#### 1983 TECHNICAL REVIEW SUMMARY

Tanjong Jara Beach Hotel (TJBH) and Rantau Abang Visitors' Centre (RAVC) 395.

Kuala Trengganu Malaysia

A beach resort hotel and a museum/arts and crafts center on the Malaysian East Coast intended to provide international class accommodation and services to the local and international tourist.

Date of completion: 1980

The Malaysian Government through its Tourism Development Corporation (TDC) decided in 1976 to establish a beach resort hotel together with a museum and visitors center (near turtle hatching grounds) on the underdeveloped East Coast of Malaysia. The two projects though they are seperate physical entitites about 10 km apart, have the same owners/management and are conceived as part of an overall integrated and complimentary whole.

#### Objectives.

The objectives of the TJBH & RAVC projects were to initiate the provision of deluxe tourist accommodation for the international and local tourist on the culturally rich and physically beautifull but economically depressed East Coast of Malaysia. The determined motivations were:

- 1.1 To create a project in harmony with the surrounding environment, one which would not only "feel & lock right" but would also seem to be a natural, inevit— able outgrowth of the local elements --- the land, sea, mountains and the people who live and work there and their existing art and architecture.
  - In other words the primary objective was to use traditional forms local craftsmen and local materials and honour the essence of the traditional architectural heritage while meeting todays need.
- 1.2 To establish a mutually reinforcing relationship with the local community (by providing an impetus for ecomomic growth and an outlet for the creative and innovative effort of local resources, traditional crafts and culture).
- 1.3 To encourage respect for the conservation and preservation efforts for the natural sea life of the area.
- 1.4 To create a hotel staff training center for the hotel and travel industry and
- 1.5 To set the pace for future development in the area.

#### 2- Description of the Sites.

- 2.1 Location: Tanjong Jara Beach Hotel is located about 65 km south of Kuala Trengganu (capital of Malaysia's each coast State of Trengganu) or 13 km north of Kuala Dungun or 150 km north from Kuantan.
  - RAVC is located approximately 55 km south of Kuala Trengganu or about 10 km north of TJBH.
- 2.2 Access: TJBH can be reached by car in about 8 hours from K.L. or 2½ hours from Kuantan. Alternately, it takes an hours flight from KL to reach Kuala Trengganu from where one car drive for about an hour to reach the Hotel.

## 2.3 <u>Historical Background:</u> <u>Evaluation of Design Concepts:</u>

The design concepts for Tanjong Jara Beach Hotel and Rantau Abang Visitors Center were first proposed in a 1971 tourism study (Malaysia: Visitor Development Program) commissioned by the Tourism Development Corporation of the Malaysian Government, This master plan for the east coast of Malaysia, put together by a multidisciplinary team of architects, planners landscape architects and tourism management consultants, had recommended, resort-inn type accommodations that reflect relaxed, slower-paced atmoshpere of the East Coast for the area near Kuala Trengganu. The study recommended further:

"The architectural character for tourist facilities in Malaysia should reflect the very beautiful and sophisticated design exhibited by Kampong architecture which is so evident throughout both East and West Malaysia.

In the northern part of the country, flat roof tiles are featured which are both beautiful and practical and, in the areas where these are made, are surprisingly inexpensive. The finer traditional buildings exhibit the cabinet work approach of panels with slotted rails and styles in which metal fastenings are, in the older buildings, not known and are kept to a very minimum in more recent construction. The multiple pitch roofs, with double and sometimes triple peaks and long, sloping sheds from tall stilted buildings

down to the lower ground level enclosures makes for exceptional versatility and interest in these buildings".

However, the proposal to construct tourist accomodations at the Rantau Abang site (the very first a 10 rooms metal costing approx M\$ 1,80,000) was made in early 1960, predating the Tourism Study by almost a decade. The proposal fell through because of disagreement on the architectural design. The idea lay in cold storage till August 1973 when a local architectural firm called "Team Three" was appointed and asked by TDC to come up with a design for a 66-unit resort complex estimated to cost M\$ 1.8 million.

Ground breaking for this initial design took place in 1975. The design called for a cluster of onestory hexagonal units, of two guest rooms each. The design did not reflect anything Malaysian, nor did it relate to the site, and in fact was sited such that the during the rainy season the water level would rise above the ground level depicted for many of the units. One of the basic weaknesses was that the design was developed without an architectural program or a set of parameters and the predecessors of TDC went for the "modern" look. The unsuitable lity of the site became further evident when the tenders were floated in December, 1975 and the lowest of seven bids asked for M\$ 3.13 million.

In February 1976 the original design concept was abandoned and a new study commissioned.

It was at this time that the Tanjong Jara(meaning Maiden Cape") site was "discovered" and shown by an officer of the Trengganu District Government to TDC officials. These officials recognized

immediately the potential of the site. Years of talk and the publicity about the State & Federal Government wanting to create a tourist activity center at the site, had preceded the 1975 ground breaking cermony at Rantau Abang. The involvement of the State and the Federal Government, local consultants and the fact that the Mantri Besar (Chief Minister) of the State and himself performed the ground breaking ceremony made the whole affair very sensitive politically. Yet the TDC officials were convinced that the ideal solution for the resort hotel lay at the Tanjong Jara site. They also know that an alternate solution would be required for the original site and no cancellation would be possible because of the issues involved, the back-ground and sensitivity. TDC . subsidiary Pempena Consult, set up earlier to manage the hotel development program of TDC restudied the entire proposal and a fresh program was redone between February and June 1976. criteria for shifting the site away from Rantau Abang and scrapping the early motel design there was that the project had to stay in the State of Trengganu, and that it should stay in the Dungan The Bukit Besi iron mine traditionally a provider of employment and support for the economy of Duggan had recently closed; jobs were needed in the area.

The architect of the old design was met with, the new concept discussed and the proposal finally accepted included a new team of foreign Architects (WWAT&G) assisted by local architect who would undertake the project supervision on site & preparation of working drawings. The "Team Three"

Architects, without rancor, prefered to withdraw from the project and were paid off by the TDC for their work upto that point. WWAT&G, the Hawaiian architectural firm assigned the new task interviewed and selected Daoud Joyce's Arkitet Bersuketu Malaysia (ABM) to create with local materials reflecting the culture of East-coast Malaysia, an international standard resort hotel. The Tanjong Jara project was thus launched.

However, subsequently it was also decided to proceed with some sort of activity at the Rantau Abang site. The original idea was to build a visitor information center on the site to provide national and international tourists with regional information and empecially information concerning the leather-back turtles that use the Rantau Abang area as their hatching grounds. This idea was expanded to encompass a "museum" devoted to the regional sea-life (including the turtles) and to East-coast Malay traditional arts crafts and culture. An informal restaurant ( snack bar ) and refreshment bar was also incorporated, followed later by the idea to provide a limited number of low-priced low-room rate units particularly suited for local families on holiday. The original site was thus maintained and two physical entities the hotel & the visitors center were finally conceived & launched as an integrated program.

## 2.4 Site Descriptions:

The project consists of two developments at two seperate sites located about 10 km apart. Both sites have remarkable geographic features and Rantau Abang is noted as one of worlds few breeding grounds for the leathery turtles.

- 2.4.1 Tanjong Jara Beach Hotel Site: Approximately 3 km north of Kuala Dungun, it is spread over 77.7 acres around a crescent shaped beach of golden yellow sand. Starting at the northern and, the site begins with a rather steep foliage covered hill, and stretches to the south atop a sand berm parallel to the ocean. A natural stream runs across the proper-By placing a weir at the stream's end a lagoon has been formed. Accomodation are provided in duplex cottages organised along an arc facing the ocean. Six private cottage suites are situated within the arc. A large public house contains dining, conference, social and recreation facilities. The site is lushly planted and is traversed by winding, sometime covered, pathways joining the cottages, beath, and the communal and recreational areas.
- Rantau Abang: This site lies about 50 km south of Kuala Trengganu (or 10 km north TJBH). Spread over 15 acres it is sandwiched between the coastal road and the ocean. Running parallel between the two is the Kuala (River) Abang which is naturally seperated from the ocean by a high sand dune berm. Over the River Abang lie the public spaces: the turtle museum, restaurants and shops. The terminus of the project, on the far side of the river, is the sandy beach which slopes down to the ocean; on the river's opposite banks adjacent to the road lie 11 private cottage suites, botanical garden, and a bazaar.
- Local Architectural Character (prevalent forms and material). The architectural forms of Malaysia are diverse, ranging from the Moorish minarets and domes of mosques to the distinctive roof forms of Trengganu. Formal architecture of the "British Colonial era stand with buildings with obvious Chineese influence.

Local architecture is also influenced by architectural styles brought by the historical influx of various peofrom other nations. Thus Malaysian architecture has an unlimited vacabulary of forms.

The East coast of peninsular Malaysia in general and in particular thenorthern (Trengganu) region, has developed a unique form of architecture which is both climatically appropriate and aesthetically pleasing.

The indigenous architectural forms of Malaysia are easily adaptable to the scale required for resorts and hotels in rural settings. The determination of construction of techniques and materials is influenced greatly by the selection of the architectural style. In general, the East Coast Malaysian architectural forms are constructed of wood with concrete or masonry introduced where necessary for service or safety reasons. More often than not, the tiles have given way to tin or asbestos sheets and new public housing developments avoid the "raised on stilts concepts so common to Malay architecture of the Kampangs". Thus while the typical Malay house cool and climatically tunedin, the "new wave" architecture often seems an aberation in the environment.

The prime source of inspir tion for this project were the Istanas of the earlier Sultana of the region. Istanas are architecturally dignified buildings developed over centuries. Their style brends with the environment and takes advantage of prevailing weather conditions. Standing above the ground from three to eight feet (0.3 to 2.4 meters), the buildings have openings on both sides and at the ends; they feature lattice soffits and steeply pitched roofs with carved gable grilles. In addition the bisque tile roof is exposed on the inside of the room so that the interior can breathe and allow warm air to escape through the roof.

As a result, the natural ventilation is excellent and provides an interior temperature that is comfortable even during the hottest weather. All of these traditional design features have been incorporated in the Tanjong Jara Beach Hotel and RAVC design.

#### 3- Design and Construction.

The East Coast of Malaysia offers favourable weather conditions, picturesque settings and dozens of beaches suitable for resort development.

The unique arts and crafts of Malaysia, as well as the Trengganu cultural traditions were added attractions for the site. Another unique feature was the use of the east coast beaches at specific points by the great leather back turtles to lay their egges annually.

This was a part of the world which could not remain undiscovered for long and the Malaysian Government wanted not only to broaden its economic development program but also opted for orderly development of tourism on this coast.

Tanjong Jara and RAVC were the first major tourist facilities on Malaysia's east coast.

3.1 Architects brief: Functional requirements. The architects brief has undergone considerable changes over the years.

In 1960 it was a 10 room metel concept at Rantau Abang alone. In 1971, a more detailed brief called for 66 guest rooms at the same site. Finally two separate facilities, a 100 room international class beach resort hotel and a museum/crafts/bazaar/visitors center with 10 chalets was decided upon in 1976 at two different sites, five miles apart. The brief now required that the two projects though designed separately should be complimentary parts of an intergrated whole and provide a well functioning cost effective visitor plant for

Malaysian vactioners, ASEAN visitors and international tourists. The architectural idiom was to be Nolaysian and traditional styles, forms, material and craftsmen were to be used.

The design was to be in harmony with the site and both components were to be designed so as to allow incremental expansion, as demand grews.

There were other prime areas of concern which have been listed under objectives (Sec 1.A to E)

During the design and construction the owners (TDC/Pempena Consult) decided to make certain changes in the program which they felt would upgrade the facility to an "international class resort". Addition of certain amentics to the hotel, they hoped would expand spectrum of visitors unfamiliar with the region. These amenities included air-conditioned suites, telephones in every room, more elaborate standards of service (including room service), which necessitated a larger kitchen, and guest laundry service.

It was decided after a great deal of debate to aircondition some of the hotel rooms but simultimeously
provide the guests the option of taking advantage of
the soft, tropical air without suffering discomfort.
The buildings indigenous architectural features which
provide convection cooling and natural ventilation
easily adopted to this new brief. Although air-conditioning equipment was introduced, a system of privacy
shutters, screening against insects, and fixed-glass
windows was also to be designed later so as maintain
the ventilation options. These changes in the program,
additional rooms and expanded facilities were effected
without substantial alterations in the original design
concept.

3.2 Evolution of Design Concepts.

The initial 66 room design had been scrapped partially

because it did not reflect Malayness. Thus before WWATG went to their drawing boards, their design team, in a quest for appropriateness and authenticity, conducted extensive research into the indigenous and historical architectural styles of Trengganu and the adjacent east coast states. They proceeded from the concept that if the buildings they were to design were to be successful and appropriate in the east coast setting then they would have to incorporate appropriate design solutions from the time proven local design forms and materials. This was the key objective also. Not surprisingly they chose the Istana, the wooden palaces of the earlier Sultans as an architectural form that could be easily accepted for hotel use. Among the indigenous architecture of east coast Malaysia, these Istanas are among the few remaining antique buildings.

The centuries spent in the evolution of the Istanas have resulted in buildings of great dignity and warmth. The building form is eminently practical in relationship to local weather conditions, makes use of materials plentiful in the area, and features traditional Malaysian art forms and craftsmanship. A salient feature of the two-story hardwood construction is that buildings are three to five feet above the ground for purposes. of security flood protection and air circulation.Other ventilating elements are open-sided rooms, lattice soffits, steep pitched roofs with gable grilles and bisque roof left exposed on the inside, allowing the interior to breathe and the warm air to escape through the roof. Hot tropical rains saturate the tile, which then become an evaporative cooler in the sun that. invariably follows the rain.

3.2.2. These same traditional design elements have been incorporated in to the TJBHotel's design, eliminating almost all need for air conditioning and achieving substantial saving in construction costs and eneggy consumption. As is the tradition, the buildings are constructed of native hardwood that is being allowed to weather naturally. Using the Istana as the architectural theme the hotel Master Plan was designed in the manner of Malaysian (Trengganu) fishing village using the existing stream (and using it to form a lagoon) as a focal point of the development. Thus the casual rambling village form for the Master Plan was deliberately chosen in contrast to the more formal 'modern" or Beaux-arts type approach to massing, the village format being more appropriately Malay in terms of the overall design concept.

3.2.3 Tanjong Jara Beach Hotel. Taking advantage of the crescent shaped site, the hill on the northerizedge and by the formation of the lagoon, the unit placements have been made to maximise the physical and visual advantages for all guest rooms as well as the public areas. The public areas bridge the lagoon while looking toward the ocean. Located within the lagoon are duplex cottages that reflect traditional Malaysian Istana design. Behind them at a higher elevation near the base of the hill are a series of low rise twostory building each containing eight guest rooms that overlook the cottages, the lagoon and the beach beyond. To the south are similar cottages and two-story guest room buildings. All TJBH guest units are thus oriented toward the ocean view. The buildings, none over two stories high, have been placed in clusters and take maximum advantage of the ocean view and breeze through the high ceilings pattern the upper balconies and lower verandahs.

In the landscaping a number of large shade trees and palms existing on the site had been preserved and more added according to a land-scape plan.

3.2.4 Rantau Abang Visitors Center is slightly different as it is located along the banks of the Abang river. One of the major concerns with development on this site was to adapt the project to the location and topography taking into consideration the rising and falling levels of the fresh-water lagoon during the year, the proximity of the major east coast highway and very importantly, the affect any development would have on the life cycle of the turtles using the beach for their nesting grounds. The turtles are sensitive to light and movement (before they will come up on the beach) and the Malaysian representative of the World Wildlife Fund, which has done much to protect and support this species, was very adamant that nothing be done which had any potential to disrupt this unique breading cycle. After many meetings with the architects and project developers they were subsequently assured and later provided a great deal of assistance in creating the museum concepts.

The structures of the museum complex are therefore raised on piers above the river and the sand dunes to eliminate disruption of the site's natural characteristics. This elevated position affords a panoramic view of the turtule hatching grounds on the adjacent beach. For protected viewing and cross ventilation. many of the walls can be fully opened to the exterior by means of hinged or pivoted full height louvered doors. The information center and craftsmen's bazaar is located on the highway side of the river and is connected to the museum buildings and a restaurant (serving exclusively local Malay cuisine) by means of

a wooden bridge over the river. A group of traditional Malaysian style kampong (village) bungalow accommentions are provided for overnight guests as part of the facility. The buildings themselves are conceived as part of the total museum exhibit because of their traditional architectural style.

3.2.5 Formal aspects (massing articulation of facades, decorative feature, use of traditional motifs etc.) The physical layout of land uses and the circulation pattern in the site plan has ddopted the causal rembling form of the (Trengganu fishing) vilage. Formal concepts of massing have been avoided. This system of articulation of spaces invokes a feeling of leisure and relaxed pace. The feeling of congestion, and artificiality of urban settings has thus been avoided.

The placement of the service areas, the public spaces and the guest rooms has further, made maximum utilization of the picturesque vistas. The scale has been kept deliberately subdued (2 stcreys) and monolithicness has been totally avoided. None of the units are higher than the cononut tree. The facades follow the architectural tradition and the use of the red Trengganu tiles, local hardwoods for the building has enhanced the indigeneous character of the completed buildings and enables identification with its rural environment.

The interior decor relies almost entirely on the use of local arts and crafts from lamp shades wicker chairs to soap dish (a half of a coconut shell). The theme and colour scheme has been followed through and serves to enhance the total design effect.

- 3.2.6. Landscaping: Both the sites offer unique apportunities for landscaping local plants and shrubs have been used to enhance views, act as wind brakers and wherever necessary provide privacy. Coconut palms are extensively in evidence. At Tanjong Jara the southern end of the site seems to be suffering from salt spray effect (tennis court side) and is bare as compared to the northern and central (lobby/restaurant) area. In general however pruning seems to be required and more flowering variety introduced. At Rantau Abang the grounds seemed better kept and landscaping was more pruned and proper.
- 3.3 Structure, Materials, and Technology. The basic architectural idiom used is that of wood. The architects utilized the full potential of the hard and soft woods available abundantly in the areas. Concrete as a construction element has been used in the footings and as a thin noise suppressant slab between the floors of the two-storey structures. (These slabs are covered by polished wood for the floors and ceilings).
- 3.3.1 Structural System. The structure is a post and beam construction in the traditional ethnic style.

The <u>roofs</u> are carried by timber trusses, and are covered with local traditional clay tiles on hard wood battens and rafter. No sarking is provided generally in order to enhance the visual expression and experience of the ethnic style from the inside as well. (At some points however local weaved mats in wood frames were added in order to prevent the high winds from blowing off the tiles from inside).

The <u>walls</u> are lined with T & G infilled timber panels between columns and T&G flooring 3/4 inches thick with clear varnish finish.

Walls of the bedrooms, Conference Hall and lobbies are hinged with local "Nyatoh" timber panels with natural wax finish. External timber panelled walls are treated with brown wood stain and preservative.

The infill uses 3/4" X 6" T&G class B hardwood panels set between timber columns and studs.

Window designs are based on local traditional "French" windows and timber carving decorative motifs on the fan lights. Timber fascian are shaped to follow the local traditional palace look.

Floors are made of 3/4"x 4" T&G Class B hardwood nailed to 4" x 3" joints set at 18" centres beti-ween 10" x 2" floor beams and finished with clear varnish.

3.3.2 Construction Technology: The design provided an outlet for the utilization of the wood construction craftsmen who were available and familiar with this medium of construction.

The lumber was milled on site and a carpentary shop and saw mill was established for the duration of the project. Columns, beams and trusses were fabricated on site. Timber carved panels and moulderings were fabricated elsewhere.

The tiles were kilned in the nearby villages and were supplied through a local contractor.

3.3.3 Materials: The basic material used is wood though concrete and glass is also used.

Four major types of wood are used in the entire scheme:

- a) Nyatoh a kind of playwood is used for interior panelling.
- b) Kapor has been used for all flooring (except for the reception area which is in Thai marble)
- c) Balan which is a soft wood and has been used for carving.
- d) Chengol which is the strongest and the hardest of all and has been used for the main structural elements.
- 3.3.4 Building Services, Site utilities. Site services provided include air conditioning for the guest rooms (public areas are not airconditioned), public address system, telephone in each unit, piped music and television in guest rooms and out-lets in public areas.

The 150 line <u>telephone</u> system is connected to the general telephone system of the country and international connections, are easily available.

Electricity is supplied directly from the National Electricit, Board of Malaysia via 415 volts underground cables from the nearby substation. For distribution to distance location within the area, the voltage is stepped to 11000 volts before it is stepped down to 415 volts for consumption.

Sewage Disposal: As the location of the Tanjong Jara project is away from any major town, the project has its own means of sewage disposal. All sewage comprising of waste water and soil wastes are run into underground sanitary pipe to various septic tanks and the overflow is stored in a sewage pond to the south of the site, near the plane nursery.

## 3.4 Origins of the Technology, materials, labour force and professionals.

The construction technology and material as described above were native and locally available. Skilled to unskilled labour force ratios were between 60 to 40% and all were Malay either from the region (40 to 50%) or from the west coast and Kuala Lumpur areas.

The Hawaian architectural firm which conceptualized the design, provided the layout and created the concept was Wimberly, Whisenand, Allison, Tong and Goo. They were assisted by a local architectural firm Akitek Berse-Kutu Malaysia (ABM) who did the detailing and construction drawings. The landscaping was done by Bert Collins & Associates.

The electrical and mechanical services were provided by Stantly, Consultants Malaysia offices.

The local Malay craftsman who organized the tile production was Nik Rahman., while the artisan and Malay craftsman who supervised the wood work and wood carving was Abdul Latif.

All contractors and sub-contractors involved were local Malay firms based either at Kuala Trengganu or Kuala Lumpur.

An emergency generator set is available on standby to supplement electricity to essential areas(such as kitchen, dining room, public areas, and fire fighting equipment etc).

Fire Protection. Various fire fighting systems are employed to ensure adequate fire safety of hotel guests and personnel. These include fire hydrants, hose reels, indoor fire protection, fire extinguishers, break glass alarms, automatic fire detection and alarm is provided especially in public areas and these are linked to a master fire alarm panel to warn occupants of any outbreak of fire.

Air-Conditioning. In general, chilled water fan coil units hidden in the ceiling provide air-conditioning to guest rooms while some public areas (conference rooms) are cooled by split unit air-conditioners. Individual S-speed air-conditioning controls allow guests to set their own comfort level.

Plumbing. The water requirements for the Tanjong Jara Project were taken from Government water. mains carrying potable water. Water is first stored in an elevated storage tank before distribution. The storage capacity is sufficient for 24 hours of normal usage. Electrical hot water heaters provide hot water for the guests and for for washing in the kitchen.

Beside being used for domestic consumption, the water is also used to supply the swimming pool and to irrigate planting areas by sprinklers. The swimming pool has a seperate water treatment plant to provide clean water to the pool.

### 4- Construction Schedule and Costs.

- 4.1 The Tanjong Jara Beach H<sub>o</sub>tel design commended around February, 1973 and tenders were floated in April, 1977. Construction began in July 1977 and the facility opened in November, 1980.
  - The Rantau Abang Visitor's Center went through various stages (see Section on development of design concept) but the final design phase of the project commenced in 1973, tenders were called and construction began concurrently with that of TJBH, but the facility was opened to the public five month earlier (June 1980). The initial budget for the two projects was
  - M\$ 8,800,000 approximately; this was greatly exceeded. The total cost was M\$ 18,800,000 (U\$ 7,660,000 approximately US \$ 315 Sq.m). (Of the total, materials represent 33% labour 22% roads and fixed assets 29%, and fees 12%). Une of the prime reasons for the increase was the cost of timber which doubled during the course of construction. This factor coupled with the scar-city of the timber in a boom market played havor with the contractor. There were three general contractors involved during the project. The first could not cope with the increase in timber prices and reportedly went bankrupt. The second was invloved in the Visitor Center only. The third was large and experienced enough to complete the project as noted above.

The cost break down is given below:

#### a) Cost (in MG).

- 4.2 Budget TJBH M\$ 7,844,265 RAVC - M\$ 868,433
- 4.2 Actual (Total) TJBH M\$ 16,907,047 RAVC - M\$ 1.875.988
- Breakdown of 4.2 actual costs: HBLT RAVC 193,279 M\$ Land MB 10,100 Infrastruc- M3 2,111,658 M\$ 7113,886 ture M\$ 14,602,110 M\$ 1,152,002 Building Total M\$ 16,907,047 M\$ 1,875,988

#### 4.2 Unit Costs:

Thus the unit cost of building comes to M\$ 1,610.49/Sq.m. for TJBH and M\$ 567.94/Sq.m for RAVC. This compares fairly reasonably with the present range of hotel construction industry in the country which TDC has estimated thus

High: M\$ 1,910/Sq.m. (1983)
Medium: M\$ 1,118/Sq.m. (1983)
Low: M\$ 920/Sq.m. (1983)

## 5. Reviewer's Assessment (Technical, Economic and Acathetic)

try to incorporate into the structue as many new construction techniques and innovative design features as available or affordable. In this project however there was a deliberate attempt to seek inspiration from the

region's past Muslim heritage and to incorporate the best of both worlds. The feault has been blessed and successful.

5.1 Functionally the project is sound. The group of buildings function well together as an integrated whole, and as individual structures. The resort character, the proximity of corrosive sea salt sprays and uninhibited use of wood in all areas does require constant maintenance, but the technical and functional adequacy is similar and comparable to urban high rise hotels.

The units are adequately lighted, and are climatically comfortable. The design provides the user options for natural ventilation or airconditioned comfort.

In the duplex units the upper floors are preferred because of better accoustical qualities.

The plumbing works and so does the telephone system which is integrated into the national and international net-work.

The extensive accrage of the site requires structer security measures, slows room service during rainy weather, and requires higher maintenance cost of grounds and wooden structures.

Strict security and adequate management has reduced housekeeping pilferage. Bi-cycles are now used for room service but rains still hamper its effectiveness. Maintenance is, according to the managers, an year long affair --- scraping, polishing and opraying for insect and termite control. These efforts require more manpower than would be needed for a same sized more compactly planned "modern" (i.e western) hotel design. But in a labour intensive economy the idea was also to provide jobs to as many as possible and TDC's expressed motivation has been more than

#### 83- REPRESENTING THE CLIENTS.

- Tan Sri Philip Kuok
- Dato Baharuddin bin Musa
- Muhammad Ikbal bin Md. Hamzah

- Azizan bin Mustafa

Chairman T. D. C.

formerly Director General, T. D. C., now retired.

Deputy Director General, T.D.C. (formerly Director of Development and Project Management).

Director, T.D.C. (formaly Asst. Director of Development and Project Management)

Tourism Development Corporation of Malaysia.

17th Floor Wisma M.P.I. Jalan Raja Chulan Kuala Eumpure, Malaysia.

#### 8.2- REPRESENTING MANAGEMENT/OWNERS.

- Terry Kenaston

- Madeline Regis

- Sulaiman Rahmat

Pempena Constul Sdn Bhd. Same address as T. D. C.

8.3- REPRESENTING ARCHITECTS.

8.3.1- Foreign Consultants.

Mr. Pete WimberlyMr. Gerald Allison

Wimberly Wishenand, Allison, Tong & Goo 2222 <sup>K</sup>alakaua Avenue,

Penthouse, Honolulu, Hawaii - 96815. USA.

8. 3.2- Local Consultants.

- Daud Joyce

- Ong Guan Teck

formaly (Director Project Management now Director Development PATA Head Office).

formerly Operations Manager)
now Sales Manager Kuela
Lumpur Regant Hotel. K.L.

Sales Manager C/o. Pempena Consult/T.D.C.

Architect Architect

Architect Architect

CONTINUED.

8.3.2- (Contd).

Address of Local Consultants.

Arkitek Bersikutu Malaysia 28 Medan Tunnku Satu Kuala Lumpur, Malaysia.

- 8.4- REPRESENTING THE MASTER CRAFTSMEN.
- 8.4.1 Abdul Latif

Woodworking/Woodecarving

C/o. T. D. C.

Tile Maker/Craftsman

- 8.5- LANDSCAPING.
  - Raymond F. Cain

- Nik Rahman

Landscape Architect

Address of Bert, Collins & Associates.

514 Hawaii Building 754 Fort Street Honolulu Hawaii, 96813

- 8.6- INTERIOR DESIGN.
  - Alan Loke

Interior Designer

Address for Juru Hiasan Consult Sdn Bhd.

76-B Jalan Imbi Kuala Lumpur, Malaysia.

The Award should therefore be equally divided between the above for reasons of political sensitivity and for ensuring proper credit for these who worked for its success.

Jechnical Reviewer

SYED ZAIGHAM S. JAFFERY
Lyed Zalgham S. goffery,

ARCHITECT/PAKISTAN.

#### PROJECT BASIC FACT SHEET

1. 1.1. Country : Malaysia

1.2. Project : Tanjong Jara Beach Hotel/Rantau Abang

Visitor Centre

1.3. Architect : Wimberley, Whisenand, Allison, Tong & Goo

Architects Ltd./Akitek Bersekutu (M)

1.4. Dates of

1) Design : 30th June, 1976

ii) Construction: 15th July, 1977

#### 2. 2.1. Project Description:

#### a) Tanjong Jara Beach Hotel

A 100-room international beach resort hotel emulating an ancient istana (palace) of Trengganu on the East Coast and built entirely of local tropical hardwoods native to the region.

#### b) Rantau Abang Visitor Centre

The Rantau Abang Visitor Centre is a twin project of the Tanjong Jara Beach Hotel which includes a marine museum, a restaurant, a cocktail bar, handicraft centre and 10 chalets. The buildings are made entirely of native hardwoods from nearby foresc.

#### 2.2. Project Objectives:

#### a) Tanjong Jara Beach Hotel

- To act as catalyst for development of resort facilities on the East Coast especially in Trengganu.
- ii) To contribute towards the revival of ancient cultural activities and artisan skills of the region.
- iii) To generate positive social economic benefits to an economically depressed area.

#### b) Rantau Abang Visitor Centre

In addition to the above (i), (iii), (iii), to promote the region as a major regional visitor centre for the observation of the giant leather-back turtles' annual egg laying migration.

## 2.3. Description of site and Surroundings

#### Tanjong Jara Beach Hotel

The site starts at a rather steep, foliagecovered hill on the north and stretches to the south atop a sand berm parallel to the ocean. A natural stream runs across the property. By placing a weir at the stream's mouth, a lagoon has been formed. Bridging this lagoon are the public rooms, all looking toward the ocean. Located within the lagoon are duplex cottages that reflect traditional Malaysian design. Behind them at a higher elevation near the base of the hill are two-storey to twelve buildings each containing eight/guest rooms that overlook the cottages, the lagoon and the beach beyond. To the south are similar cottages and two-storey guest room buildings all oriented toward the ocean view. The buildings have been placed to take maximum advantantage of the ocean view and breeze while preserving a number of large shade trees and paim existing on the site.

#### Rantau Abang Visitor Centre

The site is sandwiched between the coastal road and the ocean. Running parallel between the two is the Abang River, naturally separated from the ocean by a high sand berm. The structures of the museum complex are raised on piers above the river and the sand dunes to eliminate disruption of the site's natural characteristics. This elevated position affords the visitor a panoramic view of the turtle hatching grounds on the adjacent beach. The information center and craftsmen's bazaar is located on the highway side of the river and is connected to the museum buildings by means of a wooden bridge above the river. The buildings themselves are conceived as part of the total museum exhibit for they are built in the centuries-old traditionof Malaysian construction. The roof is a distinctive Trengganu flat red bisque clay tile.

\*Local artisans are also engaged in the maintenance of the buildings like squash court etc. on a piece-meal basis.

#### 4. Costs (in M\$)

4.1. Budget : TJBH - M\$ 7,844,265

RAVC - M\$ 868,433

4.2. Actual (Total) : TJBH - M\$16,907,047

RAVC - M\$ 1,875,988

4.3.	Breakdown of actual costs:	TJBH	RAVC
	Land	M\$ 193,279	M\$ 20,100
	Infrastructure	M\$ 2,111,658	M\$ 703,886
	Building	M\$14,602,110	M\$ 1,152,002
	Total	M\$16,907,047	M\$ 1,875,988
4.4.	Unit Costs:	<u>тјвн</u>	RAVC

(1) Unit cost of building: M\$1,610.49/sq.m. M\$567.94/sq.m.

(Compares with present range in country of

High : M\$1,910/sq.m. (1983)

Medium : M\$1,118/sq.m. (1983)

Low : M\$920/sq.m. (1983)

(ii) Actual total cost of housing unit in M\$

(Actual cost & Number of units)

Land )
Infrastructure } Not applicable
Building }
Total

#### 5. Country Economic Data

5.1. Per capita income :

#### Malaysia

#### GNP Per Capita

1979 - M\$ 3,200

1980 - M\$ 3,600

1981 - M\$ 4,022

1982 \*Estimate M\$4,088

1983 \*Forecast M\$4,391

GDP Per Capita

<u>Malaysia</u> <u>Trengganu</u> 1970 M\$1,040 M\$ 593 1980 M\$1,886 M\$1,278

## 5.2. Average Household Income

Monthly Per Capita Household Inco	ome
Peninsular Malaysia	Trengganu
1970	1970
M\$ 73.00 per month	M\$47.00 per month
M\$876.00 per annum	M\$654.00 per annum
1976	1976
M\$ 95.00 per month	M\$ 70.00 per month
M\$1,140.00 per annum	M\$840.00 per annum
1979	
M\$141.00 per month	
M\$1,696.00 per annum	
Average 5.4. persons per househo	<u>1a</u>
Peninsular Malaysia: Averag	ge Household Income
1976	
M\$ 514 per month	
M\$6,168 per annum	
1980	
M\$ 763 per month	
M\$9,156 per annum	
Poverty thresholds : M\$300-400p	
Project beneficiaries:	1982)

5.3. P anu ١.

M\$ 11,000,000

49.6%

- 5.4. P Average household income level.
  - per household per month (not available). M\$

#### 6. Sources of Funds (TJBH/RAVC)

Paid up capital

	1 1	, ,	
	Govt. Loan	M\$ 3,085,394	13.9%
	Local Bank Loan	M\$ 5,000,000	22.6%
	Holding Company Loan	M\$ 3,084,850	13.9%
	Total	M: 22,170,244	100%
7.	Uses of Funds (TJBH/RAVC)		
	Land	M\$ 213,379	
	Infrastructure	M\$ 2,815,544	
	Building	M\$15,754,112	
	Debt servicing during cons- ) truction (Bank Loan) Working capital Pre-Opening expenses	M\$ 3,387,209	
	Total	M\$22,170,244	

#### 3. 3.1. Site Area:

Tanjong Jara Beach Hotel : 77.7 acres
Rantau Abang Visitor Centre : 15 acres

#### 3.2. Building Area:

Tanjong Jara Beach Hotel : 97,595 sq. ft. (9,066.87 sq.m.)
Rantau Abang Visitor Centre : 21,834 sq. ft. (2,028.4 sq. m.)

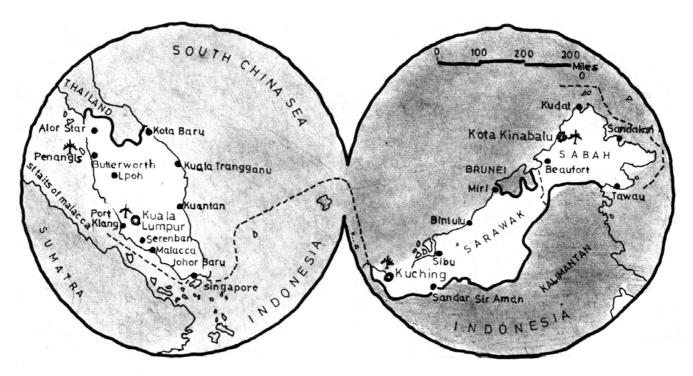
3.3. Building Materials & Techniques (identifying whether self-help or not).

			TJBH RAVC
1)	Foundations	: )	
11)	Walls	(ء )	(As per attached Akitek Bersekutu's letter).
iii)	Roofing	: )	
iv)	Other special features (if any)	: )	

3.4. Beneficiaries: Number of persons - 300 (construction)
225 (operational) - TJBH/RAVC

Types of persons (socio/econ, level, etc.)
Approximately 200 local workers were engaged during the construction of the 2 projects.

	TJBH	RAVC
Operation-Executive	9	1
Staff	186	29
Total	195	30
Suppliers	58	
The breakdown is as f		
Suppliers		No.
Beverage (soft drinks and liquor	4	
Tobacco	1	
Food (fish, meat, ve	13	
Gas	1	
Printing & stationar:	15	
Maintenance		11
Chemical		3
Sundries		8
Books	Total:	<del>5</del> 8

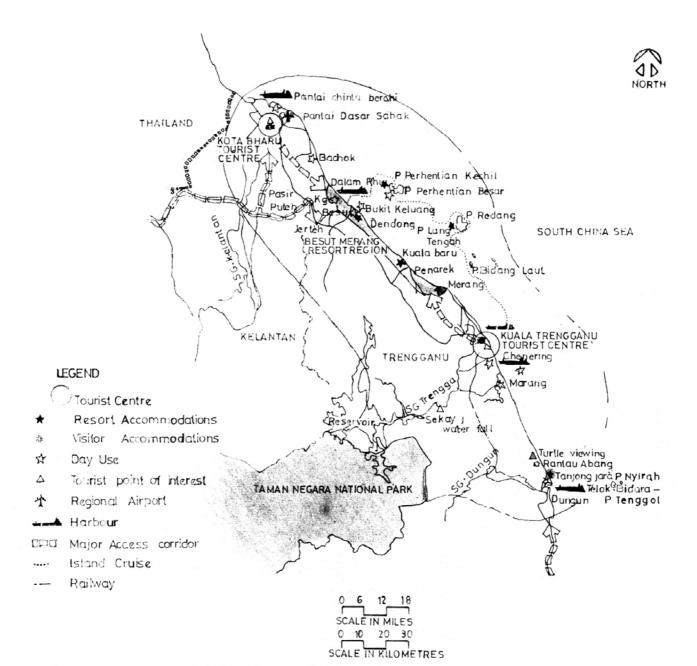


MALAYSIA: A BRIEF BRIEF

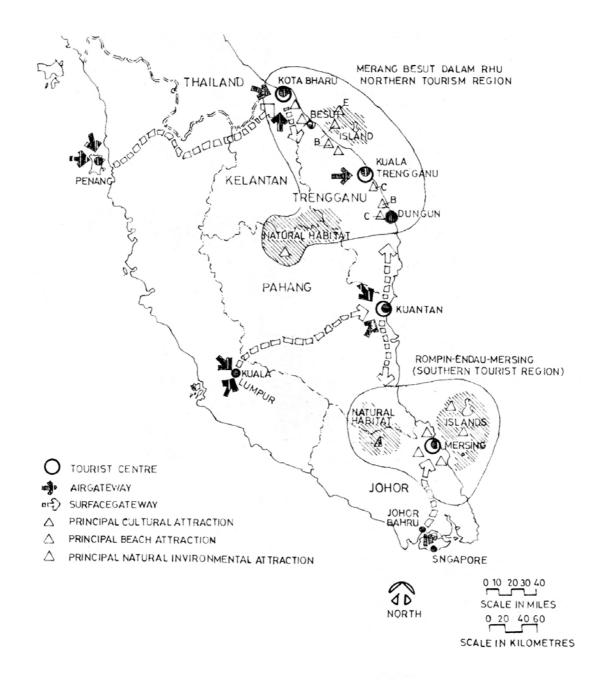
Situated on the important trade routes from Europe through the Middle East and India to China and Japan, the Malay states came under Portuguese and Dutch influence until the British arrived in 1786, acquiring Penang by treaty with the Sultan of Kedah and establishing British rule in the last quarter of the 19th century. These states still maintain a separate existence, mostly under their own Sultans. Many Chinese and Indians arrived during the British period. In 1957 Malaya gained Independence and remained within the British Commonwealth.

From 1882 until the Japanese occupation in 1942 Sabah was ruled by the British North Borneo Co., which turned it into a large rubber producer. Sarawak, as a result of successive concessions by the Sultans of Brunei, was ruled by the white rajas of the Brooke family from the 1840s to 1942. Both were British colonies between 1946 and 1963.

The Federation of Malaysia, now comprising Malaya or Peninsular Malysia, Sabab(North Borneo) and Sarawak which are together known as East Malaysia, came into existence on Sept. 16, 1963. Datuk Seri Mahathir Mohamad took over as prime minister on the retirement of Datuk(now Tun) Hussein Onn on July, 16, 1981



EAST COAST MALAYSIA NORTHERN TOURISM REGION



# TOURIST DEVELOPMENT CONCEPT EAST COAST MALAYSIA