

2011

(No.)



PARLIAMENT OF TASMANIA

PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

King Island Hospital and Health Centre - Redevelopment

Presented to His Excellency the Governor pursuant to the provisions of the Public Works Committee Act 1914.

MEMBERS OF THE COMMITTEE

Legislative Council

Mr *Harriss* (Chairman)
Mr *Hall*

House of Assembly

Mr *Booth*
Mr *Brooks*
Ms *White*

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INTRODUCTION

To His Excellency the Honourable Peter Underwood AM Governor in and over the State of Tasmania and its Dependencies in the Commonwealth of Australia.

MAY IT PLEASE YOUR EXCELLENCY

The Committee has investigated the following proposal:-

King Island Hospital and Health Centre - Redevelopment

and now has the honour to present the Report to Your Excellency in accordance with the *Public Works Committee Act 1914*.

1 BACKGROUND

Tasmania's health plan was released in 2007 as a blueprint for the reform of health systems into the future.

The Primary Health approach encompasses a focus on:-

- health and well being;
- a population perspective on health not just for individuals;
- a multi-disciplinary approach to care;
- a partnership approach in which a range of groups and organisations need to work together on improving health;
- actual needs such as chronic disease, rather than service needs; and
- fostering individuals' control over their health and participation in health decision making.

The principles underlying the approach are that:-

(a) the services provided by Tasmania's system should be accessible as close as possible to where people live provided they can be provided safely, effectively and at an acceptable cost; appropriate to the community's needs; client and family focused; designed for sustainability; integrated with other elements of the health services system; focused on health promotion, illness prevention and early intervention; and delivered in a culturally appropriate manner; and

(b) where services cannot be delivered safely effectively and at acceptable cost from within local communities, access to services should be facilitated through service coordination, the provision of outreach services from an external base, the use of technology, transport assistance and other appropriate community support.

The redevelopment of the King Island Hospital and Health Centre project is consistent with the aims and objectives of the plan to maintain services in remote communities and build linkages between isolated and major centres.

The main text of the submission from the Department of Health and Human Services in support of the redevelopment of the facility on King Island is as follows:-

2 PROJECT DEFINITION

2.1 Background

“Tasmania’s Primary Health Services Plan highlights the requirement for Tasmania to provide safe and sustainable services to its rural communities in the face of a number of significant challenges e.g. difficulties in the recruitment and retention of staff, ageing population, increase in chronic conditions and rapidly escalating costs.

Rural health facilities are the primary means by which the Department engages the community in a proactive and preventative way that decreases morbidity and the demand on acute services in the long term. Because health facilities are prominent in rural communities and deliver a range of services, they are effective both in promoting a sense of community and in offering a “one stop shop” which is not only convenient for clients but encourages integration of services and effective case management.

Particularly isolated communities benefit from an identifiable “centre” which is therefore able to support a range of ancillary and non-government activities that engender a sense of community and encourage participation and involvement.

The redevelopment of the King Island Hospital and Health Centre is consistent with the aims and objectives of the Primary Health Services Plan to maintain services in Tasmania’s most remote communities and build critical linkages between isolated and major centres.

The King Island Hospital and Health Centre will be maintained as a Tier 2 facility. Due to its isolation it will retain its capacity to participate in emergency responses in conjunction with acute health services including medical retrieval.

The development of functional and contemporary facilities on King Island is critical to enhancing its capacity to recruit and retain staff and deliver safe, quality care.

2.2 Primary Objectives

The redevelopment of the King Island Hospital and Health Centre is to provide a combined hospital and community health services site. Implementation and completion of the project will provide hospital and community health services with a facility that improves functionality, amenity and ensures long-term sustainability with enhanced capacity for expansion of the various health services delivered to the local community.

The aged care wing will have sufficient flexibility in its layout/design to cater for future expansion needs due to potential future community needs.

The redevelopment will provide appropriate facilities to enable rural health practitioners to carry out their work at the King Island Hospital and Health Centre in an appropriate environment with adequate facilities in compliance with accreditation standards.

2.3 General Scope

The scope of the work planned entails a complete redevelopment of the existing Hospital and Health Centre to a modern configuration capable of supplying a range of inpatient, residential aged care, primary health and community care services. There are 6 in-patient beds and 14 residential aged care beds: 6 low care and 8 high care. Other services provided from the centre include: Community Nursing, Home Help/Personal Care, Home Maintenance, Day Centre for frail, aged and disabled, Child Health, Radiology, and a Telehealth videoconferencing site. Visiting services include: Orthopaedics, private and public Dental

Services, Social Work, Physiotherapy, Podiatry, Audiology, Chiropractor etc. An independent GP practice is located in the Centre and is provided by a private specialist medical company under a contract with DHHS. This practice also provides a pharmacy dispensing service. There are approx 45 staff working at the King Island HHC (28 FTE). The site is also a University Department of Rural Health teaching site.

The facility will incorporate single patient rooms with ensuite facilities that capture all day sun and maximise outlook. The redevelopment provides for 6 in patient acute care beds 6 low aged care and 8 high aged care. All of the inpatient/residential areas will be new build with direct access to secured garden areas. An important component of the Aged Care redevelopment is the creation of a specific Dementia Wing and associated support areas including gardens and amenity spaces.

The primary health areas will be developed to a modern community health centre that includes GP consulting and treatment rooms, dental surgeries, and consulting rooms for visiting specialists and allied health services.

Community meeting/activities area will have their own entry which enables separation from the health care elements allowing after hours use without impacting on inpatient care or activities.

The work will also include the relocation of the kitchen, the accident and emergency area and diagnostic and therapy services. Site works will enhance access, improve parking and maximise the amenity of the grounds for the use of patients and staff.

The proposed improvements and relocation of the hotel services areas of the hospital are required to improve the safety of patients and staff, and to allow the facility to provide contemporary delivery of acute, aged and community health services. Major issues are present with the dysfunctional location of key acute health service areas in this facility. The health services staff are unable to provide effective and safe attendance on patients in all areas.

New facilities for Tas Ambulance will be integrated within the redevelopment to allow Tas Ambulance to co-locate on the same site. A significant proportion of the building's existing infrastructure requires upgrade, in particular fire and domestic water systems.

As part of the redevelopment some internal improvements to the adjacent nurses accommodation building is proposed to provide contemporary accommodation with individual bathrooms, rather than the current communal configuration, which will significantly enhance the hospital's ability to attract and retain staff onto this isolated location.

Improving and expanding the areas for delivery of acute and community health care services is essential for the sustainability of this facility and for the island community that has this facility as the base of healthcare services.

Improvements and expansion of accommodation will generally be achieved through consolidation of existing usage and demolition, some minor areas of new build and reuse of the existing building. While the building structure is essentially sound, the layout, adaptability to alternative uses and fit out do not meet current clinical need and are becoming increasingly dysfunctional over time.

An upgrade and new build is essential to ensure future compliance with building certification and accreditation requirements.

High recurrent funding is required to maintain the existing facility and the DHHS is exposed to risks in the above areas, which could have significant financial consequences.

3 NEED FOR THE PROJECT

3.1 Changing Community Health Needs

Throughout Australia significant changes are occurring which are particularly affecting the priorities for rural health and community services. These changes are needed to ensure that services meet current requirements and that they are favourably based to respond to a changing environment rather than rely on past expectations and experiences.

Area Health Services are responsible for coordinating the provision of aged care, in-patient and community health services in Tasmania. These services are generally delivered from rural hospitals, multi purpose services/centres and community health centres. There is a statewide governance structure for the Department of Health and Human Services with health services managed through three Areas: the south, north and north-west. King Island is located within and is the responsibility of North West Area Health Service.

3.2 Strategic Direction of Rural Health

In 1999 the Australian Health Ministers commended and endorsed Healthy Horizons: A Framework for Improving the Health of Rural, Regional and Remote Australians. The purpose of this Framework is to provide direction for Commonwealth, State and Territory Governments in developing strategies and allocating resources to improve the health and well being of people in rural, regional and remote Australia. The Framework also provides guidance for communities and organisations for action to improve the health and well being of people living in rural, regional and remote areas.

During 2000 and 2001 the Department's Asset Management Services Branch coordinated a project called 'The Network Project' with the cooperation of the various Divisions responsible for providing and coordinating primary health services in the urban and rural communities. The Network Project aimed to consolidate the dispersed primary health services onto key, multiple-service delivery sites in order to achieve the following benefits:

- opportunities for greater efficiency (sharing support facilities, etc.);
- "Cross-fertilisation" between related and compatible services, for the benefit of clients;
- improved asset utilization;
- asset change on those sites, to address issues of matching service need and responding to service change;
- integrated and achievable management regimes for facility maintenance and operation, within the context of life cycle planning; and
- integration with other services and like opportunities, in each case from a total site perspective. Client amenity is a key driver in this regard as is the ability to integrate various services that a single client may need to access and improve individual case management.

The Network Project prioritised all the key sites for service delivery and asset performance analysis and the redevelopment of the King Island Hospital and Health Centre was identified as a high priority.

Tasmania Together is seen as a framework for setting government policy priorities, including the allocation of resources to those priorities, and will identify where service delivery can be improved. King Island Hospital and Health Centre redevelopment is to improve the services provided to the community and the aims underpinning them are consistent with government policy, the Agency's Business Plan and Strategic Positioning Document. The King Island

Hospital and Health Centre redevelopment will aim to provide a community friendly facility with the potential to develop an approach to health and wellbeing that focuses on preventing poor health and encouraging healthy lifestyles and activities that engender a sense of community and encourage participation and involvement consistent with Goal 5: *Improve Tasmanian's health through promotion of a comprehensive approach to a healthy lifestyle* and Goal 6: *To improve the health and wellbeing of the Tasmanian community through the delivery of coordinated services.*

In 2007 The Tasmania's Health Plan with supporting plans – *the Clinical Services Plan for Tasmania* and the *Primary Health Services Plan* were developed in support of the whole of government 20 year plan *Tasmania Together*. The *Primary Health Services Plan* promotes the primary health approach with a focus on health and wellbeing not just illness; a multidisciplinary team approach to care; health promotion activities working with key stakeholders and local community to design and implement programs to support healthy life conditions and choices. The changing and expanded role of rural health facilities is to ensure the services better meet the needs of the Tasmanian population and their local communities; such as increased access to visiting services including allied and mental health services. The *Primary Health Services Plan* aims to improve relationships with general practice to provide additional capacity to respond to the challenges of chronic disease, working together in the prevention and management of chronic disease and health promotion.

3.3 Existing Facility and Services at King Island

King Island Hospital and Health Centre has evolved over a period of time from a bush nursing centre to its present configuration as a Hospital and Health Centre with the last significant addition to the centre occurring in the early nineties with the construction of the aged care wing.

The internal layout of the building does not provide functional working units for the multitude of services now scattered throughout the facility. The facility fails to meet a number of best practice health service delivery and safety standards necessary for provision and care of in-patient, residential aged care and primary health services.

The King Island Hospital and Health Centre facility does not meet contemporary occupational health and safety requirements for staff or clients in both the current acute and aged care sections; examples of this include bathrooms which are too small for assisted showering, lack of individual ensuites in aged care rooms, the lack of disability accessible toilets in the expanding community service area and confidentiality issues with sound proofing in the general practice consulting rooms, limited access to meeting and consulting rooms.

The Centre presently, has 20 beds and provides accident and emergency treatment, physiotherapy, diversional therapist, occupational therapist, podiatry, community health services, radiology, dental and other visiting services.

King Island Hospital and Health Centre is situated on a large site conveniently located close to the main centre of Currie township and adjacent to the perimeter of the Currie shopping centre. The location provides ready access for the public arriving by foot or private transport. The hospital is located approximately a half hours flight from Wynyard and Burnie's North West Regional Hospital, which is King Island's Primary Acute centre link.

The overall aim of this redevelopment project is to provide a new and integrated facility that combines the functions of a hospital, residential care, community health and primary health services that contributes to the community in improvement of health and wellbeing through the delivery of coordinated services.

This project will see the redevelopment of the existing centre to enable the provision of comprehensive, accessible and integrated services to individuals and the island communities within the catchment area. High priority should be given to the specific problems facing all

rural communities, caused by their isolation, the fragmentation of services and access to essential services.

3.4 Limitations and Changes with Existing Facility

Summary of Required Project Outputs

The original project proposal was prepared in April 2008 and project funding was approved in the 2008/09 budget round for expenditure during the financial years of 2009/10, 2010/11.

As health care standards and the needs of the community have continued to evolve since the initial project proposal, the project requirements were reviewed prior to the engagement of the Architect and further refined through the design process.

In essence the original required project outputs have been refined with further required outputs identified during the stakeholder community consultation, master planning and schematic design stages.

The Project Team used the information gathered regarding stakeholder priorities to review the preliminary designs. The final design maximises 'value for money' by achieving the 'essential' and 'important' improvements required by the acute, aged care and community services section of the hospital. This approach has distilled the project outputs on a priority basis and these needs are addressed by the current design.

In accommodating all the required project outcomes decisions had to be made relative to design, Architectural components, building fabric and fittings to maximise value and achieve savings to actively manage the budget.

The project will provide a clear demonstration of the State Government's commitment to retaining and further enhancing health services in Tasmania's most remote communities, in accordance with Tasmania's Health Plan.

The project will enable the development of contemporary facilities which will provide a standard of amenity that meets community expectations and all relevant standards.

Cost savings and efficiencies will be recognised through:-

- improved working conditions, accommodation facilities and the resultant capacity to recruit and retain staff;
- reduced clinical and occupational health and safety risks resulting from sub-standard or poorly maintained infrastructure;
- reduction in on-going maintenance and energy costs; and
- improved capacity to meet residential aged care certification requirements and maximize Australian Government revenue.

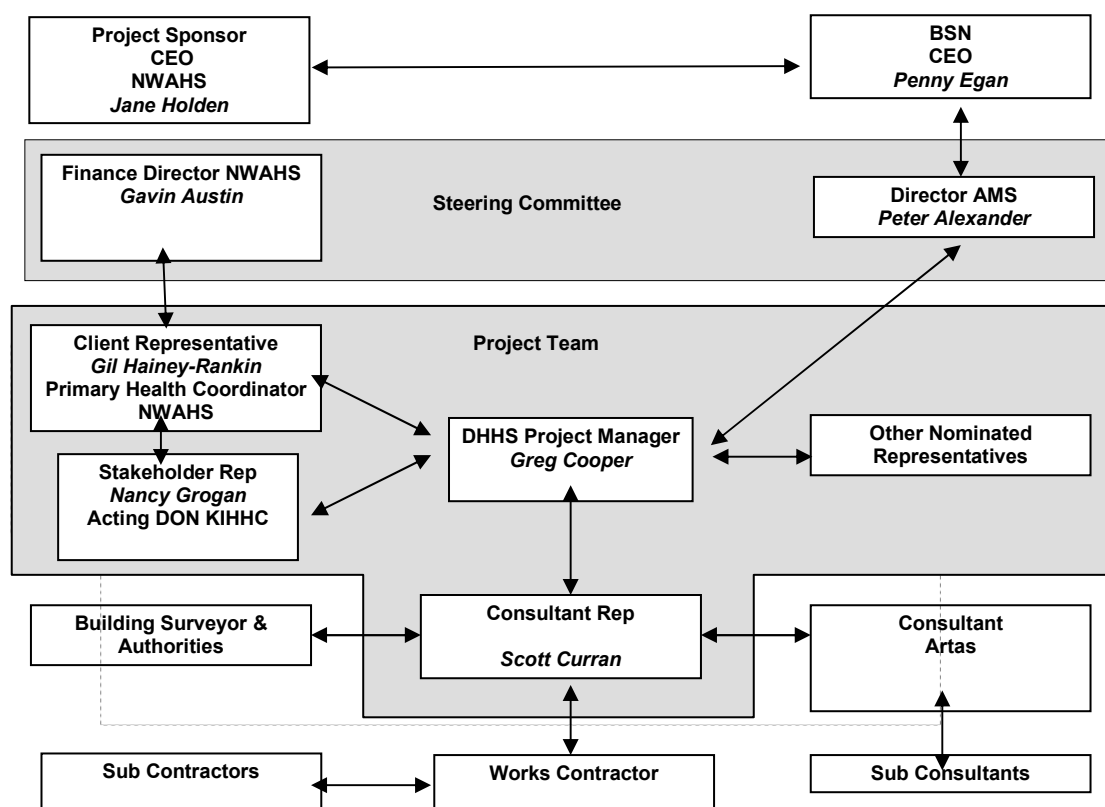
Preliminary Consultation

The original project brief was prepared in 2001 through the Department's 'Network Project' in consultation with the various Divisions responsible for providing and coordinating primary health and community services. This project brief was reviewed and updated in 2009 in consultation with representatives from the King Island HHC, Primary Health, Allied Health practitioners other departmental and community stakeholders including the local General Practitioners, Council, auxiliary and community members.

Project Coordination Group

Detailed stakeholder consultation commenced immediately following appointment of the Project Architects Artas represented by Scott Curran. The following diagram illustrates the Steering Committee, Project Control Group and consultant team relationships.

Project Coordination Structure



The Project Steering Group have been meeting as required to enable the project to evolve in line with the project timeline, the aim being to enable an adequate consultation phase while still allowing sufficient periods for documentation and procurement of the project.

This approach was identified during the initial consultation phase to maintain the project momentum to effect tendering of the project in early 2011. The tender date is based on working back from the desired completion date of March 2012. Due to the nature of being a redevelopment within an existing building, the construction period will be longer than if this had been a Greenfield project.

Consultation with Onsite Stakeholders

In addition to representation on the Project Control Group through the Stakeholder Representative (Nancy Grogan, Director of Nursing King Island MPC), consultation and information sessions were held with onsite staff, general practitioners and visiting services and community members. Preliminary plans have been displayed onsite and further information sessions have been held.

Design Review

Consultation with the stakeholders culminated in the development of the final agreed schematic design. A number of design options were tabled, discussed and then a system of

prioritisation undertaken to ensure the maximum delivery of outcomes of highest priority within the available budget. The project team tested the options for adequacy in planning, design and budget and maximising value by improving the relationship between various services and related functions.

During the review process key stakeholders identified and analysed risks associated with the design changes, affecting the service profile and/or changing the physical scope and layout of the proposed building without impacting on the main objectives of the project.

This consultative approach has resulted in a design that allows desired outcomes to be delivered and forms a strong platform for any future development.

5 ADDRESSING THE NEED

King Island Hospital and Health Centre Redevelopment

Existing Building and current issues

The King Island Hospital and Health Centre is located at 31 Edward Street, Currie.

The existing building is a combination of building styles and constructions which have been altered and amended over a number of years.

The facility has evolved over time from a district hospital to its current status incorporating aged care, acute inpatient, accident and emergency, ancillary services, community and allied health services.

The building condition generally is reasonable with the exception of some building services elements that are in poor condition due to corrosion caused by the buildings' proximity to the sea.

A program of works over the last ten years has overcome a number of identified building and mechanical systems' problems, however, ongoing upgrade of these systems is required.

Other issues to consider include:-

- heating and overheating of building; and
- linking services to improve functionality.

The current structure and condition of the building is fair but requires modification and refurbishment. The life cycle of the services, fixtures and fittings is nearing their maturation point. In addition to these considerations, the following have also been carefully considered:-

- eaves contain asbestos;
- fascia is rusting – requires repainting and replacement in some areas;
- aluminium windows have degraded;
- the majority of plumbing requires replacement;
- electrical switchboard requires upgrading;
- metal work is rusting in areas; and
- fire services require upgrading.

Limitations of the existing facility

The existing building currently operates on one level.

The number of access points distributed throughout the facility makes servicing the building out of hours difficult and time consuming.

Monitoring of patients and visitors is difficult due to the number of different access points.

Aged Residential

The rooms are constrained in that they do not have ensuites or the ensuites are small and do not comply with current regulations.

The common areas are small which makes manoeuvring lifting machines and other pieces of equipment difficult.

Inpatient Sub Acute

Inpatient Sub Acute is situated in the original building and all rooms open off a busy and noisy corridor. The rooms are large without ensuites. The location of the Emergency Department, Treatment Room and Visitors' area all contribute unwelcome noise and activity to this area.

Ambulance Entry

The current ambulance entry is located too far from the Emergency Treatment Room. This area has issues with weather protection, narrow vehicular access and no automatic doors. After hours access and security need to be re-considered to provide a safe and manageable entry point.

The emergency treatment room and smaller treatment room are too small and require refurbishing.

The X-ray/Pathology room is adequate in size, however, an equipment upgrade is recommended.

General staff meeting and dining areas are extremely limited and small, thus restricting the opportunity for staff to participate in any meeting or education.

The condition of the original building is fair but requires extensive upgrading to achieve modern and efficient spaces.

Ancillary Services

This area comprises the Kitchen and Pantry/store. The staff dining room is too small to service all staff and is in poor condition. The capacity for large food storage is required in case the island becomes inaccessible – a separate freezer/cool-room area is required. It is recommended to redesign this area and upgrade the kitchen, equipment and storage facilities. The present location for delivery access is suitable. However the kitchen will require relocation to allow better ambulance access to the proposed new treatment room.

The general condition of the laundry, dirty linen and linen store is poor. Equipment requires replacing and the functional layout requires improvement.

GP Services

Two GP's rooms and a treatment room are currently located in this area. In addition to the two consulting rooms there is a Treatment Room, Pharmacy, Reception and private toilet facilities.

The Waiting Room is dual purpose as it also services as the waiting room for the remainder of the Centre. A separate waiting room is required for the GP practice. The GP reception area provides no privacy for patients as it is located too close to the waiting area.

Current access to the GP Consulting Room is inappropriate. There is no privacy – sound proofing of the GP surgeries has been highlighted as an issue and there is no dedicated Practice Nurse space. This entire area requires redesign, staff and patient security, privacy, access and acoustics needs to be considered. The Pharmacy area also requires an upgrade and an increase in size. Proximity to treatment and emergency should also be addressed.

Allied Health Services

This area provides consulting rooms for visiting allied health professionals and/or local staff and a multi-purpose room.

It is contained in a separate wing that appears to have been constructed and extended over a number of years. Access to this area is via the main entry. Whilst the condition of the building in this area is fair to reasonable the site and layout of the rooms leads to inefficiencies.

The Reception area, Records, Pharmacy and waiting areas are all undersized and additional area is required. The day centre is in fair condition however is undersized and has no storage.

Administration and Entry

This is the first point of contact into the building from the Main entrance via an airlock and foyer. It comprises reception area, office, administration area, toilet and switchboard room.

The foyer is narrow and the reception area is uninviting and cramped.

6 DESIGN PHILOSOPHY

The proposed redevelopment is a major refurbishment of the existing hospital with selected areas of new build.

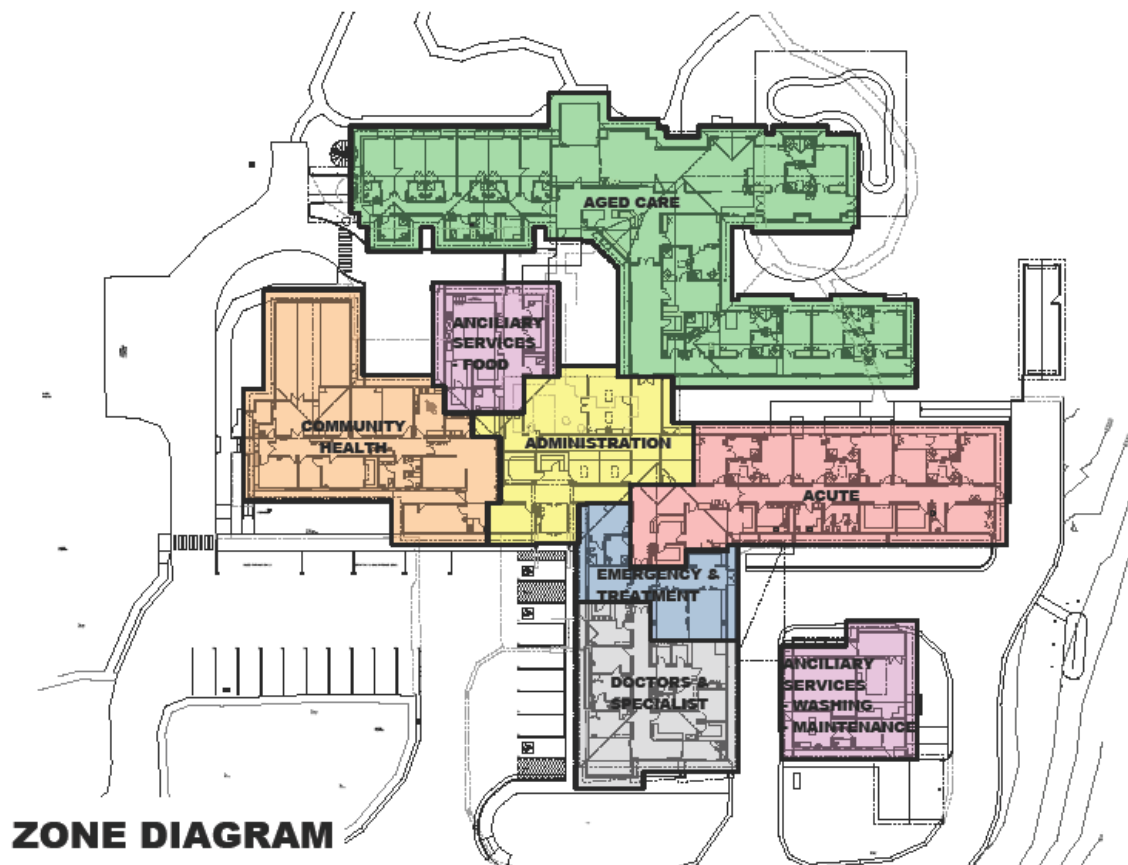
The design philosophy has been to:-

- refurbish the facility to incorporate best practice contemporary health planning and also accommodate current efficient hospital operation practices;
- incorporate functional planning to accommodate shared resources between acute care and community services such as accident and emergency treatment suites;
- design for flexibility changing health care delivery into the future; and
- design for staged development that takes into consideration that the hospital will remain in operation for the duration of the project.

Generally, a refurbishment of this facility would increase functional efficiency and provide a contemporary environment for the delivery of the required services.

7 PROPOSAL

KEY ELEMENTS



The proposed solutions below outline the identified building deficiencies as highlighted previously and the design teams planned approach towards resolving the deficiencies.

Aged Care

- *Access to the rooms is restrictive and the ensuites do not comply with the current standards.*

The entry doors have been widened and the toilet pan will be angled to help ease access. A complying access toilet will be constructed in this area in addition to an equipment store, pan and cleaners room.

- *The living areas generally are confined and moving patients is difficult.*

An additional living space, conservatory/morning room, has been added to create more flexibility for the residents and enable them to experience the morning sun. An access shower, cleaners store, pan and dirty utility and equipment store have also been added to this

area to help with the functionality of this space. The patient sitting, patient dining and patient lounge have been reconfigured to enable better movement in and around this area.

In addition, the rooms have been enlarged and walls removed to open the spaces up and assist with resident comfort. The nurses station and drug store are immediately adjacent to this area

- *Dementia patients wander the facility and disturb the other residents.*

Two new rooms have been added to the eastern end of the existing building. This area can be secured and the dementia residents confined to this area if required. The location was determined due to its proximity to the nurses' station.

The remaining six rooms are grouped around a courtyard to provide sun penetration into the rooms and an enjoyable and pleasant outlook. Each room contains an ensuite. Dirty pan/utility store will be added to this area.

The aged care area is defined by a "front door" and "back door" and this area has been located so that no service delivery or function needs access to this area to perform other functions associated with the facility.

A new drop off area is proposed for the "back door" which is located at the western end of this wing.

Ancillary Services (Laundry and Maintenance)

- *The location of the existing kitchen is relatively central to the facility however its proximity to the emergency and treatment area needs to be addressed. It requires air conditioning and upgrading to relevant current standards.*

The kitchen and associated stores and delivery bay have been relocated to free up space adjacent to the treatment area, a critical functional relationship that is required with the GP's and specialist area. It is located centrally to all the functions and provides an opportunity to isolate deliveries to a central zone.

The loading bay and service area has been isolated and does not share any vehicle movements with other areas.

The location of the kitchen allows for the construction of a new secure courtyard that can be supervised from the nurse's station and staff room.

The current laundry requires a general refurbishment to increase functionality and efficiency. The laundry will be redeveloped in its current location. The new layout will increase the functionality of this area. No work is intended for the current maintenance facilities in this area.

The morgue will remain in its current position with a small renovation to the viewing area to create a small sitting space. This overcomes an existing community concern about the current configuration which requires mourners to stand outside in the elements whilst anybody is viewing the body.

Administration

- *A number of issues were identified in the existing administration area, these included, adequate file storage, relocate the public toilet and include a baby change adjacent to this area. Enlarge the photocopier area and provide a more flexible space.*

The administration will be remodelled utilising the existing entry to the hospital. Reception will be re-worked and be located adjacent to the fire-rated store, the resource room and the ambulance hot desk. The reception area was moved to the west of its current location. The file store, resource room and staff room and tele-health are located centrally.

Acute

The acute area needs to be redesigned to enable an ensuite to be included in each room, lifting rails are required to assist with lifting patients and the work areas require a general refurbishment. The retreat has been identified as a crucial area that families utilize during palliative care and this area should be enhanced.

The existing acute area is now positioned adjacent to the emergency and treatment area. The nurses' station in this area provides a good contact point for visitors.

It was determined that this area be refurbished to enable each room to have an ensuite and that the northerly orientation was also desirable. Lifting rails will be installed in the rooms and the corridor and work areas refurbished.

The existing tele-health room will be converted to a ward and the adjacent store converted to "The Retreat" for families.

Emergency and Treatment

The location of the entry to the Emergency area requires a rework to ensure that after hours the hospital can be reduced to one entry point for the public.

The Treatment Room requires enlarging and ambulance access should be carefully considered. The location of this area should be adjacent to the acute area and the Doctors/ Specialist area.

The emergency and treatment area has been redesigned to enable a number of the considerations to be incorporated.

Ambulance access and drop off zone was a key driver in determining the position of this area. A new access corridor and covered area will provide ready access for patient delivery.

The treatment room has been enlarged and divided into an area that can be utilized as a large treatment room or as two smaller rooms.

The corridor will also be used to transfer patients to the ambulance for transfer outside the facility. The existing treatment area will be retained to add flexibility to this area and a new access toilet and upgrade of x-ray.

The main entry will be used for after hours access and the waiting room in the community health area utilised for accompanying family members. This will provide a discrete and quiet place to wait. A new Sterile Store will be located adjacent to the treatment room.

Doctors and Specialist Area

The existing GP's area requires a refurbishment generally as well as being located a lot closer to the treatment area. It should also have its own entry point, waiting area and reception.

The doctors and specialist area has been relocated to a more central position adjacent to the treatment and acute area.

A discreet entry has been added to the south with access from the existing car park. New consulting rooms for the GP's, nurse and visiting specialists have been provided in this area. Ensuites have been included off three of these consulting rooms, storage, tea-making, toilet and cleaner's area have also been included.

A door to the corridor enables this area to be secured at night if required.

Community Health

The existing community health area requires a general refurbishment with an upgrade required for the dental, toilets, waiting area and child health. Entry into this area requires a rethink.

The dental area will be relocated within this zone to a larger space on the northern side of the building.

The toilets have been relocated and upgraded. Included in this area is a cleaner's store.

Child health has been relocated to a larger space adjacent the waiting area and baby change.

The physio has been enlarged due to the relocation of dental and two new counselling rooms provided. Community and health promotion will remain in their current position however the offices will be refurbished.

The day centre will remain in its current position with a general refurbishment as at this stage the proposed extension is not funded.

A new access ramp to the west will provide an additional access point to the Day Centre and Counselling rooms.

It is proposed to provide a new bus drop off point adjacent to this ramp to provide direct access to this area. This will eliminate the need to have the bus access the new service zone to the east of the Day Centre, which is where the bus currently parks.

Car park and Grounds

The car park will be reconfigured to include a bus parking zone and a short term drop off.

Existing spaces will be located adjacent to the west side of the GP wing. Two access compliant spaces will be located adjacent to the main entry.

Limited landscaping works are proposed for areas adjacent to new works and the new internal courtyard.

8 PROJECT STAGING

The project is to be split into 6 stages to allow for the facility to operate throughout the construction period.

It is proposed that the construction will be staged as following and that the facility remains fully operational during this period.

Stage 1	
Redevelopment of aged care, GP reception	Construction period 12-16 weeks
Stage 2a	
Kitchen, administration	Construction period 6 - 8 weeks
Stage 2b	
Aged care (high care)	Construction period 6 - 8 weeks
Stage 3a	
Acute, treatment, part GP's area	Construction period 6 - 8 weeks
Stage 3b	
Balance of GP area and part car park	Construction period 6 - 8 weeks
Stage 4	
Community health and balance of car park	Construction period 12-16 weeks

Sustainability Features

The existing building is poorly insulated and has poor insulation and heat resistance properties in its glazing systems. The redevelopment will upgrade windows to current Building Code of Australia levels and improve insulation levels to minimum Building Code of Australia levels or better.

Sustainability Strategy

The following sustainability strategies will either be incorporated as standard and best practice or be considered as effective measures of reducing the impact of the proposed systems on the environment via greenhouse gas emissions. Due to the remoteness of the site, any technology has to be weighed up against the requirement for maintenance and servicing.

Energy Sub-Metering

Both electrically and to the various components of the Mechanical Services systems by way of flow, temperature and energy sensors, potentially linked to a Building Management System with reporting capabilities to target wasteful or faulty processes.

Peak Energy Demand Reduction

Where hospital operations will not be compromised, shedding load to reduce the peak energy usage will involve relaxation of temperature control limits, temporary isolation of non-critical energy sources (coupled with increasing storage of energy). DHHS is working with Hydro Tasmania which is the energy generator and retailer on the Island to investigate opportunities for load management if identified to assist in balancing the overall King Island energy system upgrade proposal of Hydro Tasmania.

Environmentally friendly refrigerants, insulation and other products. Systems with zero Ozone depletion potential and low Global warming potential will be given priority in the design process.

Indoor Environment Quality

Holistic approach to energy and waste management – the various services and the building envelope must be considered together, from the Building Code of Australia point of view and for ESD purposes to maximise passive advantages and minimise the use of energy and resources including utilising natural ventilation wherever feasible.

Electrical

The following sustainability strategies will either be incorporated as standard and best practice or be considered as effective measures of reducing the impact of the proposed systems on the environment.

Intelligent artificial lighting controls to allow zoning and dimming of lighting via motion detection, photo-electric cell, time of day level control and setback levels for areas of sporadic usage will be incorporated.

Energy sub-metering with meters linked to the Building Management System with reporting capabilities to target wasteful or faulty processes and improve long term energy reduction.

Indoor Environment Quality

Many considerations will be incorporated as standard practice and requirements for Building Code of Australia compliance with lighting efficiency and efficacy, passive measures to increase daylight quality and quantity and decrease energy usage will be considered.

Occupant comfort considerations such as high frequency lighting ballasts, artificial lighting levels and control systems will be reviewed.

Minimisation of light spill (emissions) will be included in the design process.

9 SERVICES

Existing Services

Building services are generally beyond their economic life and it is recommended they be replaced by energy efficient and low maintenance fittings and equipment.

Reuse potential includes the following that can be adapted to meet the staged nature of the redevelopment:-

- telephone system;
- communications racks and equipment;
- nurse call system;
- some electrical submains;
- air conditioning units on site;
- wall mounted hydronic panel heaters;
- some fire hose reels and hydrants;
- hot water cylinders and central boiler;
- kitchen exhaust hood and kitchen equipment; and
- stand-by generator.

Electrical Supply

The facility is powered from a pole mounted Aurora transformer in the street.

New loading requirements require a new main switchboard.

Electrical services will include new submains, switchboards and distribution boards, circuit protection and general lighting, power and heating in all areas.

The existing stand-by generator can be reused subject to new loading requirements. Load shedding will be undertaken if necessary. Currently the site operates on nearly 100% generator back-up. It will be modified to essential/non essential to accommodate the expanded building area.

Electrical supply will be configured to enable a wind turbine to be installed. Installation of turbine under this contract will be dependant upon budget.

Communications

There is an existing Telehealth facility which will be relocated to a more central location. Ambulance 2 way radio services will be retained.

The existing telephone system can be reused but reticulated over a new integrated voice and data network to DHHS IT standards (Category 6) throughout the new facility. Use of wireless technology will also be facilitated.

Security

Staff and patient security will be managed by:-

- access control to key building entry points;
- a new CCTV system and monitoring from any connection to the DHHS wide Area Network;

- all external doors monitored for opening via the Nurse Call system;
- intercommunication improved for staff by additional Digital Enhanced Cordless Communications handsets with full coverage of the site;
- personal safety for staff via a new duress system with coverage of the community health areas of the site only; and
- lighting to external areas and car park.

Fire Detection Services

The existing Fire Detection system will be reused and upgraded to a full Smoke Detection system and Electronic Warning system. The existing Fire Indicator Panel will be replaced with a new addressable type Fire Indicator Panel.

To be interfaced to the Nurse Call/Digital Enhanced Cordless Communications system.

No sprinklers are allowed for at this stage.

Mechanical Services

New works will have compliant exhaust systems etc as required. Dependant on budget and spatial needs, selected spaces will be air conditioned by split air conditioning systems which will generally be retrofitted and relocated existing units. Natural ventilation will be utilized where possible in all areas. Generally heating is to be by ceiling mounted panel radiators and reused wall mounted hydronic radiators that utilise heating water from the existing central boiler.

The kitchen hood will be considered for reuse but it may not be practical based on maintaining food service provision at all times and the staging requirements.

As with lighting, the areas of similar usage patterns will be zoned for operating times and temperature control. The intent is to minimise energy usage when areas are not occupied. With heating, this would be a combination of time scheduling and after-hours push buttons and timed operation.

Hydraulic Services

Water Supplies

Town water is utilized for fire fighting and laundry. Potable water is also town water, which goes through a water softening system. Reserve capacity is available in existing underground tanks, which have not been utilised for some time but will be re-instated under this project. This system will be upgraded as part of the Contract works due to the failing nature of the existing infrastructure.

Hot water heating is via several banks of gas fired storage heaters, which will be reused. Further study will be undertaken into reverse cycle central or distributed plant plus solar boosting.

Sewage Treatment

All the facilities sewer collection is gravity fed to town sewer.

Grease traps will need to be replaced with new to facilitate the new kitchen location.

Potentially a cooling pit for the laundry may be required, to be confirmed in detailed design.

Fire Fighting

External Hydrants and Hose Reels will be reused with some relocation required and upgrade of the existing pumping systems due to significant degradation of the existing infrastructure.

10 PROJECT SCHEDULE

The construction program for the redevelopment of the King Island Hospital and Health Centre will need to be conducted in a number of stages, due to operating in an existing Hospital which needs to retain its existing services and functionality throughout the entire construction period.

The current project status is that the initial design phases have been completed and the design and tender documentation are being progressed through to tender in late January 2011.

Summary Project Timeline	
Project Stage	Completed
Design and Documentation	
PSCPW Submission and Approval	15 December 2010 – 20 January 2011
Works tender advertisement	22 January 2011
Contract Award	28 February 2011 (on approval of the Parliamentary Standing Committee on Public Works and the Procurement Review Committee)
Construction commencement	
Stage 1	14 March 2011 (12-16 weeks)
Stage 2a	20 June 2011 (6 - 8 weeks)
Stage 2b	15 August 2011 (6 – 8 weeks)
Stage 3a	26 September 2011 (6-8 Weeks)
Stage 3b	14 November 2011 (6-8 weeks)
Stage 4	20 February 2012 (12-16 weeks)

11 PROJECT COST

The approved funding for the redevelopment is \$5,300,000¹.

The cost of the redevelopment is currently:

Construction costs	\$4,367,132 ²
Construction Contingency	\$159,642
Professional Fees	\$442,040
Fees Contingency	\$40,000
Art in Public Building	\$80,000
Escalation Costs	\$80,000
Equipment	\$80,000
Project Total	\$5,248,814
Budget surplus	\$51,186

1 - Tas ambulance have agreed to adding a further \$100,000 to the project budget to allow for the relocation of their King Island facility to the Hospital Site which is functionally a significantly better location for them.

2 – The current construction budget allows for an allowance of \$600,000 for the remote location of King Island. This figure provides nearly a 20% allowance relative to expected costs should the project be located in a mainland Tasmania site such as Devonport or Burnie and reflects additional costs of travel, food, accommodation etc. An element of potential cost savings that the Department is considering is upgrade of the nurses accommodation to provide some initial accommodation for the builders and to provide subsidised meals for the construction workers.

The above budget for the redevelopment indicates a funding surplus of approximately \$50,000. This outcome is subsequent to rigorous design and value management review process. The remote location with the current high levels of activity in the construction industry has markedly increased the level of the locality allowance as builders are able to achieve a good level of profitability for projects in the metropolitan areas without the complication of undertaking work in a remote area with its associated logistical challenges.

The current project costs are provided by the project Quantity Surveyor and based on reasonable allowances for the remoteness of the job, current market conditions and the ability of the contractor to engage subcontractors in a remote location.

12 RECOMMENDATIONS

The Project Steering Committee and Project Team have carefully assessed and explored the options and solutions available and have determined that the design submitted provides the required project outputs as determined in the project functional brief. In addition, the design is consistent with the strategic long-term direction proposed for the site.

It is recommended that this submission be viewed favourably and in the spirit of the benefit it will provide to this isolated rural community. The proposed works will immediately address the high priority outputs the facility requires to deliver appropriate health and community services.”

13 DOCUMENTS TAKEN INTO EVIDENCE

The following documents were taken into evidence and considered by the Committee:

- Department of Health and Human Services, King Island Hospital and Health Centre – Redevelopment
- King Island Hospital and Health Centre – Redevelopment Scoping Report
- ARTAS Architects – Professional Fees
- Department of Health and Human Services - Additional information re ‘Design Tenders’

14 EVIDENCE

The Committee commenced its inquiry on Wednesday 15 December 2010 with an inspection of the site of the proposed works. The Committee then proceeded to the King Island Council Chambers whereupon the following witnesses appeared, made the Statutory Declaration and were examined by the Committee in public:-

- Sarina Laidler, Community Development Officer, King Island Hospital and Health Centre
- Nancy Grogan, Acting Director of Nursing, King Island Hospital and Health Centre
- Rosemary Ayton, Nurse Unit Manager, King Island Hospital and Health Centre
- Greg Cooper, Manager Major Projects Asset Management Services
- Scott Curran, Director, ARTAS Architects
- Matthew Green, Project Coordinator, ARTAS Management Services

The Committee was presented with a PowerPoint presentation which showed the proposed development, some of the specific issues requiring resolution and it also included some additional information. A couple of small amendments to the documentation were noted along with the fact that consultation on some finer details was still proceeding.

The Committee commenced their questions with an inquiry about the project cost particularly with respect to a contingency of \$600 000 for construction, a contingency of \$40 000 and an additional escalation cost. Mr Cooper explained -

The escalation is essentially that the QSs develop their budgets at this moment in time and so, given that there is going to be another three or four months, maybe longer, before we go to tender and a contractor starts, then there is an escalation that we just leave in our budgets internally until we come to the pre-tender estimate.

It was noted that the construction costs include an allowance of \$600 000 for the remote location of King Island and the Committee asked about the calculation of such a precise figure of \$4 367 132 for the construction costs. Mr Cooper replied that sub-consultants estimated the figure and asked Mr Curran to explain further -

Initially they start off with a square metre rate. We start off with our schematic design and then they will put a base square metre rate, based on their experience working within the industry. Then as we progress the drawings and we get more and more detail onto the drawings, the quantity surveyor is able to refine his estimate. We are at a stage where we are probably 75 per cent to 80 per cent complete with documentation, so he has been able to refine his estimate down. There are still some unknowns as we continue to tinker with the design and what is in some of the rooms, but essentially that is the process that we have been following and we are very much guided by the information that he provides to us.

When asked about the current economic environment with the BER funding slowing down and the expectation that there would be increased competitiveness for the project Mr Cooper said -

The department tendered a few projects 12 months ago and we would only get one price. Recently we have been tendering some works at the Mersey and the North West Regional Hospital and we have received seven or eight tenders so we are seeing more interest from the builders in pricing, which is good for ourselves. We also have the unknown, though, of the island and how many builders are going to be attracted to coming over to the island if there is adequate work on mainland Tasmania.

The Deputy Chair asked about the number of tenders expected to which Mr Cooper replied -

We are hoping that we might get five or six but I suspect that it is probably mainly going to be the big three or four builders - Fairbrother, Vos, maybe Hazell Brothers, maybe one or two others.

He was then asked about the opportunity to use local resources and employ local subcontractors -

Essentially there is every opportunity. It is a public-let tender process.

Mr COOPER - The head contractor needs to be on that preferred tender list and they will need to be pre-qualified up to the level of the project. The construction value is about \$4 million so they will need to be pre-qualified at that level. In terms of local tradespeople, they will all have the opportunity to provide quotes to each of the major contractors. There might be some pre-qualification requirements for mechanical and electrical contractors which may make it difficult for local contractors if they are not already pre-qualified, but certainly in terms of, say, a carpenter, plumber or bricklayer, they could all put quotes to the main builders.

Mr Cooper added -

Yes, certainly, and we have done so before with Bruny Island - another recent project where as part of the tender assessment we asked them to provide details of any local labour that they were going to incorporate, and we can include that in the tender documents that we go to the market with.

The suitability of the design for King Island was raised with questions about population demographics, including a recognition of an increasing ageing population. The Committee were assured that the design had sufficient flexibility and that such consideration had been taken into account when designing the centre.

Mr Cooper explained-

... that one of the other aspects that the department did was a health snapshot of the island, looking at projections of health issues, so in terms of the numbers of beds and that sort of thing, that was reviewed at that time and it was confirmed that having six acute beds was adequate moving forward - it may even be a little more than we need. Similarly, in terms of the 14 aged-care beds, it was felt that that was adequate for current and future needs.

Mr Cooper referred to a separate report on population projections which he undertook to provide for the Committee. The document - King Island Hospital and Health Centre Redevelopment Scoping Report - was subsequently received by the Committee. The report included a detailed long term analysis of hospital separation rates; average length of stay; aged care occupancy; community care services rural primary preventative health projects and many other statistics. As indicated by Mr Cooper the proposed development takes into account all the statistics and the population projections by age.

The manner in which the design team was selected and the process for the design concept was explained by the following exchanges -

Mr BOOTH - Greg, I am interested to know how you adduced the design criteria for the project. Was it a funding-based thing or was it an age-based thing? How did you get to the point where you decided that this was what was needed?

Mr COOPER - I think it was about two years ago. Prior to that there seemed to be a need to redevelop a number of remote acute health centres, what we call Tier 2 health centres. The department saw this site, Flinders and a few others that needed redevelopment and we at that time did an assessment, including a condition assessment - Scott was involved in this site - identifying what all the deficiencies were and from that we came up with a budget which was put up for Cabinet approval, and that occurred about two years ago. Since then we have been going through the planning process.

Mr BOOTH - Is that work part of the design fee? I notice that professional fees are nearly 10 per cent of the billed cost? Can you give us a breakdown of those fees?

Mr CURRAN - The initial work that we did was not part of the engagement that we have now, that was a separate engagement to do the investigation on the hospital. We then went through a process where we had to tender for the work and we were successful with that tender. The fees that we have are broken down into a number of different sub-consultants that we use. As the architects, we are the lead consultants and it is our responsibility to coordinate the other consultants. I do not have the

breakdown of the fees with me but I can provide that to you, but included within our range of sub-consultants we have mechanical, electrical, fire, communications, quantity surveyor, building surveyor and a number of other different consultants that we use to enable us to produce documents to tender for this project.

Mr BOOTH - So then the design part of the project was put to tender?

Mr COOPER - Yes.

Mr BOOTH - What other tenders did you get? How did you sort out the tender for the design, and what were the other prices for the design?

Mr COOPER - I couldn't tell you here but I can find it out and make it available.

Mr BOOTH - Ten per cent seems an extraordinarily high fee for architect and design fees, it seems to be a lot of money.

Mr COOPER - That is a very traditional figure - on most construction projects it is a broad rule of thumb. If you are getting up to a \$30 million project it might be less than 10 per cent, it might be 7 or 8 per cent. The other issue - the same as the builders - is the travel requirements. For the consultant team to come over here they need to go through the existing building with fine toothcomb and that takes time and effort to look at all the issues, go through ceilings, look at walls and plumbing and then to prepare the documents and go through the consultation phase with staff and management, and then go back and forth with the designers. We come up with estimates and we might find that we are over budgets and we need to prune areas and see where we can get savings. So it is a very typical-type rule of thumb - the 10 per cent-type figure.

Mr BOOTH - With regard to the ultimate design, which at this time isn't finalised because there are some changes taking place - and I want to talk about some of those issues at a later time - how did you go about determining the needs of the site, was it something that you discussed with the managers and sought their advice with regard to that?

Mr CURRAN - Initially we get a brief, which is what we prepare our submission on, and then we will take the brief and start our consultation. So we sit down with the managers and start to discuss the brief to determine whether parts of that brief are still relevant or whether things need to be added into it. From there we progress through a number of stages. We have a schematic design stage where we then start to put some of these thoughts onto paper, then come back and have consultation, talk about the impact of what we are doing on the building, on the design and on the functionality of the hospital. As we work through those stages we move into a stage of further schematic design where we continue to resolve some of these issues in more detail to a point where we ask for it to be signed off. So that issues of functionality, placement of rooms, size of rooms, all of those things, are signed off at an initial phase, and then we would start our documentation, which is when we start to zero in on rooms and see what bits of furniture and equipment are needed, locations of power points, fire detectors, lights, conditions of ceilings and all those sorts of things, and through that we were able to tender the job.

The Committee were later provided with a breakdown of the professional fees of sub consultants and the tenders and prices tendered for the design phase of the project.

In relation to the selection of the Design team the Department of Health and Human Services submitted that :-

“The selection of the design team was based on the Department’s own panel of prequalified consultants. In May 2009 submissions were obtained from over 30 local and national design organisations for a range of potential projects of varying value and complexity. This was undertaken to obtain initial competitive pricing for potential health infrastructure projects across Tasmania when significant funds were about to be invested in the Education sector and creating a potential risk to the Department being exposed to higher fees due to the excess workloads of Consulting organisations around Australia. Once the submissions were obtained with an indication of fees for a range of projects, DHHS then approached ARTAS architects based on their experience with the site competitive panel submission and availability with the specific scope for the King Island project and obtained confirmation of their fee for the works. It was noted at the time that the fee offered by ARTAS was below their original panel submission. This process was in compliance with Tasmanian Government procurement guidelines, Specifically Treasurer’s instruction T11299.”

The ARTAS professional fees were based on a construction budget of \$4.5m with project fees and hourly rates clearly specified. The total fees for all services is 10.28% of which the architectural component is 4.75%. A consultant summary listed the names, qualifications and experience of the local consultants.

The site inspection highlighted several outstanding issues of concern to the Committee particularly those related to adequate drug storage and a sterilisation room. The Committee asked about the continuing consultation and fine tuning of the project.

Ms Ayton spoke first -

Ms AYTON - I don't think it was the drug storage because there has been adequate provision for that. I was just highlighting that the current drug storage in the aged-care area is totally inadequate and that has been improved on.

Mr CURRAN - Yes, that has been addressed.

Mr BOOTH - What about the sterilisation room?

Ms AYTON - We need to get together and re-talk about that.

Mr BOOTH - Scott, do you see a problem in providing enough space? You only have the rooms you've got; you don't have a sterilisation room and I think the equipment storage was another issue. Is there capacity within the design, or are you constrained by the building to adequately cater for those deficiencies?

Mr CURRAN - We are constrained by the building but there are a number of opportunities underneath the building to provide an ancillary equipment store. I think it is a matter of going back and addressing some of the issues with the equipment to see where they need to be placed around the facility. There have been some comments back that some areas we have, such as the linen store, may be able to

be decreased and some other storage put into there. I think now that we have this in more detail, it is a matter of sitting down and discussing where those things will be located.

Mr BOOTH - And the issue of the sterilisation room will be dealt with? There seems to be conflict at the moment in terms of the advice; one advice is that you don't need it, the other advice is that you do and it seems from a health professional point of view the advice is that you do need it.

Mr COOPER - I think there are two professional views about sterilisation. One professional view is that you go with disposable systems rather than sterilisation. But working through the local issues, I think that onsite sterilisation is a more suitable solution for King Island. The disposal option just doesn't work well for King Island. Would that be a correct summary, Rosemary, or are there other clinical aspects?

Ms AYTON - I think some of the issues that we can address probably need to be discussed more with clinical nurses. You couldn't possibly provide enough pre-packaged sterilised equipment to be available. On the day they run a podiatry clinic, for example, I don't think it would be possible to have 50 pre-packaged sets for podiatry, it is just not realistic.

Mr BROOKS - I see us here to make sure that the public's money is protected and spent wisely and invested in an appropriate manner. This is also about scrutinising the project and seeing if we can make some more adjustments or suggest to the architects or those involved that they make some amendments to get it right so that we do not have to knock a hole in the wall six months later.

Mr COOPER - That is really what we are still working through with the design process. The original program was trying to go out to tender by about now but we recognise that we still need to do a bit more detailed consultation with the staff and so we are still working through that. These minor details are certainly important details but they are relatively minor in the overall scheme of the project and that is what we are still working through, that is what the final 10 per cent of the design does for us; it fine tunes those elements and, as you say, we do not need to knock out walls in six months' time after they have moved in.

The Committee considered the future maintenance requirements envisaged in the new facility and asked about compliance with modern fire standards and asbestos removal. Mr Curran and Mr Cooper both assured the Committee that the provision of adequate fire protection was included and future maintenance had been considered -

Mr CURRAN - Yes. We are putting in a new fire detection system and upgrading areas where fire needs to be detected. Asbestos will be removed. It has been identified in the eaves, the gables, lagging around some pipes and in some floor tiles. It will all be removed as part of this project.

Mr BOOTH - Across the whole facility?

Mr CURRAN - Yes.

Mr BROOKS - Will this require an increase in the maintenance budget?

Mr COOPER - I don't believe so. We are not adding extra bells and whistles.

Mr BROOKS - We are increasing the air conditioning across the board. I'm not sure if you are spending more on maintaining the older systems than bringing in a new preventive maintenance regime of quarterly, six-monthly or yearly inspections and so on.

Mr CURRAN - The current system will be removed - those big stacks over the top of the old surgery area. We are looking to refine that system and make it a lot more efficient. Regarding the exterior of the building, we are going for low maintenance materials - such as brick. A lot of the finishes will be as they are currently. Areas where we are required to upgrade downpipes and so on will be done as part of this process. We have tried to keep the construction on a cottage scale so if things need to be fixed in the future they can be sourced locally without needing specialist tradesmen to do that work. That is part of the philosophy behind the construction.

The submission from the Department of Health and Human Services summarised the proposals about water supplies including a water softening system and the proposal to ensure reserve capacity by the re-use of existing underground tanks. The Committee wondered why the project included spending money re-instating old reserve tanks when the town water supply was potable and assumed to be adequate. The following exchanges clarified the matter -

Mr CURRAN - My understanding is that the water goes through a softening process and that is why we are storing the water - so that we have an adequate reserve of this softened water.

DEPUTY CHAIR - Okay, but I presume that you would be using normal reticulated water that goes into the system at the moment.

Mr CURRAN - Yes, but it comes in and then it travels right down to the bottom of the site, it gets softened, and then it comes right back up around to the top and back into the supply. What we are looking to do is to bring it in, soften it in the areas where it comes in and then have adequate storage of it on site. I don't believe it has the capacity to constantly keep producing itself - that is my understanding, but I could seek some further information for you.

Mr COOPER - I think the peak water flows are above the instantaneous ability of the water softener. Would that be correct?

Mr CURRAN - Yes, I think that is a good way to describe it.

Mr BOOTH - I think the point Greg was making was, what is wrong with the reticulated supply that is coming to the site? Is it a requirement that with every hospital you have to soften the water?

Mr COOPER - No, I think we soften the water -

Ms LAIDLER - The Currie water does need softening. It contains a lot of iron. It needs a lot of work done to it before its useable.

Mr COOPER - That is for the laundry-type functions -

Ms LAIDLER - That's for maintenance of all the equipment that water is running through.

DEPUTY CHAIR - But you have gotten away with it for some time without using those reserve tanks - that is the point I am trying to make.

Ms LAIDLER - We have had ongoing issues around that.

Ms AYTON - No water, frequently.

Mr BOOTH - No water?

Ms AYTON - Yes.

DEPUTY CHAIR - That answers my question.

Mr CURRAN - It is an issue that needs to be addressed.

Mr BOOTH - Is there any proposal to upgrade the whole reticulated supply? These softening procedures would then be unnecessary, were you getting a proper, safe, potable supply.

Ms AYTON - I cannot answer any technical questions, but as a resident I have to say that King Island water isn't nice. If you are able to have either tank water or softened water, that is the way to go. But perhaps the gentleman at the back could comment on that!

In her evidence Ms Ayton referred to the Mayor of King Island who was present in the public gallery. The Deputy Chair invited the Mayor, Mr Charles Arnol, to be sworn in to further clarify the condition of the town water and answer questions. Mr Arnol was sworn in and described the water supply thus -

Mr ARNOL - The water contains a high calcium content because it is obtained through the sand aquifer, and it is a requirement to reduce that so that it doesn't put a coating on or otherwise affect the equipment that it is going through. Basically it is potable, as far as the medical side is concerned. It is tested every week or fortnight, but it does play up with machinery and particularly hot water systems where it calcifies. That is where the difference is.

When asked if there were any plans to upgrade the island's water supply to soften it all or remove that calcium from it Mr Arnol said -

It is highly impractical to do that. It was looked at but it was found to be totally impractical to soften it at the source because basically we would be putting softened water through for agricultural or horticultural purposes and it is a cost that we can't stem, the same as electricity costs. If you would like to bat for us we'd be happy with that too.

The cost and supply of electricity for heating and hot water and the potential for the use of solar power as a supplement and/or substitute for the boiler was put to the witnesses. Mr Cooper confirmed that the current boiler uses LPG bottled gas which is quite expensive as it is shipped in bottles and went on to say that-

As I understand it, there was an analysis of the different types of fuels done a few years ago which at that time showed that using LPG was a more economical solution than having an electric boiler.

As far as incorporating solar power Mr Cooper told the Committee -

I think solar hot water is again one of those nice things that we would really like to achieve but we have the service requirements of the space that we are concentrating putting our dollars into. We could quite easily add a solar hot water system that could preheat the boilers, and then save money. Ultimately, we really need to wait until the tenders come in and we see certain aspects, such as the remote area allowance and how realistic those figures are, and should we end up in a fortunate situation where we are \$300 000 under budget, then we might be able to put in a wind turbine and solar hot water. They are certainly high-priority items that we would like to put in but the focus needs to be on providing the solution for the people who use the space.

The Committee followed up with questions on the energy rating and efficiency of the new building and the fact that the island has a very efficient system with wind and solar power generation and inquired whether similar systems could be incorporated for the hospital. Mr Cooper described the budgetary limitations which precluded the inclusion of alternative power generation in the current project.

Mr COOPER - In the budget at the moment we cannot accommodate our own on-site generation. We want to do so, therefore the electrical system has been designed to allow future external connections. When the department, through its whole-of-agency energy efficiency upgrades, can afford a wind turbine, we will look to install one and connect it to the system.

Mr BROOKS - A hospital requires a back-up energy supply. Is that being upgraded as part of the project?

Mr COOPER - No. We have a generator on site, which is adequate. It is probably over-designed for what you would reduce a building to in an emergency. The scale of the generator will allow us to maintain probably 70 per cent of this site.

Mr BROOKS - So it's not a 30-year-old diesel that puffs out smoke?

Mr COOPER - No. It has quite a reasonable life left in it. Should it fail in the future then we will have those other funds to upgrade that facility.

15 CONCLUSION AND RECOMMENDATION

The redevelopment of the King Island Hospital and Health Centre, when completed, will provide a facility combining hospital and community health services which will ensure that the residents of King Island have access to sustainable community health services and a hospital to facilitate the professional delivery of appropriate health care services. The Committee have been assured that consultation is continuing to guarantee that several issues which are not currently finalized can be suitably accommodated in the design.

The project budget of \$5 300 000 including a contribution from Tas Ambulance and the King Island Hospital Fund provides sufficient funding to allow for the additional costs of construction at a remote location and any necessary minor amendments or modifications to the plans.

Accordingly the Committee recommends the project in accordance with the documentation submitted.

**Parliament House
Hobart
7 February 2011**

**Hon. A. P. Harriss M.L.C.
Chairman**