

Old Bega Hospital

Condition Assessment and
Options for Future Management

August 2017



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SUMMARY OF FINDINGS

- The Old Hospital main building has been extensively damaged by fire and demolition post-fire.
- The complex has some historical significance and is listed on the Bega Valley Shire Council Local Environmental Plan (LEP) as a heritage item of local significance. However, the fire and subsequent damage have diminished this to some extent.
- The main building has the potential to be rehabilitated and returned to beneficial use. A rehabilitation strategy would be required for conservation works to the asset if this option is pursued.
- The external and internal brick walls, including chimneys and openings, are structurally adequate but requiring minor repair/strengthening (such as restoration of upper courses of brick and stitching of step-cracking to brick arches) and roofing to brace and strengthen walls. Floors and roofs are mainly destroyed, but it is feasible to restore them in full or part.
- Some roofed areas of the main building, though comparatively dry and intact, are not weathertight and require urgent action to prevent further damage (replacement of damaged roof coverings, new rainwater services, repair of internal ceilings, repair of external joinery).
- The Nurses Quarters requires immediate roof repairs and minor maintenance/internal works if further damage is to be avoided. Other outbuildings are in good or fair condition.
- Full 'restoration' of interiors is not a necessary requirement from a heritage point of view. Based on policy for use and management, efforts should focus on design interventions that best deliver user outcomes but are affordable, achievable and do not negatively impact heritage significance.
- Budget estimates for a suite of options were developed. Rehabilitation of the main hospital building and others on the site is an option with a cost in the order of \$2.5 million. This assumes a substantial volunteer contribution of in-kind activity. If volunteer labour were to be used then serious attention to WHS matters etc would be required, including appropriate training and supervision.
- The two lowest cost options, demolition or preservation of the main building as a 'ruin' would likely be opposed locally and by the Old Bega Hospital Reserve Trust (OBHRT).
- There appears to be limited consideration by the Trust to develop a business plan to guide the overall operation and development of the facility. Further work in this area together with the options identified and costed in this report could assist in finding a long term solution for the structures on the site. Prior to commencing any staged rehabilitation subject to available funding and resources, consensus should be formed on the overall aims and objectives for the use, function and occupancy requirements for different areas. This is imperative to prevent a piecemeal approach to rehabilitation.

1.0 INTRODUCTION

1.1 Purpose of Report

Department of Industry - Lands & Forestry engaged Public Works Advisory to carry out a detailed condition assessment of the Old Bega Hospital to assess the structural integrity of the building after the fire and provide advice and options for future management of the structures. An inspection of the building was conducted on 15th June 2017 by the following PWA Staff:

- Project Officer Geoff Pender
- Senior Heritage Specialist David Mason
- Senior Structural Engineer Mikhail Kogan

Background information on the history of the building was obtained from the History of the Old Bega Hospital web site (www.obhrt.org) which provides an insight to the building and an overview of its years in service to the community.

It was noted that considerable work has been undertaken since the 2004 fire by the Old Bega Hospital Reserve Trust (OBHRT) and its professional consultants and advisers in developing a plan for full restoration of the old hospital building. This includes scopes of work and cost estimates for re-roofing, as well as costings for full internal refurbishment and upgrading. The reliability of existing cost estimates should be treated with caution. It is noted that the approach to restoration, although guided by accepted heritage principles, is ambitious. However, it is only one of several possible approaches. The estimates are indicative, based on a very limited level of documentation, with minimal contingency and there are a number of important exclusions. Experience suggests repair and restoration of elements like traditional joinery require more precise costing in association with skilled tradesmen.

The authors thank Jay Ellard and Richard Bomford (OBHRT), and Guy Russell and Mark Edwards (NSW Department of Industry – Lands) for their contributions to site information, discussion and inspections.

2.0 SITE OVERVIEW

2.1 Site Elements

1. Old hospital building (615 m2 plus 212 m2 of verandahs). Date: 1888; 1904-1909 (wings); 1912 (isolation building); 1934-37 (alterations)
2. Nurses quarters (164 m2 plus 66 m2 of verandahs). Date: 1928
3. Morgue (14 m2). Date: 1889
4. Laundry (120 m2). Date: 1934-35
5. Operating theatre (50 m2). Date: 1934-35
6. Cottage. Date: c.1990s

- 7. Garden shed/gazebo. Date unknown
- 8. Men's Shed. Date: 2015 (not shown in image 2.1)
- 9. Prefabricated storage shed
- 10. Landscape: grounds, paths, fences/fence posts and mature trees.



Figure 2.1 Site Plan

KEY

- | | | |
|---------------------------|-----------------------|-------------------------------|
| 1. Main Hospital Building | 5. Operating Theatre | 9. Prefabricated Storage Shed |
| 2. Nurses' Quarters | 6. Cottage | 10. Landscape |
| 3. Morgue | 7. Garden Shed/Gazebo | |
| 4. Laundry | 8. Men's Shed | |



Figure 2.2 General view of the precinct



Figure 2.3 North elevation before 2004



Figure 2.4 Original building with timber wings on each corner c.1909 (since altered and extended, c.1909)



Figure 2.5 Former Kitchen, Women’s Ward and Verandah, from the South. June 2017

2.2 Old Hospital Building

The old hospital building is single story, solid double brick construction with corrugated iron roof and timber floors. The external brick walls are 19 inches wide plus render. All internal walls are rendered and finished with a lime set over. Ceiling finish (where present) available for view appears to be plaster sheet with timber battens covering the join.

The floor construction is typically timber on brick piers. The surviving floor is clad with tongue and grooved board generally being covered with differing floor coverings.

The building consists of one main roof that has several wing roofs that join in, all constructed from timber and clad in corrugated iron. The original roof construction method appears typical of a cut timber roof.

3.0 CONDITION INSPECTION

3.1 Old Hospital Building

The inspection was somewhat limited by access. The main building can be divided into roofed and unroofed areas. Refer to Figures 1.0 for hospital room layout and 2.1 Site Plan.

Roofed areas are:

- Private Room in the former E Wing (north east corner)
- Former Day Care area in the W Wing (western end)
- E, S & N Verandahs
- Bathroom (south west and south verandah)
- Morgue (outbuilding)
- Operating Theatre (outbuilding)

The remaining parts of the original building are unroofed.

Fire damage to the main building destroyed 80% of the roof and this was removed after 2004. East wing Private Room and Conference Room have ceiling joists still in place. The walls throughout are still standing.

Most floors in these areas have been destroyed by fire or rotted away since the fire. Where protected from weather, joists will require further structural investigation after removal of floor coverings. Minor structural defects were observed to brickwork (minor cracking, loose upper course of brickwork, decay of timber lintels. A section of upper gable above the original north verandah is propped. Otherwise, no serious structural defects (such as foundation failures, leaning/cracking to chimneys/gables or brickwork, collapsed openings etc) were apparent in the walls.

Much of the exterior (N and E) is obscured by vegetation so that condition of drainage could not be inspected. Timber verandahs are generally intact and roofed but in poor condition. Internal windows and doors are either damaged or removed (some have been salvaged for potential re-use). External glazing is in variable condition. Internal finishes and fitments are largely destroyed by fire and exposure to weather.

Roof & Rainwater Services

Roofs were checked from the ground only.

Roofed Areas

The private room in the E wing is generally dry and secure although with holes in the SW corner of the roof that pose a risk to internal construction and finishes. The bay window roof is complete and in fair condition.

The mostly roofed former 'Day Care' room in the west wing, including adjacent toilet block, is generally dry but in a disused state. It is susceptible to some water ingress at roof/eaves in the NE corner of the room where part of the roof is missing.

The interior of the mostly roofed Private Room (E) and Day Care (W) rooms are protected. However the roof gutters and downpipes are limited. Roof framing and covering however would need to be repaired or reconstructed in order to provide a permanent, safe and compliant covering for long term occupation.

Valleys, eaves gutters, downpipes and in-ground systems would require inspection and overhauling along with roof repairs to ensure adequate rain water disposal.

Verandah roofs and southern services rooms appear generally weathertight and secure with good or fair timber skillion framing (including some earlier strengthening) and functioning flashings. Gutters and downpipes are in place but vegetation limited inspection of stormwater pits.

The Morgue and Operating Theatre are discussed in Outbuildings below.

Unroofed Areas

The Private Room at the SE corner of the E wing has no roof, but has ceiling joists still in place. All other areas of the old hospital building are effectively roofless and disused.

Chimneys/flues

On the main building here are seven brick chimneys, projecting approx. 4m above wall plate level, all with rendered brick cowls (caps). High level inspection was not possible, but the chimneys appear to be structurally sound with no apparent cracking or movement. Fireplaces are mostly intact although with surrounds and finishes damaged or destroyed.

Due to the slenderness, it would be advisable to provide strengthening to seismic (earthquake) standards to these chimneys, although this is not a mandatory requirement. This is common practice in NSW public assets and Bega is located in a zone where earthquake hazard mapping has indicated a peak ground acceleration of >0.05g.

External walls

External brickwork and structural walls are generally sound with little sign of movement or cracking. No obvious sign of damage to brickwork due to heat or fire-fighting was seen during the inspection. Brick joints appear largely sound with no serious loss of mortar jointing material affecting stability.

Internal walls

Internal structural walls appear structurally sound but with damage to wall plaster and finishes. Fire damaged timber lintels should be replaced.



3.1 Section of remaining roof, Day Care area



3.2 Chimneys, hospital ward block



3.3 Brick external walls to private rooms, East end



3.4 internal plaster and masonry walls with internal windows

Step cracking on one of the verandah brick arches is supported with timber formwork and acrow props. Brickwork can be repaired in situ.

Footings

Footings were not inspected but no major signs of movement (bowing, leaning, cracking) in walls were observed during the inspection.

Verandahs/verandah posts

Verandahs to the E side and eastern end of the N side are glazed timber framed (with brick half walls), in fair condition, largely protected from the weather. Part of the southern verandah has a framed storage/ toilet block which is roofed.

Verandahs on the western part of the N elevation still have framing but not infill. Verandah posts are still upright although showing signs of timber decay at some of the bases. The open verandah with decorative brackets below the hospital date panel is also broadly intact and structurally sound.

Gables

Three gables are visibly unrestrained due to no ridge or purlins in unroofed areas. One has been shored (N elevation), another partially dismantled (E elevation) and the third is complete but with no sign of instability. If roofs are not be reinstated where unrestrained gables are located, they may require restraining structures (eg buttresses) to ensure adequate safety from eg from wind loading.

Floors

Roofed Areas

Timber floors survive and are in a fairly dry state in the roofed areas. But these were not fully accessible for structural inspection.

Unroofed Areas

Floors in unroofed areas are in various stages of collapse. They cannot be safely accessed, limiting detailed inspection. It is assumed 100% of floors in unroofed areas need replacing. Structural board/ply has been laid as an access track to pass through some areas. It is assumed this is laid on original joists which cannot be inspected for safety. Much of the damaged flooring is obscured by vegetation.



3.5 Verandah in use as a store



3.6 North gable to central offices



3.7 Decayed floor to Conference Room/Private Room (SE)



3.8 Ceilings, Private Room (NE)

Ceilings .

Fragments of original 1920s lath and plaster ceilings in the roofed parts of the wings survive. Some have been clad with gyproc panels. Fibro ceiling panels in roofed verandahs appear to be in sound condition. These could be left undisturbed and maintained to limit WHS issues.

Exterior joinery

Approximately 50% of original exterior timber door and window frames survive in situ. Almost all timber joinery in the Mens Ward has been removed or destroyed. In several areas components have been salvaged and stored for potential repair. Much of the surviving timber work is repairable. A good quantity of barge boards, fascias, gable half-timbering/shingles and verandah flooring also survives, which would enable reconstruction/ reproduction of damaged or lost features.

Except for the roofed areas above (which have windows and most or all glazing intact) most of the glass in the windows has been broken or removed. Remedial work is necessary to either temporarily or permanently exclude driving rain, birds, vermin, intruders, etc. from window and door openings not in current use.

The high level windows have mostly been removed or destroyed, but some are still in place and in repairable condition (eg the Day Care area).

External windows and door architraves to the wings are in run cement stucco, not timber. They are in fair condition.

Drainage

Site conditions did not permit storm drainage to be adequately assessed. Some sections of the building still have more or less intact galvanised steel gutters and downpipes.

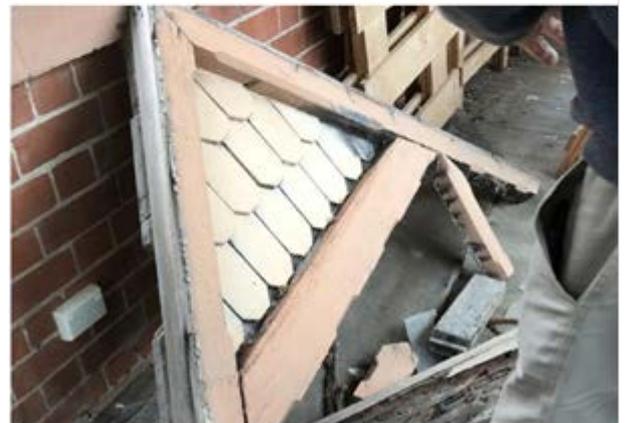
It is assumed that extensive work would be required to upgrade in-ground pits and pipework if a roof were reinstated. Vegetation, earth and debris is likely to have blocked or damaged the in-ground stormwater services.

Security

A few missing or insecure openings have been boarded for safety. For the site as a whole, security signage and fencing (combined with partial occupancy) is the only form of security.



3.9 Sash windows, N façade bay window



3.10 Salvaged gable frame from E elevation



3.11 Internal joinery stored in Private Room (NE)



3.12 Security fence, signage, S Verandah

3.2 Nurses' Quarters

The building is brick with weatherboard additions, timber framed/shingled gables, corrugated galvanised roof and raised brick verandah on timber posts.

Roof

The building has signs of roof failure including leaking roof sheets on the east side and heavily corroded valleys and sheets on the southern wing.

Walls/chimneys

Walls are common brick and weatherboard and are in good or fair condition.

Joinery/glazing

External joinery, glazing and verandahs are in good or fair condition.

Internal

Interiors are in good or fair condition but with some signs of water leakage from defective roofs.

3.3 Outbuildings

Morgue

The Morgue was not accessed but external roofing appears sound and rainwater disposal appears operational.

Laundry

The laundry is a brick-built single-story building with two chimneys (one tall, one short) and a rear lean-to. Brickwork is in good condition apart from small areas of missing pointing. Walls/chimneys show no sign of structural defects. The building has a painted corrugated metal roof in good overall condition, and functioning rainwater/stormwater services. External joinery and glazing, and external paving are in good condition. The interior was not inspected.

Operating Theatre

The Operating Theatre is brick with galvanised corrugated roof. External roofing appears sound except for minor rust patches. Rainwater services are good or fair. External joinery, glazing and brickwork are in good or fair condition. The interior was not inspected.



3.13 Nurses' Quarters



3.14 Laundry



3.15 Operating Theatre

Cottage

The cottage is a modern timber framed prefabricated building on brick piers with a sheet metal roof. It is in good overall condition.

Shed/Gazebo

The Garden shed/gazebo is a small timber framed and weatherboard-clad structure.

Men's Shed

The Men's Shed was not inspected but is a 2014 building clad with hardiplank and colorbond with pitched roof. It is assumed to be in good condition.

3.4 Landscape

The grounds consist of a paddock and enclosed play area to the front, gravel drive around the perimeter of the buildings, and stands of mature trees (one at the northern edge of the former hospital garden, another to the SW) and isolated smaller trees and shrubs elsewhere. The grounds are well maintained. Paving around the Laundry and (new) disabled toilet has recently been upgraded for easier access.



3.16 Cottage



3.17 Men's Shed



3.18 Trees and garden View looking North



3.19 Early precast fence posts

4.0 HERITAGE ISSUES

This section of the report provides context for the options presented in section 5 which follows.

4.1 Crown Lands Act 1989

Old Bega Hospital is located on Crown land administered by the Lands and Forestry Division of NSW Department of Industry as a Crown Reserve under the NSW Crown Lands Act 1989.

There is new Crown lands legislation to come into force once enabling activities are complete. The provisions of the new legislation include principles for the management of Crown land which are consistent with the current legislation. The current Act states that:

Crown land should be managed for the benefit of the people of NSW; environmental protection principles must be observed and natural resources should be conserved where possible; public use and enjoyment of Crown lands is encouraged.

The site was reserved for “public purpose: preservation of historical sites and buildings and community purposes” by notice in the government Gazette on 30 March 1990. Management of the reserve is under the care and control of the Old Bega Hospital Reserve Trust. A Reserve Trust was established on 3 June 1994 by the Minister for Land and Water Conservation, under clause 4(3) of Schedule 8 of the Crown Lands Act 1989.

Reserve trusts must not, or allow others to, damage, destroy, display a notice or advertisement on, or remove vegetation from a heritage object or heritage area without first obtaining necessary approval under the Environmental Planning and Assessment Act 1979 and/or the Heritage Act 1977 (Section 11 of the Crown Lands Act). Reserve trusts should as far as practical allow general public access to items of environmental heritage located on their reserve.

Reserve trusts are also required by the Crown Lands Act and the Crown Lands Regulation (Schedule 4) to keep a register of environmental heritage items on their reserve land, and also to report on heritage items in their annual report to the Minister administering the Crown Lands Act.

4.2 Heritage Act 1977

The Old Bega Hospital is not listed under the NSW Heritage Act (State Heritage Register).

4.3 Environmental Planning & Assessment Act 1979 (EP&A Act)

Old Bega Hospital is listed as a heritage item on the Bega Valley Local Environmental Plan 2013. In 2014, the Old Bega Hospital site was re-zoned from SP1 ‘special purpose’ (in part because no ‘special purpose’ had been specified in the LEP, which severely limited development options for the site) to RE2 ‘private recreation’ (which allows a range of uses, including public uses).

4.4 Other Legislation

Management restrictions or requirements may also arise under Commonwealth legislation, including (but not limited to) Disability Discrimination Act 1992, Native Title Act 1993, and NSW legislation including (but not limited to) Local Government Act 1993, Local Government (General) Regulation 2005.

4.5 Non Statutory Heritage Lists

Old Bega Hospital is listed on the Australian Institute of Architects Register of Significant Architecture in New South Wales, and on the National Trust Register of Historic Places. These are non-statutory but give an indication of heritage significance to the NSW community.

4.6 Other Constraints

A number of other constraints are likely to come into play in considering management options. These are beyond the scope of this study but may include:

- Specific Land-use constraints imposed by LEP zoning, noting the surrounding land is zoned 'Industrial'
- The public purpose or purposes of the reserve and consent regarding future uses/ leasing/licensing or transfer
- Requirements of relevant legislation, including as set out in forthcoming Crown Lands legislation
- Financial and asset management capacity of the Reserve Trust.

4.7 Heritage Significance

As indicated above the Old Bega Hospital is listed on a number of statutory and non-statutory registers as of local heritage significance. The Statement of Significance (updated 2012) reads as follows:

Historically significant for its initial construction in the late 19th century and subsequent development over many decades. Aesthetically significant for its architectural design, proportions and rich details. Socially significant for the long role it played in the community's health when operating as a hospital and for its role as a focus for community activities over many decades. The main building suffered extensive fire damage in about 2005, however many of its important values have survived.

A recent Conservation Management Plan prepared by the Trust (2012) offers analysis of significance. The report is limited in scope and depth but makes the following points (relevant NSW significance criteria added here in brackets)¹:

- The Old Hospital is one of the oldest extant public buildings in Bega (historical significance)
- It is an important example of regional healthcare facilities in NSW in the early 20th century the only extant hospital from the late 19th century located in the Far South Coast (historical, representativeness and rarity values)
- It is important for its association with Robert Lucas Tooth (associative significance)
- It has important social and community significance for the Bega Valley as many community members share a personal connection with the hospital (social significance).

4.8 Effect of Fire and Dilapidation on Heritage Significance

Notwithstanding its heritage significance, the damage caused by fire and decay have negatively affected the heritage values of the place, especially the aesthetic and technical values (construction, design, layout, details, scientific values for public health, and craftsmanship).

It is fair to say there are other public buildings of significance in the township that are better preserved and managed, in particular the Public School, which is still in use for its original purpose and is well maintained. Government funds for heritage conservation works are finite and limited. A case such as this requires considerable capital expenditure to bring about rehabilitation of the main building on the site. This involves directing limited public funds to restore and reconstruct a building that has some local significance but has also lost a very large amount of original material and fallen into a critical state of disrepair. It is important for all stakeholders to carefully and rationally consider the approach and objectives with this in mind.

¹ Beasley, K, *Old Bega Hospital Conservation Management Plan*, for OBHRT, 2012

5.0 OPTIONS

A number of options are available to address the condition of the building. All but the first and last options below would be likely to be classed as development under the EP&A Act. They would therefore be likely to require development application to be submitted to Bega Valley Shire Council (BVSC).

5.1 Options

The options for the future of the main hospital building under trust management are considered to be:

1. Stabilise to minimum safe condition
2. Stabilise and manage as a ruin
3. Re-roof and “lock-up” (Trust to complete internal works, a sub-set of option 4 below)
4. Re-roof, restore and adapt
5. Demolition, and
6. Repairs to Nursers’ Quarters

Cost Estimates (‘Order of Cost’ +/- 30%) are presented for each option in Appendix A.

Option 1 - Stabilise to minimum safe condition

This entails minimal work to verify structural stability and public safety. The building would require a minimum level of safety and security and a strategy to manage the risks associated with it being in a reserve managed by a volunteer trust that is using another/other buildings on the site.

Option 2 - Stabilise and manage as a ruin

A ruin is defined as “a place that currently, through abandonment, redundancy or condition, is disused and incomplete, is usually no longer maintained and appears unlikely to regain its original or a substantive use, function or purpose other than interpretation”.

²This would not be a “do nothing” solution but would need to be planned in conjunction with the use of the reserve managed by a volunteer trust using another/other buildings on the site, with an active strategy for public access, enjoyment and interpretation.

Option 3 - Re-roof and “lock-up”

Re-roof and “lock-up”, without returning the building to operational viability – this could enable a future staged refurbishment (see 4 below). Roof and minimum additional remedial work (eg repair/make secure windows and doors; provide fire safety installations) would be undertaken in the lockup stage. Interior refurbishment would be effectively mothballed. This could be combined with Options 2 above or 4 below.

Option 4 - Re-roof, restore and adapt

Re-roof, restore and adapt, to return the building to operational viability, includes measures identified in Option 3 (above) plus new floors, services, fixtures and fittings

² Australian Heritage Council, *Ruins: A Guide to Conservation and Management*, Commonwealth of Australia, 2013

required to achieve agreed business/re-use objectives. The rehabilitation process could be staged to deliver specific outcomes over an agreed time period. It assumes an agreed management strategy and heritage approvals are in place. This could be combined with Option 2 or 3 above.

Option 5 - Demolition

Partial demolition may be possible where intrusive later additions or accretions are removed, subject to heritage assessment. Full demolition is not acceptable from a heritage perspective and may be inconsistent with legislative requirements under NSW legislation.

Option 6 - Repairs to Nurses' Quarters

Added as a separate Option. The Nurses' Quarters building is in use and has potential for further use and/or minor alteration but requires urgent roofing repairs and minor internal works/maintenance.

A consideration of each of the options in terms of their advantages and disadvantages is presented below. Budget estimates for each follow in Section 6.

Only option 4 would result in a return of the building to a functional condition. Option 6 is compatible with all other options and provides for the maintenance of this structure. A brief description of each option follows. Detailed costing and underlying assumptions for each appear as Appendix A.

TABLE 1 OPTIONS ANALYSIS

The options below consider pros and cons primarily in terms of existing built assets, resources and stakeholders. Future management under NSW legislation, including potential leasing subdivision, transfer etc, may lead to further delay in restoration or repair. These scenarios are considered beyond the scope of this report but could be discussed as part of the business plan necessary to help establish a preferred course of action.

	OPTION	ADVANTAGES	DISADVANTAGES
1	Stabilise to minimum safe condition	Retains current building shape Indefinitely defers long term planning for re-use/occupation Minimum cost	Does not achieve best long term heritage outcomes Requires ongoing safety management Limits public access Does not enable business/revenue strategy Will not satisfy community/Council
2	Stabilise/ manage as a ruin	Retains current building shape Reduced restoration costs May satisfy heritage requirements if carefully planned Could be combined with Option 3 or 4 as part of a strategy for rehabilitation Social & economic benefits of conservation (eg heritage tourism, associated business development long term)	Some design cost to achieve minimum structural safety Constrains potential business/revenue options if applied across whole structure May not satisfy community/Council Revenue only from useable premises less recurrent costs
3	Re-roof and lockup	May achieve long term heritage requirements Acceptable protection for structure and building Flexible option that can be made to fit funding/management objectives or alternative uses Allows building to be rehabilitated in stages Allows time for long term adaptation/re-use options to be further explored Defers most rehabilitation costs	Less efficient in construction costs (staged) Defers necessary design and management planning Defers business options and viability May be burdensome for community May limit public access Revenue only from useable premises less recurrent costs Defers most revenue activities. Revenue only from useable premises less recurrent costs

OPTION	ADVANTAGES	DISADVANTAGES
<p>4 Re-roof, restore and adapt</p>	<p>Achieves heritage requirements</p> <p>Adaptation could be staged</p> <p>Enables business/revenue value to be realised</p> <p>Meets community objectives</p> <p>Social & economic benefits of heritage conservation (eg traditional skills, heritage tourism, associated business development long term)</p> <p>Potential to use improvement incentives (e.g. CRIF grants/ loans)</p>	<p>Relatively high construction cost if undertaken in one stage</p> <p>Immediate short term cost associated with design and feasibility</p> <p>Short term cost and stakeholder engagement to prepare necessary management strategy</p>
<p>5 Demolish (and comparable rebuild)</p>	<p>Only if limited to minor non-significant or intrusive additions/modifications, based on reliable heritage assessment, within any of the strategic options above</p>	<p>Full demolition not acceptable from heritage perspective</p> <p>Opposed by community. Still requires a strategic justification. No structural basis for full demolition</p> <p>Inconsistent with CL Act 1989, CLM Act 2016 and EP&A Act 1979 to protect cultural heritage on Crown Land reserves</p>
<p>6 Repairs to Nurses' Quarters</p>	<p>Ensures ongoing operational viability</p> <p>Social & economic benefits of conservation (eg heritage tourism, associated business development long term)</p> <p>Potential to use improvement incentives (e.g. CRIF grants/ loans)</p>	<p>Repair cost not readily offset by short term revenue gain without management strategy</p>

6.0 OPTIONS' BUDGET ESTIMATES AND ASSUMPTIONS

6.2 Discussion

Budget estimates below for the options in Section 5.0 are provided as a guide only. Note there are no fully developed drawings or scopes of work for the options compared. This will enable a more reliable comparison of feasibility options presented in this report, and will allow for more detailed scope to be developed from which more accurate cost comparisons can be made.

6.3 Assumptions for Costing

All OPTIONS

- include design and project management fees
- assume the use of volunteer labour (VL) coordinated by the Trust and other stakeholders where this is feasible
- assume the re-use of salvaged components (internal doors, joinery)
- assume a 30% contingency (except Option 5)
- excludes landscape design/construction costs.

OPTION 1 Stabilisation to minimum safe condition ***Estimated Cost \$81,900***

The option does not provide for re-use of any of the currently disused spaces within the Old Hospital Building or adequately address public safety hazards or strategic management.

OPTION 2 Stabilise/manage as a ruin ***Estimated Cost \$273,000***

- assumes basic pedestrian access through the ruined areas using sympathetic walkways.
- assumes limited interpretation (signboards/wayfinding)
- includes basic rehabilitation only for the spaces that are currently roofed but unoccupied, to allow potential future re-occupation.
- assumes a fee for a heritage consultant to advise on further developing a policy for retaining some or all the heritage fabric as a ruin.
- excludes fees and costs for planning approvals and heritage impact statement.

OPTION 3 Re-roof and "lock-up" ***Estimated Cost \$838,500***

- assumes a roof form of similar shape and volume to existing but not full heritage reconstruction of all carpentry details.

OPTION 4 Re-roof, Restore & Adapt**Estimated cost \$2,455,700**

- assumes staging of work with Stage 1 to provide a roof and stormwater drainage plus secure weathertight envelopes, and Stage 2 a base fitout consistent with the Trust's vision
- excludes detailed market analysis and business plan
- assumes a roof form of similar shape and volume to existing but not full heritage reconstruction of all carpentry details
- assumes base fit out only in Stage 2, without full internal heritage restoration
- assumes basic fire protection only (smoke detectors and compartmentation)
- assumes basic upgrade of existing sanitation and sewage services
- excludes fees and costs for planning approvals and heritage impact statement

Only this option would result in a return of the building to a functional condition.

OPTION 5 Demolition and Rebuild**Estimated cost \$1,895,575**

- assumes reconstruction of a new building to fulfil the overall vision for a mixed community and commercial facility as articulated by the Trust. Alternatively the activities carried on in the existing still usable premises could be relocated to another site (if available)
- not an appropriate heritage option: assumes demolition- reconstruction would be agreed by heritage and planning approval authorities, with conditions, and compliant with Crown Land Act requirements
- assumes reconstruction of a basic office/commercial fitout in contemporary style of comparable surface area/facilities
- note that this option is not preferred by the Trust, community or Council. It is included only to provide a benchmark against which other options can be assessed
- Assumes a 10% contingency sum, not 30% as for other options.

OPTION 6 Repair to Nurses Quarters**Estimated cost \$131,300**

- assumes like for like repair of roof sheeting and plumbing and minor internal work only. Stormwater inspection, services and routine maintenance not included.

Option 6 is compatible with all other options and provides for the maintenance of this structure. Detailed costing and underlying assumptions for each appear as Appendix A.

7.0 CONCLUSIONS

The following factors should guide further consideration of options for the Old Hospital Building.

Prior to commencing any staged rehabilitation subject to available funding and resources, consensus should be formed on the overall aims and objectives for the use, function and occupancy requirements for different areas. This is imperative to prevent a piecemeal approach to rehabilitation that could adversely impact on heritage and environmental values of the reserve, user experience and revenue.

Rehabilitation or return to beneficial use does not necessarily require full restoration of the Old Hospital Building in all its pre-existing form, fabric, layout and design as it was prior to 2004. This is an ambitious challenge. For best heritage results it requires major financial and human resources, heritage oversight, building historical research, construction design services and exceptional craftsmanship. Budgets in this report include a level of heritage expertise suited to the outline scope and objectives of each option.

A flexible approach to rehabilitation could achieve good heritage outcomes. Option 4 above, is a scalable option that could be implemented in multiple stages. This may include (for example):

- re-roofing, drainage and repair of external envelopes as an initial stage (“re-roof and lock up”)
- internal refurbishment of less damaged areas to bring them on stream at an early stage
- stabilisation (management without reroofing, as a ruin) of selected areas, with public access, interpretation for public use, and user access to occupied areas, selective removal (of intrusive or later additions/accretions or redundant elements where these are shown to be of lesser heritage significance)
- adaptation including new work suited to re-use requirements (eg upgrading toilets, access electrical, lighting and mechanical services or other minor additions of appropriate form and scale. These should minimise impact on cultural heritage significance but do not have to be heritage “style”
- internal restoration/refurbishment staged over a five or ten year time scale subject to resources and approvals, with scope of work agreed as part of management planning and advice from heritage professionals.

Budget estimates prepared for this report assume some use of volunteer labour as a cost saving measure. There are supervision and WHS matters that accompany this and these would need to be carefully managed. This could be deployed only in pre-or post-construction phases eg for vegetation removal, removal of stored items and minor internal fitout or finishing after completion of work, as agreed at design and documentation stage, under the responsibility of the Trust.

A Business Plan should consider the heritage, environmental significance and public amenity and potential of the buildings, and all associated landscape and garden elements, as a precinct. It should be based on a full examination of constraints and opportunities for the precinct for sustainable long term management, including financial constraints.

All viable options for rehabilitation require proactive community and stakeholder consultation, heritage input and planning approval. The current Conservation Plan prepared by OBHRT, though referred to in an existing draft management plan prepared by the Trust, provides only a basic framework for heritage planning and precludes a number of alternative or complementary strategies for rehabilitation.

Any new roof, whether partially or fully reconstructed, should reinstate the original profile, geometry and appearance though not necessarily the original cut-roof structural form.

New flooring, internal joinery and fixtures, services, wall finishes etc do not need to systematically reproduce the original or pre-fire materials, construction details or appearance. However they should respect and not distort or obscure the cultural significance of the place, or detract from its interpretation and appreciation.

There is some potential to restore interior rooms where there are strategic policies to re-roof them. Many fixtures and joinery elements were salvaged. However, full restoration of interiors is not a necessary requirement from a heritage point of view. Based on policy for use and management, efforts should focus on design interventions that best deliver user outcomes but are affordable, achievable and do not negatively impact heritage significance.

Heritage interpretation can assist in complying with best practice heritage principles for the preservation and enjoyment of cultural heritage where full restoration/reconstruction may be not feasible or not advisable.

Public Works Advisory is in a position to provide further strategic support to DPI-Lands and Forestry and the OBHRT notably in regard to supporting further consultation, heritage management principles, project management services, procuring specialist heritage services and trades.

8.0 FINDINGS

- The Old Hospital main building has been extensively damaged by fire and demolition post-fire, with around 20% of the building currently roofed and usable.
- The complex has some historical significance and is listed on the Bega Valley Shire Council LEP as a heritage item of local significance. However, the fire and subsequent damage have diminished this to some extent.
- The main building has the potential to be rehabilitated and returned to beneficial use. If this option is adopted a strategy would be required for conservation works to the asset.
Relevant aspects are:
 - The external and internal brick walls, including chimneys and openings, are structurally adequate but requiring minor repair/strengthening (such as restoration of upper courses of brick and stitching of step-cracking to brick arches) and roofing to brace and strengthen walls. Floors and roofs are mainly destroyed, but it is feasible to restore them in full or part.
 - Some roofed areas of the Old Hospital main building, though comparatively dry and intact, are not weathertight and require urgent action to prevent further damage (replacement of damaged roof coverings, new rainwater services, repair of internal ceilings, repair of external joinery).
 - The Nurses Quarters requires immediate roof repairs and minor maintenance/internal works if further damage is to be avoided. Other outbuildings are in good or fair condition.
- Full 'restoration' of interiors is not a necessary requirement from a heritage point of view. Based on policy for use and management, efforts should focus on design interventions that best deliver user outcomes but are affordable, achievable and do not negatively impact heritage significance.
- Budget estimates for a suite of options were developed. Rehabilitation of the main hospital building and others on the site is an option with a cost in the order of \$2.5 million. This assumes a substantial volunteer contribution of in-kind activity. If volunteer labour were to be used then serious attention to WHS matters, etc would be required, including appropriate training and supervision.
- The two lowest cost options, demolition or preservation of the main building as a 'ruin' would likely be opposed locally and by the Trust.
- There appears to be limited consideration by the Trust to develop a business plan to guide the overall operation and development of the facility. Further work in this area together with the options identified and costed in this report could assist in finding a long term solution for the structures on the site. Prior to commencing any staged rehabilitation subject to available funding and resources, consensus should be formed on the overall aims and objectives for the use, function and occupancy requirements for different areas. This is imperative to prevent a piecemeal approach to rehabilitation that could adversely impact on heritage and environmental values of the reserve, user experience and revenue.

APPENDIX A - COSTING BREAKDOWN

OLD BEGA HOSPITAL

BUDGET ESTIMATE OF OPTIONS

Option No.1 Stabilise

Criteria Stabilise to minimum safe condition – this entails minimal work to verify structural stability and public safety. The building would require a minimum level of safety and security and a strategy to manage the risks associated with it being in a reserve managed by a volunteer trust that is using another/other buildings on the site.

<ol style="list-style-type: none"> 1. Project Management Services to Include - • Engage Engineer for Structural Report • Prepare Scope of Work for Tender • Tender Works / Award Contract / Supervise Works • Engage Heritage advice to provide written strategy for the Trust to manage ongoing risks associated with the complete site including used other buildings • Preliminaries 	<p>\$35,000</p>
<ol style="list-style-type: none"> 2. Work Performed to minimum safe condition a. Remove Temporary safety fence b. Remove Loose bricks c. Remove Trees & Shrubs within Building d. Remove Broken Glazing e. Stabilise remaining windows f. Relocate all salvaged/stored material elsewhere on site g. Remove/ Stabilise loose and damaged material to eliminate WHS issues h. Provide Shoring to remaining gables i. Carryout grounds maintenance within the perimeter fence j. Re-erect perimeter Fence constructed to allow access to maintain area around building by Trust 	<p>\$28,000</p> <p>VL</p> <p>\$10,000</p> <p>VL</p> <p>\$2,000</p> <p>\$5,000</p> <p>VL</p> <p>\$5,000 / VL</p> <p>\$6,000</p> <p>VL</p> <p>VL</p>
<p>Sub Total</p> <p>Contingency 30%</p>	<p>\$63,000</p> <p>\$18,900</p>
	<p>Total \$81,900</p>

Note – This equates to \$84.00 per sq/m

Option No.2 Repair and Manage as a Ruin

Criteria

Repair and manage as a ruin – a ruin is defined as “a place that currently, through abandonment, redundancy or condition, is disused and incomplete, is usually no longer maintained and appears unlikely to regain its original or a substantive use, function or purpose other than interpretation”. This would not be a “do nothing” solution but would need to be planned in conjunction with the use of the reserve managed by a volunteer trust using another/other buildings on the site, with an active strategy for public access, enjoyment and interpretation.

<p>1. Project Management Services to Include -</p> <ul style="list-style-type: none"> • Engage Engineer for Structural Report • Engage Heritage Architect to provide Scope of Work with written strategy to develop safe public access throughout the ruin. Provide overall interpretation (signage) of the building development, individual interpretation within rooms and directional signage for safe passage. • Prepare Scope of Work for Tender • Tender Works / Award Contract / Supervise Works • Provide written strategy for the Trust to manage ongoing risks associated with the complete site including used other buildings with an active strategy for public access, enjoyment and interpretation • Preliminaries 	<p>\$40,000</p> <p>\$30,000</p>
<p>2. Work Performed to minimum safe condition</p> <ul style="list-style-type: none"> a. Remove Temporary safety fence b. Remove Loose bricks & shore walls where required c. Remove Trees & Shrubs within Building d. Remove Broken Glazing & Stabilise existing windows where required e. Remove/ Stabilise loose and damaged material to eliminate WHS issues f. Make good to remaining roofs and make water tight in those areas g. Make good to remaining ceilings h. Make good to loose and damaged items to walls i. Stabilise Chimneys j. Remove/store all salvaged material to provide clear view of remaining ruin k. Repair steps and provide compliant handrails where required l. Shore brick arches as required m. Provide solid public walkway to meander throughout ruin with Handrails 	<p>VL</p> <p>\$15,000</p> <p>VL</p> <p>\$7,000</p> <p>\$5,000 / VL</p> <p>\$15,000</p> <p>\$5,000</p> <p>\$5,000</p> <p>\$25,000</p> <p>VL</p> <p>\$20,000</p> <p>\$10,000</p> <p>\$33,000</p>
<p>Sub Total</p> <p>Contingency 30%</p>	<p>\$210,000</p> <p>\$63,000</p>
<p>Total</p>	<p>\$273,000</p>

Note – This equates to \$323.00 per sq/m

Option No.3 Re-roof and “Lock-up”

Criteria

Re-roof and “lock-up”, without returning vacant parts of building to operational viability – this could enable a future staged refurbishment (see 4 below). Roof and minimum additional remedial work (eg repair/make secure windows and doors; provide fire safety installations) would be undertaken in the lockup stage. Interior would be effectively mothballed. This could be combined with 2 above or 4 below.

1. Project Management Services to Include -		\$57,000
• Engage Engineer for Structural Report		
• Prepare Scope of Work for Tender		
• Tender Works / Award Contract / Supervise Works based on 8 weeks		
• Provide Written Strategy for the Trust to manage ongoing risks associated with the complete site including used other buildings		
• Preliminaries		
Engage Heritage Architect to provide Scope of Work		\$50,000
2. Work Performed to Stabilise / Re-roof and “lock-up”		\$538,000
a. Remove temporary perimeter safety fence	VL	
b. Remove Loose bricks & re-point walls where required for strengthening	\$15,000	
c. Remove Trees & Shrubs within Building	VL	
d. Remove Broken Glazing & Stabilise existing windows where required	\$7,000	
e. Remove/ Stabilise loose and damaged material to eliminate WHS issues	\$5,000 / VL	
f. Scaffold to Complete Perimeter	\$75,000	
g. Stabilise Chimneys	\$25,000	
h. Re-roof complete with fascia/eaves/gutter & downpipes	\$400,000	
i. Paint fascia	\$8,000	
j. Repair or provide lockable external doors	\$3,000	
k. Reinstall temporary perimeter safety fence	VL	
	Sub Total	\$645,000
	Contingency 30%	\$193,500
	Total	\$838,500

Note – This equates to \$992.00 per sq/m

Option No.5
Criteria

Demolition - Rebuild

NOTE Full demolition is not acceptable from a heritage perspective and may be inconsistent with legislative requirements under NSW legislation.

Comparable Re-Build

Comparable rebuild include costs the same facility new – not a heritage design but conventional modern. Ie: 825m2 single story, timber framed, brick veneered, concrete slab, aluminium windows and doors. Timber framed low pitched overhanging roof in colorbond with verandahs complete with male & female ambulant & 1 disabled toilet 30m2. Include demolition of attached outbuildings (morgue & theatre)

1. Project Management Services to Include -	\$110,000
• Demolition (see above)	(\$35,000)
• Prepare Scope of Work for Public Tender	
• Tender Works / Award Contract / Supervise Works	
• Preliminaries	
Engage Architect to provide design & document to comply with planning requirements	\$97,000
 2. Demolition – Including	 (\$100,000)
a. Asbestos management	\$15,000
b. Partial Demolition	\$50,000
c. Removal of all in-ground services	\$10,000
d. Level site clean of all building debris and provide top soil over	\$10,000
e. Provide & Install Detailed Heritage signage board with Complete history	\$15,000
 3. Construct New Build	 \$1,381,250
a. Construct new single story office type building of comparable form complete ready for us (Price from 'Rawlinsons') of \$1,650m2 x 825m2	
	Sub Total
	\$1,723,250
	Contingency 10%
	\$172,325
	Total
	\$1,895,575

Note – This equates to \$2,243 per sq/m

Option No.6**Repairs to Nurses Quarters**

Criteria

Replace roof sheeting with new galvanised roof sheeting to match existing style plus allowance for minor ceiling repairs, internal painting and termite inspections.

<p>1. Project Management Services to Include -</p> <ul style="list-style-type: none"> • Engage Heritage Architect to provide Scope of Work to comply with Heritage Council • Prepare Scope of Work for Public Tender • Tender Works / Award Contract / Supervise Works 	<p>\$35,000</p>
<p>2. Replace roof sheeting with new galvanised roof sheeting to match existing style including:</p> <ul style="list-style-type: none"> • Roof Sheet • Gutter • Downpipes • Downpipes to stormwater • Insulation • Roof Anchor system • Scaffold • Building Size - 325m2 x \$140m (Price from Cordell's) 	<p>\$45,500</p>
<p>3. Minor Repairs</p> <ul style="list-style-type: none"> a. Ceiling Repairs b. Internal Painting c. Termite Inspection 	<p>\$20,500</p> <p>\$8,000</p> <p>\$12,000</p> <p>\$500</p>
	<p>Sub Total \$101,000</p> <p>Contingency 30% \$30,300</p>
	<p>Total \$131,300</p>