Conserving heritage houses in the Mackay region
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1 Conserving the character and heritage significance of your house

Introduction

The houses in a city or town are a source of history for the area and can provide a sense of connection to community, to the past and to previous experiences. They are historical records and a collective expression of the identity of the area in which they are sited.

Mackay has retained several of its traditional houses, some small workers’ cottages and inter-war workers’ dwellings. They all have their own unique story to tell about the lives of early residents and their contribution to the growth of the city. Many houses in the Mackay region are similar to other Queensland houses with strong stylistic links to houses in other areas of North Queensland. The common theme is that almost all are exclusively single storey, are timber and raised on stumps.

Barnes’s cottage and garden at Cremorne (1876).
Contributed by: John Oxley Library - Image No. 2444

The Hermitage, Rawson’s cottage, West Mackay (1870–1880).
Contributed by: Mackay Regional Council Libraries - Image No. 02887
Mackay was settled by Europeans as a river port in the early 1860s to serve the pastoral and agricultural hinterland. The successful growing of sugar cane by Captain Louis Hope at Ormiston prompted the Queensland Government to encourage the growing of sugar cane in the colony and Mackay was the first area developed as a sugar cane district in tropical Queensland. Sugar production has been the driving industry in the city since its earliest days of settlement.

A violent cyclone hit Mackay in January 1918 and destroyed many of the town’s original buildings. Reconstruction was necessary and the general expansion of the sugar industry in the 1920s and 1930s resulted in a major building boom in the city during the inter-war period. For much of this period Mackay was the fastest growing major city in regional Queensland.

The physical boundaries of the city expanded and areas west of the city centre developed to house the growing community. Whilst expansion of the urban areas occurred in recent years, the sugar industry comprising the farms, mills and supporting settlement, continues to dominate the visual landscape of the Mackay region.
Mackay's settlement

Within two years of Mackay's settlement, the area heralded a period of pastoralism with massive runs taking up nearly all land in the Pioneer Valley, with the exception of a small area of land extending along the river from its mouth set aside for the development of the port settlement. The land on the south side of the river, known today as the Pioneer River, was laid out as a conventional rectangular pattern with broad streets. In addition, two park squares were provided, one on the site of the present Civic Centre and the other on land which was occupied by the goods rail yard close to today's Queen's Park.

The first 62 town lots were offered for sale in Bowen in October 1863 ranging from 27 perches to half acre lots and all were eagerly snapped up. Additional land was sold off in lots from 1864 both as town allotments and small farm areas. These lots generally followed Nebo Road, later to become the main track out of town to the pastoral runs. Subdivision along Nebo Road and the coast took place in the 1870s. There was little residential development on the north side of the river until after 1940 where much of the land was used for sugar cane and small-scale agriculture.

To help alleviate the shortage of residential accommodation following the 1918 cyclone when approximately 70 per cent of building stock was destroyed, cottages were relocated from Mt Morgan, a mining centre then in decline. Many of these houses were located in South and East Mackay close to the railway facilities.
Residential character areas

Unique residential character areas have been created by Mackay's historical development. These character areas are defined as:

- **Queen’s Park Character Precinct**
  This precinct was subdivided in the 1880s and is dominated by Queen’s Park and Victoria Park State School. Houses are larger than in other parts of the city and are sited on larger blocks of land. Recent multiple dwelling developments have caused some loss to both the heritage and character of the precinct.

- **Railway Station Character Precinct**
  This precinct was subdivided in the 1920s and contains narrower streets and smaller allotment sizes than other residential areas. It has distinct areas due to proposed railway corridors and contains a mixture of building types including ‘character’ houses of various ages and multiple dwelling units which have had an impact on the historic character of the precinct.

- **West Mackay Character Precinct**
  This precinct was subdivided in the 1930s and 1940s with the street pattern determined by the railway line and contains housing predominantly from that era in the typical Californian Bungalow style. This is the most cohesive and consistent precinct with a consistency in both age and building style and, with the exception of some increases in density, very little change has occurred.

The Bungalow Form

From the late 1920s land in West Mackay was subdivided into a series of residential allotments. Continuous grids of streets were surveyed in the suburb at 45 degrees to the city centre, dictated by the alignment of Nebo Road from the first survey of the 1860s. Subdivisions continued in the 1920s and 1930s and many houses were constructed in the suburb at this time.

The style can be broadly defined as a house with a low-pitched roof, overhanging eaves and prominent gables. Front and side verandahs for sleepouts were also distinctive features. The typical house was constructed of timber and elevated on high timber stumps, however, low-set houses were also constructed in this period. Further information regarding this form of housing is available in the brochure “Bungalows Near the Cane: The Houses of West Mackay”.

George Street residence, originally the home of Alderman A Harrup, built by TH Field.
Conservation

If you are the owner of a heritage house, do not think of it as just an old house to be spruced up to make it more appealing. Instead, think of it as an important part of the history and development of the Mackay region. Consider yourself, as the current owner, to be the temporary custodian of a part of your city’s heritage which has been passed to you from previous generations and should be allowed to pass on to many more generations as part of a living history collection. You will become a vital part of its fascinating history and be appreciated for your efforts.

What is conservation?

Conservation is an integral part of the management of places of cultural significance and is an ongoing responsibility. The character and heritage significance of houses in the Mackay region, from the days of early settlement through to the first half of the 20th century, reflect and preserve the history of the area. Undertaking conservation principles (that is retaining or reinstating all of those parts of a building in their original form) is a tribute to those who have shaped the community and is ultimately an expression of Mackay’s identity.

Why conserve?

The terms cultural and heritage significance means of value for aesthetic, historic, scientific, social or spiritual reasons for past, present or future generations. Places of cultural significance enrich people’s lives, often providing a sense of connection to the past. They are historical records that are important as tangible expressions of Australian identity. Places of cultural significance reflect the diversity of our community, helping to explain who we are. They are irreplaceable and precious.

Cultural significance is embodied in the place itself, its fabric (physical material), use, setting, associations, meanings, records and related places. The fabric of a place is the tangible evidence of its significance. In most cases, the significance of a place is explained principally by its fabric.

To maintain a heritage house in its original form, or to return one to its former glory, should be a satisfying and rewarding experience. It can also be beneficial when it comes time to move on, as houses which have undergone a proper conservation process are usually easier to sell than those that have been substantially modernised. The principle “as little as possible, as much as necessary” is one which should guide your conservation work. Conservation need not be expensive as it should involve only the least work necessary to achieve the goal.

The Burra Charter

The Burra Charter is a nationally accepted standard for the conservation of places of cultural significance. It has also guided the Queensland Heritage Act 1992 to provide for the conservation of Queensland’s cultural heritage. The charter sets out a standard of practice for those who provide advice, make decisions about, or undertake works to places of cultural significance, including owners, managers and custodians.

The Burra Charter advocates a cautious approach to change – do as much as necessary to care for the place and to make it useable, but otherwise change it as little as possible so that its cultural significance is retained.

The key concepts of The Burra Charter include:

- the place itself is important
- understand its significance
- understand the fabric
- significance should guide decisions
- do as much as necessary, but as little as possible
- keep records
- do everything in a logical order

For further information refer to The Burra Charter, International Council on Monuments and Sites (Australia ICOMOS).
To which places does the Charter apply?

The Charter can be applied to all types of places of cultural significance including natural, indigenous and historic places with cultural values.

The standards of other organisations may also be relevant. These include the Australian Natural Heritage Charter and the Draft Guidelines for the Protection, Management and Use of Aboriginal and Torres Strait Islander Cultural Heritage Places.

Adoption of The Burra Charter as a guideline for making decisions under the Queensland Heritage Act:

- provides a consistent approach to the assessment of significance of registered places
- provides a consistent approach to the assessment of proposed development in registered places
- gives owners and managers certainty that development which complies with the principles, processes and practices of The Burra Charter will gain approval and
- encourages a high standard of conservation management for registered places in Queensland.

The development components of the Queensland Heritage Act 1992 were rolled into the Integrated Planning Act 1997 (IPA) which was superseded by the Sustainable Planning Act 2009 (SPA) in December 2009. The Queensland Heritage Act 1992 established the Queensland Heritage Register, a list of places, trees, natural formations and buildings of cultural heritage significance. Once a place is listed in the state register, anyone wanting to alter the structure must get approval from the Queensland Heritage Council, which maintains the register. In 2009, 24 places throughout the Mackay region were listed in the Queensland Heritage Register.

Amendments under the Integrated Planning Act 1997 (IPA) allowed local councils to identify places of local heritage significance in their planning schemes. These places form the Local Heritage Register. The Mackay City Planning Scheme currently lists 98 places of local heritage significance identified on the Local Heritage Register. Mackay Regional Council will continue to identify local heritage places in the region and add them to the Local Heritage Register from time to time, after consultation, to control development in local heritage registered places in order to conserve local heritage.

In addition, the Mackay City Planning Scheme has identified Residential Character Areas within which development is subject to Outcomes and Design Guidelines that seek to enhance the existing character and historical value of the area. The Mirani and Sarina Shire Planning Schemes do not currently include Local Heritage Register listings. Council may consider listings in these areas at a future date. There are, however, a number of sites registered in the Queensland Heritage Register.

Your house or other valuable features on your property (such as trees and landscaping, fences, outbuildings or other structures) may be listed on the Local Heritage Register or may be located within a Residential Character Precinct, as identified in the planning scheme. If you are unsure whether your house is registered as a heritage place or is located within a Residential Character Precinct, contact Mackay Regional Council's Development Services department to obtain further information (www.mackay.qld.gov.au). You can also refer to various websites to assist you in this process:

- Department of Environment and Resource Management (DERM) – previously the Environment Protection Agency (EPA) - www.derm.qld.gov.au – links to the Cultural Heritage Unit, the Queensland Heritage Council and general information regarding the preservation of heritage and access to registers.

- Sustainable Planning Act and Integrated Planning Act: www.dip.qld.gov.au - information on how to make an application for approval and links to the relevant forms.

Professional advice can also be obtained by contacting a heritage consultant or architect experienced in conservation work. Using a little of your budget to obtain professional advice from the outset may save you money in the long term.
**Conservation not restoration**

Conservation not restoration is the generic term for properly caring for buildings and sites of historical significance. Conservation of heritage houses should be guided by the philosophies laid down in the publication titled “The Illustrated Burra Charter”. Conservation is an integral part of the management of places of cultural significance and is an ongoing responsibility. The Burra Charter defines the various aspects of conservation as:

**Maintenance**

The continuous protective care of a place to maintain its current form and materials and to protect it against decay or deterioration including cleaning out guttering and painting walls. Maintenance is always good conservation. If your house is basically intact, simply maintaining it in good condition may be the best, and certainly the cheapest, method of caring for it.

**Restoration**

Returning the existing fabric (the physical material) of a place to an earlier known state by removing accretions (for example, removing fibro sheeting from verandahs), or by reassembling existing components without the introduction of new material (such as reinstating French doors found in the back shed, into a previous position).

**Reconstruction**

Returning a place as closely as possible to an earlier known state through the introduction of new or old materials (such as reinstating missing verandah balustrading and mouldings using evidence found from old photographs and paint impressions located on the verandah posts).

**Adaptation**

Modifying a place to suit a proposed compatible use without changing the significant parts of the place and by implementing works which are substantially reversible or which impose minimal impact (for example, using an old house for office use or simply adding new kitchen benches).

The fourth aspect of conservation, adaptation, is one that is very pertinent. Few people have a desire to live in a museum, therefore, new facilities such as bathrooms and kitchens may be required. Such work should take account of existing room forms and not require major changes to the structure. Likewise, extra room may be required to cope with today's lifestyle expectations. Any additions should be in keeping with the house. Preferably, new living space should be placed at the rear to retain the visual amenity of the house. Carports or garages, if to be attached to the side of the house, should be kept well back from the front wall or verandah line for the same reason.

Guided by The Burra Charter, work on a registered place is based on respect for the existing fabric. The objective of conservation is not to make something old look new. Significant fabric should be preserved. Unnecessary removal breaks tangible links with the past.

The golden rule for alterations to heritage places is as much as necessary, and as little as possible.
2 Getting help with your conservation project

Where to start?

Before launching into your conservation project, you need to know what you are conserving and how much is necessary and how little is possible. Discovering the history of your house can be an adventure – exciting, fascinating and rewarding. With a little research you may find out who owned the house, when the house was built, why the house was built, how it has changed and what significance it holds for the community.

Researching a house is a worthwhile process and can assist you to protect and enhance your property's unique value. It may also present new opportunities for you to understand the distinctive characteristics of the property and introduce forgotten features that will improve the liveability of your house.

This section will step you through the process of discovering the history of your house. It will assist you with identifying what features to conserve through determining the style of your house, valuing the general streetscape and understanding the needs of previous occupants.

There are three key activities to be undertaken to prepare a plan for conservation of your heritage house namely looking at, researching and recording the history of your house from initial construction to its current form. Undertaking these activities will enable the culturally significant aspects of your house to become apparent.

Look

Perhaps the best place to start is out in the suburbs. Look for houses which have been properly conserved, or are in original condition and have been well maintained over the years. Compare these with houses that have been renovated rather than conserved, raised too high or unsympathetically altered and extended. Consider how out of place they appear.

Look for houses which have been clad with fibro and try to imagine what lies beneath. Fortunately much of the original detail was left in place when fibro was added. Removing the fibro may reveal all the details necessary for good conservation of a verandah.

Appreciating the special character of the house and its setting is very important before commencing any work. Live in the house, appreciate the angles where the sun and breezes enter the house, experience storms and downpours and it may become apparent why former owners changed certain aspects.

> Typical Mackay house styles

A variety of house styles is common to the Mackay region. Changes in house styles usually occur over many years and it can sometimes be difficult to trace the history of your house from the style alone.

Both the builder and the architect have a different impact on the design and features of the house. Some builders kept to the same basic design throughout their working lives, not changing their style. Some houses were built with a blend of traditional and “new” features while other owners may have wanted to express their own individual style. Additions, extensions and renovations over the years can hide and disfigure the original features. Sometimes houses have been moved. Removal may have only been a short distance resulting from a subdivision or a large removal project (such as the removal and transportation of houses from other areas, including Mt Morgan). This can also make identification of a particular style difficult.

Some typical house styles from the Mackay region are shown in the following pictures. The styles can be tracked through various eras as well as precincts and localities.
Conserving heritage houses in the Mackay region

Interwar Porch and Gable (1920-1930s)

Carlyle Street, Mackay
Heritage Gold Award Winner 2009 for Residential

Milne Lane, West Mackay

Double Gable

George Street, West Mackay, built by TH Field

Triple Gable

George Street, West Mackay, built by TH Field

Colonial Gable Cottage

Colonial Pyramid

‘The Heritage’, Rawson’s cottage, West Mackay (1870 - 1880)

Early sketch of ‘Swastika’ (1912) James Street, Mackay
Research
Undertake a research program for your house, collecting as much information as can be found, such as the position, setting, local settlement history, previous ownership and changes to the property over time.

> Research the early days
Understanding why your house is in the position it is and how the area in which it is located was settled will assist you in identifying the factors which influenced the design and location of your house. The importance of linking place to history through economic, social and political themes determines the style of house, layouts, materials and setting.

> Understand the setting
The setting of the house is important in understanding the influences of geography, climate and the natural environment. Early settlement patterns and house designs in North Queensland were highly influenced by these factors.

The "setting" includes the immediate gardens or grounds, the contribution of the place within the historical streetscape and the location of the place within the landscape. Ancillary buildings such as laundries, sheds, stables, coach-houses, garages, bush houses and greenhouses, as well as features such as tennis courts, gazebos, fountains, ponds, driveways, edgings, fences and walls also assist in understanding the relevance of your house with others constructed during the same period.

Looking at the surrounding landscape and other houses in your area will assist you in determining whether the current status of your house corresponds to the other style of houses in the area, including the design and the location. Early houses in the Mackay region were constructed of timber and corrugated iron as was typical in most Queensland towns. However, these styles as well as the use of materials, do vary between the various precincts in Mackay.

> Local history
The settlement of Mackay and surrounding towns including Sarina, Mirani, Marian and Walkerston is outlined in several local history documents. These publications include when and why people settled here, which suburbs and streets were settled first, why the town expanded into new areas, where early farms were located and the economic or social status of the owners of these houses.

The major settlement patterns of the Mackay region include:
- establishment of ports to service the inland
- establishment and relocation of railway lines
- exploration and development of pastoralism and squating
- development of the sugar industry in the Mackay region.

Schemes to assist in the development of the area include:
- Workers’ Dwelling Act 1909
- Flood and Cyclone Restoration Schemes
- Workers’ Homes Act 1919
- Building Revival Scheme 1932
- Commonwealth War Services Home Commission.
> The journey of your house

To find out information regarding who first established your house and how the house evolved over time, you need to know:

- the house number
- the name of the street

And if readily available:

- the lot and Real Property Description (RPD) number
- the parish and locality in which the house is situated.

These details can be found on the contract documents for your house purchase, or you can visit Mackay Regional Council's website (http://www.mackay.qld.gov.au and click on the MiMaps Online Mapping link). You can find your property by searching for your street address. It will also provide you with other important information about your property including if the house is located in one of the three Residential Character Precincts (Mackay City Planning Scheme only).

> Determining the previous owners

Knowing the Real Property Description (RPD) number, parish and locality of your house will assist with researching various documents to ascertain ownership of the house over the course of its history. By determining ownership over time, other details may be discovered including the size of the land (it may have been subdivided over the years), if the house was rented and for what reason, which families lived in the house and other interesting facts and important events in their lives, famous and memorable moments (floods, extensions) as well as stories of neighbours, their friends and the household's contribution to the settlement of Mackay.

The Title Office holds Certificate of Title for all transfers of land. The size of the land, subdivisions, easements, transfers, mortgages and leases may be recorded on the title deed.

To obtain the title deeds for your land you will need to go to the Department of Environment and Resource Management (DERM), previously known as the Department of Natural Resources and Water (DNRW). Advise them you are doing an historic title search and that you may need image copies. You will need your RPD (or the address if you are unable to retrieve this. Check the details on your rates notice). DERM converts the RPD to volume and folio numbers for reference to each title the office has recorded. Once you have these reference numbers, DERM should be able to print out a copy of the corresponding certificate of title. There is a fee, but this will provide you with a factual trace of your house.

On each title there is a reference to a parent title. You can then obtain a copy of this title. Continue requesting the previous titles going back as far as you can. You can work forward from the original; however, it is safer to work backwards.

Other information recorded on the deeds includes details of changes in ownerships, reference to mortgages, deceased estate and to whom the property passed and if the land was used as security for a loan to build a house on the land.

> Council records

If your property or the area is registered on the Local Heritage Register, Council may have a heritage statement about the character and heritage values. If your property is registered on the Queensland Heritage Register, a detailed heritage statement will be available from the Department of Environment and Resource Management (DERM) (previously the Environmental Protection Agency).

Mackay Regional Council also has access to various information including sewerage and drainage plans, planning approvals and rates books.

Contact Mackay Regional Council Customer Services on 1300-MACKAY (1300 622 529) or visit them on the ground floor of the Civic Centre, Gordon Street, Mackay to determine how to access these documents.
> Births, Deaths and Marriages
To find out more about the people who owned your house, Birth, Death and Marriage Certificates can help you trace the descendants of people who occupied your house. You may have enough information to attempt to contact living descendants to enable you to find out more about the family history.

Other sources to help trace family history include the Mackay Family History Society Inc and the Mackay Regional Council Library Services Heritage Collection.

> Library and museum resources
Visit libraries, museums and other places to view their historic photograph collection. They hold a vast array of resources and will also assist with discovering more about Mackay's past (you may even find details about your house there).

Mackay Regional Council Library Services' Heritage Collection also contains many records of important documents relating to particular houses, streets and precincts, and includes a series of rate books and information about well-known local builders and architects.

> Directories and maps
Over time, many directories have been produced that may assist in identifying who has lived in your house and what occupation they may have had. These documents may assist you in identifying specific features or help determine why alterations or additions were carried out.

The Post Office Directory is the equivalent of the current White Pages Directory. Almanacs contain trade directories and advertisements which may assist you in finding out more about the previous occupants. Pugh's Queensland Almanac contains Brisbane and country town directories, which list the names and professions of many people in Queensland. There is also a comprehensive almanac section giving information on weather, events, history of the colony, the government and more. The Mackay Regional Council Library Services' Heritage Collection holds copies of these documents. They also have a small collection of historical maps from the Queensland State Archives.

> Magazines, newspapers and publications
Newspapers and magazines may contain interesting information about your house. This might include things such as sales, rentals, building reports, catastrophes and family events. This information may not be just about your house, but about your street or your area. This may help to piece together some of the events you have traced and how your house has developed and changed over the years.

Some houses were built by prominent people who may have featured in some of the publications. Other houses were pre-fabricated and advertisements for these builders can be found in old newspaper clippings. There were also a number of well-known builders around this time who built in their own style.

> Oral history
Talking with older residents and neighbours may assist with discovering some interesting information. They often hold a wealth of information and can provide details about your house or the area. Talk to elderly residents and write down important points or record conversations. Establish if they know of any surviving previous owners or their descendants. Ask questions about such things as previous colour schemes, dates of construction, reasons for extensions or changes, how the garden was laid out. They will be pleased to know someone is caring for a house with which they had a close association. Ask if anyone has old photographs of the house such as a family portrait on the front verandah. Even a photo of the family pet on the front steps may provide the details about the stairs, the balustrade, the battening under the verandah and any verandah gates.
By using some of your research, you may have been able to identify other people to talk with and fill in gaps in understanding the evolution of your house. Visiting museums and contacting historical groups can often be valuable. You may consider writing a letter to the editor of The Daily Mercury to contact people who once lived in your street.

While looking at other houses in your area, stop and chat with people about how they went about undertaking work on their house. They may even be looking for suggestions for their houses. You may be able to guide them in the right direction or between you find a solution to a problem.

Suitably enthused from your observations and research, return home and think about all the information you have collated. Don’t rush into the work. Good conservation takes planning, research, some solid decision-making and time.

Record

Now that you have some understanding of the factors influencing your house, the next step is to inspect and document all details pertaining to the property. There are a number of ways of doing this which will assist you in identifying the evolution of the house, such as distinguishing early features and later additions.

> **Draw the plan**

Draw a sketch plan of your property showing the location of the house including any other structures (sheds, outbuildings, gardens, fences) and features (tennis courts, ponds, driveways). Old trees and shrubs may form part of the original garden design and may give an indication of the original use of the land surrounding the house.

The floor plan of the house is also important in identifying the style of housing. When considering the location of various rooms in your house, also consider their relationship to the other features you identified on the site plan. Make several copies of this plan and as your research evolves, you can write notes and draw pictures on these plans, as outlined in the next section.

> **Look at the house closely**

Most houses have undergone alterations and additions of some description. Examining the structural elements, joinery and sizes of rooms may provide clues of previous works undertaken on the house. Examples of this include wall openings, varying floor boards, enclosed stove recesses for storage and lack of consistency in plaster ceilings. Enclosure of verandahs has been a common alteration to houses, although other rooms commonly relocated are the bathroom and kitchen. Opening of rooms for open plan layouts has also been a trend over the years.

To assist you in doing this, make markings on the floor plans and site plans while you are examining the house. Take photos at the same time in order to help recall certain features and compare with previous findings. Make a note on the plans of where you were standing at the time of taking the photo and indicate which direction you were facing through the use of arrows.

Also mark on the plans your observations of the current repair status of your house and any other ancillary structure or features. These observations can include anything from timber decay, water entry, suspect structure (whether it be from termites, rotted stumps, failed joints and so on), roof and guttering conditions to mature trees, gardens and paths, details which could be of value, regardless of whether they appear to be important or of relevance. Photograph the house from all directions and close up: studying photographs may reveal details and conditions not readily evident from casual observation.

The markings on the plans will assist in the preparation of a conservation plan for your house (maintenance, restoration, reconstruction, adaptation).
Make a statement
Now that you have done the research, examined your house and identified the style, you need to make a statement about your house. This statement should include the date, style, era and important features of your house. This information will be important when renovating, altering or making additions to your house.

Compile all your information in an easy to understand format as this will be important when discussing with your designer, builder and undertaking your own renovations and maintenance.

> Have a vision
Now you have made your statement about your heritage house, you need to define the vision that you have for the future life of the house. This may include not only the restoration and maintenance of the culturally significant features of the house, but your plans for alterations and additions. Decisions regarding how much space you require for everyday living (bedrooms, open plan, family room, ensuite, light and ventilation) need to be made. Be aware initial ideas may need to be reconsidered throughout the conservation process.

> What to consider
Conservation is about identifying and preserving the cultural significance of your house. Some houses may have undergone extensions at various times, altering the original style the house. This does not mean that this feature of the house is to be removed or changed to match the original style of the house. Sometimes, these additions have their own story to tell and may, in fact, enhance the cultural significance of the house.

When undertaking your research, do not necessarily try to replicate the original form of the building based on original photos alone. Try to ascertain the significance of any changes to the building and land over time.

If you would like to extend the verandah or perhaps turn your house into an antique shop, you will need to seek approval. This may affect your original plans and ultimately your budget. While undertaking your historical research, refer to the various guidelines and requirements along the way, to make sure nothing is overlooked. Approvals do not apply to maintenance work such as painting a peeling fence or mending a rust-eaten galvanised roof. However, it is always wise to contact council regardless of how minor the work may appear.

> What to avoid

- ‘Renovations’ - while maintenance, restoration or reconstruction may be applied to all old houses, significant renovations require more consideration. Renovations often substantially alter a house and affect its cultural significance.

- ‘Modernising’ is another process which can be fraught with danger – what is modern today will not be modern in the future, just as the fibro sheeting applied to houses in the 60s and 70s to ‘modernise’ them is being removed today.

- To ‘over-decorate’ or ‘over-improve’ a heritage house should be resisted as it will turn it into something it never was. For example, installing imitation lacework onto a verandah simply to make it look prettier, should be avoided as it detracts from its historical significance rather than enhances it. Likewise, adding lots of curly timber features and fretwork can ‘over-restore’ a house and make it appear more like a wedding cake than an important element of Mackay’s heritage.
• Refrain from cladding a house with siding or fibro planking as this may not only spoil its appearance and lessen its value, but also provide dark wall cavities ideally suited to termite infestation. Accept the original features and form of an old house for what they are. Accept also any extensions made to the house which suit its original style. Just as owners today extend houses as families grow, lifestyles change and mortgages reduce, so too did our ancestors. It is all part of the history of the evolution of a house.

• Resist the temptation to cut great openings through internal walls to ‘open up’ the interior. Not only does this detract from the original form of the floor plan of the house, but it may substantially weaken the structure. The success and longevity of Queenslanders was due, in no small part, to the walls being tied together to form a good structure (although constructed of small section timbers). It has also been found more recently that the wall boarding itself contributed significantly to the bracing process of the houses.

• The temptation to raise an old house to gain additional living space should be avoided due to the negative impact it can have on the visual amenity of the area. If your house is low-set, investigate its history as sometimes a low-set house was one of the first in the area and therefore may be of particular historical importance. Consider extending onto the rear. If enclosing the lower level of an existing high-set house is contemplated, consider battening or similar technique to retain the form of the verandahs and the deep shading below them.

When you have completed all your research, investigations and prioritised what is required to be done (with consideration to necessity, budget and timeframes) you can plan your schedule and consider financial requirements.

Prepare a Conservation Plan setting out all the work that has been identified, whether it is maintenance, restoration, reconstruction and even adaptation. Sort the work into priorities and prepare a schedule starting with urgent works. It would be unwise, for example, to launch into reinstating missing doors or windows or reconstructing balustrades before the floor is levelled and the stumps corrected, just as it would be dangerous to pass over repairs which could be a safety hazard in favour of work which is less urgent.

You may need to talk to various professionals throughout this time (regulatory bodies, heritage consultants and architects, builders, loan officers). A prepared plan, including the house’s heritage statement, your vision and priorities, will facilitate more purposeful discussions. You will need to review your plan from time to time due to timeframes, budgets and unexpected hitches.

Refer to the next section “Making alterations and additions to your heritage house” to help you prepare your Conservation Plan. This contains general housekeeping hints, corrective and planned maintenance, alterations (raising the house and restumping, verandahs and facades, roofs, external walls, windows and doors, painting) and additions (building under and on, separate additions, carports and decks, sheds). This guide also outlines details of regulations that you will need to be aware of when undertaking alterations and additions.
3 Making alterations and additions to your heritage house

Owning a heritage house, like any house, requires regular housekeeping and maintenance to preserve its heritage value. This value can be preserved not only through restoration but also through thoughtful renovations, additions and alterations. You can make your heritage home adaptable to your lifestyle by adding modern conveniences while preserving the heritage features and unique beauty. This section will step you through the tasks of housekeeping and on-going maintenance through to major additions and alterations.

Mackay Regional Council Character and Heritage Awards

Mackay Regional Council recognises efforts to maintain and refurbish heritage houses as part of the Biennial Character and Heritage Awards. The awards offer:

‘recognition of excellence of refurbishment of historical buildings, and new building designs, which reinforces the built character and heritage values of the Mackay region’.

Heritage houses are judged against criteria such as:

• physically consistent with the character of the precinct
• sympathetic to adjoining buildings
• complementary to the streetscape
• reinforces existing architectural styles
• attractive landscaping and fencing complementing the building’s character.

Carlyle Street, Mackay
Heritage Gold Award Winner 2009 - Residential
[Image: George Street, West Mackay Heritage Silver Award Winner 2009 - Residential]

**Housekeeping hints**

Housekeeping for a heritage property need not be an overwhelming task. Through tender loving care you can stop it from deteriorating. Here are a number of housekeeping hints to help you maintain your heritage property:

**Wear and tear**

Wear and tear from human use can destroy old surfaces. Always protect original fabric and furnishings. For example, runners, mats, and rugs can be used to protect floors.

**Humidity**

When using heaters in heritage places, minimise humidity levels in order to avoid damage to timberwork, paintwork and wallpaper. Environmental controls such as sunscreening and air-conditioning can control the temperature and keep your heritage property in good condition. Don’t forget the heritage features of ventilation such as air flow beneath the house, louvres and vents.

**Cleaning**

When cleaning heritage materials and surfaces, you may require advice from preservation professionals. For example, cleaning masonry or stained glass is a specialised job. Using the wrong technique or product could cause irreparable damage to a heritage building. Only use pH neutral products. Keep gutters and drains clear of matter on a regular basis. This will avoid early deterioration and save major work having to be undertaken.

**Waxing**

Waxing protects against material abrasion and wetting. Always check with a professional before using products.

**Storage**

To prevent fire hazards, material for maintenance should be kept separate from heritage buildings.

**Brass**

Major brass cleaning tasks are best undertaken by a professional but if you have a few pieces that need cleaning you can do this yourself. Badly tarnished brass can be soaked in lemon juice and salt, rubbed on briskly with a soft cloth, and then brass polish applied.

Polishing small pieces of old brass once can be a pleasant pastime, but few people wish to spend their time polishing it again and again. Some brass polishing tasks are so complex and large professional help is required. A brass gaslight is something which should be polished once and then forgotten. The best way to keep polished brass looking good is to have it clear powdercoated. The cost is small and the results are well worth it. Brass which has been clear powdercoated will retain its appearance for many years.
Maintenance

Maintenance of a house is a continual chore all home owners must undertake. Maintenance of a heritage house does not need to be any more daunting than any other house if you are regular about it.

All properties need maintenance and continuing repair. Heritage places need to be protected from deterioration. If you take the right approach to maintaining and repairing your heritage property, you will save time and money.

Continuing maintenance work on your heritage property allows you to:

- fix problems promptly
- preserve your property
- avoid major, expensive repairs in the future.

Preparing a maintenance plan

Maintenance is the continuous protective care of the fabric, contents and setting of a place. Maintenance can be categorised according to why and when it happens.

Corrective maintenance

Work necessary to bring a building to an acceptable standard (often as recommended by a conservation plan) such as treatment for rising damp.

Planned maintenance

Work to prevent failure which recurs predictably within the life of a building, such as cleaning gutters or painting.

Emergency corrective maintenance

Work that must be initiated immediately for health, safety or security reasons or that may result in the rapid deterioration of the structure or fabric if not undertaken (for example, roof repairs after storm damage, graffiti removal or repairing broken glass). A daily response system detailing who is responsible for urgent repairs should be prepared.

Building maintenance

Building maintenance can also be categorised according to who carries out the maintenance work, as follows:

- **Housekeeping maintenance** - carried out by property managers.
- **Second line maintenance** - carried out by specialist building tradespeople.

> Second line maintenance

Equipment and plant installed within a building also need routine servicing and the replenishment of consumables to keep them in working order. They usually have specific servicing and maintenance requirements which are provided through a service contract, often with the supplier.

The main reason for a maintenance plan is that it is a cost-effective way to maintain the value of an asset. The advantages of a plan are:

- the property is organised and maintained in a systematic rather than ad hoc way
- building services can be monitored to assist their efficient use
- the standard and presentation of the property can be maintained
- subjective decision making and emergency corrective maintenance are minimised.
**Maintenance checklist**

To help maintain your heritage property, always keep:

- a log book of all maintenance work done on your property
- all historical records, such as details of heritage listings and legal records, in a safe place
- records of colour schemes and tradespeople
- records of termite inspection dates
- records of dates fire extinguishers and wiring have been checked.

Recording your findings in a logbook helps you to:

- know your property
- compile a comprehensive record of work carried out
- plan and budget for future work
- tailor housekeeping and maintenance practices.

Maintenance means the continuous protective care of the fabric and its setting and is similar to the process of preservation rather than the process of repair. Maintenance will often include the process of preservation, but most frequently will require repair of the fabric. Repair involves the processes of restoration and/or reconstruction.

Knowing the fabric of your house, recording the status of deterioration and its stabilisation or acceleration is vital to identifying and planning for recovery of integrity of the fabric. Routine protective tasks may be as simple as ensuring under floor ventilation is working, that stormwater is disposed of away from footings and that gutters are in good condition. Simple but regular inspections as part of a maintenance programme will help ensure repair work is minimised.

In particular:

- prepare a maintenance schedule for your house
- avoid unnecessary replacement and repair
- avoid the use of modern materials just to reduce maintenance cycles.

Having just acquired or repaired an asset, it would be irresponsible to neglect it only to face the financial burden of extensive repairs in the future. Following a well-planned maintenance plan will greatly reduce repair costs and extend the life of any building.

Items to be aware of include:

- Leaking downpipes causing cracks in some masonry walls and extensive damage to internal and external finishes on timber houses. Regular maintenance inspections will detect leaks before they cause too much damage, and co-ordinated repair should result in the leaks being repaired before deterioration of the internal and external finishes.

- Deteriorating paintwork may cause swelling, shrinking or cracking of building materials. Coatings such as paints, varnishes, waxes and oils are the principal means of controlling swelling, as well as protecting and enhancing timbers.

- Pest infestations can cause damage not only to the appearance of the house, but also major structural damage. Regular and planned pest inspections should be undertaken.
**Alterations**

Whether purchasing a house with dreams of making it new again, or altering your existing house to cater for the changing demands of your lifestyle, there are many things to consider. A heritage house offers many opportunities and can give the owner a chance to make the house unique. However, these things must be undertaken while preserving the heritage value of the property.

There are a number of issues to consider when making alterations. This guide will give you tips to determine what to keep an eye out for, as well as assisting with the drafting of plans. *The Burra Charter*, as described in this guide, outlines the conservation principles, processes and practices required and the planning process for maintenance, restoration, reconstruction, alterations and additions.

It is not just the house on the site which is important from a heritage point of view. Other elements such as landscaping, fences and gates, lamp standards, paving, garden furniture and outbuildings, all contribute to the heritage significance of the place and this should be considered in your evaluation prior to carrying out any work.

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**Raising the house and restumping**

Timber or concrete stumps support most traditional timber Mackay houses. Some earlier houses were supported on brick piers, although in the Mackay region this is quite rare.

The stump and its galvanised iron ant cap formed an effective deterrent to termites and ensured dry conditions within the house during flooding and tropical downpours. Being raised above the ground also gave the occupants a feeling of protection against intrusion by snakes and other creatures, particularly at night. In Mackay's hot summers, air can also circulate under the house producing cooler conditions for occupants in the house.

Very early houses were quite low to the ground. However, the height above ground gradually increased until the space under became useable for storage or a semi-enclosed laundry area. Vehicles could also be parked underneath the house in the space between the stumps where cross braces do not interfere.

Many older houses may have already been restumped using square or round concrete stumps and more recently steel posts, mainly due to the base of the original timber stumps rotting which caused the floor structure to drop and the house to become uneven.

Timber stumps should be inspected for rot or termite damage and concrete stumps should be inspected for 'concrete cancer', the result of reinforcing bars rusting and expanding causing concrete to crack away. Ant caps should also be inspected to ensure they are intact. Any breaching by termites can be found if mud galleries are evident around the caps.

If new stumps are required, as a general rule you should match the material and size of the originals. For example, round durability class 1 hardwood to replace round timber stumps, reinforced square concrete to replace square concrete posts.

If the house is to be raised, consultation with an architect or heritage consultant is advisable as this often destroys the proportions of the house and its setting in the streetscape. If you are raising the house to enclose underneath, refer to the section 'Additions, building in/on/under'. How the house is enclosed underneath can affect the heritage value and character of the house. Ant caps, anchor bolt tie down brackets and any cross bracing and timber screens or battens between stumps should be reinstated or replaced as applicable.
Raising a house may require planning approval from Mackay Regional Council. Owners are advised to carefully consider the overall character and scale of the adjoining houses and the streetscape generally before deciding on this course of action.

Some larger houses on wide allotments can be raised without spoiling the streetscape. Small houses closely aligned with adjoining buildings generally cannot be raised without producing a discordant result.

Because timber stumps and battens are an important characteristic of most old houses, it is preferable to recess any new downstairs wall line in order to maintain the appearance of perimeter stumps and battens.

**Verandahs and facades**

The verandah and facade of the Mackay house is typical of the Queenslander style and vastly different from the many styles of houses from southern states. This was done to protect the walls of the house from heavy rain and to keep the house cooler by providing protection from the sun.

A verandah can individualise a house with its balustrade, brackets and mouldings. Verandahs also reflect the style of the surrounding external features and landscape including fences, outbuildings or even gardens. The ornate style of the balustrade may be reflected in a more English romantic garden style, or geometric features may dominate the overall setting.
When making alterations to verandahs and facades, the setting and style of the house should be maintained so the alterations do not dominate or clash with the original style of the house. There is often the temptation to apply lavish decoration to the exterior of the building. This temptation, though well intentioned, should be avoided. The form and appearance of your house, as well as the paintwork and decorative roof items, should suit the original style of the building. These features are referenced throughout this guide.

> Form and appearance
As settlement spread into northern Australia, with it came the verandah. While verandahs in the early colonies were quite simple and austere, by the time they were introduced in Mackay they had become quite decorative.

Each verandah, whether by intention or simply because it was normal repetitive practice, achieved a delightfully human scale. The roof was brought down enough to provide the maximum shading for the house behind, while the height of the roof at the edge of the verandah was sufficient for the tallest of people to look out comfortably.

The extent of verandahs on houses generally reflected the means of the owner. Small workers’ dwellings usually had one verandah on the front to protect the front door and the windows to the front rooms. More often than not there was a rear verandah as well. Often, small allotments were all workers could afford and this meant there was no room for verandahs at the side of the house.

Those with slightly better finances had front and rear verandahs as well as a side verandah. The side verandah was generally located to give the desired protection from the weather, for example the western sun. More affluent people had verandahs on all four sides of their houses to repel almost everything nature could threaten the house with.

However, verandahs on all classes of house were usually of similar form and structure. They were embellished with simple and decorative, but slightly different, details to reflect the individuality of the owner.

> The evolving verandah
Many houses were built for single men or for young married couples, therefore, the verandahs could remain open on the perimeter as they were only required for weather protection or for an outdoor room to escape the incessant heat of the day inside the house. Over time, people became familiar with the house in which they lived and the weather conditions affecting their dwelling. Blinds and lattice panels were added to provide sun protection.

As families grew, more sleeping area was required and the trend became to enclose verandahs. This was usually done by either changing the balustrade to a half-height wall with wooden louvres or casement windows in the openings over the wall, or by retaining the balustrade and adding wooden louvres above it. The latter method permitted airflow though the balustrade.

While wooden louvres reduced both the outlook from the interior and the amount of light penetrating the rooms, they were a barrier to sun and rain. They also provided safety in cyclones repelling flying objects in cyclonic winds such as roof sheeting and branches.

In the first half of the 20th century, house styles evolved from symmetrical to an asymmetrical form with projecting gables at the main (front) bedroom and sometimes at the entry. Throughout this period, all houses had at least one verandah. The size of the verandahs may have progressively decreased, generally as a result of increased costs, but the need for a casual outdoor sitting area endured.

From the end of World War II verandahs were a luxury item due to shortages of materials and bans by construction authorities resulting in very few houses with them.

> Conserving the verandah
One of the common mistakes made when restoring verandahs is to replace the balustrade with one that may be too ornate for the original style of the house or making assumptions about the original appearance. It is wise to research and investigate the early form and appearance of your house before proceeding.
Sometimes it may be best to live in the house before making alterations to the verandah. If you want to make the alterations to the verandah before you move, consult an architect to provide guidance in understanding the orientation of the verandah and how the climatic conditions affect these enclosures.

> Physical investigations
If you have not been successful in tracing the history of your house or have not been able to locate any original photos, there are other ways to investigate what may have been there. Look on the verandah posts and plates and on the floor for such things as paint marks, mortises, screw holes and stop chamfering. You may notice:

- paint marks on the verandah plate show the length of the brackets
- paint marks towards the top of the verandah posts can be used to reveal the vertical size of the brackets and if there were any post mouldings around the posts below the brackets
- mortises on the side of the verandah posts are evidence of the number of rails in the balustrade and their heights. Paint marks may provide the shapes of the rails
- stop chamfering on the posts is proof the verandah originally had a balustrade as opposed to a solid half-height wall
- small notches or holes at regular intervals in the verandah nosing boards suggest there was originally a cast iron lacework balustrade.

In the mid-20th century, some houses were ‘modernised’ by applying fibro to the faces of the balustrades. In such cases, removal of the fibro may reveal an intact balustrade.

If enough evidence cannot be found through physical investigation, it is important not to abandon further research and investigation. If all else fails, go back to the historic photograph collections and try to find houses generally of similar age and appearance as yours. Try not to mix details from different eras as this will result in inconsistency.

> Structural matters
It is imperative before starting on the repair or reconstruction of the balustrades and other decorative work to carefully assess the condition of the structural timber and to ensure the floor is level and the posts are plumb. Structural timber should be checked for dry rot and termite damage and repaired or replaced if necessary.

> Materials
Because verandahs, except for the roof, are the part of the house most exposed to the weather, it is important to give consideration to the type of materials used. Wherever possible, use good quality hardwood timber of a suitable durability class. If there is no alternative to using pine for such items as balustrade dowels, ensure that the pine is given a good preservative treatment.

All fixings such as nails, screws and bolts should be galvanised if they are steel. It is very frustrating to finish the job only to have rust marks appear on the outside of the paint within a couple of years.

If the original verandah had timber battening below the edge of the verandah, try to retain or reconstruct the battening as it adds to the appearance of the verandah.

Do not be tempted to fully enclose the space between the stumps unless your research indicates it was enclosed from an early date. Keeping the space open enhances the deep shading effect below the verandah. Even when the space was completely battened, it was usual to finish the battening in a dark colour, possibly similar to Creosote, to achieve a similar appearance.

If stairs have been rebuilt with modern steel stringers or if the original stairs have survived and require reconstruction, consider matching the original details so the house can retain its cohesion. If photographic evidence of the original stair balustrade cannot be located, matching the verandah balustrade is always a safe option.
Roofing

The roof shape of the typical Mackay house comes in a variety of forms, generally steeply pitched, hipped or gabled roofs, or a combination of these. Roof styles changed from the late 1800s through the 1900s. The verandah roofs of older houses are usually separate from the main roof and laid at a flatter pitch while some are curved or bullnosed. Other houses have the verandahs under the main roof. Sometimes a separate roof covered kitchens or bathrooms at the back and sides of houses.

Hardwood beams, rafters, battens and ceiling joists nailed together formed the roof frames. They were originally sheeted using short lengths of corrugated galvanised iron, which were lapped down the roof and fixed with lead head galvanised nails. Spring head galvanised nails are used on later roofs. Today, many of the original roofs which had rusted away have been re-sheeted using corrugated zincalume steel sheets in single lengths from ridge to gutter.

Ridge cappings, hip flashings, barge flashings and valley flashings, which are used to bridge the gap at the change in direction of the roof sheetings, are generally formed up out of galvanised iron sheets, bent and scribed to fit into the corrugations of the roof sheeting. Gutters are generally ogee or quad types held on with spike brackets. Downpipes are three-inch round pipes formed out of galvanised iron with a folded seam on the outside placed closest to the wall or post to which they are fixed using strap brackets. Other rainwater fixtures found on some houses include gable rolls, roof ventilators, finials, acroteria and other ornate crestings.

If your roof is in a deteriorated condition or leaking, sometimes repair is not possible. It may be necessary to replace the roof sheetings and rainwater fixtures. While the roof framing is off, the strength of the roof framing should be upgraded to withstand cyclonic wind conditions by improving the bracing and the joint strength of members for tie down. You also should consider introducing insulation under the new roof to improve the comfort level within the house.

When replacing partial roof sheetings, for example on only one side of the roof, be aware of the problems of dissimilar metals. When water discharges off new zincalume roof sheeting into the original galvanised iron gutters and downpipes, electrolysis can occur causing the sheeting or guttering to corrode. Corrugated iron is a traditional material and should be used where it's appropriate. Be consistent with the lengths of the sheets you are replacing with the same length as the roof sheets you are repairing. Avoid the practice of using full length sheets.

Corrugated galvanized Custom Orb and galvanized Custom Blue Orb should be used in preference to Colorbond or Zincalum Custom Orb. Colorbond colours are generally not appropriate for heritage buildings. Custom Blue Orb is available in the traditional profile, but you will have to specify this when making your order with the supplier. Traditional springhead nails should be used for fixings. 25mm gauge corrugated steel, such as Lysaght Custom Mini Orb, is only appropriate to replicate a product that was used in the 1900 – 1920 period. Other gauges may be available from other suppliers. Sometimes they may have to be specifically run.
> **Roof plumbing**

Use the correct guttering and downpipes. Downpipes on older buildings are usually round. Gutter profiles come in half round, ogee and quad forms. Check old photographs or profiles in paintwork to determine the correct shape for your building. Cast iron plumbing can be purchased or specially cast to order. If downpipes were recessed in the original building, maintain them, but ensure they are watertight.

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**External walls**

The timber wall frames of most Mackay houses are sawn hardwood, while some houses from the early 1900s have a silky oak frame.

Wall studs were tenoned into the top plates above and floor bearers below and nailed. Externally, walls were clad with hardwood weatherboards or chamfer-boards and internally were lined with beaded tongue and groove boards laid horizontally. In order to save money, sometimes the external cladding was left off altogether, except over external windows and doors where it was required to weatherproof the heads.

The original finishes of the building should be kept in good repair and any new work should closely match the original. For example, if the original building was clad in timber chamferboards, then restoration work should be undertaken using timber chamferboards. The introduction of materials which are different to the original form and intent should be avoided. For example, extensions and alterations should not be clad in fibre cement, concrete block or brickwork if the original material was timber chamferboards or weatherboards.

It is not always possible to match current building work exactly with the original structure. This may be due to cost constraints, availability of materials or lack of authentic information. In such instances, the scale, style or type of finish should be approximated. This way the original feeling of the building is respected and maintained.

Most of the historic houses in Mackay are of painted timber construction which can normally be repaired or restored using carpentry and joinery techniques. Many of these techniques are still practised today and therefore the work is achievable in practical terms by tradespeople. It may be necessary to talk to a builder or tradesperson who is familiar with heritage houses and not be persuaded by builders who may try to convince you to use more modern practices or materials.

Imitation cladding such as metal or vinyl weatherboards or chamferboards should not be used. Corner and joining details are generally lost by using modern materials and is readily identifiable. An experienced purchaser looking for a character building will spot the difference immediately.

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**Problems with timber walls**

Repainting timber walls should be done regularly to preserve the timber. If the timber has been affected by termite infestation, wet rot or dry rot, the cladding should be treated and replaced as necessary before further decay and major maintenance work is required.

Do not replace timber floors near ground level with concrete slabs as, contrary to popular belief, this actually promotes termite infestation. Creating air space under the timber floors allows for adequate access to check for pests and the status of the floorboards. Any live infestation should be eradicated immediately and checked on a regular basis. It is essential that regular or annual checking of termite infestation is undertaken for buildings in Mackay and treated accordingly.

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**Problems with masonry walls**

Although most houses in the Mackay region are timber construction, some houses have masonry walls or stonework in the footings. Masonry walls have often deteriorated due to the absence or decay of the original damp proof course. In many instances, thin sheets of slate were inserted at the lower levels across the thickness of the wall to prevent dampness rising from the foundations below. Due to deterioration these are generally no longer effective and rising damp will be a common result.
Rising damp can be controlled, but there are no miracle cures. Existing rising damp is aggravated by lack of adequate drainage, lack of under-floor ventilation and even hosing of gardens immediately adjacent to masonry walls. These problems can be addressed through good home management practices, resulting in the rising damp being alleviated. This can go a long way towards prolonging the life of the wall. Where the wall has suffered irreparable damage by spalling of the face brickwork and stonework, reconstruction using new materials may be the only answer, together with the incorporation of a new damp course. Installation of a new damp course should be carried out very carefully by experienced tradespeople.

If the original building was constructed of face brickwork, it is important for the building extension to closely match both the type of masonry and the type of jointing. For example, heavily textured "sandstock" bricks with deeply raked joints should not be used if the original building consisted of plain well burnt face bricks with sharp edges and flush joints.

It may not always be possible to match the early construction exactly, but the spirit of the original structure should be respected and maintained.

> Removing modern cladding
Sometimes original timber-clad walls have been 'modernised' with asbestos cement sheeting (fibro) or vinyl or aluminium cladding. These detract from the original appearance of the house and can sometimes cause damage to the substructure. Often, the original wall cladding remains intact behind the modern cladding and can be retrieved with little effort.

If you intend to remove asbestos-based products such as old 'fibro', be aware of the potential health risks and take necessary precautions during removal and disposal (see “Preparation” on page 28). For information on asbestos sheeting removal, contact the Queensland Department of Industrial Relations (Division of Workplace Health and Safety) or visit their website on www.whs.qld.gov.au.

Windows and doors
The types of windows and doors (including arrangement of these openings in the walls) are important in correct restoration work. It is generally possible to identify the original positions of relocated doors and windows by looking for cutting and patching of wall lining boards.

The proportions, size and spacing of windows and doors should generally blend with the original style.

Heritage houses contain a variety of double hung windows, casement windows, shutters and French doors. All of these types of joinery can be reconstructed. There are a number of joinery works that specialise in such work or you may be able to find some in secondhand yards.

Timber is the main material of most Mackay houses which was generally painted on the exterior and clear finished with varnish or shellac on the inside. The use of aluminium framed windows and doors in restoration work is not desirable and even in extensions to historic buildings, timber doors and windows are preferred.
It is important to note that traditional style windows have an emphasis on the vertical proportion (the width is smaller than the height dimension) and this general approach should be repeated where new openings are required. Traditional style windows and doors can be purchased from demolition yards or they can be made to order if you require new fittings.

As mentioned in the section on roofs, dormer windows to attic spaces within the roof should be avoided if the building didn’t have them originally. If added living area is required in the roof space, then dormer windows should be restricted to the rear slope of the roof and not be visible from the street. Where there is a desire to admit more light to a room in a new extension, a series of tall narrow windows can be placed together rather than using one large horizontal form window.

Fittings for doors and windows (often called door and window furniture and hardware) are now readily available from stockists of reproduction items. These items will include rim locks, brass knobs, sash pulleys and sash cords, casement fasteners of all types, fitch fasteners, cleats and hinges. These are generally available either in brass or steel and should, where possible, match existing fixtures in the building. The surviving fittings in historic buildings are often still serviceable and, as important original items, they should be repaired and reused.

Doors are either panelled or boarded. Panelled doors in the late 1800s and early 1900s usually have four panels, and three panelled doors were more common in houses built after 1918. Boarded doors with ledged and braced frames were used on more austere houses. External doors usually have a boarded bottom section on the frame with either glass panels or timber louvres in the top section. Doors leading from the main rooms onto verandahs are usually French door pairs, with a timber panelled bottom section and patterned cast panels above. Some doors have opening fanlights above the doors and fretwork ventilation panels are common above the internal doorways.

Windows consist of many types, however double hung sashes, casements, and adjustable louvres made of silky oak are the most common. Window glazing is usually thin small sheets of float or patterned glass held into the frame with metal springs and putty. Unprotected windows are usually covered by a sunshade, either timber framed and ripple iron sheeted or fabricated galvanised iron hoods in a variety of designs.

You should retain the existing doors and windows in your house, including any accompanying hardware and ironmongery. If for any reason some of these are damaged beyond repair, then it may be possible to obtain matching second hand items cheaply from a demolition yard. It does not matter if an exact match cannot be obtained. New doors and windows could also be made to match existing hardware using suitable substitute joinery timbers.

Painting

Traditional timber houses in Mackay were generally painted both externally and internally, with the roof sheeting and the underside of the exposed floor framing being the exceptions. The paint helped to preserve the timber and most have been repainted a number of times. Many older houses were painted using solvent borne linseed oil paint made with lead-based pigments. Other paints contained a red oxide base. Red lead was used to prime bare timber and galvanised iron.

> Colour schemes

Colour schemes were commonly associated with the period in which the building was constructed. Colour schemes were a direct reflection of the range of paints available at each point in time. Choosing the colour scheme can be an agonising process and can be influenced by many things, including personal taste, current fashion and price. There are no rules, but there are trends which can be identified by looking at old photographs or by taking paint scrapings and matching the colours against a paint manufacturer's colour system. Even old black and white photographs enable you to distinguish which elements on the house are painted with dark colours and those which are painted in light or medium tones. It is just as important to get this balance right as it is to choose the correct colours. It is not necessary to paint your house using only so-called ‘heritage colours’.
If you are looking to maintain the heritage colour scheme, you can either find the original colours or replicate a colour scheme from that period. Finding the original colours may involve some painstaking research. This work is sometimes made more difficult if earlier paintwork has been burnt off. With the help of a magnifying glass, the earlier colours can be matched with commercial paint colour cards. To discover the original external colours, do paintscrapes under window sills or behind meter boxes or anywhere where there may have been alterations or additions to the original house. Inside the house, look underneath door hardware such as fingerplates or rimlocks. Commercial paint colour cards and booklets can assist with replicating a colour scheme from the period in which your house was constructed.

> Preparation
Repainting your house, both inside and out, is a task which should be undertaken approximately every 10 years. Preparation of the surfaces (washing down, stripping back, sanding and filling) is more important than the painting itself. Be careful when preparing surfaces which have lead-based paint applied to them as the dust (sanding) and fumes (burning off) are toxic. If the lead paint is stable, it is better to leave it and repaint over it. If it does require removal, then stripping with chemicals is the recommended method. Paint companies produce detailed data sheets with recommendations on preparation and repainting over existing surfaces including the number and types of priming (undercoats) and finishing coats.

Safe procedures must be followed in the removal of old paintwork containing lead and attention is drawn to the Queensland Department of Health advice on this subject. For further information, contact the Queensland Department of Health Environmental Health Office or the Community Information Unit, Environment Australia on 1800 803 772.

> Clear finish
Some houses were not painted internally but contain unpainted or clear finish pine tongue and groove vee-jointed boards. Similarly, it was fashionable to clear finish, shellac or varnish internal cedar joinery work. Some careful research will reveal the original finish and the original intent of the work should be followed. It is undesirable to paint surfaces which were originally clear finished as it is impossible to remove later layers of paintwork successfully.

> Special finishes
Many houses have stencilled borders, dados and friezes of painted decorative patterns. These can be carefully restored or reproduced. There are a variety of books available to assist with undertaking this type of work. A standard range of pre-cut stencils is available from some paint and decorator outlets.

Other finishes include ‘Black Japan’ which was often applied to floor boards around the perimeter of rooms and entrance halls to produce a dark border. This border was then overlapped by a centre square of lino, rugs or mats, or carpet runners in hallways. Black Japan is still available and is relatively easy to apply with a paint brush.

Stains and varnishes were sometimes used, particularly on architraves, skirtings and interiors of doors and window sashes. Where found, these finishes can be repeated using similar materials which are readily available.

‘Graining’ of timber is sometimes found in historic buildings. This consists of paintwork which simulates the grain of another timber. For example, English oak grain was sometimes applied over a cheaper material such as pine. This is work for an expert conservator and specialist advice should be sought.
> What paints to use
Today's paints are either oil-based solvent borne (enamels) or water-based latex (acrylics) with the colours obtained by adding tinters to a dark or light base and these are available in a variety of gloss levels.

There were traditional combinations of colours used for body, trim and accent elements. There were also traditional types of paint used on specific parts of buildings.

Modern paint manufacturers market a large range of gloss, semi-gloss, satin and matt finishes in both oil-based and acrylic paints. Their advice should be obtained to establish the most durable finish for each part of the building.

> Decorating with paint
Decorating the interior of rooms can be challenging. Interior decorating is not only about colour selection, but also requires decisions about floor coverings, joinery cupboards and benches, plumbing and light fittings, window curtains and blinds and furniture. Mackay has a very sunny climate and the glare is intense, so don’t be afraid to use dark colours in the rooms of the house. You will very quickly become accustomed to the feeling of relaxation and coolness that darker colours can create.

The division of rooms was based on classical principles. Rooms were individually coloured to reinforce their architectural features or their function. Hallways were usually painted in stone-like colours. Bedrooms and parlours were decorated in soft feminine shades. Dining rooms and living rooms had another identity, with architectural features such as the black or dark marble chimneys in dining rooms and white marble in drawing rooms.

In the reconstruction of traditional colour schemes, it is usually possible to accurately reproduce the colours and finishes of early paint schemes. However, it may be necessary to make some assumptions about these colours in order to finalise all of the details. In such cases, it is advisable to work from one of the ‘heritage’ colour ranges to choose colours which more accurately reflect those being replicated.

Additions
Some owners of a heritage house may want to extend the existing building to provide additional living and bedroom spaces, update kitchens and bathrooms, or build on decks and carports.

If a large amount of additional space is required it may be more appropriate, and more economical, to buy a larger house, or consider building the extension as a separate wing with a link to the main house. Avoid large additions which affect the scale of the original house. The overall impact of a large extension can be reduced by designing it in smaller parts to reduce the bulk of the altered building.

Consideration should also be given as to how the spaces within the house relate to the outdoor space on your property, to spaces on adjoining properties and to the streetscape as a whole. Try not to build close to boundaries where neighbouring houses and yards may become crowded and lack privacy. Mackay's timber
houses are better positioned with space around them for privacy and to catch breezes. Owners resort to air-conditioning where privacy and cross ventilation provisions are compromised, resulting in more noise, heat, cost expenditure and damage to the environment.

To ‘over-decorate’ or ‘over-improve’ a heritage house should be resisted as it will turn the house into something it never was. Thorough research should be undertaken prior to the commencement of any work. All kinds of reproduction fixtures and fittings from roof ventilators to iron lacework are available from restoration shops and hardware stores.

When undertaking additions do not be tempted to add on ‘bits and pieces’ to the new extension or to the original house. Similarly, do not add on front porticos and pediments or elaborate staircases. Attempting to turn a simple worker's bungalow into a grand villa will only look out of place.

When Mackay houses were built, materials were what they were. Plywood was plywood, timber was made into internal lining boards or exterior cladding boards and fibre (asbestos) cement sheeting was just that. Nowadays, punched metal is made to look like timber lattice, plywood sheeting is made to look like timber boarding and fibre cement and vinyl cladding are made to look like timber chamferboards and weatherboards.

Be true to good conservation principles and dispense with the fakes.

**Regulations - what you must do**

Any additions will require properly drafted working drawings to be lodged with either Mackay Regional Council or a private certifier and will require payment of fees. These plans will need to comply with the *Queensland Building Act and the Building Code of Australia – Volume 2*. You could also consider employing a heritage consultant or an architect experienced in conservation work to provide design advice and assist with the preparation of the plans. Remember to consider the conservation principles outlined in the introduction to the section on Alterations.

Building work must be carried out by a registered builder, or alternatively if you want to perform your own building work you must obtain an Owner Builder Permit from the Queensland Building Services Authority (BSA).

Once you have engaged a builder, there are other statutory requirements to consider such as BSA insurances, plumbing and drainage approvals, portable long service levies which all require fees to be paid. These are usually covered by the builder or his subcontractors in the cost of their works.

Because Mackay is in a cyclonic region, any timber-framed additions to your house need to be designed and constructed to withstand cyclonic winds in accordance with *Australian Standard AS1684.3 Residential timber-framed construction – Cyclonic areas*. Framing sizes, joint connection, bracing and tie down details can be referenced from this standard.

**Need more space?**

> **Building under**

If your house is highset, a simple way to gain extra rooms is to enclose the space under the core of the house, although this is generally not the best solution. Aesthetically and for practical reasons, like waterproofing, it is best to keep the external walls of the enclosure back by one row of stumps from the external walls or verandahs of the upper level. Minimum flood levels should be taken into account before proceeding with this option.

It may be necessary to raise the house to achieve legal height for headroom. This approach should be carefully considered, as it generally results in a substantial change to the appearance of the house which is often out of scale. Raised larger houses on wide allotments are more likely to maintain a compatible scale with adjacent houses than small houses on narrow blocks that have been raised. Turning a lowset house into a highset is not recommended.
Habitable rooms require a minimum 2.4 metres ceiling height, while other rooms such as laundries, kitchens, bathrooms, storerooms and garages require a minimum height of 2.1 metres. Raising the house usually involves designing new footings, stumps, bracing, tie-down, stairs and strengthened floor bearers (if some of the stumps are being removed to provide more open spaces). Extending sewer and waste pipes, water pipes and electrical wiring (including lowering switchboards) will also be required.

Building in under a house can provide termites with ideal locations for concealment and may also affect the natural drainage of sloping sites. The installation of a concrete slab on ground and termite prevention measures need to be carefully considered.

Use materials which are lightweight and compatible. Nothing looks worse than a concrete masonry box propping up a traditional timber house. Partial screening using timber battens and timber framed walls set back, will maintain the lightweight look enhanced by light and shadow on the new enclosure.

> Building on
Your house may look large with plenty of verandah space, but it may only have a few rooms that are usually located in the centre or at the rear of the house. It is usually better to build on an addition rather than altering the character of the original interiors by enlarging rooms and removing walls, or by building in under to create more habitable space.

In the past, many houses have been added onto, thereby providing additional bedrooms as the family’s needs have changed, or as the bathroom, toilet and laundry have become a part of the interior of the house. This was achieved by enclosing verandahs and adding on structures at the sides and rear of the dwelling.

Town sewerage, water supply and electricity have changed the way we live in the house in comparison with the way occupants lived in the original house in the late 19th and early 20th century.

The simple dominant roof forms of the typical timber-framed houses of this period should not be spoilt by additions which significantly alter the shape and character of the original roof. The roof pitch should match the original. Don’t add large skillions or incorporate dormer windows. Avoid joins of the new roof with the original which involve box gutters.

The key to a well-designed addition is the relationship between the new and existing roofs. Typical workers’ dwellings have a hipped roof form that is truncated on one or both sides of the house. In these cases it is simply a matter of completing the hip form of the roof to achieve extra floor area under, provided there is enough space on your block of land to achieve this. The width of the extension is governed by the springing point for the rafters and the height at this point should be constant around the edge of the roof. Likewise, gabled roofs can be extended by incorporating additional gable extensions.

> Separate addition
When undertaking more extensive renovations, it may be appropriate to construct a separate building which is linked to the main house. There is no need to replicate the original style and in fact a simple modern design using materials in keeping with the original structure often looks better when constructed adjacent to a heritage building. Proportion and detail is more important than style and decoration.

It may be more appropriate to construct any additions at the rear of the house, where there is less chance of conflict with the appearance of your house from the street. Casual living spaces are best accommodated in this type of addition, relating to outdoor living areas of the backyard.

Always employ these design principles:

- accommodate activities in appropriately varying degrees of enclosure
- integrate the inside with the outside, and landscape the spaces
- exclude sun and promote ventilation
- build ‘post and beam’ and pitch your roof
- select materials which are energy efficient and ecologically sustainable.
> **Decks and carports**

Traditional timber houses have changed over time and many of the smaller cottages and workers’ dwellings have lost their outdoor verandah spaces to partial or full enclosure. Rather than reinstate these verandahs, there is now a tendency to construct a new deck. This is usually the first task undertaken, along with modernising the kitchen or bathroom. Decks can be either roofed or unroofed. The design of a roof over the deck is an important consideration and the solution will be dependent on the existing roof and how the connection between the two is made.

Mackay’s heritage houses were built before families owned motor cars. As a result, many carports were simply tacked on to the front or side, or a garage shed was constructed in the backyard. It is preferable to design deck and carport additions to complement the original house and not be discordant with it. They are best located at the side or rear of the house and not in front. This will help to maintain the visual amenity of the house. The roof form and pitch should normally match the main roof, although other shapes can sometimes work.

> **Sheds**

A shed can serve a variety of purposes from a simple garden shed or for the ocean-loving Mackay resident, a large boat shed. As with any addition, it is important that the style of the shed complements the heritage style of the dwelling. Through your research and by examining old photographs from that era, you may be able to determine if a shed existed and what it looked like.

However, sheds were not common when many of these houses were built and were usually later additions. When many of the larger estates were subdivided, this resulted in smaller lot sizes and therefore many of the external buildings, which were located on the original estate, were demolished.

Particular attention is required if the shed can be seen from the street or if it is attached to the house. If the shed is in the rear of the yard and not visible from the street, you may be able to use a commercially purchased shed. Don’t forget that gardens around the shed, lattice screening and some decorative features may be able to enhance the shed hidden at the back of the yard. Regardless of how meticulous you have been with the rest of your property, a large galvanised shed that can be seen from the street may adversely impact on the visual amenity or devalue your property. Design and placement of the shed is important.

The shed should follow the same principles of conservation as other additions. This includes the roof, external walls, siting and position in relation to the house.

*Before constructing any shed, it is important to seek information about building and planning requirements from a building certifier and Mackay Regional Council.*
Further reading and information

Further reading

Bungalows Near the Cane: The Houses of West Mackay, former Mackay City Council Heritage Advisory Committee brochure (available from Mackay Regional Council Library).


Conserving the Queensland House (the series), National Trust of Queensland, Brisbane, Qld, 1994-1996.

Cultural Landscapes Study for the Mackay Planning Scheme, Tony Eales BA (Hons) and Jon Prangnell PhD, School of Social Science, University of Queensland, Brisbane, Queensland, 2001.

Heritage Brochures (various brochures and guides), former Mackay City Council and Mackay Regional Council, Queensland, 1996-2008.

Heritage Context Study for the Mackay City Council Town Planning Review, Berenice Wright, Anne Jacobs and Roger Dalton, July 2006.

Illustrated guide to entering houses in the Queensland Heritage Register, Queensland Heritage Council, Cultural Heritage Branch, Environmental Protection Agency, Queensland, 2005.

The Sugar Industry: Understanding the role of sugar in the development of Mackay and its hinterland", Mackay City Council, Mackay, Queensland 2002.

Further information

For advice on various technical aspects of house conservation, please refer to the series Conserving the Queensland House prepared by the National Trust of Queensland.

Department of Environment and Resource Management: http://www.derm.qld.gov.au
National Trust of Queensland: http://www.nationaltrustqld.org
National Trust of Australia: http://www.nationaltrust.org.au

Planning Schemes

Mackay City Planning Scheme 2006
Sarina Shire Planning Scheme 2005
Mirani Shire Plan 2007
http://www.mackay.qld.gov.au

Mackay Regional Council Library Services

Mackay Regional Council Libraries Heritage Collection - Civic Centre, Gordon Street, Mackay
Gordon White Library - Phillip Street, Mount Pleasant
Mirani Library - 16 Victoria St, Mirani
Sarina Library - 65 Broad St, Sarina
Walkerston Library - Dutton Street, Walkerston
Heritage collection
The Mackay Regional Council Libraries Heritage Collection, located at the Mackay City Library, has material which may be photocopied for research purposes or private use within the provisions of copyright legislation.

Some of the resources held include:
- Books
- Family history resources
- Newspaper archives
- Photograph collection
- Vertical file
- Microfilm/fiche readers
- Links

Family history resources
The heritage collection includes the following family history resources held on microfiche and microfilm:
- Queensland Pioneers Index 1829 - 1889
- Queensland Births 1890 - 1919
- Queensland Deaths 1890 - 1959
- Queensland Marriages 1890 - 1939
- Queensland Post Office directories 1868 - 1949

The Mackay City Library also holds a number of published local family histories.

Queensland state records
Queensland Registry of Births, Deaths and Marriages holds records of all Queensland births, deaths and marriages since 1 January 1890. An index is contained in the heritage room, however, you will need to go to Department of Justice to get copies of these. To find out more go to www.justice.qld.gov.au and click on the Births, deaths and marriages tab.

Mackay Family History Society
If you can’t find the family history resources you are looking for at the library, consider the Mackay Family History Society as an alternative source of information.

The Mackay Family History Society's library offers a wide range of family and local history related resources. Society members are available to offer assistance during the library's opening times. Fees apply to non-members.

The Mackay Family History Society is located at 17 Keith Hamilton Street, West Mackay and can be contacted on (07) 4952 2762.

Newspaper archive
The heritage collection includes a variety of local newspapers dating back to 1878 on microfilm and 2000 in hard copy. Newspapers available are listed below.
Microfilm
Early Mackay newspapers available on microfilm include:
- Mackay Standard: Nov. 1878 - 1905
- Mackay Mercury and South Kennedy Advertiser: 1867 - 1905
- The Daily Chronicle: 1895 - 1905
- The Daily Mercury: 1906 - 2004
- The Capricornian (Rockhampton): 1875 - 1927

Microfilm/fiche readers are available for use. Bookings are recommended.

Hard copy
Local newspapers available in hard copy:
- The Daily Mercury: 2000 - present
- The Mackay Midweek: Nov. 1985 - present
- The Pioneer News: Nov. 1985 - 2005
- State Library of Queensland and University of Queensland also hold early Mackay newspapers on microfilm. They can be found by searching the catalogues using the title of the newspaper.

Historical groups and societies

Coral Sea Family History
Midge Point, Qld 4799
Ph: (07) 4947 6316

Greenmount Homestead
Peak Downs Highway
Greenmount, Qld 4754
Ph: (07) 4959 2250

Mackay Family History Society Inc
17 Keith Hamilton Street
West Mackay, Qld 4740
Ph: (07) 4952 2762

Mackay Historical Society and
Museum Incorporated
3 Casey Avenue
PO Box 1349 Mackay, Qld 4740
Ph: 0422 237 172

Pioneer Valley Museum at Mirani
Victoria Street, Mirani Qld 4754
Ph: (07) 4961 9229

National Trust of Queensland,
Mackay-Whitsunday branch
PO Box 6544
Mackay Mail Centre, Qld 4741
Ph: (07) 4957 5736

Pioneer Valley
Machinery Preservations Society Inc
461 Bedford Road, Andergrove Qld 4740
Ph: (07) 4955 7829

Sarina District Historical Centre Inc
PO Box 668, Sarina, Qld 4737
Ph: (07) 4956 2436

Valley Genealogical Interest Group
PO Box 6, Gargett Qld 4741
Ph: (07) 4958 5236

Valley Heritage Festival
Committee Inc
c/- Post Office, Gargett Qld 4741
Ph: (07) 4959 1101
Conserving heritage houses in the Mackay region

Mackay Regional Council - Civic Precinct, Gordon Street, Mackay Q4740
Phone: 1300 MACKAY (1300 622 529) | www.mackay.qld.gov.au

This information has been compiled by Mackay Regional Council with the assistance of the Heritage Advisory Committee. Special thanks goes to local historian Berenice Wright for her assistance on this project.