

Heritage Design Guidelines



September 2020





1.	Introduction	2
----	--------------------	---

Statements of Significance

2.	Miner's Cottages Style 1850–1875	4
3.	Bendigo Boom / Victorian Style 1870–1901	8
4.	Federation Style 1901–1918	11
5.	Inter-War Style 1918–1939	14

Design Guidelines

6.	Additions & Alterations	18
7.	Subdivision	22
8.	Car Parking	24
9.	External Paint & Finishes	26
10.	Fences	30
11.	Signs	34
12.	Demolition	38
13.	Solar Energy Facilities & Domestic Service Units	41
14.	Infill Development	43
15.	Glossary	46

Introduction



Introduction

The City of Greater Bendigo is well known for its wonderful heritage places, ranging from grand public buildings to small miners cottages. These places are highly valued by the community and provide a link to the past and enrich the present.

Greater Bendigo is a municipality built on gold...

Many of its buildings were simple. Others were elaborate. Most were the work of local builders, sometimes of owner builders, others drew on the distinctive vision of Bendigo architects.

Sometimes the roads which they faced simply followed the tracks on which miners walked to get from one digging to the next. At other times they face broad avenues laid out by government surveyors and intended to make Bendigo into a proud city, the worthy rival of any European town. This townscape still survives. The street layout of Bendigo, the massive public works and public buildings of the city's heart, the cottages, chapels and pubs of miners, the mansions of mining investors, the trees, gardens and forests of the town and its surrounds together make up a rich environment.

It is an environment worthy of protection for both the amenity it brings to provincial living and for the messages it brings of the history of town life and mining in Australia. Bendigo is an important Australian town for both its place in the economy of the nation and for the richness of its buildings and landscapes.

– Eaglehawk and Bendigo Heritage Study, 1993, (pp. 2-3).

The purpose of these Guidelines is to...

- Help property owners understand the heritage significance of their property and provide guidance on how their place can be restored and altered sympathetically for modern-day use.
- **Assist with the planning process** for buildings protected by heritage overlays.
Clear guidelines assist decision making in the planning process, making it possible to achieve good design outcomes and meet the objectives and policy frameworks for heritage in the Greater Bendigo Planning Scheme.
- **Encourage good design** that maintains and protects heritage assets.
Excellent design respects the past, responds to its setting, and yet clearly creates its own modern identity.
- **Help conserve** the distinctive historic character of Greater Bendigo.
The best way to conserve our heritage is to use it. Through use, our heritage will continue to evolve and be part of the stories and history we are creating today.

The Guidelines do not aim to provide a solution for every individual design situation, but provide a starting point.

These Guidelines form part of the Greater Bendigo Planning Scheme and will be used when making decisions on applications under the Heritage Overlay. These Guidelines in combination with published heritage studies should be used when researching heritage places and how they can be developed. The Planning Scheme will identify when a planning permit is required for development under the Heritage Overlay. Generally maintenance that doesn't change the appearance of a place will not need a permit, or internal works. Works that do change the appearance, including the use of different materials to original, will need a permit. The Planning Scheme also outlines the broader heritage policy and objectives for the City.

The Planning Scheme can be found at www.bendigo.vic.gov.au/greaterbendigoplanningscheme. Heritage studies are an excellent source of information that assists with identifying the cultural significance of places and precincts in the municipality, including maybe the style of your house. Find these at www.bendigo.vic.gov.au/heritagestudies.

Owners and developers are encouraged to discuss any proposals with the City of Greater Bendigo prior to making an application. Just make an appointment with the Statutory Planning Unit.

How these Guidelines work...

1. Identifying what is significant – the 'Statement of Significance'

These Guidelines provide information about common historical architectural styles found throughout the City of Greater Bendigo. Each style has a 'Statement of Significance' which discusses what, why and how it is significant and provides a detailed description of the characteristic features of each style, known as 'contributory elements'. More recent architectural styles may be added to the Guidelines in future when that information becomes available through heritage studies.

There is a 'Statement of Significance' for each of the following styles:

2. Miner's Cottage Style 1850–1875
3. Bendigo Boom / Victorian Style 1870–1901
4. Federation Style 1901–1918
5. Inter-War Style 1918–1939

2. Designing for the heritage place – the 'Design Guidelines'

These Guidelines set out Objectives and Design Advice for different types of development so that the significance of a heritage place can be retained and protected.

Design advice is presented on each of these topics in these Guidelines:

6. Additions & Alterations
7. Subdivision
8. Car Parking
9. External Paint & Finishes
10. Fences
11. Signs
12. Demolition
13. Solar Energy Facilities & Domestic Service Units
14. Infill Development

3. A Glossary has also been compiled to assist you with architectural and building terms used in these Guidelines.

15. Glossary

Miners' Cottages Style 1850–1875



Statement of Significance

Historic context

Bendigo was one of the richest goldfields in the world, in a series of global gold rushes of the 19th century. The wealth from the central Victorian goldfields transformed international banking systems and financed colonial expansion and world trade.



Typical miners' cottages with gable roof and rear skillion.



Miners' cottages with gable and hipped roofs.



What is significant?

Crown land could be mined under a lease system called a Miner's Right. A Miner's Right granted a miner the right to build and live on the site, known as a Residency Area.

The 1850s rush on the Bendigo and Heathcote goldfields was transitory. Miners were mobile, often living in tents along the outlying creeks. However, when alluvial gold finds were substantial, miners would erect small, often prefabricated, timber cottages known as miners' cottages. These cottages were a rudimentary, cheap, and transportable form of mass housing.

Companies formed in the 1860s with the expansion of deep reef quartz gold mines in Bendigo. Cheap labour was provided by gangs who worked in 'tribute' teams. These miners clustered their cottages around the wealthy mines where they worked.

The miners of Cornish and German origin often also used their traditional building skills to build mud brick and stone cottages.

Miners' cottages are the historic markers of the gold mine sites that were once scattered throughout the Bendigo goldfields. Miners' cottages along with the grander homes of mine managers, engineers and magnates were the start of permanent settlement in this region.

Miners' cottages are largely unadorned, single storey and consist of a basic rectangular tent-like each approximately 3-4 metres by 6-9 metres.

The Miners' Cottage style was also used by early residents in other trades.

Statement of Significance

How is it significant?

The miners' cottages are of cultural significance for their historic and aesthetic values.

Why is it significant?

Miners' cottages are historically significant as an example of a modest domestic construction that reflects the different traditions of early migrants, which evolved from vernacular cottages to manufactured buildings.

The topography of each goldfield saw aesthetic adaptations of the miners' cottages, showing the shifting fortunes of the mines and miners.

Miners' cottages and Residential Areas are also historically significant as a Victorian Government initiative to enable gold miners to occupy crown land for residential purposes. Holders of a Miner's Right could take out a residential claim as leasehold and this was vitally important in the development of Victoria's gold-mining towns.

Miners' cottages have maintained their vernacular style over time whilst adapting to change, making them an integral part of Greater Bendigo's goldfields heritage.



Double gable roof extensions, creating the distinctive zig-zag outline of a miner's cottage.

Victoria's Historical Themes

- Peopling Victoria's places and landscapes
- Migrating and making a home
- Transforming the land
- Gold mining

Contributory Elements

Setting



Setting and location

Miners' cottages were typically built on a quarter acre block. As many were built before roads were surveyed, miners' cottages do not always face the road or have regular front setbacks.



Gardens and outbuildings

Blocks were self-sufficient and had outbuildings, vegetable gardens, wells, fruit trees and animal enclosures—some of which survive. Gardens were cottage style.



Miners' Cottages Style 1850–1875

Contributory Elements

Form



Scale

The basic unit was a tent like low rectangular box in 3.6m x 9m variations. Cottages were made up of 1 or more boxes, sited at the rear, side or right angled.



Roofs and chimneys

Roofs were a ridge with gable ends or hipped, with a skillion off the rear or another gable end, creating the distinctive zigzag roofline. Each gable would typically have a chimney. Sometimes no eaves.



Building Fabric



Windows and doors

Central timber door with simple, narrow, and modest windows either side. Windows could be double hung and sizes varied. Cornish long house style feature asymmetrical door and multiple windows. Later renovations added more windows and doors.



Details

Verandahs could be decorated with cast iron brackets, friezes or wooden trim. Other features were often applied later, including bay windows, window hoods, elaborate front doors and cladding.



Material and finishes

Cottages were weatherboard, mud brick, or stone, with some made of rendered brick or even rubble. Shingle roofs were often covered by corrugated metal sheets. Floors could be earthen or timber.

Contributory Elements

Building Fabric



Verandahs and posts

Verandahs were basic with simple skillion, hipped, convex or concave, with some decorative features. Many early cottages had none. A number of verandahs were added or altered later to bullnose or inter-war 'barley sugar' concrete posts and brick.

Fences and gates

Front fences might be stone or hedge, but were more commonly low timber pickets in a variety of styles.

Bendigo Boom / Victorian Style 1870–1901



Statement of Significance

Social historic context

The quartz gold mining boom transformed Bendigo in the 1870s–1890s from a dusty mining town into a glorious city with an international reach. Fortunes made on the Bendigo stock exchange were flaunted by magnates on flamboyant grand buildings, opulently decorated interiors and beautiful gardens designed by migrant architects, builders, and craftsmen.



Boom style villas with decorative projecting gable rooms.



Symmetrical single and double storey Boom dwellings.



What is significant?

The distinctive Bendigo Boom style was developed by migrant German and Austrian architects like William Carl Vahland and later, William Beebe. Vahland worked in the Northern German Baroque Revival style; his aim was to create a little 'Vienna of the south'. William Beebe's preference in the 1890s was for Queen Anne Revival, Carpenter Gothic and Art Nouveau styles.

Gold finds in the 1890s buffered Bendigo from the worst effects of the economic depression experienced by the rest of Australia. Mine owners built their grand mansions near their mines alongside miners' cottages. But for mine speculators, hillsides were favoured. Grand villas were enhanced by ornamental gardens, exotic palm trees, and elaborate fences.

The resulting housing stock from this period ranges from the grand and flamboyant to the more basic, less ornate timber villas. The boom in building was stimulated by the production of 'Vahland pattern house designs' through the Bendigo Land & Building Society which encouraged home ownership for the poor and working classes. These were often more simple in design.

How is it significant?

Bendigo Boom style is of cultural significance for its architectural, historic and aesthetic values.

Why is it significant?

Bendigo Boom style is historically significant for the collection of fine buildings designed by migrant architects, who were drawn to one of the world's wealthiest 19th century goldfields.

Bendigo Boom style is of architectural significance for its creative fusion of architectural and design styles, adding British picturesque characteristics to German Romantic imagery. This aesthetic exploration of man's relationship to nature evoked a garden idyll amidst the devastation of the industrial mining landscape.

Bendigo Boom style is of historical significance as a record of the imagination and indulgences of the wealthy mine magnates and speculators in what was becoming one of the grandest 19th century gold rush cities. It was also a record of the changing fortunes of the ordinary person.



Boom villa and a miner's cottage with gable Boom extension.

Victoria's Historical Themes

- Transforming the land
- Gold mining
- Building towns, cities and the garden state
- Marking significant phases

Contributory Elements

Setting



Setting and location

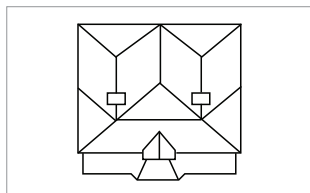
Owners and managers built around their mines but the wealthy sought out hills for their grand buildings. Blue stone kerbs and channels lined these streets and rear lanes provided access.

Gardens and outbuildings

Boom villas had ornamental gardens, with paths, water features, statues, exotic plants, palm trees, shrubberies and greenhouses. Villas could also have stables, coach houses and servant quarters.

Contributory Elements

Form



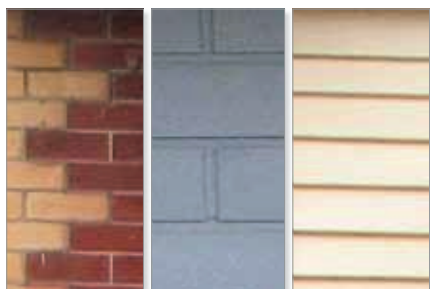
Roofs and chimneys

Hipped roofs were usually either corrugated galvanised iron or slate. Roofs could have a central valley gutter between horizontal ridgelines, or a projecting front gable, with polychrome brick and stucco chimneys. Eaves were closed and decorated.

Scale

Villas were mostly single storey but there were also two storey or two storey with partial basement rooms villas and mansions.

Building Fabric



Material and finishes

Timber weatherboard cladding was common, some patterned to look like ashlar stone. Common features included polychrome brick patterns, raised quoins, brick tuckpointing, cast cement decorative elements, and vermiculated, textured stucco.



Windows and doors

Wide ornate architraves, decorative mouldings and pediments framed double hung sash windows with decorative hoods and labels. Door entrances had elaborate panels with fanlights and sidelights.



Verandahs and posts

Verandahs had convex, concave, skillion, or hipped bull nose roofs. Brick buildings often had ornate cast iron verandah posts, friezes and brackets. While timber houses were more likely to have square section timber posts with chamfered corners, and timber or cast iron valances, friezes or brackets, with timer gable ends or barge boards.



Details

Elaborate, decorative, geometric detailing was done in timber, render and stucco in a creative mix of styles in many Boom houses to add richness.



Fences and gates

Fences were brick piers and cast iron palisades, solid masonry or stone, or timber pickets with simple or very ornate spearheads and gates.



Statement of Significance

Social historic context

The extraordinary wealth of the 19th century goldfields contributed to a land boom which transformed the State. This success followed by the hardships of the 1890s Depression crystallised the determination for a federated Australia, leading to the formation of the Commonwealth Constitution in 1901. These political and civic advances of the modern 20th century engendered a fresh national identity.



Picturesque asymmetrical layouts with return verandahs.

Timber details and fretwork are Federation features.

What is significant?

The Federation style was inspired by a sense of Australian nationalism and identity, of the transition from British colony to a federated country of the British Commonwealth.

In the cosmopolitan city of Bendigo, the Federation style was a flamboyant mix of European architectural influences. Influenced by the Arts and Crafts Movement, with embellishments from Art Nouveau, design inspiration was also drawn from the native Australian environment, and flora and fauna.

It was a time of reform and Bendigo saw major restructuring of the mining, agricultural and industrial sectors. Urban reform sanitised and beautified what had been wasteland, reclaiming mine sites, cleansing fumes and dust, and removing slums. The management and control of public space saw increased tree plantings, creation of public gardens, and installation of water features and ornamental lakes, transforming and greening the city.



Hipped and Dutch-hipped roofs with apex decorations.

How is it significant?

Federation style is of cultural significance for its historic, architectural, and aesthetic values.

Federation Style 1901–1918

Why is it significant?

The Bendigo Federation style is historically significant as a domestic architecture that reflects the nationalistic spirit seen on the Bendigo goldfields in the early 20th century.

Federation style was the evolution of a distinctly Australian architecture. The complex broken form and scale of the buildings embraced the outdoors, enhancing garden views from the interior. Deep encircling verandahs and picturesque gardens were design responses to the hot dry inland climate of Bendigo.

Federation style is aesthetically significant for the creative interest in native imagery as well as skilled craftsmanship and techniques.

Victoria's Historical Themes

- Building towns, cities and the garden state
- Marking significant phases
- Governing Victorians
- Struggling for political rights

Contributory Elements

Setting

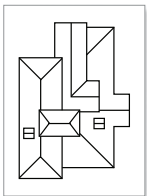


Setting and location

Bungalows took advantage of hills, vistas and boulevards, forming new middle class suburbs. Asymmetrical layouts made the most of gardens and generous setbacks of tree-lined avenues.

Gardens and outbuildings

Buildings were designed to relate to the outdoors, surrounded by well laid out paths and gardens. Wide, deep verandahs, pergolas and shade houses created shade in the hot inland climate. Use of deciduous and European trees prevalent.



Roofs and chimneys

Roofs were large, often with Dutch hips, broken by a multitude of gables, and made of terracotta tiles or corrugated iron. Roofs had decorative ridge capping and gargoyles, bays, towers, and roof ventilators. Tall red brick chimneys were often stuccoed.



Scale

Bungalows were large and imposing single storey buildings with high ceilings, or dormer attics and towers, less often two storey. The use of height in verandahs and chimneys increased the scale of development.

Contributory Elements

Building Fabric



Material and finishes

Timber weatherboard was common with bold paint schemes. Bungalows could also be made of red pressed Hoffman bricks set in a cavity wall construction; with flush mortar joints or tuck-pointing.



Windows and doors

Bungalows had an eclectic mix of windows with side-hung casement sash pairs and stained glass/lead light windows. Front doors were elaborate with recessed panels, fanlights, and coloured and patterned glazing.



Verandahs and posts

Deep encircling verandahs were supported by turned timber posts and highly ornate arched valences and brackets. Gable ends could be decorated with half-timber Tudor features. Cast iron continued to be used in this period.



Details

Timber fretwork motifs included sunrays, parrots kangaroos, and native flora. Gargoyles, dragons and finials adorned ridge tiles and gables. Timber or metal panelling and shingles also created detail.



Fences and gates

Fences were elaborate timber picket, post and rail. Simple cut-out patterns were used like arrows, spades, squares and circles, with scalloping or swagging in the profile, set between high masonry posts.



Inter-War Style 1918–1934



Statement of Significance

Social historic context

By the early 20th century gold mining had peaked and was starting to decline on the Central Victorian goldfields. Bendigo became a focus of government initiatives to halt rural decline and depopulation. From the end of WWI, the promotion of ‘closer settlement’ helped develop the rural interior and Bendigo developed as an important regional city.



Examples of the distinctive Art deco Inter-War style.



Inter-War style combined a variety of architectural shapes.

What is significant?

Fostering growth in regional areas, following war and depopulation, was critical. After the Great War, there were state-wide schemes to settle returned soldiers, with an emphasis on home ownership.

The War Service Homes Scheme, banks and building societies all became involved in creating new suburbs in Bendigo.

In an era of mining decline, former mine sites were seen as an opportunity for suburban development. New infill housing development on reclaimed mine land encouraged the growth of garden suburbs and model villages in the Greater Bendigo region.

Depression era ‘homemade’ mud brick houses were also built.



Verandahs adapted from American styles created cool interiors.

How is it significant?

Inter-War style is of cultural significance for its historic, architectural and aesthetic values.

Why is it significant?

Inter-War style is historically significant for the collection of 20th century buildings that show an optimism and confidence in the future at a time of rural depopulation, government intervention and suburbanisation.

Inter-War style was architecturally and aesthetically significant for its universal eclecticism, combining styles such as American Spanish Mission, Californian Bungalow, Italian Mediterranean, Arts and Crafts, Georgian Revival, Art Deco as well as streamline Modernism. Features from styles for hot climates were creatively adapted for the inland heat of the central Victoria region.

Inter-War style is socially and historically significant for the substantial investment in the provincial building industry trade and skills.

Victoria's Historical Themes

- Peopling Victoria's places and landscapes
- Promoting settlement
- Building towns, cities and the garden state
- Marking significant phases

Contributory Elements

Setting



Setting and location

Inter-War housing development occurred in small groups of infill sites and in new subdivisions along main roads. Suburbs were created in picturesque layouts with cull de sacs and wide grassy verges.

Gardens and outbuildings

Gardens featured lawns, curved paths, rustic gates, patios, pergolas, and rockeries, and planted with perennials, shrubs, fruit trees, succulents and palms. Garages were common and set back and separate from the house.

Inter-War Style 1918–1934

Contributory Elements

Form



Roofs and chimneys

Roofs were simple and low with deep eaves, made with terracotta roof pantiles, or concrete or multi-coloured Marseille tiles and metal roof sheeting. Chimneys were often massive and roughcast.

Scale

Bungalows were compact with low horizontal forms but half a storey attic houses were also popular. Two storey mansions were built in Spanish Mission mixed with Mediterranean styles.

Building fabric



Material and finishes

Materials included special coloured clinker brick, earthen, stone or concrete, rough edged weatherboards that were oil or creosote stained. Wall paint colours were stone, white and creams.



Windows and doors

Box timber casement windows were common, with bay or Georgian windows, concrete lintels, and leadlight features often in Art Deco Style. Doors were rustic with glass panels and wire screens.

Verandahs and posts

Wide verandahs with masonry piers and pillars bear low gables in Californian bungalows. Spanish Mission porches have arched loggias, barley sugar columns or Italian Renaissance arches.

Contributory Elements

Building fabric



Details

Decorative details included gable vents, shutters, tiled niches, wrought iron, flower boxes, fluted and curved parapets, and splayed entrance steps.



Fences and gates

Fences usually low front hedges or solid stonewalls, scalloped timber pickets or palings, or crimple wire mesh post and rails.

Additions & Alterations

Design Guidelines

Objectives

- To encourage additions and alterations that retain and protect the main architectural style, structure and significance of the heritage place.
- To ensure integration of new development by encouraging design that respects the heritage place through its setting, location, bulk, form, height, materials and appearance.
- To encourage alterations and additions to heritage places that are concealed from the public realm, or if this cannot be achieved, do not dominate the heritage place.
- To ensure that additions and alterations to a heritage place do not detract from the significance or views of adjoining heritage places and/or precincts.
- To encourage additions and alterations that avoid demolition of a heritage place and/or contributory elements; retaining facades only is discouraged.

Design Advice

Additions

- Identifying the contributory elements of the heritage place should be the reference point for new works. The relevant Statement of Significance should assist in identifying these elements.
- Additions should be set back in a way that allows the retention and view of the existing contributory elements, particularly chimneys and roof form.
- While both contemporary and conservative design approaches are appropriate, additions should be distinguishable from the existing heritage place; designs that copy the decorative detail of the heritage place on new additions should be avoided.
- When an addition is reinstating part of the building that has been demolished, details may be copied if based on photographic or other physical evidence.
- Addition design should be comprised of simple shapes of a similar scale and proportion to the existing building or be designed in a way that ensures that they do not dominate the heritage place or nearby heritage places.

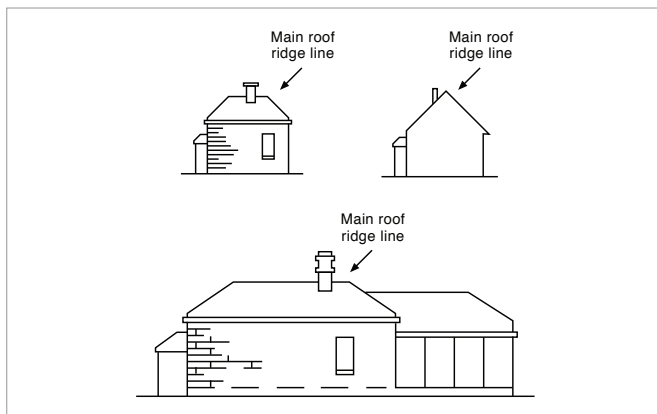


Large addition at the rear of a Bendigo Boom dwelling: the heritage place is still the main feature, the addition is distinguishable and does not alter the integrity.

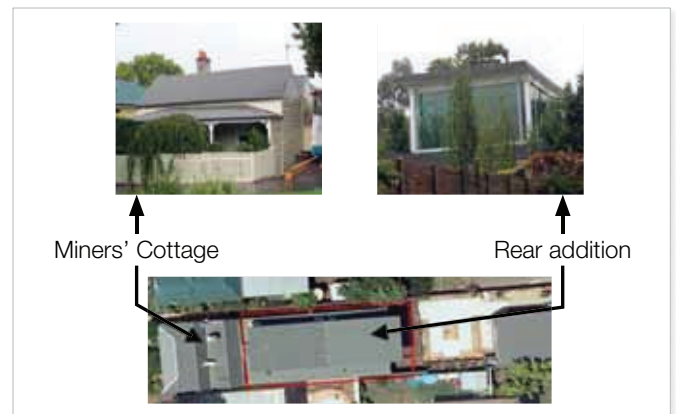


Large addition integrated at the rear of a Bendigo Boom dwelling; simple shapes of an appropriate scale and proportion and solar panels accommodated at the rear.

- Where possible, additions should be located at the rear, behind the main roof ridgeline, have a separate roof form to that of the heritage dwelling and not be visible from the street.
- The original roof form should be retained, including chimneys.
- Where visible from the street, new additions should have the same eave width as the original dwelling (this does not apply to small, rear skillion additions).



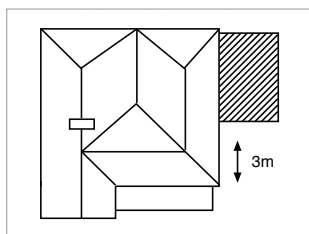
Rear addition with separate roof form.



Large contemporary addition successfully integrated at the rear of a Bendigo miners' cottage.

Small additions

- Small additions should be concealed from public view; and/or where possible setback a minimum of 3 metres from the front building façade.



Side addition with 3m setback.



Small rear skillion addition.



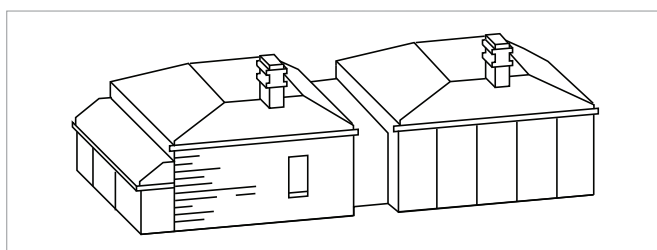
Small side addition.



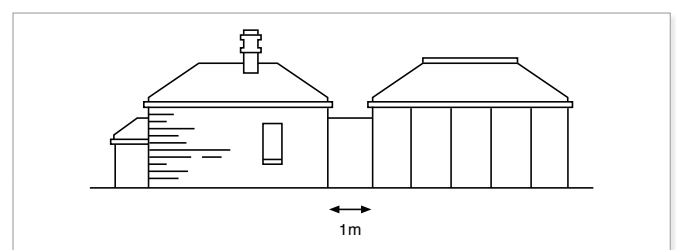
Small side addition.

Large and double storey additions

- Larger additions can be joined to the heritage place with a recessed, unobtrusive link.
- When joined by a link, additions should be setback a minimum of 1 metre from rear of the original dwelling.
- Additions should be setback as far as possible from the front building façade (or primary façade) to ensure that the new additions are concealed or partially concealed from public view.
- Where additions are taller than the heritage dwelling, the addition should not dominate when viewed from points 1.7m above natural ground level on the opposite footpath, from directly in front and from a position aligned with the side boundary two allotments away, on both sides.



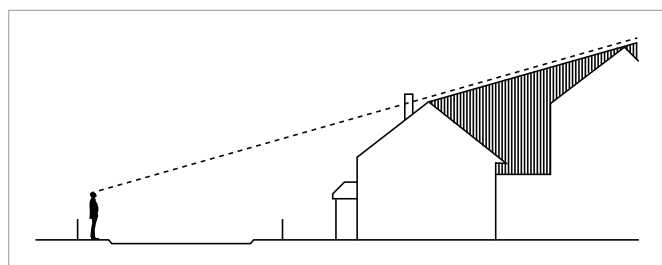
Large rear addition.



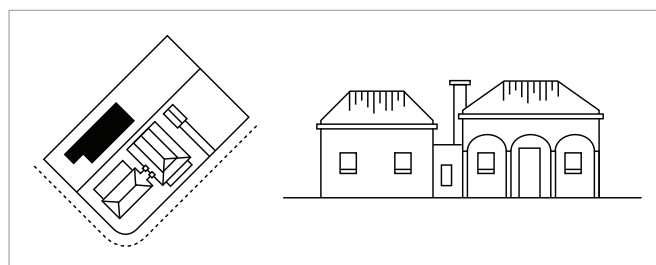
Large rear addition joined by 1 metre wide link.

Additions & Alterations

- In rural locations, or in predominantly single storey areas, double storey additions may not be appropriate.
- When an addition cannot be achieved to the rear due to site constraints, the addition should be set back as far as possible from the front building façade and great care should be taken to ensure that views to contributory elements are not blocked and that the addition is distinguishable from the heritage place.



Assessing the dominance from a height of 1.7m.



A large addition which is located to the side of the dwelling due to site constraints. It has been setback, joined by an unobtrusive link and the retention of contributory elements such as chimneys has been achieved.

- Large additions on corner sites visible from the street, should be designed to ensure the location, bulk, form and appearance of the proposed addition does not dominate the heritage place or the streetscape.
- On corner sites and/or where open space is a feature of the heritage place (e.g. rural properties or important settings), additions should be set back to maintain the open setting and to align rear and/or side open space with that of adjoining properties.
- Previous additions should be retained where they have attained a degree of significance in their own right and illustrate the development of the place over time i.e. miners' cottages often have later additions added as miner's fortunes increased.



The setting of a heritage asset can make a significant contribution to the historical, aesthetic or social values of the heritage place. Additions should be located to ensure that the setting is maintained.



Miners' cottages with later rear additions that add to the significance of the heritage place.



Example of a sympathetic and contemporary addition that retains the original red brick wall along the street.



A new addition that has been designed to ensure the retention of chimneys, the original roof form and other contributory elements.



A dwelling on a corner site that has added a carport and still retained all chimneys.



Roof cladding that has been replaced to match the original in form, pitch, colour and style.



An addition where matching roof material has been used.

Design Advice

External Alterations

- The introduction of new elements onto the original heritage dwelling (e.g. new windows and doors) in locations visible from the public realm is discouraged, unless they result in the conservation, restoration and/or reinstatement of the fabric to a known earlier state.
- Enclosing or extending an existing front verandah is discouraged. The original form of a verandah should remain distinguishable.
- Alterations should not alter the authenticity and integrity of the original detailing, symmetry and materials of the heritage place.
- Replacement of wall cladding and roofs is discouraged if the replacement will result in the change of appearance and materials. Original cladding, such as weatherboards, should be retained and repaired, rather than totally replaced. Roofs should be replaced with same material. If different materials are used this is considered a change to the place and a planning permit will be required.
- Where chimneys are retained, removal of the lower section of the chimney (breast and hearth) is discouraged. Chimneys can be capped.
- Decorative details on roofs including finials, ridge capping, vents and other details should be retained.
- Details of original roof eaves, including decorative material, barge boards, soffits, lining, vents, rainwater heads, gutters and mouldings should be retained in all new works.
- Installation of solar panels to the front of significant and contributory elements is discouraged (refer to Solar Panels and Service Units Guidelines).
- Installation of roof lights, vents and dormer windows is discouraged where visible from the public realm. A flat window sensitively located is preferred to a dormer window.
- Replacement roof cladding should match the original, or be similar in form, pitch, material, colour and style. e.g. corrugated galvanised steel is preferred when replacing an existing galvanised steel roof.
- Any new guttering, downpipes and roof materials should match that of the existing heritage place.
- When the original material is not available or is unfeasible, a historically appropriate alternative may be discussed with the City of Greater Bendigo Heritage Advisor. In most cases, galvanised steel is the preferred material for recladding.

Chimneys and Roofs

- Chimneys are often an important element that add balance to a place and should be retained.
- Where chimneys were a contributory element to the significant architectural style they may be re-instated.

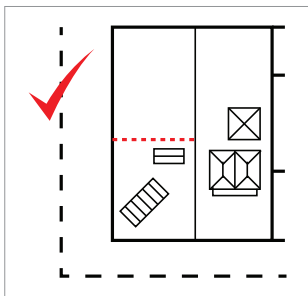
Design Guidelines

Objectives

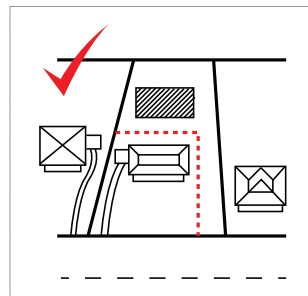
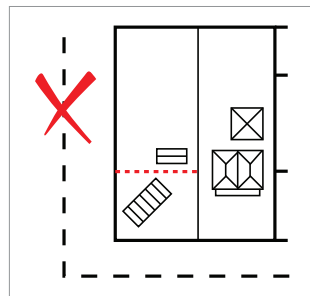
- To ensure that subdivision does not adversely affect the significance of the heritage place.
- To ensure that appropriate settings and elements for the heritage places are maintained including the retention of any original garden areas, large trees and other features which contribute to the significance of the place.
- To ensure that development which may result from the subdivision of heritage places does not adversely affect the heritage significance of the place.
- To ensure that the subdivision of heritage places retains the existing built form pattern where such pattern contributes to the significance of the heritage place.

Design Advice

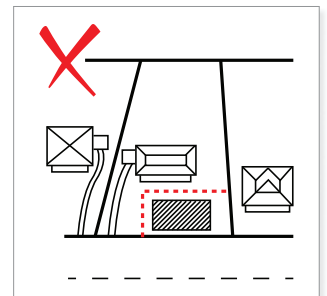
- Subdivision that may result in the demolition of a heritage place is discouraged.
- Contributory elements of the heritage place should be contained within the main lot, and utilise significant original boundaries where appropriate (contributory elements may include garden, trees, driveways, outbuildings or any other elements recognised in the relevant Statement of Significance).
- Subdivision should not allow development that will impede on public views to the major elevations of a heritage building or other heritage feature.



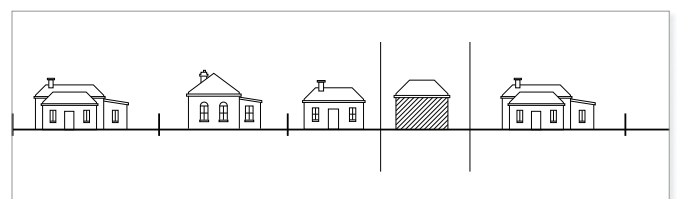
An outbuilding associated with a heritage place should be retained on the same title, as it is a contributory element which adds to the significance of the heritage place.



Views to the heritage place should be maintained; subdivision likely to lead to development that will block views is discouraged.



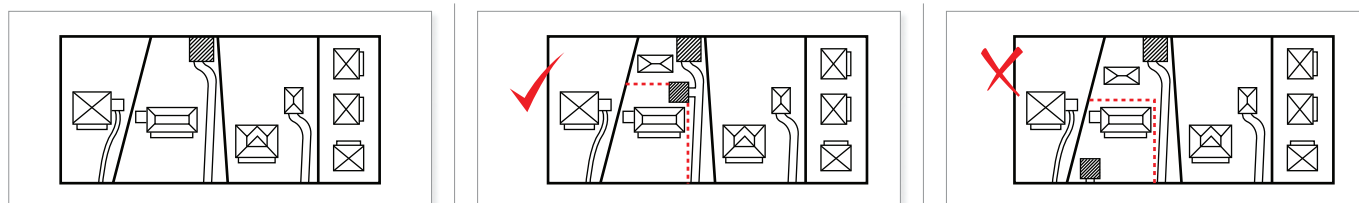
- Subdivision should result in development that respects the existing rhythm/pattern of surrounding buildings and spaces between them.
- Subdivision should result in lots with a similar frontage to that of the dominant allotment pattern in the streetscape.
- Subdivision is discouraged where it will adversely affect the inter-relationship between groups of significant or contributory heritage buildings i.e. a group of miners' cottages.



Subdivision can have minimal impact on the dominant allotment pattern in the streetscape by repeating the existing pattern and rhythm of development.

Design Advice

- Subdivision should allow for the appropriate siting, solar access, private open space, landscaping, vehicle access, parking, water management and easements within the heritage place.
- Subdivision should maintain the setting and curtilage of the heritage place with the curtilage being in scale to the building. While each case will be assessed on its merits taking into account significance of the heritage place and size and siting of the existing dwelling, a curtilage of 3 metres to the rear is considered a minimum. For miner's cottages a curtilage of 6 metres to the rear is recommended. Side curtilage will depend on the existing pattern of development in the street and the relationship of buildings to open space between buildings.



An example of a subdivision that maintains the setting of the heritage building.

Car Parking



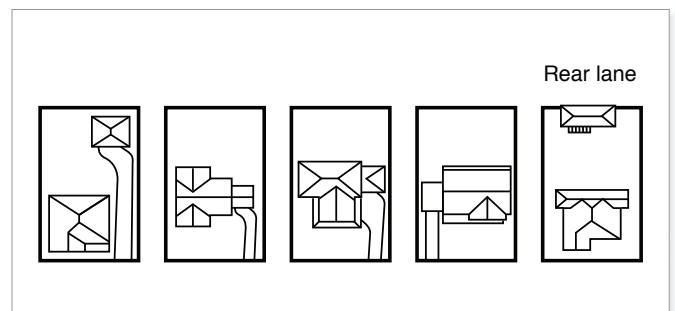
Design Guidelines

Objectives

- To ensure that car accommodation, including open parks, carports and garages, and car access points do not dominate or affect the significance of the heritage place.
- To encourage car parking to be located at the rear or to the side of the building, at least 1 metre behind the primary façade.
- To ensure that the location, bulk, form, materials and appearance of the structure does not dominate the contributory elements of a heritage place

Siting

- Where possible new car parking structures should be setback a minimum of 1 metre from the front building line (primary façade with main entry); in the case of miners' cottages a larger setback of 3 metres is appropriate.
- Where possible, side street or rear laneway access should be utilised in preference to front access.
- Where a car parking structure has access from a rear lane, it may be required to be set in from the property boundary to allow clear view of pedestrians, safe entry and exit and conservation of stone and brick gutters.
- Where it is not possible to site a new structure behind the front building line, or it is likely to become a dominant feature in the streetscape, an open parking space to the side of the property is preferred. Car spaces directly in front of the heritage building are not supported.
- Where possible, carports and/or garages should be freestanding and should not block views (from the public realm) of any contributory elements.



Preferred siting for garages and carports.

Access

- Existing access points should be used where possible; more than one access point per allotment is discouraged.
- Where a new crossover and driveway is introduced they should be located to the side or rear of the building, and be no more than one car width wide (about 3 metres), widening out within the allotment for double car parks if necessary.
- Where crossovers affect bluestone or red brick gutters, they should be designed to ensure the gutter is conserved or can be reinstated.



Crossover and access at the side of the building; an open car parking space may be the best option in some situations.



Preferred siting for garages and carports.

Form, design and materials



Simple car parking structures that don't dominate the streetscape.

New car parking structures that are smaller in scale than the dwelling, recessed, set under the eaves and have a simple gable roof.

- New structures should be proportionately smaller in scale than the dwelling.
- New structures should be set under the eaves of the dwelling (the eaves of the heritage place should not be cut into). Existing chimneys should be retained.
- New structures should be clad in similar materials to that of the dwelling and/or painted to match the heritage place.
- New structures should have a simple skillion, hipped, gable or flat roof.
- New structures should be a separate visual entity. Continuing an existing wall without a break or change of material to form a garage is not appropriate, unless located at the rear of the dwelling.
- New structures should be of simple design as to not dominate the street façade (designs that copy the heritage details should be avoided) and not use elaborate ornamentation.
- Materials and design of new driveways should be sympathetic to the heritage place; central grass strips or similar treatments are encouraged.
- Where there is an existing garage that is original to the house and is contributory to the house's significance, it should be retained.

Design Guidelines

Objectives

- To encourage the use of external paint colours and treatments that are consistent with the period of the place.
- To encourage retention of external treatments that contribute to the significance of the place including unpainted masonry surfaces and historic signs.
- To encourage the sensitive removal of paint from originally unpainted masonry surfaces where appropriate.

Design Advice

- Unpainted original surfaces e.g. stone, render, brickwork and some timber, should not be painted, rendered over or reclad with new material.
- Careful removal of paint from original face brick, stonewalls and render is encouraged where it will not damage or alter the underlying surface. Historic signs should be retained.
- Paint removal should be undertaken by a professional in the field to avoid damage to underlying materials and surfaces. Sandblasting should not be carried out.
- Previously painted surfaces should be painted in compatible materials and colours that reflect the original architectural style (See paint guidelines over page).
- Paint colours should preferably be appropriate to the style and period of the place, as use of colours changed over time. The traditional colour range includes light colours of stone, buff and pale cream, as well as light and dark greens, deep browns, deep reds, purple browns, while black was generally not used until after 1945. A paint “scrape” or investigation of the paint layers can be used to reveal the colours particular to a place and can result in a more interesting and authentic colour scheme.
- Old black and white photographs can often help in establishing where lighter and darker tones were applied, and which materials were used.
- Preservative materials or lime wash may be applied for the purpose of conservation (speak to the City of Greater Bendigo Heritage Advisor for expert advice).
- Expert advice should be sought for the conservation of render, stucco detail, unusual surfaces and complex buildings and treatments.

Paint Guidelines

Miners' Cottages – Colours



Wall Colours: Unpainted brick or stone should be left unpainted. Already painted stone walls may be painted off-white with earthen tints, e.g. iron oxide, yellow ochre colours. Weatherboard colours are generally cream, buff or light stone. The use of deeper tones of the same hue for trim and openings is appropriate. Downpipes should be painted to match the wall colour behind.

Joinery Colours: Generally deep contrasting colours, deep browns, Indian red, purple browns and dark green.

Roofs: Generally natural iron or iron painted rich red, deep green or slate colours.

Fascia and Gutters: Generally the same or similar colours as the joinery.

Lacework: While cast iron verandah posts were not used on miners cottages, lacework was sometimes added to timber verandah posts. Often darker colours, usually deep reds and greens, but sometimes mid tones or even lighter colours were used.

Fences: Light colour to match house.

External Paint & Finishes

Paint Guidelines

Bendigo Boom – Colours



Wall Colours: Unpainted brick, render or stone should be left unpainted. Weatherboard colours are generally cream, light green or light stone with some use of deeper tones of the same hue for trim and openings. Red or brown bricks, with white or cream bricks at corners. Painted render or stucco should be painted in a colour that imitates the colour of the natural render. Block weatherboards should be painted in similar colours to weatherboards. Joins can be painted in light colour such as cream (to replicate stonework). Downpipes should be painted to match the wall colour behind.

Joinery Colours: Generally deeper colours, rich browns, Indian and Venetian reds, purple brown, and dark greens. Can also use light creams and greens for window sashes, frames, door panels and trim.

Roofs: Generally natural corrugated iron, or iron painted rich red or deep green. Creams used to create a stripe on the verandahs with the joinery colour and were used even when the roof was unpainted. Stripes were the width of a corrugated iron sheet. Pale green underneath verandahs.

Fascia and Gutters: Generally the same or similar colours as the joinery.

Cast Iron and Verandah Posts: Usually painted dark green or red with elements picked out in lighter colours. Occasionally painted in lighter colours. Chamfered corners on wooden posts usually lighter or darker than the post as were bracket mouldings.

Lacework: Often darker colours, usually deep reds and greens, but sometimes mid tones or even lighter colours were used

Fences: Generally light coloured to match dwelling weatherboards or trims.



Federation – Colours

Wall Colours: Unpainted brick, render or stone should be left unpainted. Painted render should be painted in off-whites or pale creams. Weatherboards should be painted in pale browns, pale buff to mid-browns and rich ochres. Half timbering in gables was usually picked out against roughcast in dark browns, reds, blue greys, or greens. Downpipes should be painted to match the wall colour behind.

Joinery Colours: Generally window and door joinery were the same colour. Commonly colours were strong rich browns, reds and greens with lighter creams and off-whites, deeper tawny colours including olive, red oxide, buff, deep ochres as well as a combination of pale and dark greens.

Roofs: Generally slate or terracotta Marseille tiles. Corrugated steel roofs were left unpainted, or painted a terra cotta red to look like the terra cotta tiles which were the height of fashion. Slate roofs usually had terra cotta ridge and finials.

Fascia and Gutters: Generally the same or similar colours as the joinery.

Paint Guidelines

Inter-War – Colours



Wall Colours: Unpainted brick, render or stone should be left unpainted. Render and roughcast should be painted in off-white, pale creams or light pastels. Weatherboards should be stained or painted in natural colours including off-white, soft browns, greens and some pastels. Half timbering in gables should be painted to match timber trims. Downpipes should be painted to match the wall colour behind.

Joinery Colours: Generally window and door joinery were the same colour, commonly dark browns and greens or the full range of creams, butter, pearl, ivory and off-whites, greys, pale ochres, pastel colours, with highlights in brighter shades of green, black, red or dusky pink.

Roofs: Multi-coloured or mottled brown and red tiles or grey slate, painted red, grey or green corrugated iron.

Fascia and Gutters: Generally the same as the roof colours.

Further information

Colour Schemes for Old Australian Houses and *More Colour Schemes for Old Australian Houses*, Ian Evans, Clive Lucas and Ian Stapleton, The Flannel Flower Press, reprinted 2004 and *Australian House Styles* by Maisy Stapleton and Ian Stapleton, The Flannel Flower Press, reprinted 2010.

Design Guidelines

Objectives

- To retain and restore original fences where possible.
- To encourage fences that enhance and respect the significance and appearance of the heritage place or precinct.
- To encourage reconstruction of original fence styles including height, style and materials.
- To encourage low and open fence styles that retain views of heritage places.

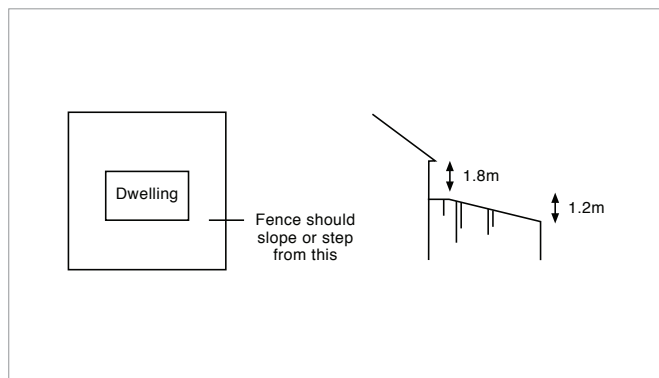
Design Advice

Front Fences

- Retention and repair of the original front fence is encouraged. If this is not viable, reinstating the front fence to its original form using photographic or similar evidence is appropriate.
- Where the original fence is unknown and cannot be established, the original common pattern of fences appropriate to the age and style of the dwelling should be used.

Front fences should:

- Be low scale (less than 1.2m in height) and solid masonry only if suitable to the era of the dwelling.
- If between 1.2 and 1.5m in height, be open or 'transparent' (except piers) or backed with a hedge, unless it can be established that a solid fence was the original or common pattern.
- Step horizontally or grade with footpath.
- Be constructed of traditional materials including wooden pickets, wire, brick, stone; hollow metal fences are strongly discouraged.
- Have detailing appropriate to the style of the building.



Side boundary fences higher than 1.5m should slope or step from the front of the dwelling (primary façade) to the height of the front fence.



A fence should slope or step with the gradient of the footpath.



Replicating a fence style common to the period and style of the building may be appropriate.



Surviving original fences within the Heritage Overlay should be used as reference.

Design Advice

Fencing Patterns

- Common patterns of fence height, position, materials, and level of transparency should be retained in residential settings (the surrounding area and nearby dwellings of a similar style should be used as a reference).
- High front walls should be avoided in urban areas. Where noise or privacy in the front yard is an issue, alternatives such as double-glazing of windows and the planting of vegetation and hedges should be considered.



Establishing a hedge is a good option for managing noise and creating privacy.

Fences on Side Boundaries

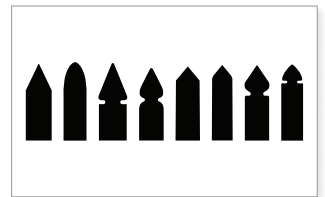
- Where visible from the street or on a corner site, fences on side boundaries should usually adopt a similar scale and design to that of the front fence, particularly when in front of the dwellings.
- Where the site is not located on a corner, it may be appropriate for side and rear boundary fences to be 1.8 metres high of palings or corrugated iron.
- If a side boundary fence is higher than 1.5 metres it should slope or step from the front of the dwelling to the height of the front fence.



Low scale wooden pickets are a good option for miners' cottages.



Fence colours should harmonise with dwelling.



Typical miners' cottages pickets. More complex picket heads are sometimes appropriate.

Miners' Cottages Fences

- Low Scale (less than 1.2m in height) and permeable.
- Wooden pickets generally painted in a single light colour or post and wire.
- Minimal detailing, simple picket heads such as arrow, round or spade.
- Posts can be of a similar design to the pickets.
- Gates can be similar to match the fence.
- Ideal size for pickets is generally 75mm x 22mm in section and spaced 65-70mm.
- Capping rails may be appropriate.

Fences



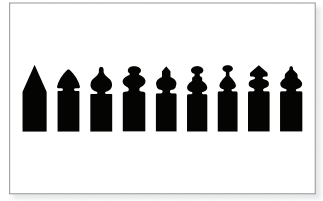
Swagged picket fence with hedge.



Iron picket heads with two levels of cast palmette (fan-shaped leaves) heads.



Palisade iron picket heads.



Typical Bendigo Boom pickets. Other picket heads are sometimes appropriate.

Bendigo Boom Fences

- More complex, ornate wooden picket heads and post profiles than found on miners cottages.
- Generally light coloured pickets to match house.
- Single or double iron palisade heads with one or two levels of cast fleur-de-lis (stylizes lily) or palmette (fan-shaped leaves) heads, ideally set into a chamfered edge plinth, usually darker colours but not black, and often with rendered posts.
- Gates of similar style to the fence but often more ornate; large gateposts in brick with stucco cornice, all stucco or cast iron are appropriate.
- A typical timber picket Bendigo Boom example has 70 mm x 19mm pickets, posts 120mm x 120mm with a height of 1100mm, and a plinth 150mm x 37mm.



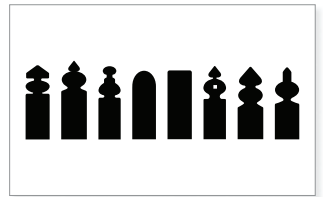
Federation fences can be lavish with sagging.



Simple low picket fence.



Established hedge fence.



Typical Federation pickets. Other picket heads are sometimes appropriate.

Federation Fences

- Similar to Bendigo Boom Style, with the similar use of carved picket heads, but often more lavish with added scalloping (or swaging) in the picket head design.
- Capped timber fences or hedges are appropriate.
- Face or stucco red brick fences with similar mouldings to those used on the chimney cornices are also appropriate.
- Gates can be similar to match the fence.
- A typical Federation example has 70 mm x 19mm pickets, posts 120mm x 120mm with a height of 1100mm, and a plinth 150mm x 37mm.
- Light coloured timber pickets.



*Low face brick masonry fences with ironwork.
Inter-War fences were often built to directly
match the design detail of the dwelling.*

*Low chain or wire fences with timber are
a good option for Inter-War dwellings.*

Inter-War Fences

- Fence designs allowing more light into gardens and integrating private gardens with the 'nature strip' are best. Chain or crimped wire in double palisades of crimped wire, set between shaped posts and sometimes below timber capping.
- Scrolled strap-iron decoration combined with wire, framed by iron pipe for the gate or a wrought iron gate.
- Chain mesh with pipe rails between timber posts.
- Other options include a broad, low round head or capped timber picket. Typical sizes were: 95mm x 20mm picket with 52 space, posts 120mm x 120mm, capping 120mm x 33mm and the posts 1370mm.
- Low face brick masonry fences with solid chains, tube pipe or iron.
- Low stucco fences are sometimes appropriate.
- Fences built to match design and colour of dwelling.

Design Guidelines

Objectives

- To encourage advertising that complements the character of the heritage place by considering placement, style and scale.
- To encourage the rationalisation of advertising to reduce the cumulative amenity impacts in the public realm.
- To maintain and enhance the appearance of streetscapes and heritage areas by encouraging well designed and located signage and advertising.

Design Advice

- Redundant signs with no heritage value should be removed. However, historic or original signs that have cultural significance should be maintained or preserved. Restoration or reconstruction of historical signage could be undertaken with accompanying physical or documentary evidence that demonstrate the original form of the signage.
- Advertising should complement the architectural style, built form and character of the heritage place. This usually means a simple design is best that incorporates a contextual design response that responds to the character and architecture of the building (e.g. through colour, lettering, materiality or style) without reproducing period details.
- Signs should be located in traditional signage zones including building fascia and below verandahs, as shown in the below diagrams. Above verandah painted signs located in the frieze to an historic entablature, or on rendered wall surfaces, may be supported in some circumstances. Painting a building as a sign is generally not supported.
- Signs should not obscure significant heritage fabric or features (refer to the signage locations in the diagrams at Figures 1-3).
- Where advertising includes corporate colouring it should:
 - respect sensitive areas and the heritage significance of buildings; and
 - Complement the character, be in proportion to the building and avoid bright or fluorescent block colouring. Visually dominant or intrusive corporate colouring should be avoided.
- New signs should be able to be removed without damage to the heritage building. Appropriate methods of attaching signs may include minimal screw fixings, particularly through mortar joints in brickwork, or re-using existing anchor points. Methods such as epoxy, which cannot be reversed without damaging the surface they are attached to, should be avoided.
- Signage should be proportionate to the architectural features of the building.
- The number of signs should be kept to a minimum.
- Signs of a disproportionate scale (e.g. sky or major promotional signs) or advertising signs with content, images or graphics unrelated to the use of the site on which they are displayed, are discouraged.
- Internally illuminated signs that exceed 1.5 square metres in size, animated and electronic signs including messages, and LED and digital displays are generally discouraged in heritage areas. Internally illuminated signage up to 1.5 square meters must be in keeping with the scale, style and character of the building.

Placement and scale

The placement and scale of signs on heritage buildings should complement the architectural style, built form and character of the place as shown in Figures 1-10, below:

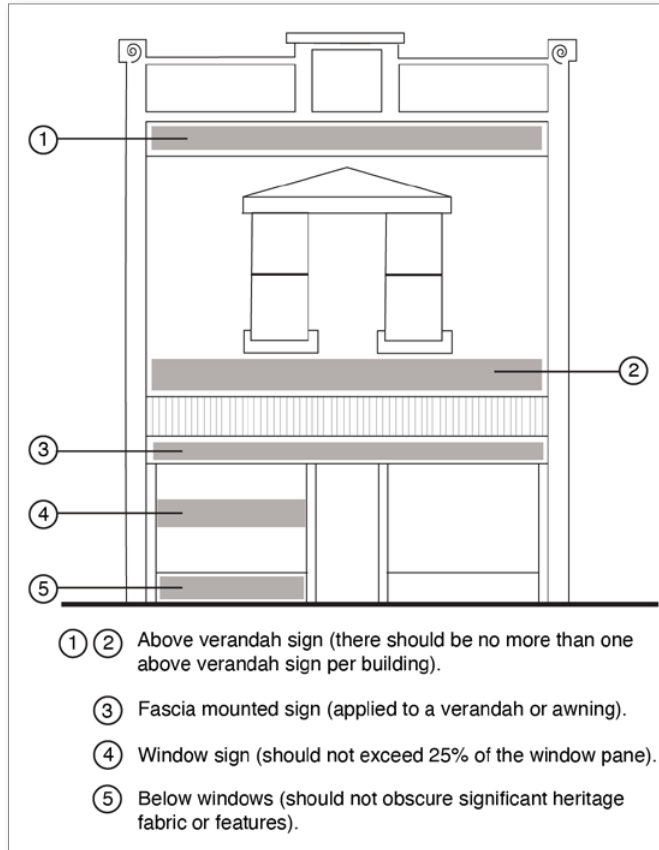


Figure 1: Appropriate locations for signage on the façade of a building.

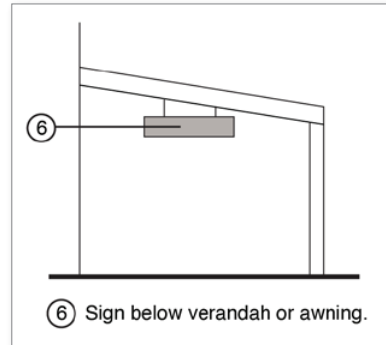


Figure 2: Appropriate location for a below verandah or awning sign.



Figure 3: Appropriate location for a sign aligned to the front boundary.



Figure 4: Appropriate sign type and placement for single storey building.



Figure 5: Appropriate sign type and placement for business occupying a double storey building comprising a sign on the entablature of the building and a suitably scaled projecting sign affixed to the ground floor level.

Signs



Figure 7: Appropriate on verandah and below verandah signs.



Figure 8: Retained historic signage.



Figure 9: Appropriate sign type and location for a business in a heritage dwelling.



Figure 10: Signs have been rationalised to minimise the cumulative amenity impacts.

Matters for consideration

- Whether the proposed advertising signage is in proportion to the building or site on which it is displayed.
- The extent of existing and/or proposed signage, and whether opportunities exist to rationalise the number of signs. Whether the scale, placement and style of signage respects the character, built form and architectural qualities of the heritage place.
- Whether the lettering, colour, materiality, style and/or layout of the signage are sympathetic and contextual to the heritage architecture and character of the building.
- Whether the advertising impedes the active street frontage by obstructing views into and out of premises or obscures significant heritage structures, materials or details.
- Whether the advertising will detract from the architectural style and/or heritage significance of a building or precinct.

Design Guidelines

The City of Greater Bendigo is fortunate to have a wonderful collection of heritage assets that connect us to our past and help attract new residents and tourists. The architect designed mine managers mansions and homes, the small Cornish and German miner's cottages, commercial and industrial buildings, gardens and streetscapes all contribute to the richness of the municipality and should be retained and preserved where possible.

Objectives

- To encourage the retention of a significant or contributory heritage buildings or places unless it is structurally unsound and beyond repair.
- To encourage the retention of original elements that contribute to the significance of a heritage place including but not limited to windows, doors, chimneys, verandahs, shopfronts, fences, outbuildings and trees.
- Allow the demolition of non-contributory buildings in heritage precincts provided the replacement building positively contributes to the heritage significance of the precinct.
- Where demolition is supported, ensure any replacement building displays design excellence and positively contributes to the heritage significance of the place.
- Allow for partial demolition where the fabric is of no significance or reveals original fabric or will assist in long term conservation of the building.
- To encourage the retention of the three dimensional form; retention of the façade only is not supported.
- Require archival recording of sites by a heritage professional where demolition is supported, as appropriate.



Before restoration.



After restoration.

Matters for consideration

- The individual significance of the building, as well as the contribution the place makes to a precinct.
- Demolition of significant and contributory heritage buildings is not supported unless the building is structurally unsound and beyond repair.
- Elements of a building that contribute to its heritage significance, such as chimneys, original windows and doors, should be retained.
- The poor condition of the heritage place should not, in itself, be a reason for permitting demolition. The amount of maintenance carried out by the owner will also be taken into account when assessing any planning application for demolition. This is to take into account “demolition by neglect”.

Relocation

- The physical location of a place is usually part of its heritage significance, unless it is a transportable building type. A building should therefore remain in its historic location unless relocation is the only means of saving the building.



Example of a partial demolition that reveals original fabric and does not affect heritage significance of building.



Fire damaged place restored.

Partial demolition

Partial Demolition will only be supported when:

- That part is not visible from the street frontage (other than a laneway), abutting park or public open space, and the main building form including roof form and a substantial portion of the side walls are maintained. Inadequate retention of fabric can result in *façadism* which should be avoided.
- The removal of the part would not adversely affect the significance of the place or the contribution of the building to the heritage precinct. In most cases, the removal of elements of a heritage place that do not contribute to its heritage significance, such as recent alterations or additions, are permitted.
- It reveals original fabric.
- It assists in the conservation of the heritage place.
- The Contributory Elements are beyond repair. In most cases, contributory elements that have been damaged (for example through neglect, fire, storm) may be repaired with appropriate professional advice.

Applications for demolition

- A demolition enquiry service is available at the City of Greater Bendigo. This service will provide you with an assessment of whether or not demolition is likely to be supported prior to you making a formal application.
- An application for demolition or partial demolition of a heritage building should be accompanied by a structural engineering report (prepared by a suitably qualified engineer) that documents that the structural integrity of a place including an assessment of the roof cavity and underfloor. This report must also assess whether remedial works can realistically and reasonably be undertaken, irrespective of whether the place meets the current Building Regulations.
- An application for the demolition or partial demolition of a place under a Heritage Overlay Area should also be accompanied by a design for the redevelopment of the site. The replacement building should display design excellence and respond to the heritage context of the precinct, without copying existing significant building stock (see 'infill' guidelines).
- If demolition is allowed you may be required to professionally record the building prior to demolition.

Heritage loans

The City of Greater Bendigo has an interest free Heritage Restoration Loan Scheme available for maintenance of heritage buildings in the Heritage Overlay. This scheme has been in operation for 15 years and has supported many projects (including the examples in this guideline).

Design Guidelines

Buildings can be adapted to include new services and facilities, including solar energy facilities (solar panels), and with careful design, this can be done with little or no impact on heritage values of a place or precinct. Domestic services include but are not limited to water tanks, heating & gas units, air conditioning units and satellite dishes.

Objectives

- To ensure that the installation of solar energy facilities and domestic services do not dominate or adversely impact upon the heritage values of a place or precinct.
- To ensure that the installation of solar energy facilities and domestic services do not diminish the prominence of contributory elements of a place.
- To encourage the enhancement of the environmental performance of buildings whilst also minimising impacts on the heritage significance of a place and its contributory elements.
- Ensure that installation of solar energy facilities and domestic service units does not damage original fabric of a heritage place.



Two adjoining properties with solar panels discreetly situated at rear, on sheds and on corner side elevation.



Same property showing solar panel and air-conditioning unit hidden from street elevation.



Same property showing corner elevation.



Examples of solar panels that do not adversely impact on heritage values.

Design advice

Solar Energy facilities (Panels)

To retain the heritage significance of a place, solar panels should be:

- Located on a roof of the dwelling which is not visible from the street or public realm and not the primary façade.
- Sited below the ridge of the roof and not project beyond the edge of the roof or below the gutters. Installed flush with the roof; the mounting of solar panels on frames should be avoided unless they are discreetly located and no other options are available.
- Positioned on a building of lesser heritage significance such as sheds, carports, garages or outbuildings, or freestanding mounted on the ground where possible.
- Solar panels should not be located on sensitive heritage fabric.
- In the case of corner sites or where a heritage place has a north-facing primary façade, locating solar panels on a visible side roof might be an acceptable alternative if they are:
 - Setback from the primary façade and preferably screened by a neighbouring structure or building.
 - Arranged neatly in a symmetrical group with a margin of visible roof edge around the group.The extent of roof coverage should be proportional to the roof size.

Service Units

- Service Units should be located so they are :
 - Not visible from a street or public realm, including a secondary street when on a corner site, and not on the primary façade.
 - If located on the ground be at least 1 metre behind the primary façade and screened with vegetation or lattice or similar.
- Instead of, or as well as, installing air conditioning units, consider using ceiling fans, trees, creepers and pergolas to provide shade on the north and west elevations.

Installation solar

- When fixing solar panels to a building, the heritage fabric must not be damaged.
- Ensure that the weight of new equipment can be borne by the supporting structure (e.g. roof rafters).
- Use the minimum number of fixing holes to minimise damage to heritage fabric. Minimising fixture points will assist with future removal and replacement. Also limit number of holes made into the loft space for pipework and cabling. Ensure entry points are properly sealed to prevent water ingress, maintain fire protection and keep pests out.
- Installation may cause permanent damage to roofing material. Care should be taken with slate or old tiles, as replacements can be expensive and difficult to find. Where the installation of solar panels requires removal of Contributory Elements for the purposes of fixing, existing conditions should be carefully recorded and components (such as roof tiles) stored and reinstated to match pre-intervention form.
- Ensure replacements are available should any slates or tiles get broken during installation. In some situations, it may be prudent to remove the existing slate or tiles from the area that will be covered by panels laying new sheet metal cladding. The removed slate can be saved for future reinstatement or repair.

Design Guidelines

Objectives

- To encourage new buildings that do not adversely affect the significance, character or appearance of the heritage precinct and are visually recessive.
- To ensure that the design of new buildings responds to the context of the heritage precinct and nearby contributory buildings including scale, height, mass, form, siting, setbacks and materials.
- To encourage new development within a heritage precinct that is contemporary in appearance and does not copy historic styles or details.



Example of infill that respects setbacks, rhythm, mix of materials, height and fencing.



Example of new infill that respects height, form, fencing of adjoining contributory building.

Design advice

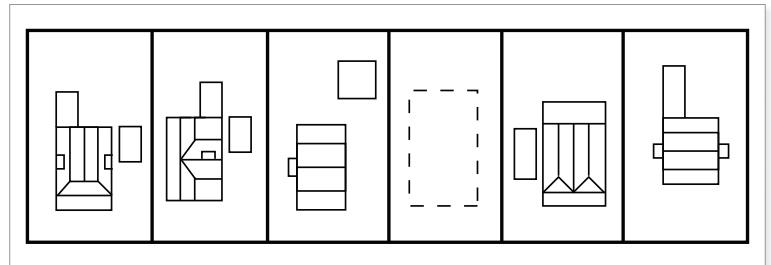
- Atypical buildings found in the heritage precinct should not be used as the reference point for new development design; the design approach should be respectful of the dominant characteristics of the precinct.
- Views of the principal façade(s) of an adjacent heritage place should not be obscured by new development.
- A new building at the rear of a heritage building should be concealed as far as possible by existing heritage fabric when viewed from the streetscape, or be read as a secondary element when viewed from any other public perspective.
- Design should be good quality design that uses the main features of the heritage precinct as a reference point; design that closely imitates, replicates or mimics historic styles is discouraged because it distorts an understanding of the significance of a heritage precinct. A range of design options from conservative to contemporary to modern is appropriate.
- Conservative design may include new buildings which have similar forms, proportions and materials to historic buildings, but they should be simplified and should not include decorative elements such as cast iron lacework, multi-pane windows or patterned brickwork.
- Reconstruction of a building that has been lost (demolished or damaged beyond repair by fire or other means) may be appropriate where there is enough evidence (e.g. clear photographs) to enable an accurate and authentic re-building.

Infill Development

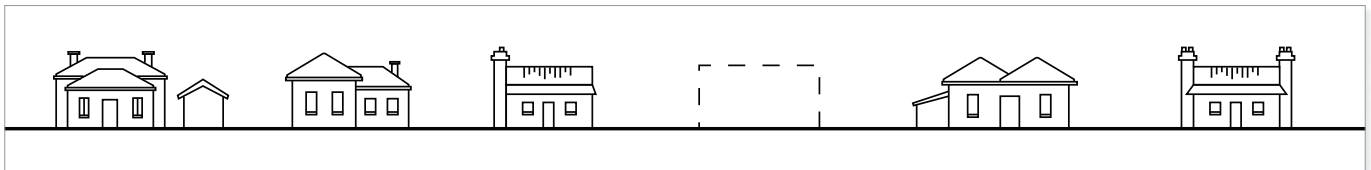
For infill development, the design of a new building should consider the prevailing built form which contributes to the significance of the Heritage Overlay Area, with specific regard to the following:

Setback (front and side)

- Front setbacks should be consistent with adjoining contributory elements, e.g. verandahs should be set back to match adjoining verandahs and façades should be set back to match adjoining front walls.
- Where there are different adjoining setbacks, the greater setback will apply.
- Where the site does not adjoin a contributory building, or adjoins an atypical setback, adopt the setback common for contributory buildings in the streetscape.
- Where parts of the development are proposed to be taller than the front façade height increase the front setback of the taller parts.
- Adopt the side setbacks which are common within the heritage precinct.



An example of consistent front setbacks.



Consistent side setbacks and rhythm.

Rhythm, orientation to the street

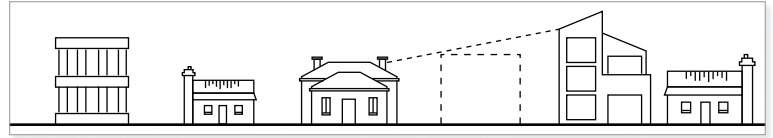
- New development integrates well into the existing character of the streetscape when it adopts the established spacing between buildings and respects the layout pattern in the heritage precinct.

Form and massing

- The overall shape and volume and the arrangement of the parts of any new development should not dominate the Contributory buildings within the heritage precinct.
- Roofs should respond to any predominant roof form characteristic of the streetscape, including regard for pitch of roofs, ridge height, eaves level, and any other predominant detailing in the streetscape.

Height and scale

- Encourage similar façade heights (roofs and eaves) to the adjoining contributory elements in the street. Where there are differing façade heights, the design should adopt the average height.
- Where the site adjoins an atypically tall contributory building use the common façade height for contributory elements in the street as the reference point.
- On corner sites and open situations, the overall new building height should not dominate adjoining Contributory buildings when viewed from the footpath directly opposite in both streets or from the open situation e.g. adjoining parks.
- Where an infill site contains significant or contributory heritage buildings to be retained, the new development should respect the scale and setting of these heritage buildings whilst also responding to the prevailing building scale of the heritage precinct.



Example of appropriate height of new building.

Materials and finishes

- Materials, textures, colour schemes and finishes should complement and respect the appearance and character of contributory buildings within the streetscape. A mix of sympathetic materials and colours is often good to lessen the impact of a new building.
- The colours, textures and extent of materials used for cladding can add an element of continuity between buildings.

Window and door openings

- Window and door openings of new developments should complement the size, proportions, and locations of windows and door openings in the significant buildings in the heritage precinct.

Architectural detailing

- The use of simple shapes of similar scale, proportions and materials is appropriate, however, the use of traditional details should not confuse an understanding of the historic fabric or significance of the heritage place; new buildings should always be distinguishable as new development.

Fencing and car parking

- Front fence design should consider the prevailing character of fencing in the immediate environs in particular height, degree of transparency, form and materials, while also being appropriate to the architectural style of the building. Side and boundary fences should also be sympathetic to the heritage precinct where visible.
- Car parking structures for infill buildings should respect the prevailing car park design of the precinct and adjoining heritage buildings. (Refer car parking guidelines more information)

Landscaping

- Landscaping is encouraged to soften and blend new buildings in to a heritage precinct.

Designs in diverse streetscapes

- Where the heritage precinct's characteristics are diverse, with variations in style, form, materials, scale massing and height, the design parameters may be greater than in consistent areas or streetscapes.

Glossary

A

Architraves are commonly the moulding around a door or window.



Ashlar is a squared building stone accurately cut. Also stone walling composed of ashlar laid in courses with thin joints.

B

Balustrade is a rail and the row of balusters or posts that support it.



Barge board is a board sometimes ornately carved, attached along the projecting edge of a pitched roof in front of a gable.

Barley sugar column is a column with a twisting or spiralling shaft.

C

Cavity brick wall is a wall constructed of 2 leaves of brickwork with a cavity in between, typically tied.



Chamfer is a bevelled edge connecting two surfaces. If the surfaces are at right angles, the chamfer will typically be symmetrical at 45°. (Wikipedia)

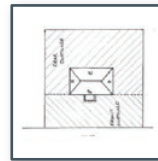
Clinker brick is a partially vitrified or overburnt brick often with darkish purple colours.

Contributory element/building are those elements that contribute to the significance of the Heritage Place. These should be identified in the Statement of Significance or heritage study.



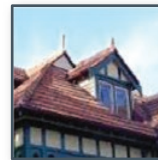
Convex (roof) radial contour roof.

Cornice is the moulding at the top of interior walls, between the walls and ceiling.



Curtilage is the area of land that surrounds a house or building which is essential for retaining its heritage significance and an appropriate setting.

D



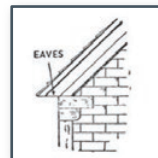
Dormer is a window that projects vertically from a sloping roof.

Dutch gable or Flemish gable is a gable whose sides have a shape made up of one or more curves and has a pediment at the top.



Dutch hip is a roof shape similar to that in a hipped roof, but with a small gable at the top.

E



Eaves are the bottom edge of a roof, usually project beyond the side of the building forming an overhang to protect the wall beneath.

Entablature is located horizontally above a building's structural elements such as columns. The entablature comprises the architrave, frieze and cornice.

F

Façadism refers to the practice where only the facade of a building is preserved with new building erected behind or around it.



Fanlight originally a fan-shaped window over a door or window, but now any shaped window above a door.



Fascia is a board usually timber running horizontally and situated vertically under a roof edge. The gutter normally sits in front of the fascia.



Finial is a distinctive spikey section or ornament usually crowning a gable.



Flush mortar is mortar that is flush with the face of the brickwork.



Fretwork is decorative carved openwork in timber or metal.

Frieze is a continuous band of decoration around the top of a building or wall; a panel of decoration under the edge of the verandah.

G



Gable is the vertical triangular end of a building with gable roof. Gabled roof is a doubly pitched roof with vertical ends.

H

Heritage Overlay is applied to a heritage place in the planning scheme to conserve its cultural heritage values. Heritage Overlays include places of local significance as well as places included in the Victorian Heritage Register.

Hip (or hipped) is a type of roof where all sides slope downwards to the walls. It has no gables or other vertical sides to the roof. A valley is the internal junction of two roof surfaces.

Hoffman brick is a brick produced in a Hoffmann kiln, which is the most common kiln used in production of bricks. The Hoffman Brick and Tile Company, Melbourne, Australia, pioneered the use of continuously fired brick kilns in Australia in the 1870's. Part of the brickworks continued in use until 1993.

J

Joinery, the timber components of a building such as stairs, doors, windows and door frames, often made off site.

M



Marseille tile is an interlocking clay roof tile of a particular shape, originally imported from France and manufactured in Australia from the early 20th century.

Masonry is the building of structures from individual units laid in and bound together by mortar and includes brick, stone, mud brick and concrete blockwork.



Moulding any prominent, continuous, horizontally projecting feature surmounting a wall or other construction, or dividing it horizontally for compositional purposes.

Motif is a repeated figure or design in architecture or decoration.

Glossary

P

Palisade (sometimes called a stakewall) is typically a fence made from wooden or iron pickets or pales.



Parapet is a wall built up higher than the eaves line of a roof, either to hide the roof surface or prevent the spread of fire, or sometimes to create a grander facade.

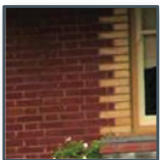


Pediments is a decorative feature finishing the gable in classical style, sometimes a feature over a door or window.

Picket profile refers to the shape or outline of the picket head.



Plinth is the slightly projecting base of a column or building.



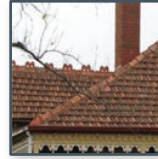
Polychrome brickwork is a style of architectural brickwork which emerged in the 1860s which used of bricks of different colours (typically brown, cream and red) in patterned combination to highlight architectural features.

Q



Quoin is an exterior angle of a wall or other piece of masonry, particularly when emphasised or decorated.

R



Ridge capping is a formed metal or terracotta designed to weatherproof the junction at the apex of opposing roof slopes.



Rough cast or pebbledash is a coarse plaster surface used on outside walls that consists of lime and sometimes cement mixed with sand, small gravel, and often pebbles or shells.

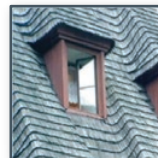
S



Sash window or hung sash window is made of one or more movable panels or "sashes" that form a frame to hold panes of glass.



Scalloped picket fence is a fence that swags.



Shingle is thin, rectangular overlapping elements of wood, terracotta and other materials mainly used for roof cladding but sometimes used for walls. These elements are typically flat shapes laid in rows from the bottom edge of the roof up, with each successive higher row overlapping the joints in the row below.



Side-hung casement sash is a window with a hinged sash that swings in or out like a door.



Skillion is a roof shape of single slope or pitch.



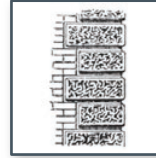
Stucco is a thin decorative finish, traditionally of lime and sand, applied to external walls in two coats, sometimes ruled to resemble stone.

T

Tuck-pointing is a way of using two contrasting colours of mortar in brickwork, one colour matching the bricks themselves and one applied on top in a contrasting colour (the tuck) to give an artificial impression that very fine joints have been made.

V

Valence is a decorative strip or panel below the edge of the roof, usually between verandah posts.



Vermiculated is a worm-like pattern of irregular fine lines or with wavy impressed lines.

Vernacular architecture is a category of architecture based on localized needs and construction materials, and reflecting local traditions. Vernacular architecture tends to evolve over time to reflect the environmental, cultural, technological, and historical context in which it exists.

For more information:

Phone: 5434 6355
Email: planningenquiries@bendigo.vic.gov.au
www.bendigo.vic.gov.au/heritage

For more information:

Phone: 5434 6355

Email: planningenquiries@bendigo.vic.gov.au

www.bendigo.vic.gov.au/heritage

