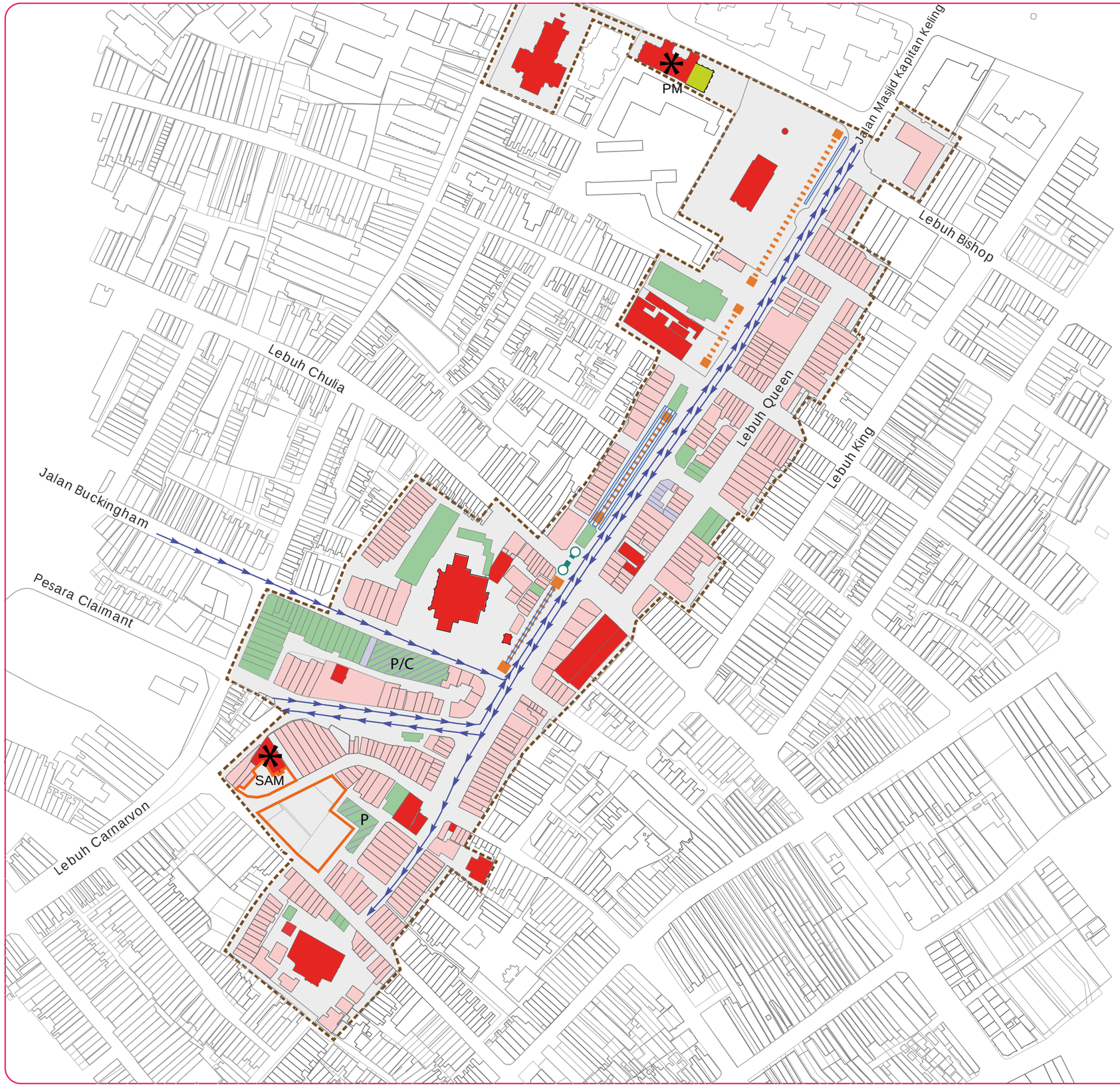
Figure D2

Jalan Masjid Kapitan Keling
Planning and Design Guide



Boundary of sub-area

Existing Buildings

- Category I
- Category II
- Replacement
- Infill
- Adaptive reuse of building
  - Public use (P)
  - Public /cultural use (P/C)

New Buildings

- New building
- Special heritage project
  - Penang Museum (PM)
  - Syed Al-Attas Mansion (SAM)

Open Space

- Public promenade
- Hardscape
- Open Space Improvement

Circulation & Access

- Traffic flow
- Improved pedestrian link

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Abbreviation

CCTV	Closed Circuit Television
CH	Commissioner of Heritage
CMP	Conservation Management Plan
DNH	Department of National Heritage
DPR	Development Proposal Report
DSR	Dilapidation Survey Report
GIS	Geographical Information System
GTGP	George Town Grants Program
GTWHI	George Town World Heritage Incorporated
HIA	Heritage Impact Assessment
HUC	Historic Urban Landscape
ICOMOS	International Council on Monuments and Sites
MPPP	Majlis Perbandaran Pulau Pinang
NHA	National Heritage Act
NHC	National Heritage Council
NHR	National Heritage Registrar
OUV	Outstanding Universal Value
PTATM	Penang Traffic And Transport Masterplan
SAP	Special Action Plan
SDBA	Street, Drainage & Building Act
SDTCPD	State Director of Town and Country Planning Department
SHC	State Heritage Committee
SIA	Social Impact Assessment
SPC	State Planning Committee
SPV	Special Purpose Vehicle
TNB	Tenaga Nasional Berhad
TPCA	Town and Country Planning Act
TRP	Technical Review Panel
UBBL	Uniform Building By-Law
UNESCO	United Nations for Education, Science and Cultural Organisation
VRV	Variable Refrigerant Volume
WHO	World Heritage Office
WHS	World Heritage Site