

Facility Development Plan Issues and Opportunities

Dean's Marsh Community Hub Surf Coast Shire June 2022 REV 1



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1. Executive Summary

1.1 Overview of Purpose

The purpose of this report is to prepare a Community Hub Facility Development Plan, for the development of a Community Hub, located at the Deans Marsh Memorial Reserve, to meet the current and future needs of the Deans Marsh Community, considering the unique character and local significance of the Memorial Reserve.

1.2 Report Recommendations

The final recommendation of this report will be a synthesis of the technical inputs and community aspirations for the Community Hub.

2. Project Team

Surf Coast Shire

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Brittany Mitchell Social Infrastructure Development Officer

Tym Guthridge Asset Management Analyst

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3. Policy Context

3.1 Population

Surf Coast Shire is located in south-west of Victoria, between 75 and 135 kilometres from Melbourne CBD and between 10 and 60 kilometres south-west of Geelong CBD. It has an overall population of 36,278 and an average population density of 23.38 persons per square kilometre. By contrast, the Deans Marsh and District, has a population of 1,378 and density of .03 persons per hectare. 22.6% of people in Deans Marsh and District, have a vocational qualification. This is higher than for Greater Melbourne. Only 10.7 percent of people in Deans Marsh and District were born overseas, compared to 33.8% in Greater Melbourne.

Deans Marsh population has the lowest rate population growth of any of the Districts in the Surf Coast Shire. Therefore the proposed Community facility is not about future population growth demands, but instead, meeting an existing Community need.

3.2 Literature Review

Surf Coast Shire Council - Council Plan Incorporating the Health & Wellbeing Plan 2021-2025

The Council Plan is underpinned by 10 Community Principles that arose from Community Consultation. The Principles have translated into seven Council Plan Themes. Themes are as follows:

Theme 1: First Nations reconciliation.

Theme 2: A healthy connected Community.

Theme 3: Environmental leadership.

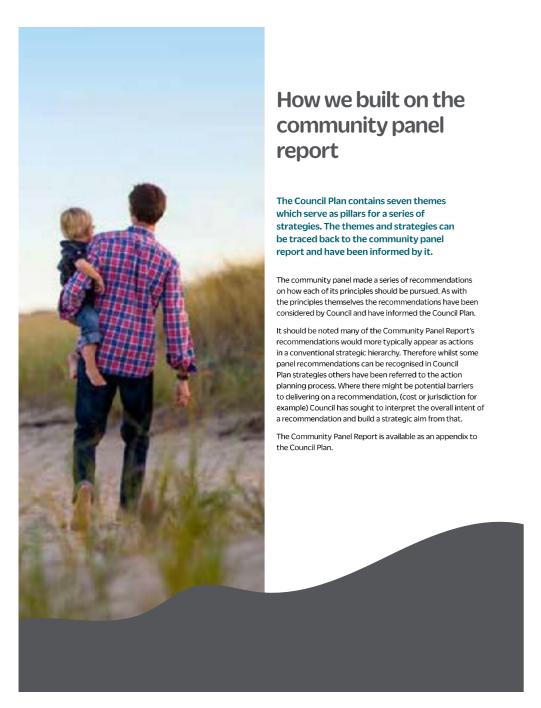
Theme 4: Sustainable growth.

Theme 5: A robust and diverse economy.

Theme 6: Arts and creativity.

Theme 7: Accountable and viable Council.

These themes then inform 19 Council Plan strategies and these 19 strategies in turn, refer back to the seven themes and how they shall be implemented across the Municipality. See extract below from Surf Coast Shire Council Plan 2021 to 2025.



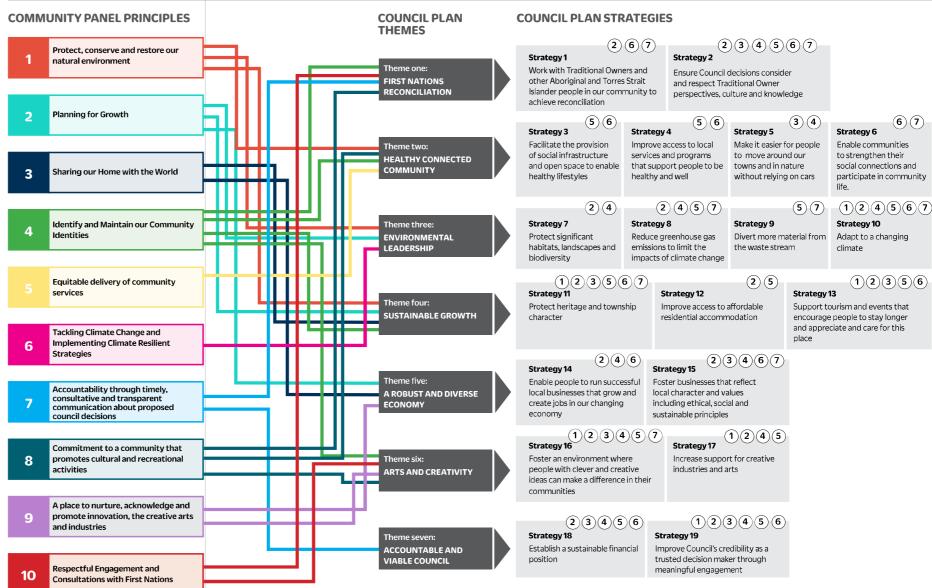
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Extract from Surf Coast Shire Council Plan 2021 to 2025



COMMUNITY VISION:

From the hinterland to the coast, from the first peoples to the children of the future, we are an active, diverse community that lives creatively to value, protect and enhance the natural environment and our unique neighbourhoods. We will leave the Surf Coast better than we found it.



Indicates other related themes

Council Plan 2021-25 Incorporating the Health and Wellbeing Plan 21

In considering the development approach for the Deans Marsh Community Hub careful consideration has been given to all relevant strategies including due consideration to Strategy 11 inserted below.

STRATEGY 11: PROTECT HERITAGE AND TOWNSHIP CHARACTER

OUTCOME (In four years we'll see)

Sense of the uniqueness of towns and neighbourhoods - their natural elements and character - is strengthened.

Rationale

Surf Coast Shire contains many separate townships. Each has its own identity comprised of physical characteristics, such as building style and landscape, and of the values, lifestyle and history of the people who live there. This strategy recognises how important heritage and township character is to our communities. As visitor and permanent population numbers rise residents are increasingly concerned about the impact on their way of life and the look and feel of their townships. We will identify the qualities that contribute to the character of our towns and seek to protect them.

Extract from Surf Coast Shire Council Plan 2021 to 2025

The current Community Hall including Community Cottage and Monday Care facilities, represent the only piece of Community infrastructure in the Deans Marsh area. Therefore, the proposed development of the Community Hub facility at the Memorial Reserve is directly informed by the Council Themes, ensuring there is an emphasis on enabling the Community.

The proposed facility will speak directly to healthy and connected Community, sustainable growth and arts and creativity. This facility is of the highest priority for the enabling of the Community in Deans Marsh, to fulfil the broader Surf Coast Shire Community vision of "from the hinterland to the coast, from the first people to the children of the future, we own an active diverse community that live creatively to value, protect and enhance the natural environment and are unique neighbourhoods. We will leave the Surf Coast better than we found it."

It is noted that the health and wellbeing priorities for the Surf Coast Shire have been incorporated into their overall Council Strategic Plan and that the *Public Health and Wellbeing Act of 2008*, mandates that Local Government have a responsibility to protect and promote public health and wellbeing within the Municipalities. The development of the Community Hub will be a major contributor to this, in the Deans Marsh area.

Deans Marsh and District Community Action Plan 2020 to 2030

The Deans Marsh and District Community Action Plan, formulated by Deans Marsh and District Community, through the MaDcap Campaign, also provides strong directives for the wellbeing of the Deans Marsh Community. These will be facilitated and enabled by the development of the Community Hub facility.

Aspirations outlined in the Community Plan, for which the Community Hub can provide direct enablement include:

- · Great opportunities for Community Members to share skills and knowledge.
- · Facilitate opportunities to share and trade resources.
- Facilitate a programme for regular Community and social occasions.
- Develop and deliver programmes for our young people.
- Develop and deliver programmes to enable older residence to age in place.

- Develop and deliver a programme of social learning for pre-school aged children.
- Develop and deliver multi- generational social gatherings and groups.

Further, there is a keen interest in having a built physical space in Deans Marsh that will enable local food activities, events and food farm / farming education to take place; being a space where the local and broader Community can connect and collaborate around food, farming and the environment.

Through consideration of pathways, the Community would like to see a network of paths that can improve connectivity and rehabilitee with the Community, interaction between Community Members, physical and mental wellbeing, a sense of character and place. These will contribute also to tourist appeal.

Surf Coast Shire People Place Future

In 2021 Surf Coast Shire undertook in a community engagement process to prepare the People, Place, Future, Community Engagement Report. The outcomes of this report through consultation with the various Communities in Surf Coast Shire, identified the liveability priorities for their district. Refer to below extract from this report, defining the liveability priorities.

Liveability priorities

Place Score has identified the Liveability Priorities for Surf Coast Shire communities by aggregating 'community values' (what people care about) with 'liveability scores' (how the things that they care about are currently being looked after). The more people that care about a place attribute, and the poorer it performs, the higher the priority. Conversely, Neighbourhood Strengths are features of a place that are both valued and already contributing positively to local liveability.

These insights will help Council to identify what is important to our community, how a place is performing and what the focus of change and improvement should be. For example; an attribute with a high Care Factor but a low Place Experience rating should indicate that it's a priority for attention.

Care Factor



Values
Care Factor captures what attributes our community values.

Place Experience



Rate
PX Assessment or 'Place
Experience' captures how
our community currently
'rates' each of those
attribute.

Liveability Priorities



Focus and Prioritise

The Liveability Priorities bring the two datasets 'Care Factor' and 'Place Experience' together.
This allows us to see how the things people care about are performing. This can help focus our efforts on where we can have the most impact.

Deans Marsh and District Liveability Priorities

Deans Marsh and District

For Deans Marsh and District residents the top feature of their ideal community was 'the natural environment that is protected and built environment that reflects sustainability best practice', including the elements of 'neighbourhood resilience' 66% and 'sustainable behaviours in the community' 56%. Second highest was 'an active and engaged community' including the aspects of 'neighbourhood resilience' 68% and 'evidence of community activity' 44%. 'A welcoming and connected community that make all people feel a sense of belonging' scored third highest including the aspects of 'welcoming to all people' 53% and 'sense of belonging in the community' 44%.

For 45 to 64 year old's, a 'sustainable built environment and community behaviours' was highest, including the aspects of 'neighbourhood resilience' 74% and 'sustainable behaviours in the community' 74%. Second highest was 'an active and engaged community' including the aspects of 'neighbourhood resilience' 74% and 'local community groups and organisations' 37%. 'A welcoming and connected community that make all people feel a sense of belonging' scored third highest including the aspects of 'welcoming to all people' 53% and 'sense of belonging in the community' 47%.

For female Deans Marsh and District respondents, highest was a 'sustainable built environment and community behaviours' was highest, including the aspects of 'neighbourhood resilience' 63% and 'sustainable behaviours in the community' 58%. Second highest was 'an active and engaged community' including the aspects of 'neighbourhood resilience' 63% and 'evidence of community activity' 47%. 'A welcoming and connected community that make all people feel a sense of belonging' scored third highest including the aspects of 'sense of connection to/feeling support from neighbours or community' 53% and 'sense of belonging in the community' 47%.



Male respondents in the district scored having 'easy to access shared community amenities like the local shops, on foot or by bike' the highest including the aspect 'walking/jogging/bike paths that connect housing to communal amenity' 70% and 'access to shared community and commercial assets' 50%. 'A welcoming and connected community that makes all people feel a sense of belonging' scored second highest including the aspects of 'welcoming to all people' 70% and 'sense of belonging in the community' 40%. Third highest was having a 'sustainable built environment and community behaviours', including the aspects of 'neighbourhood resilience' 60% and 'sustainable behaviours in the community' 50%.

Surf Coast Shire Council Asset Plan 2021 to 2031

Under the Council Asset Plan, an analysis of all Council infrastructure is mandated, identifying the total useful life of the assets and establishing the lifecycle from routine maintenance, preventative maintenance through to a renewal trigger.

The potential renewal of the Memorial Hall at Deans Marsh Reserve, has become a priority because a grant was sought for the upgrade of the existing kitchen. This triggered the need for a review of the ongoing incidental and miscellaneous alterations, additions and refurbishments of the building. Given the status of the existing building in the lifecycle assessment, and a subsequent Building Condition Report including Structural assessment of the building, (based on the BURRA charter assessment criteria), it has been found that renewal, rather than routine maintenance and refurbishment, will be the most cost-effective outcome for the development of a Community Hub for Deans Marsh.

As this Memorial Hall represents the single Council building, in the Deans Marsh area, providing a focus for Community activities, there is a high priority to ensure that such a facility is provided within the Community. The building has been assessed against the renewal ranking criteria and being found to satisfy those assessments, ie. it is in poor condition, it is a critical piece of infrastructure in the Community and it is at risk of further and future failure.

Early Childhood Services

This Municipal Early Years Plan (MEYP) is a whole-of-community, whole-of-system, local area plan for the development and coordination of early years programs, activities and other local community development processes that impact on children and their families.

Deans Marsh is not identified as an area with a growth in demand for Early Years services. By contrast Winchelsea has been identified as a population growth area.

The MEYP identifies locality priorities noting: LOCALITY PRIORITIES – DEANS MARSH/MORIAC/WINCHELSEA

"Limited access to General Practitioners' is the sole unique issue identified for the Deans Marsh/Moriac/Winchelsea locality."

It would be proposed that space to enable kindergarten, some child care and Out of School Hours Care are required, along with appropriately designed space for Maternal and Child Health and other allied health consultation

Bibliography

ID Informed Decisions Pty Ltd

Surf Coast Shire Council – Council Plan Incorporating the Health and Wellbeing Plan 2021 to 2025

Deans Marsh and District Community Action Plan 2020 to 2030.

Surf Coast Shire Council - Asset Plan 2021 to 2031.

People, Place, Future, Community Engagement Draft Report - 23rd March 2021 (V1.0 Surf Coast Shire)

4. Site Analysis

4.1 Property Ownership Details

The subject property is located at 10 Pennyroyal Valley Road, Deans Marsh 3235. The property is managed by Surf Coast Shire Council. The land is the traditional lands of the Gadubanud people.

Title particulars are:

Lot and Plan No. Lot 1TP587052

Standard parcel identified (SP1) is 1\TP587052

Council property number is 178103.



Land channel map extract

Please refer to the Planning Property Report in the Appendix 01 of this Report.

4.2 Site Context

Deans Marsh is a small rural town, with residential, business and community infrastructure development, clustered along the major roads that pass through this locality.

In the north-south direction is Winchelesea Deans Marsh Road, turning into the Deans Marsh Lawn Road to the south-east. To the west is the Birregurra Deans Marsh Road and then branching off the Deans Marsh Lawn Road, is Pennyroyal Valley Road. All the development forming the Deans Marsh Township, is located

within a 500 metre radius of the intersections of these respective roads.

The remainder of the Deans Marsh District is made up of farming land, with a small cluster of development to the west, near the railway line. Land use in the area has traditionally been for dairy, sheep, beef, pear and potato production on large parcels of land.

However, over the last 30 years there has been a transition to smaller industries such as native plant nurseries, wineries, cellar door sales, berry, olive, garlic and vegetable growing, beekeeping, honey production, short stay accommodation, cafes and agroforestry.

The Deans Marsh Township and the Memorial Reserve are located on relatively flat land, which is hinterland to the Ottway Ranges that rise and then fall down to the sea at Lorne.

The Memorial Reserve is made up of two parcels of land – 10 Pennyroyal Valley Road and 20 Pennyroyal Valley Road. The Memorial Hall which forms the basis of this report is located on 10 Pennyroyal Valley Road site.

The Memorial Reserve consists of the Memorial Hall which includes the Community Cottage and Early Centre to its rear. A Playing Oval, two Tennis Courts with associated small Tennis Club Building and a collection of other structures, including a Cricket Club social space, a repurposed old Football Pavilion now used as an Art space. A Rotunda, Public Toilets, Public Presentation space and a number of other small Sheds. There is also a well-developed Adventure Playground, adjacent to the Car Park for approximately 20 car spaces which is unsealed and services the Memorial Hall. There is informal carparking around the perimeter of the oval. There is a will developed BMX track and skate bowl also.

Across Pennyroyal Valley Road opposite to the Memorial Hall, is the Deans Marsh Primary School.



Near Map

4.3 Planning Controls

The subject site is zoned "Public Park and Recreation" zone (PPRZ). The Schedule to the Clause 36.02 Public Park and Recreation Zone, has no specified permit exemptions and conditions or sign requirements. It is affected by an Heritage Overlay (HO) and Heritage Overlay Schedule HO46.

HO46 is specific to the Deans Marsh Public Hall and Recreation Reserve, including Public Halls, Sports Ground, Fibro Pavilion and Memorial Gates and Cyprus boundary plantation, covering all of 6 to 20 Pennyroyal Valley Road. Deans Marsh.

A small portion of the south-west of the site (20 Pennyroyal Valley Road) is affected by Design Development Element Overlay (DDO) and Salinity Management Overlay (SMO) This will not affect the subject site where the Memorial Hall is located.

In terms of the typically listed controls, the only one that applies to this site is "Tree Controls." There are no controls that relate specifically to the Memorial Hall.

Refer to the Appendix 02 of this Report for the Schedule Extract.

The property is in a designated bush fire prone area and it is not expected to be of Aboriginal Cultural Heritage sensitivity.

A Planning Permit will be required for the development of a facility on the site (building and works), demolition of existing buildings as applicable and the any works effecting the trees.

4.4 Heritage Controls

As noted above, the site is affected by a Heritage Overlay and the Surf Coast Shire Planning Scheme.

Although there are no specific controls under the relevant Schedule relating to the Memorial Hall, it is noted that the building is of local cultural significance and therefore due diligence has been conducted in terms of the assessment of this building and its viability for preservation and repurposing.

4.5 Trees

Along the north and west perimeter of the reserve are well established plantings of Cypress trees. These trees are the subject of specific controls under the Planning Scheme.

In addition to the established Cypress planting along the northern-west perimeters of the site, there is established planting of smaller trees along the Pennyroyal frontage to the Reserve and within the Playground and perimeter of the Car Park and Playing Field area.

The tree protection zones for all trees in proximity of the subject site, have been established along with the critical root zones. Due consideration will be given to these tree protection zones in the development of the design of the Community Hub and associated car parking and pavements.

Refer to Appendix 03 for Plan showing relevant trees and tree protection zones.

4.6 Site and Building Services Overview

From the site inspection undertaken and Authority services details received, any major redevelopment of the existing community facility would require an upgrade to the majority of services on site and Authority incoming infrastructure.

It appears that the site would require an electrical upgrade and extension of a three phase supply to the site. The existing fixed wireless incoming NBN service could be retained and utilised in any redevelopment.

The capacity of the existing waste water treatment would appear to be under capacity for any future increase in capacity of visitors to the facility and the collection and reuse of rainwater would need to be assessed for any increase in function or capacity. The capacity of both the sewer treatment and water consumption would need to be assessed on occupancy numbers and building function through the design phase of the project. A land capability study would more than likely be required for the site for any increased in waste water volume and disbursement of treated water on the site.

The existing on site building services infrastructure is generally of a reasonable age and in average to poor condition. There would be little services infrastructure that would be recommended to be reused in any redevelopment.

In any refurbishment of the existing facility, it would be recommended that the majority of services be upgraded, replaced and brought up to current regulations and requirements.

For any increase in building area in excess of 500m2, the site will need to be provided with a new fire service incorporating on site fire pumps and tanks.

Refer to Appendix 04 for full services report.

4.7 Geotechnical and Geochemical

Geotechnical

A geotechnical investigation was provided by Provincial Geotechnical on 26th April 2022 and the site was found to have soil classification of CLASS P (PROBLEM SITE). Any new building structure will have to be designed with deep footings in response to this classification along with pavements designed accordingly. Based on the Yttrup Building Condition Report the existing footings that were exposed are not founded to the depth required for this soil profile.

Refer to Appendix 05 for full Geotechnical Report

Geochemical

Based on results of the investigation undertaken by Ground Science, they consider the potential for land contamination at this site to be low.

Refer to Appendix 06 for full Geochemical Preliminary Site Investigation, prepared by Ground Science.

4.8 Bush Fire Attack Level

The site is in a designated bush fire prone area. A BAL assessment has been done of the site. The site has a BAL of 12.5. Primarily the site is at risk of ember attack, the risk of radiant heat is considered low. This 12.5 rating will necessitate particular construction requirements such as non-combustible enclosed sub floor space, metal screens to windows and doors, non-combustible ember guards to wall and roof junctions. The existing Memorial Hall building does not meet the BAL 12.5 requirements construction requirements.

Refer to Appendix 07 for BAL assessment

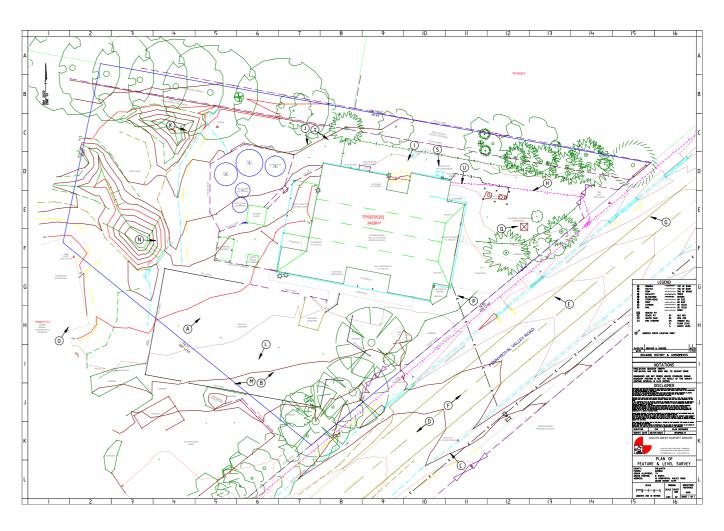
4.9 Parking

Memorial Hall is currently serviced by 20 unsealed car spaces in a dedicated Car Park adjacent to it, accessed off Pennyroyal Valley Road. It includes one accessible car space. There are seven indented car spaces on the north side of Pennyroyal Valley Road, twelve on the south, and some informal parking for the Reserve around the Oval and various buildings. There are various Community use buildings located in the Reserve grounds.

However a final analysis of the parking requirements has been undertaken by TTS Traffic Engineers. They have found that taking in to account allowed concessions under the planning scheme for existing and proposed, uses only 3 additional car spaces will be required. These could be provided as additional indent street parking. Noting that either the existing car park for 20 spaces or equivalent replacement on the site will be required.

Refer to Appendix 12 for Traffic Engineers advice.

4.10 Site Survey



5. Existing Building Analysis

5.1 Building Description

The Hall is generally of traditional timber framed construction, with various additions and alterations over the vears.

The Main Hall consists of a timber floor on stumps. The extensions to the east and south are on slabs and the extensions to the north and west are on timber floors on stumps. The eastern extensions contain a mixture of timber stud and externally rendered brick cavity walls. Newer extensions to the west and south have prefabricated roof trusses. There is corrugated metal roof sheeting to all the various roofs.

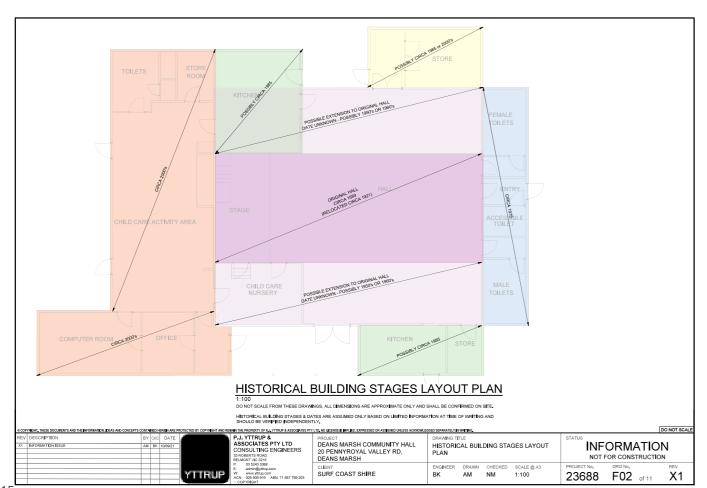
The external cladding is a mixture of composite and timber cladding boards. External windows are a mixture of aluminium and timber frames. External doors are timber framed with timber doors. It appears gutters on the building have been replaced fairly recently.

The building floor level is at ground level along the southern façade and at the North approximately 400 out of the ground. At the east of the building the floor is approximately 100 out of the ground and at the west, approximately 400 out of the ground, however there is localised mounding of soil to achieve a direct path of travel from the Children's Room located at that end of the building into the Playground.

There is very basic landscaping around the perimeter of the building, with a rudimentary Playground formed at the north, for the Children's Centre. To the west of the building is a combination of concrete and unsealed paths to the unsealed Car Park.

The building does not have a clearly identified front entrance, as what was once the main front entrance, has been modified to form Toilets. The Main Entrance is under a Verandah along the south of the building.

The plan of the building takes the form of a central Hall, which was originally relocated to this site in summer of 1921/22 and then surrounding it on all sides are a combination of Ancillary and other Activity spaces. Below is a plan showing the indicative timeline of development of the building and subsequent additions.





Original entry absorbed in amenities



Eastern facade floor approx 400 out of ground mixed lightweight cladding



Western facade floor at ground level with combination of pavement finishes



At north ground line locally mounded to provide access to children's rooms



Forecourt



Adventure playground



Unsealed carpark

Description of Interior.

The centre of the Main Hall is the only remanent of the original building and of that, it is only the ceiling structure, that has been retained.

The ceiling is a flat-topped vaulted ceiling that presumably follows the underside of the roof structure, with the flat top to the underside of the collar ties (if present) of the roof framing. The ceiling is lined with tongue-in-groove timber lining boards, cornices to its perimeter and intermediate expressed support framing. The ceiling has been cut into for the provision of ceiling fans, light fittings and air exhaust. Further, it is stabilised with tension cables across the vault.

The additions of space on either side of the Central Hall, have sheet lining with expressed junctions, down to dado height and then below dado are vertical tongue-and-groove timber lining boards. To the eastern end of the Central Hall are tongue-in-groove lining boards above the dado line.

The floor to the Central Hall is a timber framed polished timber floor. The central and northern portion of the Hall is darker coloured (presumably Jarrah floorboards). The southern portion has lighter coloured (presumably Victorian Ash floorboards). Structural analysis identified that the floorboards have machined edges and therefore highly unlikely to be original. The floor to the main hall is uneven with a general "tilt" from south to North

All the remaining interiors are clad with plasterboard or expressed joint sheeting with paint finish throughout.

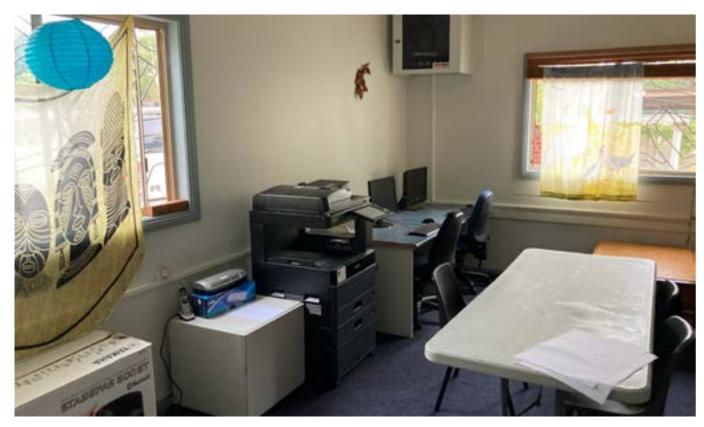
The joinery and fit out to the Kitchen area is aged and of a low amenity. The fit out to the Toilets has basic partition structures and painted face brickwork, with sheet vinyl to the floors.



Central hall floor



Central hall ceiling



Interior of Community Cottage



Kitchen interior



Toilets



Childcare

5.2 Structural Conditions

In 2019 a visual walk through Condition Assessment Report was prepared for the building. This report identified up to 35 items requiring maintenance, replacement or remediation works. Prior to commencing any such works or other miscellaneous upgrade works to the building Surf Coast Shire commissioned, in accordance with the Burra Charter, a Building Condition Report by Yttrup & Associates Consulting Engineers. The purpose of this report was to more fully investigate the issues identified in the 2019 report and any other building condition issues. This was undertaken in the context of the building having some local significance. Refer to the Appendix for a copy of this report.

The structural investigation found numerous issues which require remedial works and a non-exhaustive summary of the more significant items is identified below:

Site drainage improvements required.

Roof drainage remedial works.

Sub-floor ventilation upgrades.

Restumping and pad footing upgrades.

Flooring upgrade and/or load limitation controls.

Possible wall tie down upgrades.

Roof framing remedial works to area of the Stage.

Steel truss (TR1) replacements.

Wall bracing upgrades.

Roof bracing upgrades.

The structural report found that numerous aspects of the building structure do not comply with relevant regulations and Australian Standards. Substantial work would need to be undertaken to bring these elements up to compliance. The report called into question the cost benefit of undertaking all these works to the building and ongoing maintenance requirements. This has been informed by the Council's Asset Management Plan and triggers for renewal.

5.3 Functionality

Brand Architects prepared a Template Functional Analysis of the building. This analysis posed typical questions for a Community Facility regarding basic functional requirements, such as, compliant paths of travel, affective connections between internal spaces and external spaces, heating, cooling, lighting, ventilation, provision of amenities such as Toilets, Kitchen and Storage.

The building was found to function poorly, with a 62% failure rate. It does not have an effective forecourt and arrival area. It has no Foyer space. The Main Hall has poor natural daylight and ventilation levels, extremely poor heating and no cooling. There is no flexibility in the Public spaces. Insufficient storage. The centre Kitchen has aged and poor fixtures and fit out. There is poor connectivity between the Community Cottage, the Childcare Facility and the Main Hall. The Toilets are poorly located in relation to spaces other than the Main Hall. The building does not perform well for crime prevention through design. The general level of accessibility through the building is poor. The site planning of the building in relation to orientation, clear street access and addressing other facilities on the Memorial Reserve is poor.

Refer to Appendix for a full function survey

5.4 DDA Compliance

Although a full audit on DDA compliance was not undertaken the building does not satisfy AS1428 Access code, with a sample of non-compliant items noted below:

- The facility does not have a compliant accessible path of travel to the main entry.
- Although most of the doorways are of a reasonable width, they do not allow for the necessary circulation space, around the doors.
- · The Toilet facilities have non-compliant circulation spaces, nor do they achieve luminance contrast.
- · There is no accessible path of travel to the stage.
- · There are non-compliant (temporary) steps to the stage from the hall.
- · There is no accessible path of travel between the Children's Room and the adjacent Playground.

5.5 Regulation 233 and NCC Compliance

Given the age and rudimentary nature of the construction of this building, it is assumed that the existing building would not satisfy the current thermal performance and waterproofing requirements of the NCC. This makes the building a poor candidate to do substantial alterations and additions to, as based on Regulation 233, If more than 50% of a building volume is altered or the building increased by floor area of more than 25%, of its existing area, the entire building fabric including existing, must be brought up to the current building code.

This includes all:

- · structure,
- thermal performance.
- · waterproofing requirements,
- · access requirements,
- · current fire, smoke and flame spread properties of the construction."

This would not be possible with the existing building fabric and would require wholesale replacement and rebuild. Based on the feedback we have received from the community regarding required spaces this regulation will come into effect

Please refer to Appendix for Regulation 233.

5.6 Heritage Assessment

A Heritage Citation was prepared by Context Pty Ltd in 2021.

Refer to Appendix for this Citation

The building was found to be of local significance only, with the original Hall being subject to numerous unsympathetic extensions, over the last 70 years.

Bryce Rayworth Heritage Consultants were engaged to make a further assessment of the building and their advice was as follows.

Council's citation and statement of Local Cultural Significance take in to account the following in relation to the Deans Marsh Community Hall and its broader recreation reserve context:

Historical Value

Architectural Value

Social Value

In relation to these aspects of significance, the following comments can be made regarding the Deans Marsh Community Hall:

- · The Deans Marsh Community Hall as found today is primarily of Historical and Social value.
- The exterior of the building has lost all its original features due to extensions and alterations, other than its central roof form (reclad); this has effaced its architectural character and significance, and therefore the exterior is not of Architectural Value

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- Due to alterations and additions, the Interior of the building is only partially intact. There are no Heritage controls on the interior of the building.
- · If feasible partial retention of intact sections of the interior could be considered for retention.
- · Overall, the architectural significance of the building has been lost
- It would on balance therefore seem reasonable to consider the full demolition and redevelopment
 of the facility
- Any new development must provide an interpretive response to the previous building (this might include the ceiling form of the Hall)
- Provision should be made for the curation and display of historic artefacts pertaining to the History
 of the Hall
- The cultural and social value will continue in the new building, particularly with appropriate interpretation on site
- Other elements within the memorial park (memorial gates, old pavilion building and cypress trees) that contribute to the Historical, Architectural and Social value of the local significance remain intact.

5.7 Issues and Opportunities

After careful consideration of all the relevant elements of the existing building and site services the following Issues have been established:

- · Existing building functions poorly.
- Existing building does not meet Disability. Discrimination Act requirements.
- Existing building does not meet bushfire attack level requirements.
- Existing building has substantial structural and sub-floor drainage issues.
- Existing building is affected by poor site drainage.
- · The building has areas of poor roof drainage and weather proofing
- The existing site and building services infrastructure are aged and in poor condition and will require upgrade and replacement
- Scope of potential alterations and additions to any existing structure will trigger the requirement for wholesale replacement of existing building fabric and structure to meet current codes.
- Existing building poorly orientated for outlook, street address, passive solar performance and indoor/outdoor relationships.
- · The building itself does not have specific heritage controls.
- Heritage Assessment has found the building to be of low retention value
- Careful consideration has been given to the potential to save the remaining central ceiling of the
 old hall as part of the new building. It is has been established that this will not be possible given
 the absence of any of the original supporting walls, the inadequacy of the supporting and roof
 structure over and most importantly the non-compliance of the existing timber lining boards for a
 Class 9B Place of Assembly.

Based on feedback from the community and back ground research into Public Hall Architectural Typology for similar rural community halls of this period, it appears a flat topped vaulted ceiling is a very common feature. An opportunity exists to reinterpret this form in a new building using contemporary and compliant construction materials.

As Deans Marsh is a community well blessed with Creatives of all disciplines, materials salvaged from the existing Hall ceiling could be re-purposed for non-building elements for the future hub and reserve.

The development of a new building will provide the opportunity for a purpose built facility that meets the communities needs, with beautiful and functional spaces, upgraded services, enabling amenities, universal access and a unique Deans Marsh architectural language.

6. Consultation Process

6.1 Introduction

To help understand the Deans Marsh community's needs in terms of a space to gather to connect with one another and to take part in a diversity of activities ranging from social interactions, music, art, theatre, cooking, creating, learning, recreation, etc, a variety of engagement tools were utilised, i.e.

- Workshop and homework activities were undertaken with the Project Steering Group This
 includes representatives from the Deans Marsh Project Steering Group, Deans Marsh Community
 Cottage, Positive Ageing Advisory Group and the Deans Marsh Primary School.
- Community survey
- Community drop-in session
- Written submissions.

This information will be used to provide the architectural team with direction in the formulation of the project brief and ultimately to proceed with design work on re-imagining community facilities in Deans Marsh.

Key messages obtained through the engagement exercises include:

- The significant place the hall has in the hearts of local people and the value it has in connecting the community to one another
- · The strong desire to retain the rural character of the existing building
- The need for any development to have a big emphasis on environmentally sustainable design features, to incorporate natural materials and to create a seamless transition between inside and outside
- The need for any development to be welcoming and inclusive and to be accessible for people of all abilities
- The desire to celebrate indigenous history and to retain a strong connection to the past (Marjorie Lawrence connection, historic photos, plaques and the stage curtain)
- To provide multi-purpose spaces that can be used for a diversity of different activities and events and to adapt to new opportunities as they emerge.

In terms of spaces required, the following spaces have been suggested by the community:

Hall	Cottage	Potential shared facilities
Entrance / foyer	Reception area	Accessible toilets
Hall	Childcare facilities	Kitchen
Program / meeting rooms	Office	Parking
Stage	Meeting room	Outdoor spaces
Art / craft room	Business hub	Paths
Historical display area	Community lounge	
Storage	Grow Free Pantry	
	Storage	

6.2 Workshop with Deans Marsh Project Steering Group

A workshop was held on 10 March with 12 members of the Project Steering Group. Each person was asked to identify the positive aspects of the existing building, the negative aspects, desired features and other opportunities. As a 'homework exercise' participants were asked to provide additional information about the strengths, weaknesses, opportunities and threats associated with the existing building.

More detailed information about each of these exercises follows:

Workshop

Key theme	Details
Promotional tools	There is no mail delivery in Deans Marsh
	 Postcard should have photo of facilities on it and a description of the project
	 Need to use Council database so that people who aren't living permanently in the area can have their say
	Utilise Croca newsletter or mailing list
	Utilise Compass and school newsletter
	 Hold an event with wine, cheese and music for the broader community to have their say
Catchment	Catchment for the hall and cottage includes Bambra and Pennyroyal
Madcap	Need to build on the work undertaken to prepare the Madcap report
Age groups	 Need to ensure that the facility is suitable for all age groups including young people and older adults
Positive aspects of existing	Character of the building
buildings	• Curtain
	Timber flooring
	The hall brings people together
	Close to store and sports oval
	Fond memories of school concerts
Negative aspects of existing	Too cold in winter
buildings	Dark – lack of natural sunlight
	Poor acoustics
	The Cottage is not inviting
	Childcare centre is too small
	Poor orientation

Key theme	Details
Desired features	Build with local, natural materials
	Use local builders and designers
	Fully sustainable building – potentially off-grid
	Commercial kitchen for cooking together
	Nice gardens
	Places to hang out / drop in
	Meeting spaces
	Earthy, organic feel
	Northerly aspect
	Have a sense that the outdoors is inside
	Parking drop-off area for older adults
	Needs to be suitable for exercise classes
	Place of last resort capacity
	Welcoming and inviting
	Storage
	Organic wandering between facilities
	Reconfigure public accessible spaces in The Community Cottage
	Incorporate childcare
	Retain and display important community historical artefacts
	Promote Marjorie Lawrence connection
	 Determine the best location on site for the new building – potentially change axis of building and consider moving / altering the car park, skate park and play space
	Retain the feel of the existing building
	Make connections between hall and festival / markets
	Promote agroforestry and showcase food
	Light, spacious and airy
	Inclusive of all ages
	Communal office
	Celebrate indigenous history
	Connect the community
	Reconsider location of bus stop in town
Other opportunities	Explore potential to collaborate with the school for events and to attract joint funding
	Salvage some of the materials

6.3 Homework exercise for members of the Deans Marsh Project Steering Group

Five people from Deans Marsh Project Steering Group provided some thoughts in relation to questions posed for their consideration after the workshop. Their answers are as follows:

a: "	
Strengths	
What do you see as the positive features of the existing Community Hall, Cottage and Child Care?	 The building itself is problematic. The fact that the hall facilitates these things is the positive feature. The central location of the hall and other small buildings on the site are the social, sporting and arts focus of the community.
	Strong links to the community
	Historically important to the community
	The stage curtain which was created by locals
	 The old photos and memorabilia on the walls
	The hand carved seats and bespoke cauldron outside the hall
	 It's a space that can be used by community groups
	 There are childcare facilities including before and after school care
	The Hall has a stage for performances
	 Gathering space, outdoor fire pit, grow free pantry, carved chairs outside
	 The actual fact that we do have these facilities and that they are used regularly (the building itself is a mess)
What do people love about the	 Connection to previous generations / history (3)
facility?	 Memories about past gatherings /nostalgic memories of past events (2)
	Curtain (2)
	The activities that currently take place here
	 The boards listing the names of those from the district who served in the First and Second World. There is no public war memorial here as in other towns.
	 A place to gather for a wide range of community activities
	Timber floors
	Physically not a lot
	 A community facility / meeting place / sense of community
What works well?	Nothing (2)
	Central location
	 Familiarity and community engagement.
	 Having a commercial kitchen to service community gatherings
	The 'tearoom' has direct access to outside gathering spaces
	 The hall can be used for multiple activities from sewing workshops to table tennis matches
	Childcare / before and after school care

Strengths		
What aspects do you want to retain or replicate in the new development?	Curtains (2)	
	 A warm, welcoming building that looks at home in a rural hinterland location. 	
	Childcare / before and after school care	
	Timber floors	
	Grow free pantry	
	Historical photos and plaques	

Weaknesses	
What aspects of the existing hall don't work so well?	 Kitchen – outdated, in the wrong place to service outside functions, old (5)
	Acoustics (3)
	No natural light / bit dark & dreary (3)
	Poor heating (3)
	 Lack of cohesion between different spaces and uses / layout (2)
	Negligible storage (2).
	 The hall, the cottage and childcare all being in the same building creates endless confusion in the community about "what's where"
	Recurring mould
	 Ad hoc nature of additions over time
	Visual appearance
	Quality of materials
	 Where the building sits on the land e.g. too close to the north boundary
	The entrance to the hall does not face the stage
	There is no foyer to the hall
	The toilets are old
	It is not energy efficient
	 Nothing really for young people
	Cottage space
What don't people like about the facility?	 The set-up required to use the hall for the various activities that take place
	 The way the hub addresses the street and the other buildings in the precinct
	Not enough north light
	No dining area
	Virtually nothing about the community cottage works well
	Car park is dangerous and interrupts other precinct uses
	Old and cold
	The spaces are difficult to use and very outdated
What do we need to avoid in	 Current issues with light, ventilation and drainage.
the new development?	Unsustainable building materials
	Making it complicated to use and high maintenance

Opportunities

What could we do as part of the new development to make the hub an even better place for the whole community?

- Adequate parking with the provision of a driveway to allow drop-off and pick-up for older and disabled community members.
- Explore the feasibility of a collaborating with the school/ education department to fund a well- equipped performance space and a basic gym suited to all ages. This is not just for young people and the sporting clubs. Attendance at regular gym regular sessions is often recommended by doctors for older people.
- Provide basic accommodation as A Place of Last Resort in the event of a serious bush fire.
- To rethink from first principles -where the hub is located, how it is oriented, what it contains and how it relates to the other buildings/uses in the precinct
- A design which is in keeping with the Deans Marsh aesthetic and character
- A building which is designed to last both in materials and design for 100 years
- Move the car parking, except perhaps disabled and drop off loop, to 90 degree on street parking. There is probably not enough space/priority/safety to warrant having the parking on site as currently exists. (If this was done the total number of parking spaces available would be unlikely to decrease)
- Rotate the axis of the most important element of the hub, the hall, from it the current, largely east/west orientation, to north/ south. This would create a new axis between the hall and the other buildings in the precinct such as the football shed, cricket shed and festival pavilion.
- Create a new small piazza where the current car park is. This
 would create the potential for a new axis between the road and
 the oval. The new piazza would provide a community outdoor
 space linking the hub, the oval, the road and the other precinct
 building. And would provide an ideal location for small markets
 (which could spill onto the oval if necessary)
- Locate the community cottage on the road side of the new hall and the childcare on the oval side of the new hall.
- Incorporate principles of sustainability
- A dedicated space for storing and showing the communities history (perhaps this could be the dinning/large meeting room?)
- Courtyards on the north side of the building
- A bell in a 'tower' which could be rung at special times
- Think about youth and kids
- Commercial kitchens, good storage, good acoustics, community lounge room, drop in space, meeting rooms, community gardens, good outdoor space for our events, big central fire pit / outdoor space, cottage space
- Our hub development has the opportunity to be a leader in sustainable building construction, community-led decision aking and fire safe building design due to our bushfire prone area
- More user-friendly, multi-purpose spaces; inviting layout; comfortable; visual appeal; plants; timber; natural

Opportunities	
What activities could occur?	Cooking / food processing (3)
	Films / movie nights (3)
	Music events (3)
	Community dinners / eating (2)
	Meeting / gathering (2)
	Table tennis (2)
	Community performances
	Current uses
	Education
	Emergency gathering
	• Gym
	• Markets
	• Plays
	• Scouts
	Story time
	• Yoga
	Youth groups
What spaces need to be made	Art / craft space (3)
available?	Childcare facilities (3)
	Cottage office space for computers and printers (for community use) (3)
	 Health / fitness space for Tai chi, yoga, table tennis and exercise classes (2)
	Kitchen – commercial (2)
	 Lounge space for dropping in to drink coffee, read a book and chat (2)
	Meeting space – larger space plus smaller break out rooms (2)
	Stage including dressing rooms for plays etc. (2)
	Better parking / access
	• Gym
	• Hall
	Nature area
	Somewhere for teenagers to hang out

Opportunities	
What would make everyone want to use the hub	• Warm (3)
	 Inviting / welcoming atmosphere (3)
	Fit for purpose
	 Community consultation and engagement from the beginning of the project.
	 Exciting and vibrant colors / Visually appealing
	• Design
	 Windows
	 Always open
	 Access process
	 Low community rates for hire
	Built from natural materials
	Quality facilities
	Comfort / Easy

Weaknesses	
What things may prevent us from achieving our vision?	 Poor community consultation - community views not given adequate weight; lack of community participation and consultation; rushed process; not listening to and responding to feedback; difficulties in contacting and involving some members of the community (6)
	 Cost of build and ongoing management staffing cost / inadequate budget (4)
	Being narrow minded
	Not future-proofing
What might discourage people	Not user friendly (2)
from using the hub?	Poor acoustics (2)
	 A building that looks totally out of place in this environment and is not in sync. with the community's values. (e.g. Lorne community's rejection of the Point Grey redevelopment in Lorne.)
	Clinical, harsh, dark
	Difficult spaces Don't know about it
	Don't think they can use it
	 Feeling excluded from planning stage.
	Poor heating and cooling
	Poorly designed gardens
	Too much protocol for access
	Uninviting style

Weaknesses		
What are the threats we need to be aware of?	• Fire.	
	Water supply dependent on rainfall and climate change.	
	The community cupboard (of food) gets vandalized	
	Too much red tape for use of facility	
	Trying to please everyone	
	Sticking too closely to the existing footprint.	

6.4 Written Submissions

The general community was also invited to provide a written submission to share their ideas. A total of five written submissions were received. Key messages obtained from these written submissions include:

No.	Key poi	ints
1		The hall itself is the single most important component of the existing, and future, Hubs.
		The new hall needs a stage. A stage works best when it is on axis with the entrance to the hall, as it is in most theatres. (this is not currently the case)
	•	The existing axis of the hall could be rotated away from the current, largely east-west alignment, to a new north south alignment. The stage would then be the closest part of the hall to the north boundary. This would move the main axis of the Hub away from the nearby street and point it towards the other buildings in the oval precinct.
	•	Potentially the Community cottage could go on the side of the hall closest to the street, east, and the Childcare on the west side of the hall, near the oval.
	•	The current carpark is a major problem, it takes up a lot of valuable space in the Hub precinct and is dangerous for people using the existing hub, including attendees at the Childcare centre. The carpark could be removed from the Hub precinct and relocated as 90 degree on street parking all along the road length of the oval. (possibly indenting the footpath to help accommodate it?)
	•	With the carpark removed a 'piazza' could take its place (for gatherings, markets, outdoor performances etc). This would permit the creation of a new secondary axis between the road, through the new piazza, to the centre of the oval.
	•	The outcome of the above would be a new main axis which starts near the north boundary, runs the length of the hall, crosses a new piazza and continues on to engage with other important spaces / buildings in the oval precinct. Including the playground, BBQ area, footy shed, cricket shed and festival stage.
2	•	Believe a renovation to upgrade the facility while retaining the character and heritage value of features such as the hall ceiling, stage and curtain is appropriate. The Hall redevelopment should also be broken down into three projects, the Kindergarten area, the Cottage and the Hall itself. Perhaps a new building to house the Cottage and kindergarten and physically separated from the Hall would be appropriate? In this way the Hall could be retained and renovated to continue with its valuable community gatherings and functions while catering for the different needs of the Cottage and Kindergarten.

No.	Key poi	ints
3		Believe our present community character, our township's unique character, our Hall and Reserve's unique character, have all evolved generation by generation, by each successive community adding more to the mix, while keeping, respecting and enhancing our past. Believe we must retain contact with our past.
	•	The absolutely essential quality this new and reworked old facility needs is flexibility (not every space of course, not the toilets, the childcare, the Cottage office – spaces with very specific requirements). For many other spaces most of all what we need is bare bones quick and easy flexibility.
		Believe there will need to be some sensitive trade-offs between sustainable and practical, e.g. easy to store furniture.
	•	The more the operational design imposes on us – the less creative we can be with those spaces in the decades to come
	•	This Place Making should be most of all about making communing easy, fun, flexible, adaptable, as the years roll by. About sustaining our community as it evolves.
		Not Hub building as a goal in itself, but Hub building as a means to help
		sustain and evolve the very special community we see ourselves to be.
4		The Hub development needs to take into consideration five key elements:
		Childcare – our future
		Cottage – our present
		Hall – one part of our past
	•	Indigenous recognition – the deep past of our place – should be something that acknowledges, respects, and celebrates those who cared for this Place for thousands of years before the white colonial "Us" took over. A place of contemplation. A place of education. A place where we might feel the shadow of shame, as we should. A place where we can help make a small but important contribution to reconciliation.
	•	Ecology and environment - The landscaping, the outdoors setting for this Hub, could / should reflect and celebrate our present and historical natural ecology and environment; Our Earth, Our Water, Our Fire, and Our Air (the Dreaming of all who have ever settled here, in deep history through to right now. Who have always done far more than just live here; who have always dreamed of making, and acted to make, Our Place a Better Place).
5	•	East Otway Landcare has assets currently spread among several members houses/sheds. It would like a small dedicated shed to house these community assets in the new hall development. This would enable community members to more easily access tools and also help strengthen the group's presence in the community.
6	•	Too cold in winter
		Dark – lack of natural sunlight
		Poor acoustics
		The Cottage is not inviting
		Childcare centre is too small
		Poor orientation

6.5 Social Media

One social media post was received from the Deans Marsh community on 8 April 2022. The suggestion included in this post was for a soft play area.

6.6 Community Drop-in Session

A community drop-in session was held at Dean's Marsh Community Hall on Friday 8 April from 6pm to 8.30pm. Approximately 50 local residents were in attendance. People had the opportunity to place their ideas on sticky notes; talk to the project team; complete a survey (10 completed on the night); or take part in an impromptu group workshop towards the end of the night. Children were also able to draw pictures or write down their ideas. Key issues and opportunities identified at the drop-in session are as follows:

Sticky Notes

Dicky Notes		
Topic	Details	
What do you like most about	Sense of place	
the Hall and the Cottage	Identity	
	Hub of Deans Marsh	
	Brings community together	
	That it's here – that is all	
What don't you like about the	Childcare facilities need to be separate (3)	
Hall and the Cottage?	Kitchens are sub-standard (2)	
	Car park is dangerous (2)	
	Acoustics (2)	
	Separate meeting rooms at the Cottage are needed	
	Building location moved towards pizza oven to engage with the reserve	
What activities would you	Music (3)	
like to do in the Hall and the Cottage in the future?	Board games (3)	
cottage in the latare.	Community cooking (2)	
	Reading room (2)	
	Community dark room	
	Dancing	
	Colouring	
	Community loungeroom	
	Classes	
	Used when market is on	
What spaces do we need in	A dedicated space for under 18's	
the hall and the cottage in the future?	Spaces for live entertainment, social interactions and informal meetings	
	Open space with allocated areas	
	Retractable wall	
	Community loungeroom	
	Commercial kitchen for cooking classes and emergency food catering	

Children's Ideas

A children's table was set up and children were asked to draw a picture of themselves doing their favourite activity or draw their favourite thing about Deans Marsh. Responses included the following:

Topic	Details
Activities desired	Board games (3)
	• Books (3)
	Colouring
	Giant chess set
	A kitchen and a chef
Upgrades / developments	• Toilets
required	Kitchen
	Pictures
	A playroom for little kids and babies
Favourite places	Skatepark
	General store
	School (4)
	Park and playground

One-on-one discussion with the project team

10 one-on-one conversations were held during the evening. Key points raised include:

Topic	Details	
Accessibility	It is hard for people with disabilities to access the hall	
Acoustics	 Acoustics need to be improved (4) 	
Activities	 Indoor bowling 	
Aesthetics	Existing hall is charming	
	Retain country aesthetics	
	Preserve the character	
Art / craft	 Need a craft room to store sewing machines and industrial sewing machine. Also needs tables suitable for sewing. Ideally will have a concertina door to open up the hall space for pattern cutting 	
Building structure / features	 New build needs to be light and warm 	
	Orient building better	
Camping	 Could establish a camping ground for young hospitality staff who work in Lorne but cannot find affordable accommodation there. Would need a camp kitchen and an ablution block and space to hang out with the community. Camping could be available for other events like music festivals or dog trials. 	
Car Park	Car park is dangerous – it should be circular	
Childcare	Childcare should be separate from the Hall	
Community groups	 Provide an opportunity for the CFA and kinder to raise money by using the kitchen in the Hall 	
Cottage	The Cottage and childcare could be placed into a new purpose-built facility, thereby freeing up the existing cottage to be used by the Hall users	
	Better integrate the Hall and the Cottage	

Topic	Details
Curtain	Need to retain the curtain
Demolition of hall	Don't demolish the existing hall – structural building issues can be fixed (2)
Drainage	Need to fix drainage at door to hall
Emergency shelter	Provide showers for emergencies.
	 Could potentially rent the hall out to other groups / organisations if it has showers
Environmentally sustainable design (ESD) features	Include solar panels
Governance	Keep 2 separate committees
	Only have 1 committee of management
Gym	Develop a community gym
History	Provide an area to retain historical information (2)
Intergenerational	Provide opportunities for all age groups
Kitchen	Kitchen should be separate from the hall
Lounge area	Install a fireplace and acquire couches and a bar
Market	 Hall and kitchen are currently closed when the market is on – they could be opened to enhance the market
Meeting rooms	Meeting rooms required for professional people (3)
	Need a space for community meetings
	 Community meetings should be set up with audio visual communications and Wi-Fi
Plans	Plans drawn up by Frank are still very relevant
Relocation	Move the hall to the tennis court area
Retention	Retain the original part of the hall and ceiling
School	Important to continue to promote school use
Stage	The stage should be portable and it should be able to be accessed from the street. A green room with showers should be made available behind the stage. Need an undercover area so musicians can unpack their car without their instruments getting wet.
Toilets	Toilets should be moved to a different spot

Group Workshop

The 25 people who took part in this exercise were asked to identify their vision for the Hall and the Cottage in the future and what is important to them. Their responses included the following:

Topic	Details
Acoustics	Need to provide good acoustics
Activities desired	Film nights
	Music
	Dancing
Aesthetics	Country hall feel with a gothic peak
Art / craft	Provide a dedicated art / craft room

Topic	Details
Building structure / features	Make this the first significant building in Deans Marsh
	Natural building techniques
	Local builders
	Passive solar (lots of glass on the north side)
	Fire retardant
	Recycle some of the existing materials
	Needs to be north facing
	Incorporate concertina doors
	 Install load bearing posts that are designed to look like rustic tree trunks with carvings on them
	Be a leader in sustainable building and consider building off- grid
	Consider developing a mezzanine
Camping	Provide opportunities for people to camp at the site
Commercial kitchen	 Commercial kitchen required to cater for shared community cooking; cooking classes; catering for weddings, parties and funerals; community lunches; community dinners
	Consider social enterprise model for a café which could also provide meals on wheels
Cottage	Provide a hang out space with comfortable chairs and coffee
	Move the Cottage slightly
	Have a separate entrance to the Cottage
	Provide kitchen for childcare
	Improve office space
	Retain childcare
	Provide storage
Emergency shelter	Consider incorporating features to cater for the community during emergencies – kitchen, showers, toilets, large space for sleeping
Environmentally sustainable design (ESD) features	Provide charging station for electric vehicles
Food	Consider growing food, including on any new build
History	Provide a place to display local history
Indoor / outdoor	Construct a large veranda
Intergenerational	Provide opportunities for all ages
Interim hall	 If the hall gets rebuilt, there is a possibility that the hall in Pennyroyal can be used until such time as a new hall is complete
IT	Provide IT equipment such as Wi-Fi, audio visual equipment, screens, etc
Meeting rooms	Provide meeting rooms for community groups as well as people working from home
Older adults	Provide space for older adults to connect with others
Paths	Ensure that there are pathways to connect to the site, including the area the other side of the pines (may need to purchase / lease some land)

Topic	Details
Regulations	Technically because childcare is on site, people need a Working with Children's card to be in the hall and the cottage at the same time
Reserve	 Need to develop a master plan for the remainder of the site to show relationships and how spaces connect to one another
Shed	 Consider developing a (gender neutral) shed where people can work on their projects (like the men's shed model)
Social space	Couches
	Open fireplace
	Circular cauldron with chimney made of sand stone
	coffee station
Storage	Provide storage cupboards / spaces for each regular user group of the hall
Vibe	Needs soul
Young people	Consider placing a basketball ring on the tennis courts
	Provide opportunities for music and art

7. Consultation Outcomes

7.1 Community Survey

A community survey was designed to hear from the broader community about what they like, what they don't like about the Hall and the Cottage and to identify the types of activities and spaces they would like. A total of 129 surveys were received. Of these, 58% people filled the survey out on behalf of themselves, while 39% filled the survey out on behalf of their family (therefore representing the responses of two or more people). Three percent of people filled the survey out on behalf of someone else. More than half of all respondents live in Deans Marsh (59%), with the remainder living in surrounding towns such as Bambra (15%) and Pennyroyal (15%), or part of their time in Melbourne.

In summary, local residents view the hall and cottage as the beating heart of the community and value their importance as a place for the community to connect with one another whilst taking part in a diverse array of activities including music, community events, markets, festivals, communal cooking, community dinners, meetings, art and craft, exercise classes and school performances. They would like to see the hall and cottage redeveloped in a rustic, country style, comprised of a variety of multi-purpose spaces that can be adapted to different needs. Some of the spaces desired include a hall, meeting / program areas, art / craft space, kitchen, childcare facilities, business facilities and an informal community lounge area. They want the facility to be constructed of natural / environmentally sustainable materials. Natural light, good acoustics and effective heating and cooling have been identified as factors that will enhance the experience of users. Connectivity with the outdoors and the past are important inclusions. There is also a strong focus on ensuring that the facility is warm and welcoming and inclusive of everyone.

Usage of the Deans Marsh Hall and Community Cottage

Of those who filled out the survey, 96% of people use the Deans Marsh Hall and Community Cottage for a variety of different activities – primarily community-based events such as the market, functions and the festival, as well as the Deans Marsh Grow Free initiative. The 10 most popular activities these facilities are used for (in order) include:

- Deans Marsh Community Market (78%)
- Community functions (77%)
- The Festival (73%)
- Deans Marsh Grow Free (63%)
- · Private functions, events (37%)
- School performances (33%)
- East Otway Landcare (26%)
- Spark! Craft Gathering (22%)
- · Childcare (21%)
- Marsh Fit Group Exercise (13%)

Non-use of the hall and cottage

Of those people who currently do not use the hall and / or cottage, the main reasons identified include:

- It's too cold in winter and too hot in summer (15%)
- There are no activities there that interest me at the moment (15%)
- The acoustics make it difficult to hear people (12%)
- The facilities are not to the standard / size I need (3%)

What people most love about the hall and cottage

Respondents were asked to identify what they most love about the hall and cottage. It's historical significance, its central location and the fact that it is a great place for the community to meet and gather for a variety of activities and events are the key factors. The ten top responses were:

- 1. History / heritage
- 2. Good community gathering / meeting space
- 3. Location
- 4. Diversity of activities and events
- 5. Provision of childcare and before and after school care
- 6. Low key, relaxed, country feel
- 7. Community connection / brings people together
- 8. Curtain
- 9. Memories
- 10. Stage.

Factor	No. of responses (n=125)
History / heritage / connection to past / family connections	32
Good meeting / gathering place / community hub	26
Location / central	22
Activities / programs / courses / education / events / services	20
Childcare / Before School Car / after school care	19
Low key, peaceful, relaxed, country feel, community vibe, charm	18
Community connection / brings people together	12
Curtain	9
Memories	7
Stage	6
Accessible to the community	5
Architecture of hall – country-style, the central rectangle of the hall: the shape of the ceiling, lining boards on the walls and ceiling, the stage, the beautiful jarrah, pitched roof	5
Grow Share Pantry	5
Gas heater	3
Hall is a good size for concerts, meetings and events	3
Heart of the community	3
Inclusive and belonging	3
Integration / proximity with other community facilities, e.g. school and recreation reserve	4
Well used community facility	3
Wooden floor	3
Builds a stronger community	2
Multi-functional space	2
Neutral space	2
Old and quirky, unpolished ambience	2
Outside fire pit area	2
The people	2
Welcoming	2
Amenities, e.g. large kitchen, kiosk with outside servery	1
Artistic decorations	1
Artistic group hub	1

Factor	No. of responses (n=125)
Cottage has community led / shared activities	1
Diverse community that shares core values	1
Environmental charm	1
Flexible seating area	1
Good parking	1
Humble place	1
Old fashioned toilets	1
Outside space	1
Partnerships with the school, St, Paul's Deans Marsh , Red Cross and the Fire Brigade	1
Perfect sized hall	1
Recycling programs	1
Responds to community needs	1
School Christmas Concert	1
Sense of place	1
Support for others	1
Youth activities	1

Quotes:

It's a place of gatherings and connections.

It's a place where memories are shared and made.

The hall is welcoming and full of memories of its era and must be preserved.

The historic feel and being in keeping with the rural environment and feel of our small community. This evokes memories of bygone days and connects us with our past, providing cause for beneficial reflection. It also provides a happily 'slow', relaxed feel – a perfect antidote for the increasingly busy world we live in, and another happy reminder of how special our local community and area is.

The memories that the building generates...this is central to community feeling.

We have lived in Deans Marsh for 38 years and the hall has always been extremely important for social gatherings, meeting new people, sharing skills, making music and all sorts of fun.

It brings warmth... even though it's a cold building.

I love that community activities held at the cottage bring people together and encourage locals to share their skills with one another. I love that it's community-led.

A place where I know I can always find someone I know.

I love that it's old and quirky.

A space to bring the community together for all things: socials, art, music, political, discussions, food, events

As a mother who does not have access to any support from family close by, I have relied heavily on the facilities provided at the cottage. I would not have been able to transition back into paid work without access to local childcare facilities. Please preserve a childcare space at all costs. It is essential to supporting the families, and most importantly the women, in the Deans Marsh community.

This is a vital community centre where every important meeting or gathering takes place.

The best times in the Marsh happen there!!!

Proximity - for me that means a full day of work without dropping kids into Colac for day care, and the main motivation for me to exercise. If I had to travel further to exercise for instance, I wouldn't. For example, I know there are a gym and pool in Winchelsea, but that can feel too far to travel.

What people don't like about the hall and cottage

The top 10 things that survey respondents said that they don't like about the existing hall and cottage primarily related to heating / cooling, acoustics, the kitchen and the fact that facility is considered to be outdated and in need of modernisation. A reasonably high proportion of survey respondents stated that there is nothing that they don't like about the hall. The top 10 factors identified are:

- 1. Heating / cooling / cold
- 2. Acoustics
- 3. It's outdated / needs modernising
- 4. Kitchen
- 5. Nothing (they like it as it is)
- 6. Cottage size and function
- 7. Not warm / welcoming
- 8. Not enough flexibility with spaces for different sized groups
- 9. Mould / musty
- 10. Lack of small meeting rooms

Factor	No. of responses (n=119)
Heating / cooling / cold	29
Acoustics	29
It's outdated / needs modernising	22
Kitchen – outdated, need commercial kitchen, need outdoor servery for events, need a separate bar / coffee servery into hall, poor function and layout	19
Nothing	16
Cottage has lack of suitable office / reception space / ugly / too small / uninspiring entrance	13
Not warm / welcoming	9
Not enough flexibility with spaces for different sized groups	6
Mould / musty	6
Lack of small meeting rooms	6
Toilets – old fashioned, in the wrong spot	5
Doesn't meet needs of young families / young people	5
Layout of facilities, pokey, rabbit warren	5
Internal lighting and location of light switches	5
Not enough activities offered	5
Childcare - too close to other facilities; not an appropriate set up; more places; should be a separate building with childcare	4
Extensions to hall are cheap and nasty	4
The entrance floods	4
Management	4
Axis of building to site	3
Car park	3
Infestation – mice, mosquitos	3
Lack of all abilities features	3
Lack of integration with outdoors	3

Factor	No. of responses (n=119)
Lack of storage	3
Hall too big for smaller activities	2
No designated arts space.	2
No informal social gathering space	2
No outdoor lighting	2
Activities currently feel a bit half hearted and disjointed.	1
Building is not environmentally sustainable	1
Difficult to clean	1
Drive-way / drop off	1
Entrance not connected to rest of reserve buildings and outdoor areas for events	1
Hall could fulfil a much bigger role in bringing the community together	1
Inability to use sustainable options such as solar panels	1
It is disconnected from the rest of the reserve uses.	1
Kitchenette	1
Lack of dedicated space for Spark textile equipment	1
Lack of information about what is available	1
Lack of informal meeting spaces	1
Lack of space for fitness classes	1
Lack of visible architectural appeal	1
No kitchen for family day care to easily access	1
Not big enough	1
Not integrated management of spaces	1
Not enough designated spaces for different needs.	1
No large undercover area	1
Poor ventilation	1
Sense of not being able to access	1
Septic system	1
Spaces are not to the standard that a growing community requires or deserves to flourish	1
The storage of furniture is not very user friendly.	1
Too small for some community events	1
Uncomfortable	1

Quotes:

It's time for a more useful use of space that accommodates different sized groups.

Not enough activities to meet the needs of a growing and more diverse community.

The hall is unappealing, not welcoming, it's dark and cold and has really bad acoustics.

The portable library comes every Friday, which is great but I think that the cottage could build on this by creating an inclusive space for people visiting the library to sit, read, chat, participate in activities etc.

Usually during the day the cottage just sits there dark and empty.

It does not have a conducive atmosphere that allows for meaningful community engagement. It feels like a shed with a makeshift stage.

It's hard to know the cottage is even there, has an unwelcoming layout, difficult for staff to have dedicated workspace, hard to access the tech facilities offered, has no meeting space and can get stuffy.

The cottage and the hall are currently separate buildings and managed separately- they should be joined and managed together- a true hub.

As we don't have a pub in town the hall could fulfil a much bigger role in bringing our community together.

The building is not welcoming, you can't see into it - it's intimidating opening the doors, you have no idea who is in there, what they are doing and even if you're welcome to come in.

There is no storage space - we are using the best, light filled, north facing room in the Hall entirely for storage of chairs and sound-bats.

Vision for the hall and cottage in the future

Survey respondents primarily described what the facility should look like and be constructed of, as well as described the types of gatherings and activities that it should be able to cater for. Their answers focussed on natural / environmentally sustainable materials in a facility that has a rustic, country hall style and lots of natural light. Activities suggested were diverse, hence the need for multi-purpose spaces of different sizes that can adapt to different needs. Childcare facilities, a kitchen and connectivity with the outdoors and the past are important inclusions. There was also a strong focus on ensuring that the facility is warm and welcoming and inclusive of everyone.

Vision	No. of responses (n=122)
The facility:	56
 is built using natural / environmentally sustainable materials 	
 blends, belongs and settles in with the natural colours of the Marsh and the landscape 	
has a high level of energy efficiency	
is functional	
 emphasises enduring beauty and quality design 	
 is built using fire retardant materials 	
 has a small impact on the landscape 	
looks like a rustic country hall	
is classic and timeless	
 is made to be practical, durable and low maintenance 	
feels intimate and inviting	
• is spacious	
has a high-pitched roof	
 showcases beautiful timber from the region 	
is inspiring	
is architecturally challenging but engaging	
is modern inside	
 is constructed of stone, wood and glass, but not concrete (as a feature) 	
reflects the Otway hills.	

Vision	No. of responses (n=122)
Gatherings / activities – need to be able to cater for a broad range of activities based on community needs and interests including:	52
 meetings of local groups, e.g. Landcare, CWA, men's club, book club 	
 education and information sessions 	
art / craft	
 exercise programs / fitness classes, e.g. yoga, pilates and Taekwondo 	
dinners / afternoon teas	
music / concerts	
 amateur theatre / small theatre performances 	
dance	
• films	
 mums and bubs / playgroup 	
children's activities	
youth activities	
 cooking and food growing 	
 private functions, e.g. birthday parties, weddings, funerals 	
community celebrations	
school activities / events	
• markets	
• festival	
 voting 	
bushfire support / relief	
sport, e.g. table tennis	
There is a central hall with separate multi-purpose spaces that can be altered in size to suit activities	31
Dedicated childcare facilities incorporating	26
improved facilities	
sleep area for children	
 secure play area (maybe if the building was shifted onto the current car park, the childcare play area could integrate with the park playground for bigger kids by means of a gate) 	
Inclusive of all ages, genders, abilities and backgrounds	22
Natural light	19

Vision	No. of responses
	(n=122)
Modern kitchen able to be used for:	19
catering and functions	
cooking classes	
food sharing	
food preservation	
school cooking classes	
communal cooking	
Consideration should be given to:	
commercial standard and registration	
community food coop space	
 storeroom for bulk foods and big space for fridges and freezers 	
outdoor servery (where people can have coffee)	
Garden / landscaping:	13
native landscaping	
 indigenous garden surrounding that highlights plant species local to Deans Marsh specifically 	
edible garden	
community garden	
bush food	
Indoor outdoor connectivity – including large windows / bifold doors	12
Similar / much the same, but with upgraded facilities	12
Warm and friendly and welcoming – a happy place	11
Modern and contemporary building	10
Honours heritage and history	7
Hall and cottage as separate buildings	7
Bright and airy	6
Business hub / meeting rooms for those local business operators who work from home, with an organic café	6
Cottage is purpose-built and more spacious and features a reception area, meeting room, computer room, small library	6
Car park:	6
• asphalted	
relocated / better positioned	
 space for food trucks and mobile library to park 	
bicycle parking	
space for electric vehicles (including community bus) to charge	
Comfortable communal drop in space like a lounge room to interact / meet socially	6
Cosy snug space for informally catching up with other members of the community	6
Open plan / less pokey	6
Better toilets / family change room / accessible 24/7	5
Good acoustics / sound proofing	5
Good heating / cooling	5

Vision	No. of responses (n=122)
Stage	5
Welcoming entrance from the roadway and into the building via a courtyard with undercover internal awnings for weatherproofing and seating	5
Gym	4
Outdoor play area – basketball half court, undercover area, children's play area	4
Storage for all user groups	4
Used day and night; perhaps 24/7 with swipe cards for access	4
Youth activities	4
Accessible for people of all abilities, e.g. ramps, toilets	3
Library service with story time and author's talks	3
Local artist's work / indigenous art on the walls / gallery space	3
North facing building	3
Outdoor space with shade and shelter, pergola, seats	3
Passive / solar heating and cooling	3
Technology for live streaming movies, etc	3
Views from full length glass panels overlooking sports field and primary school	3
Childcare separate from both the hall and the cottage	2
Clean	2
Good security / feels safe	2
Information about what's on/ big notice board with upcoming events	2
Retention of key parts of the original hall – the central rectangle.	2
Verandas	2
Visible acknowledgement of traditional owners, local aboriginal artwork and storytelling	2
Welcoming open space office and workspace in the Cottage	2
Accessible change rooms	1
All abilities access	1
Another room for activities	1
Better chairs	1
Bright colours	1
Child friendly	1
Comfortable	1
Community- and pet-safe place for emergencies such as fires	1
Cultural exhibitions	1
Curtain	1
Dedicated arts space	1
Designated areas for community recycling and pantry	1
Easy to move around	1
Employ local builders	1
Firepit in the middle of the courtyard	1
Food recycling system	1
Grow Free Pantry	1
Hall and cottage manged as one entity	1

Vision	No. of responses (n=122)
Hall is fully refurbished back to its original state	1
Heating	1
Indoor climbing wall	1
Information / notice board	1
Local involvement - locals have been part of designing, creating and supplying the materials for the build	1
Open on market days	1
Parking for mobile library and food trucks	1
Prayer space	1
Promotes opportunities for people to enjoy friendship and mutual support, I e, building community.	1
Reduces impact on volunteers	1
Separate childcare area	1
Site integration – the building should consider and integrate the broader reserve and other buildings/facilities	1
Space for art exhibitions	1
Swimming pool	1
Toilets in front lobby	1
Weatherproofing	1

Quotes:

People are laughing, smiling and feeling really proud of what we have created because good community spaces and opportunities to gather create opportunities to build good community relationships and networks.

The community is very strong here! Given a new community hall it will thrive. The vagabonds and artists of this town will make it their own!

An appealing site for all community interactions based on good design and functionality for generations not yet born to benefit from.

The facility looks like a country hall but with modern amenities such as heating, technology, different spaces. The facility honours heritage and history.

The Hall and Cottage are like community lounge rooms facilitating community connection, wellbeing and involving people to learn new skills, meet other people and improve their confidence. The Hall and Cottage are not 'inside only' buildings, meaning they have inspiring community spaces outside including places to grow food, art works etc to invite people to get together.

An emphasis on design and enduring beauty as if love was the motivation not money.

A place for gatherings – large and small – learning, cooking, playing, exercising, connecting, laughing...

A room that local business can use for the odd meeting (many 'work from home' setups are not ideal for meeting clients etc.).

A place where great projects and ideas can be facilitated. A strong cohesive place where all can have a say not just a few. A place of inclusiveness. A democratic space.

A small, humble building that doesn't try to 'make' spaces but rather lets them evolve. There is an indigenous garden surrounding that highlights plant species local to Deans Marsh specifically.

The facilities look tidy, rural, heritage, cosy. Families and community members use the facilities to gather and chat, play and create. This is not a place for large volumes of people, it is a small, inviting and charming setting - different from the larger coastal Towns - it is Deans Marsh!!

If I was to imagine replacing the old hall, which I have a lot of fond memories at, I would love for it to look like a community home. A cozy house that is inviting and can host and facilitate the community.

Type of activities people and / or their families would like to participate in the future at the hall or cottage

Survey respondents identified a vast array of activities and events that they would like to participate in in the future. Many of these activities and events involve social connections, health and well-being, self-improvement and arts / culture. The top 10 activities and events included:

- 1. Community events / entertainment
- 2. Health and wellbeing activities
- 3. Music
- 4. Meetings and gatherings
- 5. Art / craft
- 6. Learning
- 7. Childcare
- 8. Cooking
- 9. Markets
- 10. Festivals

Activity	No. of responses (n=120)
Community events / entertainment nights, school concerts, performances, fundraisers, music, food, dancing, Christmas lunch, fashion parades, trivia nights, comedy, card and games nights	43
Exercise / fitness / health / wellness, e.g. yoga, pilates, tai chi, Taekwondo	40
Music / Music @ The Marsh / choir	37
Meetings / gatherings / seminars, e.g. informal gatherings, club / organisation meetings - Landcare/agroforestry/bee groups	32
Art groups / craft / make things / broaden scope of Spark, sewing / pattern making / limestone sculpting	31
Short courses / weekly classes / workshops / creative classes / educational classes / skill sharing, e.g. parent support course, natural medicine, environmental, history, health and wellbeing, business, youth employment skills	27
Childcare / day care / before and after school / care 5 days per week / school holiday programs	22
Cooking / community cook-ups, men's cook up, preserving classes, cheese making	16
Markets / fetes / farmers market	14
Festivals	12
Community dinners / food nights	11
Celebrations / private events, e.g. weddings, birthdays, funerals, playdates	10
Library / literature activities, e.g. story time, author talks, book clubs, book exchange	10
Youth activities	10
Food growing / gardening / horticulture / food swap / bulk food coop	9
Theatre / drama / circus	9
Dances – classes, gigs and practice facilities, all ages, disco	7
Film nights	5
Activities that are accessible to all	5

Activity	No. of responses (n=120)
Children's activities and classes	4
Gym classes (with equipment)	4
Playgroup / Toy library / Mums and bubs catch ups	4
Table tennis	4
Activities for older adults, e.g. U3A	3
After school activities for children / tweens	3
Business activities, e.g. remote work space, consulting space for clients / work meeting rooms	3
Informal sports, e.g. indoor climbing, darts	3
Swimming	2
Voting	2
Referrals and advice – aged care, medical and social issues	1
Repair café	1

Quotes

I would love to see somewhere that teenagers (particularly girls!) could feel they could hang out safely and socialise informally with other young people.

Musical events through winter to bring the community together during the colder months.

I'd like to see more weekly classes and short courses available - more activities for the youth - the solstice and other community events are fantastic.

Would love to see Music at the Marsh happening for all those talented people in the community to be able to have the opportunity to perform.

Just catching up somewhere sheltered for a quiet beer/coffee with a mate after going for a run/walk (a space that encourages and fosters getting together).

Gather as a community group in a warm user-friendly space.

I'd like to run cooking/ preserving workshops in the kitchen and have a big island bench with stools for people to sit around.

Community get-togethers with music food and dancing

I'd like to attend music nights and community gatherings.

I'd like regular events for kids and adults like dancing and circus.

I'd like to help organise and run a food coop of bulk foods and a drop off/ distribution point for local farmers to drop and sell their produce from.

Spaces or features required at the hall or cottage for desired activities

The key spaces identified by the community for the re-imagined community hall and cottage space are:

- Kitchen
- Multi-purpose spaces, i.e. a hall plus a number of program / meeting rooms
- Outdoor spaces
- · Childcare facilities
- Good acoustics
- · Heating / cooling
- Stage

- The same facilities / spaces as now (but upgraded)
- Technology
- · Several rooms designated to specific activities, i.e. art and craft.

The full list of responses follows:

Space/feature	No. of responses (n=122)
Kitchen – decent, commercial, quality cookware, fridges, freezers	28
Multipurpose spaces - a mix of larger and smaller spaces - using dividers	20
Hall / auditorium	17
Program / meeting room / smaller spaces - carpet, kitchen access, natural light	16
Outdoor space / courtyard / undercover area / firepit	14
Childcare / family day care facilities - bathroom, kitchen, playground and storage	12
Good acoustics	11
Heating / cooling	11
Stage	10
Same facilities / spaces as now – just upgraded	9
Technology, Wi-Fi access, AV, screens and sound equipment	9
Designated rooms built for specific purposes, but which can open out to the hall space too, e.g. art / craft room	7
Well-designed furniture, e.g. comfortable chairs, easy to store	7
Historical display area	6
Lounge cafe areas / cosy informal room - couches, coffee tables, beverage station	6
Warm and inviting	6
Community cottage – office space, separate kitchenette, separate toilet, reflect local character, extended meeting room able to hold classes in it, storage space	5
Community garden / garden	5
Open plan / airy	5
Storage	5
Gym	4
Indoor outdoor connectivity	4
Clean rooms	3
Natural light / light	3
New public toilets - accessible from inside and outside the building	3
Technology	3
Bar	2
Business hub / office spaces that can be booked	2
Emergency refuge	2
Local art work on walls / gallery space	2
Play area	2
Swimming pool - heated, lap	2
Wooden floor	2
Backstage change area	1
Beautiful facility	1
Café	1

Space/feature	No. of responses (n=122)
Charming, country aesthetic	1
Comfortable and easy to use / set up and pack away	1
Computer room	1
Entrance	1
Expanded skate park	1
Fireplace	1
Fit for purpose spaces	1
Footpath	1
Grid interactive or independent solar power	1
Health services	1
Integration with school	1
Larger facility	1
Mirrors for dance / exercise classes	1
Modern décor	1
More established recycling drop-off points	1
More windows	1
Natural materials	1
Not having to pack up furniture every time.	1
Plants	1
Power points	1
Purpose built for sewing machines or pianos or table tennis to encourage impromptu and casual use frequently.	1
Quality built facility	1
Quiet room	
Service area for fundraising.	1
Suitable space for music	1
Swipe card access	1
Technology space	1
Water fountains	1

Quotes:

I wear hearing aids and the acoustics is terrible which in the large hall space sometimes makes me decide not to attend something because it's all too difficult, thus I would like some smaller spaces maybe with carpet.

Commercial kitchen would be so well used and have many uses.

A room or space for the display of the historical items, currently mounted on the hall's walls as well other items that local families have collected over the generations. A place for the historical records and archives, so that the unique history (including the first Australians' history) of this area is kept and respected.

A craft room where this equipment could be permanently housed and used would be ideal. When there are large gatherings, it would be good to be able to break out into a larger space and use the trestle tables on risers for cutting and laying out materials and patterns.

A footpath!!! We live on Winchelsea Road in Deans Marsh and the footpath stops at The Store. This is a massive barrier for us walking to the Hall and Cottage, and means we often drive up there.

Please be fully accessible, there are several families in our area that have family members in wheelchairs, it is heart-breaking when they don't attend functions due to accessibility issues.

Well-designed north facing indoor and outdoor gathering spaces surrounded by low maintenance gardens.

A large indoor gathering space with some smaller connecting meeting rooms or shared spaces.

Areas allocated for a relaxed chat or informal meetings, maybe with couches and coffee tables.

A large space to accommodate live music and local functions with great acoustics would be wonderful.

An inspiring space where people feel welcomed and comfortable to attend and bring family or friends regularly

Airy, clean rooms that have a nice feel with natural materials (especially if yoga type classes are held there)

A mix of large and small spaces - setup so group can keep their 'things' (equipment/documents) handy and accessible but secure from other users.

Spaces that can be booked and informal spaces (eg outdoor courtyard) accessible anytime, without reservation

Toilets accessible from inside and outside to save long walk to other end of reserve (benefits playground and markets, festivals etc).

7.2 Community Workshop

A community workshop was held at Deans Marsh on Friday 27 May to present the community with feedback from the engagement process and the site analysis information that has been undertaken. The community was asked to respond to some potential design styles and inclusions via mood boards, i.e. posters with a variety of different images on them. Participants were asked to identify the style of facility design and inclusions that they like by placing a green or blue sticker on corresponding images. For those images that they don't like, they were asked to place a red or orange sticker on it. Results of the mood board exercise reflect the outcomes of the community engagement process, i.e. use of natural materials, natural light, rural / rustic theming, seamless transition from inside to outside, a lounge space, a stage, multi-purpose spaces suitable for a variety of activities and an acknowledgement of the historical past. An assessment of each poster follows:

Types of spaces required

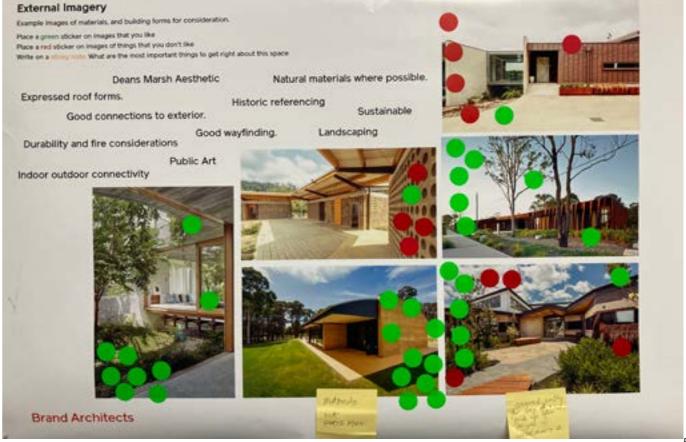
A list of potential spaces was printed onto a large poster and participants were asked to place a green or blue sticky dot on features that they want to see and red or orange sticky dot on features that they don't want to see. Only two people were observed undertaking this activity. The most important features of the hall to these two people are stage, historical display area, storage, art / craft room and program / meeting rooms. They were particularly keen to see a suitable space for yoga and tai chi. An entrance / foyer and hall did not rate (although it was probably assumed that these components would naturally feature as part of a hall). The most important features of the cottage for these two women included grow free pantry, childcare facilities, office, meeting room and storage. A reception area, business hub and community lounge did not rate. Once again, it is probably assumed that a reception area is a given.

External imagery

The spaces that received the most green or blue stickers incorporated natura materials such as wood, glass, rammed earth, stone, etc. Spaces with large areas of brick or concrete did not rate highly. Facilities that look modular or like a shed also did not rate as well as those that generally had more rounded shapes or were more traditional / rustic / rural in style. The connection with the outdoors and nature was prevalent in all images that rated highly. The importance of having a covered entry for pick-ups and drop offs (especially for people with mobility issues) was noted.

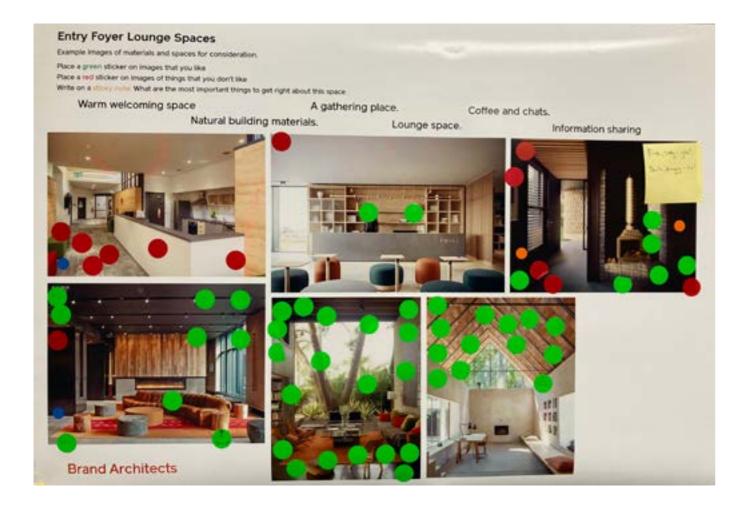
A discussion was held with neighbouring residents on the night. This couple indicated that if the hall is developed with a north facing alignment, consideration will need to be given to developing some form of screening between the hall and their property to ensure their privacy.





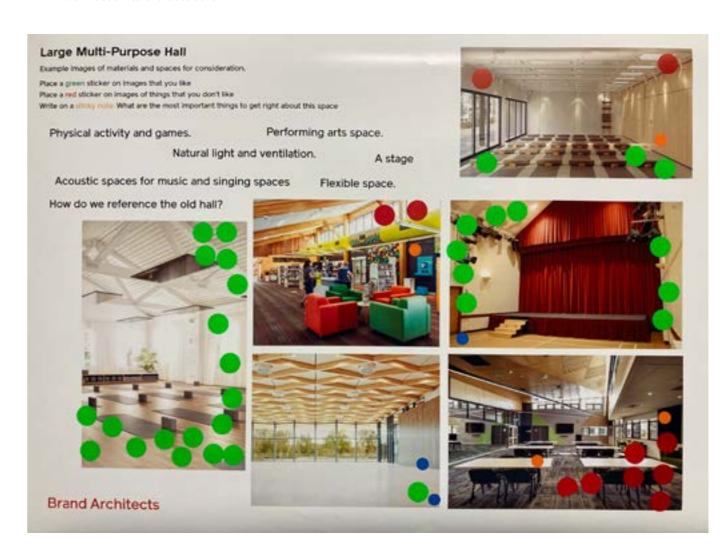
Entry Foyer Lounge Spaces

The spaces that rated mostly highly included large windows opening out on to landscaped surrounds, a steeple ceiling, a fireplace, natural materials, natural light and comfortable furnishing. Space that looked more clinical or dark did not rate well.



Large Multi-purpose Hall

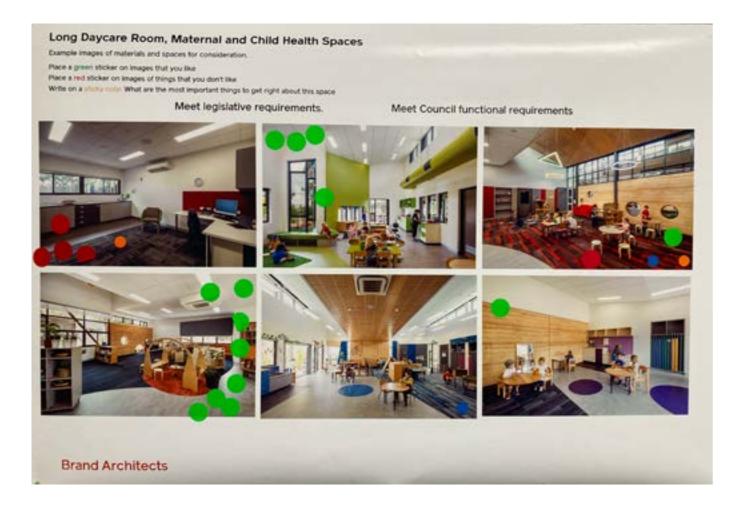
The images that attracted the most positive feedback featured a stage with curtain, large open space, natural materials, indoor plants, large windows, natural light, wooden floor, wooden steeple ceiling, connection with the outdoors and multi-purpose spaces that could be used for exercise programs. The spaces that attracted more negative feedback were darker in colour, modern design with a classroom or library feel and no connection to the outdoors.



Long daycare room, maternal and child health space:

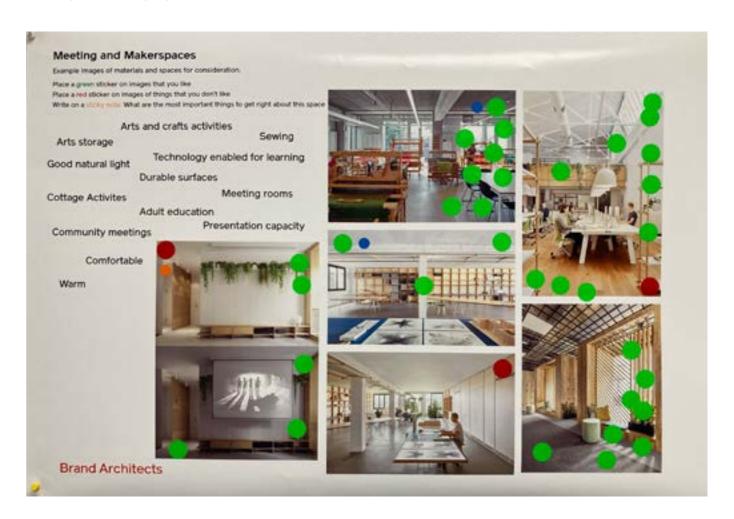
The spaces that received the most green or blue stickers were open, had large windows, featured wood and green colours, provided distinct child friendly spaces and nooks and incorporated indoor plants. Spaces that didn't rate so highly were darker, sparse and did not provide a connection with the outdoors.

A local resident wanted to make a point on the night that the images provided reflect what is realistic in a larger early years' learning facility with 20-30 children, when what is currently provided in Deans Marsh is essentially a family day care service operated from a centre rather than someone's home. He noted that whilst the feel of the space may be essentially the same, the actual scale would be a lot smaller.



Meeting and Makerspaces

In terms of the most desired spaces for meetings and activities such as sewing, those that rated most highly include lots of open space, connections to the outdoors, lots of natural light, wood, indoor plants and shared spaces where people can collaborate.



8. Proposed Facilities Brief

8.1 Facilities Schedule

Based on the above Community Consultation and desired spaces, Brand Architects have prepared the following Facilities Schedule.

DEANS MARSH HUB DRAFT BRIEF REV 3 19.05.22 incorporating community feedback

SURF COAST SHIRE

	Function	Design Criteria	Area (m2)
Deans Marsh Community Hub			
Entry/ Foyer/Lounge	Entry point and Foyer	Foyer is to be large open welcoming space.	50
		Accessible externally Automatic entry doors	
		Contains tea point	
		large enough to have tables, chair and couches	
		space for art work to be displayed	
		space/ display cabinets for archival material and hall memoribilia Space for information brochures	
		open fire place	
		community access computers information screen	
Reception/Office	Centre Reception and Cottage office	Accesible from Foyer and visible from point of arrival	12
		· ·	
Large Multipurpose Hall	Function / Social Space For community use	To be used for physical activities, functions, sports, theatre, music, large gatherings To be available for hire purposes for the community adjacent to external space Access/visibility to exterior/piazza	150
		Has immediate access to the kitchen/ can function to a catering event/hire.	
Stage Area	Adjacent to hall	Space to allow hall to be used for performance	60 15
Store 1 Multipurpose Hall	Storage facilities to cater for Multipurpose Hall	Belongings/ program storage Accessible from Multipurpose Hall	15
Store 2 Multipurpose Hall	Storage for tables and chairs	Storage for tables and chairs	20
		Accessible from Multipurpose Hall	
Community Room 1	Function / Social Space/occasional care	To be used for active, passive and learning programming	85
	For community use	To be available for hire purposes for the community	
		Storage cupboards Playgroups, children's activities	
		Access to kitchen	
Children's toilet	Toilet adjoining Community Room and outdoor space	to be used by chilren in occassional care or playgroups	15
		T	
Community Room 2/ Maker space	Meeting and learning and Art and Craft space For community use	To be used for learning programs and Maker Space To be available for hire purposes for the community	80
	Tor community use	Storage cupboards	
		Space for art, craft and other wet or messy activities - opens to outdoor space	
		Dedicated sewing alcove	- 10
Sewing Store Maker space store		Dedicated Sewing and Felting store Store for clean and dry materials	12 12
Wet Activity Store		Store for art, craft and maker activies materials	12
Meeting Room 1	Meeting Room for 15 people	To be used for meetings and learning programs	50
	For community use (including Cottage Use)	To be available for hire purposes for the community	
Meeting Room 2	Meeting Room for 8 people (including Cottage Use)	quiet games activites To be used for meetings and small group learning programming	20
3	For community use	To be available for hire purposes for the community	
MCH/Consulting Room 1	One on one consultations space	Space for one on one consultations with MCH, allied heath workers or visiting specialist providers	22
11011111 12		sink provided	
MCH Waiting Allied Health consulting suite	dedicated waiting area for MCH and consulting suite One on one consultations space	make providion for discreet breast feeding Space for one on one consultations with allied heath workers or visiting specialist	20 17
		provider	
Long Day Care -0-5 Years Room	Long day care room for 0-5 Year Old children, total of 22 Provision of bench space for food prep and food activities wth	A dedicated licenced childrens room for 22 children including sleep alcove A space for heating bottles and enabling children's food based activities	90
Long Day Care - Kitchenette		A space for reading bottoe and creating crimerone local based dearwise.	10
Long Day Care - Kitchenette Long Day Care storage	Storage for long day care room including storage provision of		
Long Day Care storage Long Day care children's toilet	Storage for long day care room including storage provision of toilet adjoining childrens room with access to exterior	2 pans, 2 basins, change bench	17
Long Day Care storage	Storage for long day care room including storage provision of	2 pans, 2 basins, change bench Decicated accessible staff toilet within the licenced area	17 7
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9. Proposed Design Principals

Entry Foyer Lounge Spaces

Example images of materials and spaces for consideration.

Warm welcoming space

A gathering place.

Coffee and chats.

Natural building materials.

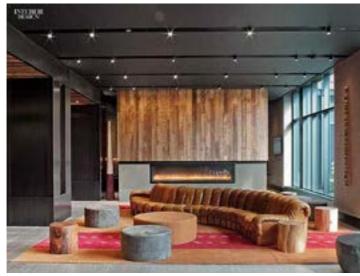
Lounge space.

Information sharing













Brand Architects

Large Multi-Purpose Hall

Example images of materials and spaces for consideration.

Physical activity and games.

Performing arts space.

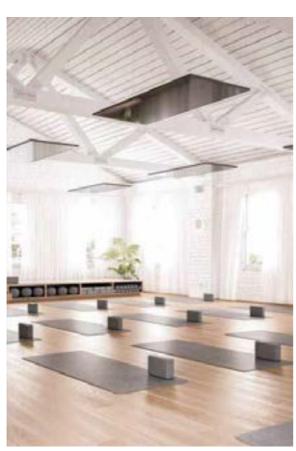
Natural light and ventilation.

A stage

Flexible space.

How do we reference the old hall?













60

Brand Architects

Meeting and Makerspaces

Example images of materials and spaces for consideration.

Arts and crafts activities

Arts storage

Sewing

Good natural light

Technology enabled for learning

Durable surfaces

Cottage Activites

Meeting rooms

Adult education

Community meetings

Presentation capacity

Comfortable

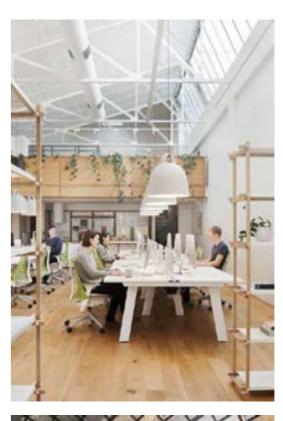
Warm













Brand Architects

Long Daycare Room, Maternal and Child Health Spaces

Example images of materials and spaces for consideration.

Meet legislative requirements.

Meet Council functional requirements













Brand Architects

External Imagery

Example images of materials and building forms for consideration.

Deans Marsh Aesthetic Natural materials where possible.

Expressed roof forms. Historic referencing

Good connections to exterior.

Sustainable

Good wayfinding.

Indoor outdoor connectivity

Durability and fire considerations

Landscaping

Public Art













Brand Architects

External Imagery

Example images of materials, landscape and building forms for consideration.

Deans Marsh Aesthetic Natural materials where possible.

Expressed roof forms.

Good connections to exterior.

Good wayfinding.

Historic referencing

Durability and fire considerations

Indoor outdoor connectivity

Sustainable

Landscaping













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Brand Architects

External

10. Potential Funding Opportunities

10.1 Deans Marsh Hall and Cottage Potential funding opportunities

It is anticipated that the bulk of funds accessed in order to upgrade / redevelop Deans Marsh Hall and Cottage will come from Surf Coast Shire's building renewal fund. However, there may be components of the development that can be funded through other sources. Therefore a range of State and Federal Government funding programs have been assessed to identify potential grants that may be available. Many of the grants listed below are currently closed. Pending the outcome of the Federal Government election there may be some new grants released in the next 12 months. Funding may also be sourced through future State or Federal election commitments.

Once further planning has been undertaken, it is recommended that the project team visits the following grant portals for more information on current availability of funding:

- Federal Government grants: www.grants.gov.au
- · Victorian Government grants: www.vic.gov.au/grants
- There are various subscription services, such as Our Community (www.ourcommunity.com.au), which Surf Coast Shire may subscribe to, in order to seek other funding opportunities such as philanthropic grants and grants available through private organisations such as Bendigo Bank.

Grant	Organisation	Amount	Closing Date	Details
COVID-19 Local Roads and Community Infrastructure Program (Phase 3)	Department of Infrastructure, Transport, Regional Development and Communications	\$20k - \$23m (total funding pool of \$1b)	30 June 2023	The LRCI Program Phase 3 aims to continue to assist a community-led recovery from COVID-19 by supporting local jobs, firms, and procurement. It expected that councils will use local businesses and workforces to deliver projects under the LRCI Program where possible to ensure stimulus funding flows into local communities. The scope of LRCI Program Phase 3 supports a broad range of Eligible Projects so communities can fund the infrastructure that they need, support businesses and create employment opportunities across their communities. The Grantees for the Local Roads and Community Infrastructure Program Phase 3 have been pre-identified. Eligible Funding Recipients will receive a Grant Agreement to participate in for the program, which they must sign and return. This grant program is not open to applications.

Grant	Organisation	Amount	Closing Date	Details
Community Development Grants		Not stated	30 June 2026	The objective of the CDG Programme (program) is:
Programme				 to support needed infrastructure that promotes stable, secure and viable local and regional economies.
				The intended outcomes of the program are:
				 to construct and/or upgrade facilities to provide long term improvements in social and economic viability of local communities
				 to create jobs in the delivery of projects and ongoing use of the infrastructure
				 to improve social amenity, increased health and wellbeing and social cohesion by utilisation of the infrastructure by community groups
				This program delivers the government's election commitments and other identified projects for community and regional infrastructure.
				Only projects identified by the Australian Government will be considered for funding under the CDG Programme, including the Government Election Commitments since 2013 and other government-initiated projects.
				The CDG Programme is a non-competitive grants program. If a project has been identified to receive grant funding the relevant person/organisation will be contacted by the Australian Government.
Early Childhood Refurbishment and Minor Works Program	Victorian Government	\$50k for minor projects and \$500k for major projects	Currently closed	Kindergarten grants for playground upgrades, roof repairs, landscaping, installing accessible ramps, fencing, kitchen or staffroom upgrades.
Local History Grants Program	Victorian Government	Not stated	Currently closed	The Local History Grants Program encourages and fosters community activities that preserve, record and share the local, social and community history of Victoria and Victorians.
Sustainable Infrastructure Fund	Victorian Government	\$50k-\$300k	Currently closed	The Sustainable Infrastructure Fund supports local governments and alpine resort management boards to use recycled materials in infrastructure projects. The Fund will support the construction / installation of a new asset or the renewal, expansion or upgrade of existing assets, including (but are not limited to): roads, footpaths, cycleways, pavements, carparks, drainage fixtures, bridges, buildings, fittings and furniture for parks, open spaces and streetscapes.

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Grant	Organisation	Amount	Closing Date	Details
Regional Infrastructure Fund	Victorian Government - RDV	\$20k - \$3m	Currently closed	The Regional Infrastructure Fund Round Two seeks to assist the growth of rural Victoria by providing grants for infrastructure projects that have the potential to stimulate economic and community activity, including those that seek to support recovery from COVID-19 and other major economic challenges, in regional Victoria. Infrastructure projects seeking funding will need to demonstrate how they will achieve one or more of the following: • improve the economic performance, potential and outcomes of a precinct, town, or region • improve business, transport, retail, education, social, cultural, industry or community linkages • provide multi-purpose infrastructure, suitable and accessible for a wide range of business and community groups such as business hubs, coworking spaces, community, and event and visitor facilities • support cultural initiatives of economic significance to the region such as renewal of buildings and sites, arts and cultural centres or resource facilities.

Grant	Organisation	Amount	Closing Date	Details
Stronger Regional Communities Program	Victorian Government - RDV	Amount \$20k - \$3m	_	The Stronger Regional Communities Program (SRCP) aims to support rural and regional towns in attracting families and young people to live and work in regional Victoria. It will do so by investing in community-led initiatives and partnerships that create or enhance the conditions for economic growth and build resilient, diversified and sustainable economies. Strong communities are characterised by high levels of social and economic participation. They demonstrate effective decision-making and strong networks and are attractive to people considering moving to live and work. Activities that may be considered include but are not limited to: • supporting locally-led partnerships to address economic development challenges and grow opportunities • establishing or growing community and small enterprise projects • community strengthening projects which incorporate an infrastructure component • increased local civic and economic development skills • collaboration that results in local economic development or community resilience initiatives to flourish • increasing local community participation, diversity and collaboration in planning, decision making and regional priority projects • population retention and attraction activities that attract unskilled and skilled labour, professionals and businesses into the regions • initiatives that build skills, increase participation and grow local
				economic programs engaging community groups to
				welcome new and potential families to the areausing existing networks to
				 using existing networks to identify and promote employment opportunities.
Community grants	Bendigo Bank	Not specified	Ongoing	Funds to eligible charities and not-for-profit groups to reinvest back into their communities.

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Appendices

Facility Development Plan Issues and Opportunities

Dean's Marsh Community Hub Surf Coast Shire May 2022



Appendices

A01	PLANNING PROPERTY REPORT
A02	SCHEDULE EXTRACT
A03	TREES AND TREE PROTECTION ZONES
A04	FULL SERVICES REPORT
A05	FULL GEOTECHNICAL REPORT
A06	FULL GEOCHEMICAL PRELIMINARY SITE INVESTIGATION PREPARED BY GROUND SCIENCE
A07	BUSH FIRE ATTACK LEVEL ASSESSMENT
80A	FULL FUNCTION SURVEY
A09	HERITAGE CITATION

A10 BUILDING CONDITION REPORT

A11 BUILDING REGULATIONS 233

A12 TRAFFIC ENGINEERS ADVICE

A01 Planning Property Report

PLANNING PROPERTY REPORT



From www.planning.vic.gov.au at 24 February 2022 05:33 PM

PROPERTY DETAILS

10 PENNYROYAL VALLEY ROAD DEANS MARSH 3235 Address:

Lot and Plan Number: Lot 1 TP587052 Standard Parcel Identifier (SPI): 1\TP587052 Local Government Area (Council): SURF COAST

www.surfcoast.vic.gov.au

Council Property Number: 178103

<u>Planning Scheme - Surf Coast</u> Planning Scheme: **Surf Coast**

Directory Reference: Vicroads 92 G8

UTILITIES STATE ELECTORATES

Rural Water Corporation: **Southern Rural Water** Legislative Council: **WESTERN VICTORIA**

Legislative Assembly: **POLWARTH** Urban Water Corporation: **Barwon Water**

Melbourne Water: Outside drainage boundary

Power Distributor: **POWERCOR OTHER**

Registered Aboriginal Party: Eastern Maar Aboriginal

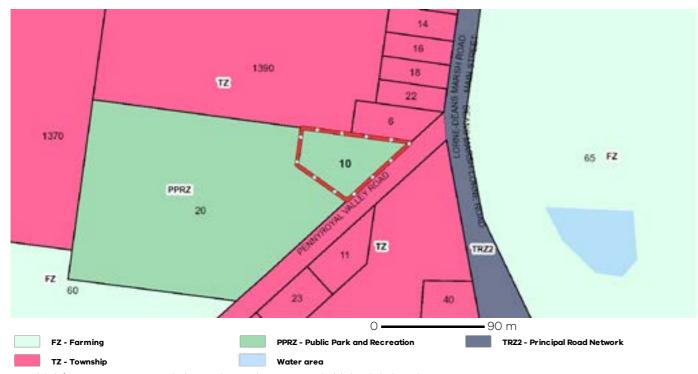
Corporation

View location in VicPlan

Planning Zones

PUBLIC PARK AND RECREATION ZONE (PPRZ)

SCHEDULE TO THE PUBLIC PARK AND RECREATION ZONE (PPRZ)



Note: labels for zones may appear outside the actual zone - please compare the labels with the legend.

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PLANNING PROPERTY REPORT: 10 PENNYROYAL VALLEY ROAD DEANS MARSH 3235

PLANNING PROPERTY REPORT



Planning Overlays

HERITAGE OVERLAY (HO)



() -

- 90 m

Note: due to overlaps, some overlaps may not be visible, and some colours may not match those in the legend

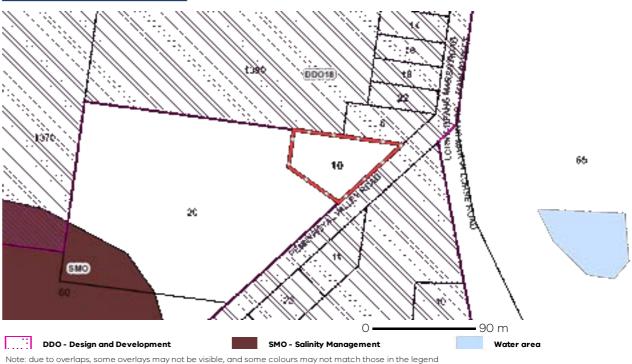
OTHER OVERLAYS

HO - Heritage

Other overlays in the vicinity not directly affecting this land

DESIGN AND DEVELOPMENT OVERLAY (DDO)

SALINITY MANAGEMENT OVERLAY (SMO)



Page 1 of 4

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PLANNING PROPERTY REPORT



Further Planning Information

Planning scheme data last updated on 23 February 2022.

A planning scheme sets out policies and requirements for the use, development and protection of land. This report provides information about the zone and overlay provisions that apply to the selected land. Information about the State and local policy, particular, general and operational provisions of the local planning scheme that may affect the use of this land can be obtained by contacting the local council or by visiting https://www.planning.vic.gov.au

This report is NOT a Planning Certificate issued pursuant to Section 199 of the Planning and Environment Act 1987. It does not include information about exhibited planning scheme amendments, or zonings that may abut the land. $To\ obtain\ a\ Planning\ Certificate\ go\ to\ Titles\ and\ Property\ Certificates\ at\ Landata\ -\ \underline{https://www.landata.vic.gov.au}$

For details of surrounding properties, use this service to get the Reports for properties of interest.

To view planning zones, overlay and heritage information in an interactive format visit https://mapshare.maps.vic.gov.au/vicplan

For other information about planning in Victoria visit https://www.planning.vic.gov.au

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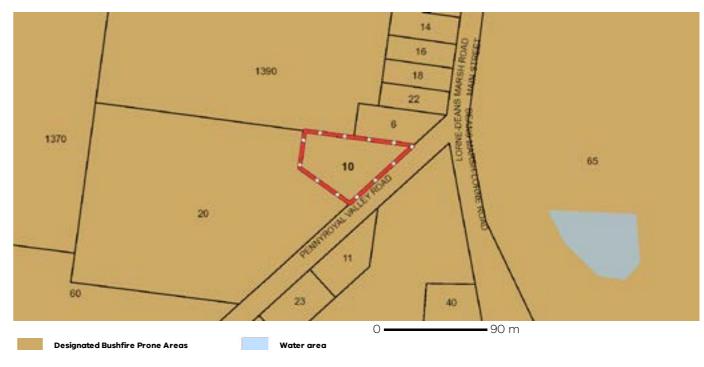
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PLANNING PROPERTY REPORT



Designated Bushfire Prone Areas

This property is in a designated bushfire prone area. Special bushfire construction requirements apply. Planning provisions may apply.



Designated bushfire prone areas as determined by the Minister for Planning are in effect from 8 September 2011 and amended from time to time.

The Building Regulations 2018 through application of the Building Code of Australia, apply bushfire protection standards for building works in designated bushfire prone areas.

Designated bushfire prone areas maps can be viewed on VicPlan at https://mapshare.maps.vic.gov.au/vicplan or at the relevant local council.

Note: prior to 8 September 2011, the whole of Victoria was designated as bushfire prone area for the purposes of the building control system.

Further information about the building control system and building in bushfire prone areas can be found on the Victorian Building Authority website https://www.vba.vic.gov.au

Copies of the Building Act and Building Regulations are available from http://www.legislation.vic.gov.au

For Planning Scheme Provisions in bushfire areas visit https://www.planning.vic.gov.au

Native Vegetation

Native plants that are indigenous to the region and important for biodiversity might be present on this property. This could include trees, shrubs, herbs, grasses or aquatic plants. There are a range of regulations that may apply including need to obtain a planning permit under Clause 52.17 of the local planning scheme. For more information see Native Vegetation (Clause 52.17) with local variations in Native Vegetation (Clause 52.17) Schedule

To help identify native vegetation on his property and the application of Clause 52.17 please visit the Native Vegetation Information Management system https://nvim.delwp.vic.gov.au/ and Native vegetation (environment.vic.gov.au/ or please contact your relevant council.

You can find out more about the natural values on your property through NatureKit NatureKit (environment.vic.gov.au)

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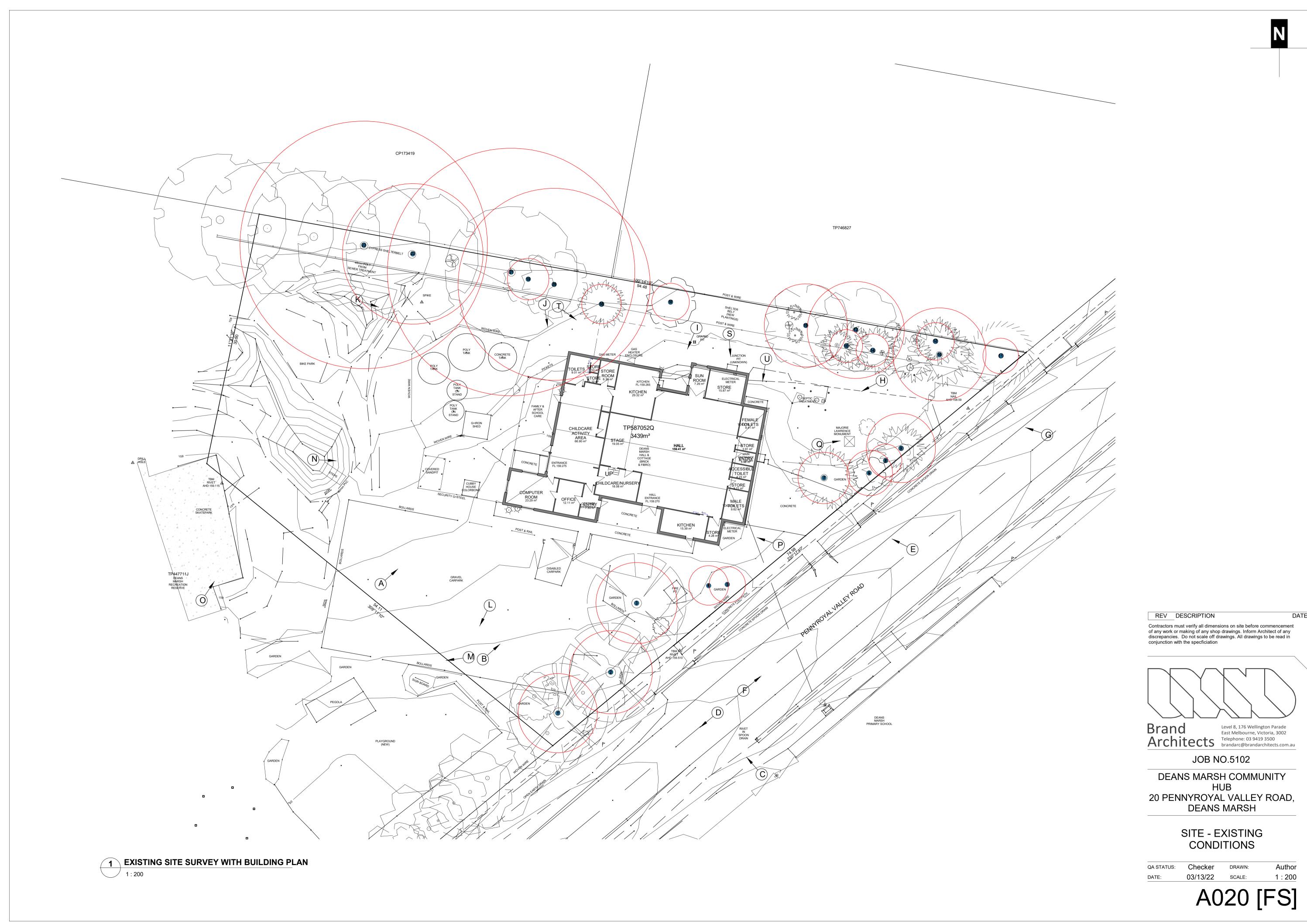
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A02 Schedule Extract

SURF COAST PLANNING SCHEME

PS map ref	Heritage place	External paint controls apply?	Internal alteration controls apply?	Tree controls apply?	Outbuildings or fences not exempt under Clause 43.01-4	Victorian	Prohibited uses permitted?	Aboriginal heritage place?
HO42	Lawrence Cottage 1409 Birregurra Deans Marsh Road, Deans Marsh	no	no	no	no	no	no	no
HO43	Deans Marsh Uniting (formerly Methodist) Church and hall. 22 Deans Marsh-Lorne Road & Pennyroyal Valley Road (Cnr), Deans Marsh	no	no	no	no	no	no	no
HO44	Deans Marsh Primary School (State School No. 1642) and Marjorie Lawrence (eucalypt) plantation. 30 Deans Marsh-Lorne Road, Deans Marsh	no	no	Yes - Marjorie Lawrence plantation only	no	no	no	no
HO45	St Pauls Anglican Church and hall 40 Deans Marsh-Lorne Road, Deans Marsh	no	no	no	no	no	no	no
HO46	Deans Marsh Public Hall & Recreation Reserve, including the public hall, sports grounds, fibro pavillion, memorial gates and cypress boundary plantation. 6-20 Pennyroyal Valley Road, Deans Marsh	no	no	yes	no	no	no	no
HO47	Presbyterian Church (former). 11 Pennyroyal Valley Road, Deans Marsh	no	no	no	no	no	no	no
HO48	Yan Yan Gurt Woolshed. 1910 Winchelsea-Deans Marsh Road, Deans Marsh	yes	no	no	no	no	no	no
HO49	Deans Marsh Hotel (former). 2250 Winchelsea-Deans Marsh Road, Deans Marsh	no	no	no	no	no	no	no
HO50	Mrs McInnes Milk Bar and Boarding House (former). 2255 Winchelsea-Deans Marsh Road, Deans Marsh	no	no	no	no	no	no	no
Freshwater	Creek							

A03 Trees and tree protection zones



A04 Full Services Report

Deans Marsh Community Hub



ENGINEERING SERVICES

Feasibility Report

JOB NO.: 11532 STATUS: For Review DATE: 05.05.2022 REVISION:

BRT Consulting Pty Ltd 159 Victoria Parade Collingwood VIC 3066 T 03 9417 2971 F 03 9417 5851 E melb@brt.com.au





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2.0 REPORT SCOPE AND INFORMATION

The scope of this report is to provide commentary on the Authority services serving the existing Community Hall located on the Deans Marsh Reserve located on Pennyroyal Valley Road and provide commentary on the proposed feasibility option for the redevelopment of the site.

The existing conditions have been assessed to inform the Feasibility Study for a proposed development of a new community facility and provide commentary on the following:

Suitability of existing site services and Authority infrastructure

The following report is based on site investigations and Authority Services information.

3.0 AUTHORITY SERVICES

3.1 Electrical Services

3.1.1 Power

The site is currently served from an overhead supply from a pole on the southern side of Pennyroyal Valley Road. The overhead Authority infrastructure appears to be only two phase power with the current hall provided with a 63A two phase supply to the main switchboard.

It is noted that the reserve has recently been upgraded with a new site main switchboard and capacity for a future 3 phase direct meter to serve the future redevelopment of the community hall facility.

The nearest overhead three phase HV supply appears to be located on the main Winchelsea-Deans Marsh road approx.. 225m from the current overhead supply to the reserve. It appears that the HV reticulation has been installed below ground, with the potential for augmentation works and a three phase supply to be made closer to the Pennyroyal Valley and Winchelsea-Deans Marsh Road intersection.

With the proposed building area noted, the provision of a commercial kitchen, an air conditioned building and with no provision of gas to the site, it is estimated that a new supply to the site will be required to be CT metered with the supply being in excess of 80ATP (three phase). It is more than likely that the reserve will need to be provided with a common meter location and a single point of supply. It is more than likely that the current common meter panel will need to be upgraded to accommodate for the CT meter arrangement.

The final load for the proposed community facility will be determined by the specification of the commercial kitchen and whether gas maybe utilised on site in any proposed development.

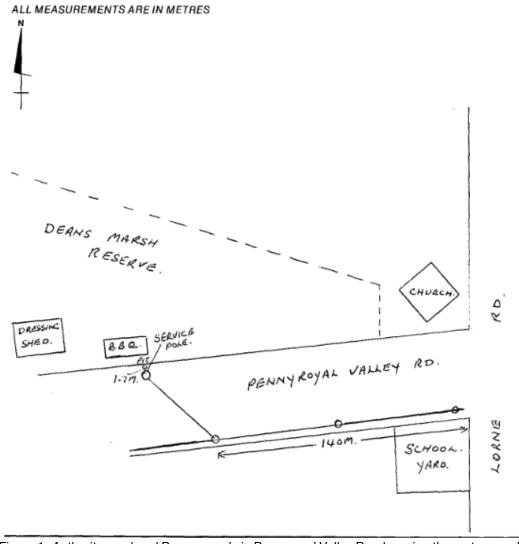


Figure 1- Authority overhead Power supply in Pennyroyal Valley Road serving the meter panel in the Reserve



Figure 2- Authority meter panel installed in 2021 located in picnic shelter in Reserve



Figure 3- Existing overhead supply to the Reserve MSB/meter panel

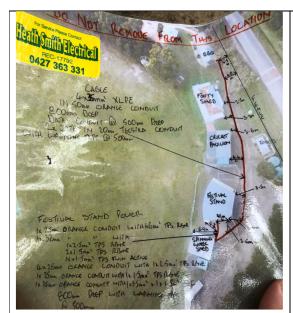


Figure 4- Recently installed electrical & comms infrastructure reticulation on site



Figure 5- Existing overhead supply to the Hall from Pennyroyal Valley Road



Sprint 200

Sprint

Figure 6- Nearest overhead HV service on Winchelsea-Deans Marsh Road

Figure 7- Existing meter panel located on the Community Hall facility

3.1.2 Telecommunications

The Authority communications infrastructure is provided in Pennyroyal Valley Road from a service pit on the boundary. However it appears that the site appears to have a relatively new fixed wireless NBNCo service to a communications rack within the childcare facility. In any redevelopment of the facility, it would appear that an NBNCo connection will be via a fixed wireless service.

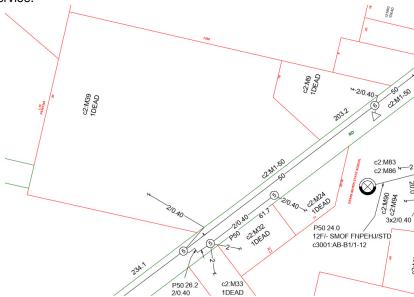


Figure 8- Telstra Communications service in Pennyroyal Valley Road



Figure 9- Comms rack located in MCH area of Community facility



Figure 10- Existing Telstra/NBN pits located in the property boundary in NE corner of the site.

3.2 Hydraulic Services

3.2.1 Sewer

The site is currently served by an onsite waste water treatment system that is located to the northeast corner of the site. The system appears to have been installed or upgraded relatively recently and is noted as being an AlphaTreat DP10, waste water treatment system.

The system consists of two inground tanks, both 3200 litres in capacity, with a four step treatment process with disinfection and disposal in the final stage. It could not be determined where the current disposal area or process is, but it is assumed that the reserve has a sub surface irrigation system or absorption bed for the system. The system is noted as having capacity for treatment of 1500 litres or 10 equivalent persons.

The capacity of the system for any redevelopment would need to be assessed with local council/EPA requirements, however it is likely that the system may need to be upgraded with the size and function of the facility increasing.



Figure 11- Onsite wastewater treatment plant located in NE corner of site



Figure 12- Wastewater treatment system with in ground storage/treatment tanks

3.2.2 Water

The site is currently served by rainwater collection and storage tanks of varying size, construction and age located at the rear of the site. There is no Authority water supply provided to the reserve or surrounding areas.

There is currently a rainwater tank farm located at the rear of the current hall that appears to collect rainwater from the roof area of the facility. There does not appear to be any significant treatment system provided on site.

With the proposed development of the site in excess of 500m2 would require a fire service to be provided to the site, which will entail storage tanks and an onsite fire pump to serve hydrants for the facility.

The collection and treatment of rainwater for the proposed facility will be required from the roof area. The collection capacity would need to be determined with building use and available roof collection area. An onsite treatment and pressure pump system would be proposed for the site.



Figure 13- Onsite rainwater tank farm at rear of the site



Figure 14- Rainwater tanks of varying age, type and condition located in tank farm

3.2.3 Gas

There is currently served by an onsite LP Gas storage tank, that is located on the northeast boundary of the site. There is no Authority mains gas service in the vicinity of the site.

The gas appears to be serving an existing gas furnace system and an instantaneous gas hot water system.

In any redevelopment of the site, the requirement for gas will need to be determined, with the potential for gas use, primarily for the commercial kitchen area. The requirement for gas or no gas on site will impact on the required electrical load and infrastructure required for the site.



Figure 15- Onsite LP gas storage tank



Figure 16- LP Gas tank located in NE corner of site



Figure 17- Gas heating furnace & DHW unit located on north façade



Figure 18- MSB located in Community Hall



4.0 SITE INFRASTRUCTURE

4.1 Electrical Services

As noted above, the Reserve appears recently to have had an electrical upgrade with new reticulation of power and communications around the reserve. It would appear however that dependant on the final configuration of the community facility, building area and function, the site electrical supply and infrastructure will need to be upgraded.

There are no electrical services or infrastructure that would be proposed to be retained or reused in any redevelopment of the Community Hall. The age and condition of the majority of services appear to be relatively old and in average to poor condition. The current switchboard is not provided with individual RCD protection to lighting and power circuits



Figure 19- Existing lighting & ceiling fan in community hall



Figure 20- Two phase main switch & circuits not provided RCD protection

4.2 Hydraulic Services

As noted above, the Reserve is not served with any Authority infrastructure, the use and reuse of rainwater tanks would be considered for any redevelopment, with the capture and reuse of rainwater proposed for the cold water supply to the facility. An upgrade to the distribution pressure pump and treatment system would be proposed for any redevelopment

The existing gas instantaneous unit appears to be in average condition, however, no date on the installation of the system could be determined. The requirement for gas domestic hot water in any redevelopment would need to be considered with the requirement for gas to be provided to the site at all. The option for an efficient electric heatpump hot water system should be considered with the ability to offset the power requirements, in lieu of gas.



The installation of a grease interceptor trap (GIT) will be required for any new commercial kitchen installation. The size and capacity of the GIT will be determined with the proposed scope of the kitchen, appliance selection and capacity for catering.



Figure 21- Wastewater Treatment system control panel



Figure 22- Sewer reticulation from local amenities adjacent the wastewater treatment system in NE corner of site

4.3 Mechanical Services

The site is served by a number of single split reverse cycle air conditioning systems. The systems appear to be of varying condition and age and serve the habitable rooms within the current facility. It is unclear if the existing gas furnace is still operational and/or utilised in the function of the facility.

In any redevelopment of the site, it would be proposed to provide new reverse cycle air conditioning throughout the facility to suit the size and capacity required for the noted habitable areas. The potential for a central multi-head variable refrigerant flow (VRF) type system would be considered for such facilities, with the system providing an energy efficient heating and cooling solution.



Figure 23- Condenser unit located on ground at rear of the building



Figure 24- Condensing unit located on façade bracket at high level, installed in 2021



Figure 25- Room A/C unit located in childcare area at rear of the facility



Figure 26- NBNCo fixed wireless receiver located at roof level

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5.0 BUILDING SERVICES OVERVIEW

From the site inspection undertaken and Authority services details received, any major redevelopment of the existing community facility would require an upgrade to the majority of services on site and Authority incoming infrastructure.

It appears that the site would require an electrical upgrade and extension of a three phase supply to the site. The existing fixed wireless incoming NBN service could be retained and utilised in any redevelopment.

The capacity of the existing waste water treatment would appear to be under capacity for any future increase in capacity of visitors to the facility and the collection and reuse of rainwater would need to be assessed for any increase in function or capacity. The capacity of both the sewer treatment and water consumption would need to be assessed on occupancy numbers and building function through the design phase of the project. A land capability study would more than likely be required for the site for any increased in waste water volume and disbursement of treated water on the site.

The existing on site building services infrastructure is generally of a reasonable age and in average to poor condition. There would be little services infrastructure that would be recommended to be reused in any redevelopment.

In any refurbishment of the existing facility, it would be recommended that the majority of services be upgraded, replaced and brought up to current regulations and requirements.

For any increase in building area in excess of 500m2, the site will need to be provided with a new fire service incorporating on site fire pumps and tanks.

A05 Full Geotechnical Report

CONSULTING GEOLOGISTS





GEOTECHNICAL SITE INVESTIGATION REPORT



i. SITE ADDRESS: Deans Marsh Community Hub,

10 Pennyroyal Valley Road, DEANS MARSH, VICTORIA

ii. PROPOSED

DEVELOPMENT: Community Hub

iii. CLIENT: BRAND ARCHITECTS

LEVEL 8, 176 WELLINGTON PARADE

EAST MELBOURNE VIC 3002

iv. ISSUE DATE: 26th April 2022

v. OUR REFERENCE

NUMBER: 19182C

vi. DISTRIBUTION: BRAND ARCHITECTS

vii. SUPERVISING

GEOLOGIST: Andrew Redman BSc

viii. AUTHOR: Andrew Redman BSc

Page 1 of 24 Reference Number: 19182C

CONSULTING GEOLOGISTS



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- ii. Site Classification
- iii. Site Soil Characteristics Summary
- iv. Terrain Evaluation Summary
- v. Testing Program
- vi. Findings
- vii. Conclusions and Recommendations
- viii. Site Constraints
- ix. Construction Requirements
- x. Report Limitations

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- i. Land Channel Property Report
- ii. Geovic Map
- iii. Photographic Evidence
- iv. Test Site Location Plan
- v. Borelog Descriptions

Page 2 of 24 Reference Number: 19182C

CONSULTING GEOLOGISTS



i. INTRODUCTION

Provincial Geotechnical Pty Ltd has been commissioned to provide a Geotechnical Site Investigation report for the nominated address. We understand that construction of a community hub building is proposed.

This report addresses the structural component of the proposed development.

The relevant Land Channel Property Report to confirm the site location and address is also appended (Appendix i).

The site investigation hereby reported has been carried out with regard to the information supplied to us by our client or client's agents at the date of our commission. Should the client or his agent have omitted to supply us with relevant information or make significant changes to the building type, building envelope, or site our report may be irrelevant and/or inappropriate. No responsibility will be accepted by us for the consequences of such action.

The client should acknowledge that this is a Geotechnical Site Investigation report specifically prepared for the proposed building development at the identified location and does not extend beyond that brief.

All site works related to the building project must be undertaken to comply with the relevant Codes and Standards and must not potentially adversely impact upon the building envelope. Provincial Geotechnical Pty Ltd accepts no liability or responsibility for any site works outside of our specific commission.

ii. SITE CLASSIFICATION

Site Classification is based upon Section 2 Clauses 2.2 of AS2870 - 2011. The method adopted for clay sites primarily includes 2.2.1 (a). Clause 2.2.1 (b) can be adopted under instruction from the client.

The scope of AS2870-2011 allows for the classification of sites for some light commercial and institutional buildings. However, the proposed development appears to fall outside the scope of the code and the design should be based on engineering principles.

This site would normally be classified as CLASS P (PROBLEM SITE) noting the underlying soil profile is moderately-highly reactive.

Classification of the site has taken into account the following:

- Identification of the sub soil profile.
- Field classification of the soil type and plasticity.

iii. SITE SOIL CHARACTERISTICS SUMMARY

SITE FILLING:

Minor filling encountered during tests: disturbed/filled ground anticipated from infrastructure removal.

Page 3 of 24 Reference Number: 19182C

CONSULTING GEOLOGISTS



iii. SITE SOIL CHARACTERISTICS SUMMARY CONTINUED

UNSUITABLE FOUNDATION CONDITIONS:

The fill present is not considered a suitable foundation material.

DRAINAGE:

The installation of suitable site drainage should ensure that destablisation of the foundation soils does not occur.

BEDROCK:

None encountered.

FLOATERS:

None encountered.

ABNORMAL MOISTURE CONDITIONS:

Not applicable.

GEOLOGY: Tertiary Limestone Sediments (Nhg)

Identification assisted by reference to appropriate geological survey map. This report contains a geology map obtained from the Department of Natural Resources Geovic website including the site under investigation. It is provided as a guide to mapping of the local geology only and not to be used as a basis for design

(Appendix ii).

SOIL TYPES: NATURAL: Silty clay topsoils overlying clays, typical of

area's geology. Clays of the above sedimentary origin are generally

considered moderately-highly reactive.

FILL: Silty clay mix.

iv. TERRAIN EVALUATION SUMMARY

CLIMATIC ZONE: CZ 1

SITE LOCATION: North-West side of road.

SLOPE: Slight fall over area.

DRAINAGE: SURFACE: Fair.

SUB-SURFACE: Poor.

EARTHQUAKE

CLASS: Australian Standard AS1170.4-2007, 'Minimum Design Loads on

Structures, Part 4: 'Site Sub-Soil Class' outlines the methods for

assigning the site's Sub-soil Class. Based on the anticipated

stratigraphy, Table 4.1 'Maximum Depth Limits for Sub-Soil Class C' and Table 3.2 'Hazard Factor (Z) For Specific Australian Locations' of the standard, we recommend the following Hazard Factor and Sub-

Soil Class are adopted:

SUB-SOIL CLASS: Class C_e – Shallow soil site

HAZARD FACTOR (Z): 0.10

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iv. TERRAIN EVALUATION SUMMARY CONTINUED

PROXIMATE VEGETATION (POTENTIAL ABNORMAL MOISTURE CONDITIONS):

GRASSES: Present within or in proximity to site.
SHRUBS: Present within or in proximity to site.
TREES: Present within or in proximity to site.

INFRASTRUCTURE WITHIN OR IN PROXIMITY TO BUILDING ENVELOPES: Yes – existing infrastructure on site.

NOTE: The designing engineer should review available aerial mapping data and/or available site context information to assess the current or pre-existing conditions in respect to design considerations for Abnormal Moisture Conditions.

This report provides photographic evidence of either existing or pre-existing site context (Refer to Appendix iii).

v. TESTING PROGRAMME

Four (4) test sites were established and excavated using a 100mm direct drive drilling rig, manual auger and penetrometer at the approximate locations shown on the appended Test Site Location Plan (Appendix iv).

Where soil conditions dictated, investigation was assisted by the use of a penetrometer to confirm profile depth and condition. Where penetrometer testing is not undertaken the soil profile depths and conditions may be extrapolated from our knowledge of the geology and soils in this area.

Disturbed samples were collected and hand classified.

A vane shear apparatus was used to determine the strength of all cohesive soils in conjunction with tactile assessment.

Site history: The client is advised that site classification can be altered by past activities on this site not known at the time of our site investigation and report preparation. The client is advised that failure to investigate and report past history may invalidate the report.

vi. FINDINGS

The soil profiles encountered are shown on the appended borelog sheet (Appendix v).

The cohesion value obtained is quoted on the log sheet.

The sedimentary nature of the Tertiary aged soils indicates a <u>moderate-high</u> soil reactivity and seasonal heave potential.

The client should recognise that the soil profiles encountered during our testing are deemed representative of the building envelope for the purpose of classifications.

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vi. FINDINGS CONTINUED

The client should be aware however that in some cases soil conditions can change dramatically over short distances and although all effort is made to determine possible soil profile variations, no responsibility is taken for any undetected variations. The most careful exploration programme may not locate all soil profile variations due to time and economic restraints.

If footing excavations reveal soil conditions differing from those shown on the log sheet in this report, we recommend that Provincial Geotechnical be contacted immediately to carry out further testing to confirm or revise our conclusions and recommendations.

vii. CONCLUSIONS AND RECOMMENDATIONS

1. RESIDENTIAL STYLE STRUCTURES

The use of stiffened raft slab construction is recommended for residential proportioned buildings constructed on a residual clay profile. An Allowable Bearing Pressure of 100kPa may be considered for preliminary proportioning of stiffened raft slab edge beams and internal load bearing ribs a minimum of 100mm into stiff clay.

Minimum dimensions and reinforcement of footings will need to meet the minimum requirements of Australian Standard AS2870-2011, 'Residential Slabs and Footings – Construction' for a CLASS H1 site classification.

Where the depth of fill exceeds 0.3 metres it will be necessary to adopt suspended raft slab construction. All edge beams and internal ribs will need to be founded in stiff clay at the base of any fill and topsoils, and the slab panels will need to be designed as fully suspended.

Considerable attention to site drainage and proposed trees will be required to ensure adequate performance of structures. Failure to take into account these factors will result in poor footing performance.

2. LOW RISE STRUCTURES:

Strip and pad footings founded within residual clay are routinely adopted for flexible commercial style structures constructed on a clay foundation. The use of pad and strip footings founded on clay may be considered for any proposed low rise structures subject to:

- The superstructures being flexible and well-articulated. Steel portal framed construction and precast concrete panel construction normally satisfies this criteria.
- The superstructures not being sensitive to footing movements associated with seasonal volume changes within the clay.
- The moisture content regime of the clay beneath the structures being maintained as uniform as possible. The clays must not be subject to extremes in moisture conditions resulting from poor site drainage and/or the drying effects of trees.

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2. LOW RISE STRUCTURES CONTINUED:

If the proposed structures are not flexible and/or well-articulated, or the structures are sensitive to footing movements associated with seasonal volume changes within the highly plastic residual clay, it will be necessary to deepen the footings to a depth of negligible seasonal soil moisture variation.

Minimum dimensions and reinforcement of footings founded on clay will need to meet the minimum requirements of Australian Standard AS2870-2011, 'Residential Slabs and Footings – Construction' for a CLASS H1 site classification.

An Allowable Bearing Pressure of 250kPa may be considered for preliminary proportioning of strip and pad footings where founded a minimum of 200mm into stiff clay, subject to a minimum founding depth of 1.0 metres. An increased Allowable Bearing Pressure of 300kPa is likely to be available for strip and pad footings respectively where founded deeper into the stiff clay. It is recommended that a uniform founding stratum be provided throughout any structure to minimize differential movements.

During our investigation a suitable foundation level was found at the following depths:

SITE	FOUNDATION DEPTH	FOUNDATION MATERIAL	ALLOWABLE BEARING PRESSURE
1	1000mm	Natural stiff clay	250kPa
2	1000mm	Natural stiff clay	250kPa
3	1000mm	Natural stiff clay	250kPa
4	1000mm	Natural stiff clay	250kPa

If any trees are proposed within 1.0 times their mature height of any proposed footings it will be necessary to deepen the footings to 2.5 metres depth.

3. RETENTION OF SITE EXCAVATIONS:

a. Retention Systems

Where a single basement level is proposed and safe batters can be accommodated behind the proposed retention systems, the use of conventional precast concrete panel or reinforced blockwork retaining walls will be suitable. Safe batters of approximately 30° in fill and silt topsoils and 40° in stiff clay are anticipated under favourably dry conditions.

Where safe batters cannot be accommodated or are not preferred, the use of a soldier pile retention system with infill panels is recommended. A soldier pile retention system is recommended where bulk excavation is proposed adjacent to an existing structure.

If a retained height of more than approximately 3.0 metres is proposed it may be necessary to progressively prop or anchor retention systems as excavation proceeds.

In any case, walls should be designed for the minimum requirements of the appropriate Codes of Practice, e.g. Civil Engineering Code of Practice No. 2, Earth Retaining Structures. The effects of surcharge behind the wall should be calculated using the methods presented in the Code of Practice CP2.

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b. Lateral Earth Pressures

Permanently cantilevered retaining walls may be considered where deformation and movement behind the walls can be tolerated, such as for garden or grassed areas.

A triangular lateral earth pressure distribution and an active earth pressure coefficient (Ka) of approximately 0.3 could be adopted for preliminary design. The active earth pressure coefficient should be used to calculate lateral earth pressures generated by surcharge loads.

For minimal deflection of progressively propped walls where there are movement sensitive structures or buried services within the zone of influence of the excavation, a uniform earth pressure distribution of 8HkPa, where H is the total retained height in metres, could be adopted for preliminary design. An at rest earth pressure coefficient (Ko) of 0.6 could be used to calculate lateral earth pressures generated by surcharge loads.

A preliminary unit weight of 19 kN/m³ may be adopted for clay soil.

Sloping backfill should be incorporated as surcharge loading. Any temporary or permanent surcharge loads such as nearby high level footings, traffic loading and compaction stresses, will also need to be included in the design of retention structures.

Retention structures must be designed such that the soil behind the wall is completely and permanently drained. If this cannot be ensured, then hydrostatic pressure must be superimposed on the lateral earth pressure distributions.

Conservatively, the ultimate lateral toe resistance of retaining walls in clay may be estimated based on the following soil parameters:

Angle of internal friction: $\emptyset = 0^{\circ}$ (short term)

Undrained cohesion: Very stiff clay $C_u = 80$ kPa (short term)

Effective angle of internal friction: $\emptyset' = 23^{\circ}$ (long term)

Effective cohesion: C'= 0kPa (long term)

NOTE:

The site derived clays are not recommended for use as structural fill. High plasticity clays are generally extremely difficult to compact and are potentially subject to appreciable volume changes if they are not properly moisture conditioned. Use of a suitable imported granular or low plasticity clay fill will assist in assuring efficient placement and present less risk with respect to long term performance of structures and pavements based on soil reactivity.

Structural fill must be placed in uniform layers no exceeding a loose thickness of 200mm and compacted to at least 98% of the standard maximum dry density value as determined in accordance with Australian Standard AS1289 5.1.1-1993.

Australian Standard AS3798, 'Guidelines on Earthworks for Commercial and Residential Developments' provides guidance on the specification, execution and control of earthworks relevant to the subject site. Level 1 supervision in accordance with Australian Standard AS3798 is recommended for all proposed earthworks at the site.

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viii. SITE CONSTRAINTS

EXCAVATION/CONSTRUCTION DIFFICULTIES

SITE VEHICLE ACCESS: Fair.

SITE VEHICLE MANEUVERABILITY: Fair to Poor. Site may become boggy/slippery. During summer and early autumn when evaporation rates are typically high and rainfall levels low, the trafficability of the stripped ground surface is anticipated to be quite good. Other than dust suppression, no significant difficulties are anticipated. During winter and spring it is probably that only tracked machinery will be able to access the site once the surface has been stripped and is exposed to rain.

EXCAVATION CONDTIONS: The topsoils and clays should be readily excavated using a 20 tonne capacity hydraulic excavator.

If site access is to be provided for trucks once the ground surface is saturated it will be necessary to construct access tracks formed using non-descript crushed rock (75mm minus), recycled brick and concreter rubble or equivalent. Under extreme conditions, it will necessary to incorporate a layer of geogrid or geotextile fabric at the base of the crushed rock.

EXISTING STRUCTURE AROUND CONSTRUCTION AREA: Yes.

VEGETATION AROUND CONSTRUCTION AREA: Yes.

WET WEATHER IMPACT: Possible.

Sites without good natural or installed drainage can be adversely impacted upon during construction. The client should be aware that the following impacts can occur after wet weather.

- Site may become slippery and boggy.
- * Foundation soils may become inundated and unworkable.
- * Site drainage may need to be installed.
- * Site may need to be abandoned for a period.
- * Deeper footings or additional earthworks may be required.

ix. CONSTRUCTION REQUIREMENTS

1. CONSTRUCTION ADJACENT TO EASEMENTS, EXCAVATIONS AND SERVICE PIPE TRENCHES

Buried services should be located adjacent to footings. Where this cannot be avoided, the trench should be backfilled in such a way as to prevent moisture ingress. Any footings located adjacent to easements, excavations or backfilled service trenches should be founded below a line drawn up at 40° above horizontal from the base of the easement or excavation. If the angle of repose is to be intersected, a piled footing will be required.

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2. SITE DRAINAGE AND MAINTENANCE OF FOOTINGS

Effective drainage of the site should be maintained at all times. Water run-off should be collected and diverted away from all structures during construction. Water should not be allowed to pond against footings during or after construction. The ground adjacent to footings should be graded to provide a permanent fall of 1(V):50(H) away from the footings over the first two metres. Water supply and drainage infrastructure should be maintained so that no leakage occurs.

3. ARTICULATION OF STRUCTURE

Adequate articulation should be provided in accordance with The Cement and Concrete Association of Australia – Technical Note TN61. In addition to the requirements of TN61, a full height articulation joint should be provided at the following locations:

- At the junction where two different footing types intersect.
- Where new structures adjoin existing structures.

4. INSPECTION OF FOOTING EXCAVATIONS

All footing excavations should be inspected by a suitably qualified geotechnical consultant to ensure that the required founding stratum has been achieved. The presence of any unusual features or conditions should be brought to the attention of this office before construction proceeds.

For shallow footing and trench excavations, based on the ground conditions information obtained, it appears excavations will be predominantly in natural clays. Personnel should not be permitted to enter confined excavations in excess of 1.5 metres deep unless such excavations are appropriately battered or shored. Shallower excavations, particularly in loosely compacted fill, may also need to be battered or shored and will need to be assessed at the time of construction.

5. BATTER SLOPES

It is recommended that temporary batter slopes should be steeper than 1H:1V, but flatter slopes may need to be considered within fill materials. Permanent batter slopes should not be steeper than 2H:1V and should be protected from erosion by vegetation or proprietary protection systems. Drainage should be provided at the top of batter slopes to divert runoff away from the slope face. The above recommendations are provided for batter slopes up to 3 metres in height; further geotechnical advice should be sought where higher batter slopes are proposed.

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x. REPORT LIMITATIONS

This report is for the use of the party to whom it is addressed only and has been produced for the proposed development as described and for no other purpose. It has been assumed that the conditions encountered by the limited number of boreholes are representative of the site in general. Some variation from the conditions encountered by the boreholes is expected over the site.

ANDREW REDMAN BSc.

GEOLOGIST.

AR: KT











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APPENDICES

- i. Land Channel Property Report
- ii. Geovic Map
- iii. Photographic Evidence
- iv. Test Site Location Plan
- v. Borelog Descriptions

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LAND CHANNEL PROPERTY REPORT

APPENDIX i

PROPERTY REPORT



From www.planning.vic.gov.au at 26 April 2022 02:37 PM

PROPERTY DETAILS

Lot and Plan Number: Lot 1 TP587052

Address: 10 PENNYROYAL VALLEY ROAD DEANS MARSH 3235

Standard Parcel Identifier (SPI): 1\TP587052 Local Government Area (Council): SURF COAST

www.surfcoast.vic.gov.au

Council Property Number. 178103

Directory Reference: Vicroads 92 G8

This parcel is in a designated bushfire prone area.

Special bushfire construction requirements apply. Planning provisions may apply.

Further information about the building control system and building in bushfire prone areas can be found on the Victorian Building Authority website https://www.vba.vic.gov.au

SITE DIMENSIONS

All dimensions and areas are approximate. They may not agree with those shown on a title or plan.



Area: 3546 sa. m. Perimeter: 258 m For this property: Road frontages

Dimensions for individual parcels require a separate search, but dimensions for individual units are generally not available.

Calculating the area from the dimensions shown may give a different value to

For more accurate dimensions get copy of plan at <u>Title and Property</u>

UTILITIES

Rural Water Corporation: Southern Rural Water

Urban Water Corporation: Barwon Water

Outside drainage boundary Melbourne Water

Power Distributor: POWERCOR

STATE ELECTORATES

Legislative Council: WESTERN VICTORIA

Legislative Assembly: POLWARTH

PLANNING INFORMATION

Planning Zone: PUBLIC PARK AND RECREATION ZONE (PPRZ)

SCHEDULE TO THE PUBLIC PARK AND RECREATION ZONE (PPRZ)

Planning Overlay: HERITAGE OVERLAY (HO)

HERITAGE OVERLAY - SCHEDULE (HO46)

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LAND CHANNEL PROPERTY REPORT

APPENDIX i

PROPERTY REPORT



Planning scheme data last updated on 21 April 2022.

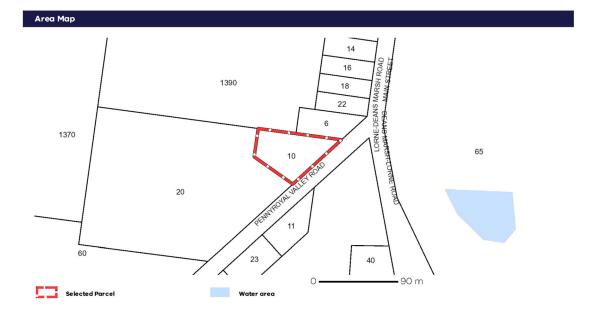
A **planning scheme** sets out policies and requirements for the use, development and protection of land. This report provides information about the zone and overlay provisions that apply to the selected land. Information about the State and local policy, particular, general and operational provisions of the local planning scheme that may affect the use of this land can be obtained by contacting the local council or by visiting https://www.planning.vic.gov.au

This report is NOT a **Planning Certificate** issued pursuant to Section 199 of the **Planning and Environment Act 1987.** It does not include information about exhibited planning scheme amendments, or zonings that may abut the land. To obtain a Planning Certificate go to Titles and Property Certificates at Landata - https://www.landata.vic.gov.au

For details of surrounding properties, use this service to get the Reports for properties of interest.

To view planning zones, overlay and heritage information in an interactive format visit https://mapshare.maps.vic.gov.au/vicplan

For other information about planning in Victoria visit https://www.planning.vic.gov.au

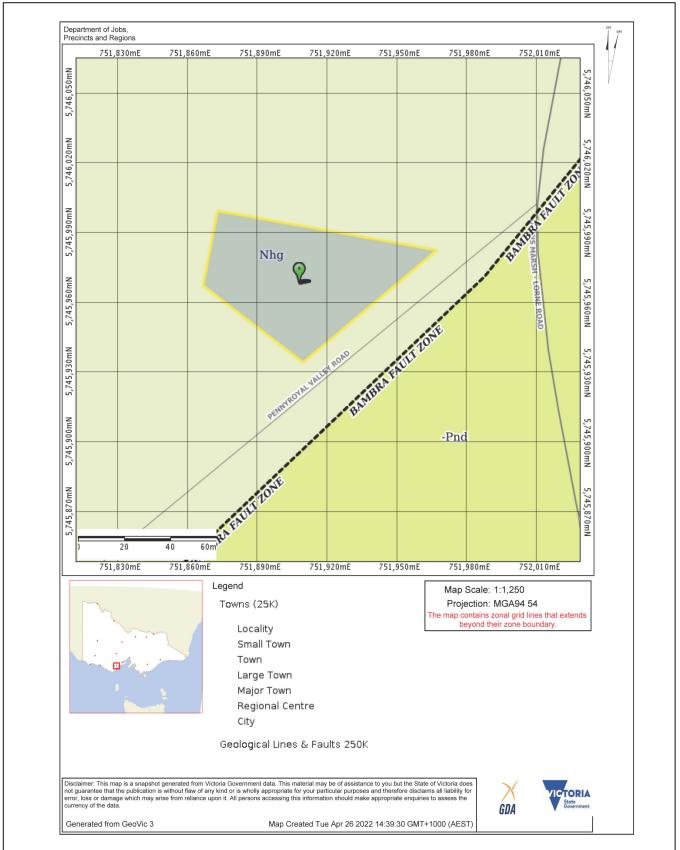


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GEOVIC MAP APPENDIX ii



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APPENDIX iii

AERIAL PHOTOGRAPH

(Approximate Location)

Client: BRAND ARCHITECTS

Ref. Number: 19182C **Date:** 21/04/2022

Site: Deans Marsh Community Hub, 10 Pennyroyal Valley Road,

DEANS MARSH, VICTORIA



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SITE PHOTOGRAPHS

APPENDIX iii





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SITE PHOTOGRAPHS

APPENDIX iii





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CONSULTING GEOLOGISTS



SITE PHOTOGRAPHS

APPENDIX iii





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SITE PHOTOGRAPHS

APPENDIX iii





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APPENDIX iv

TEST SITE LOCATION PLAN

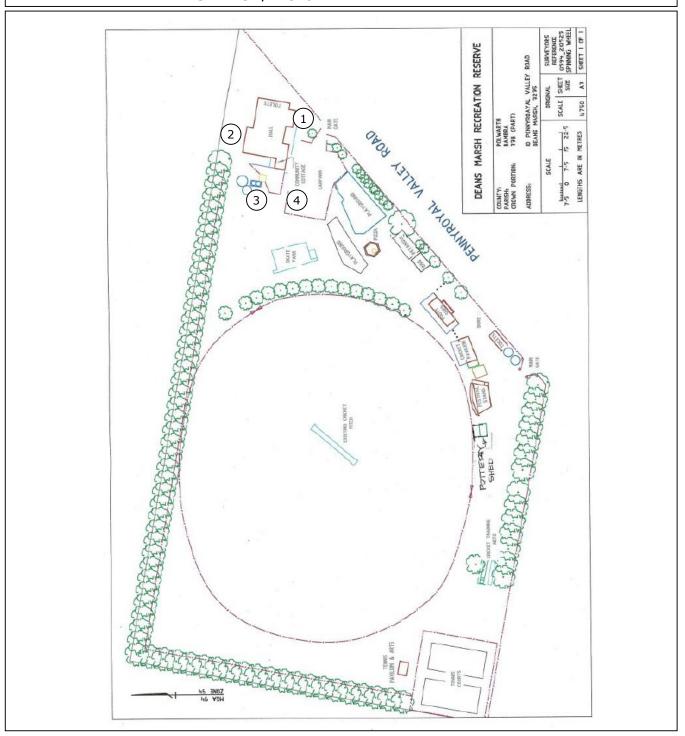
O-Approximate borehole locations

Client: BRAND ARCHITECTS

Ref. Number: 19182C **Date:** 21/04/2022

Site: Deans Marsh Community Hub, 10 Pennyroyal Valley Road,

DEANS MARSH, VICTORIA



CONSULTING GEOLOGISTS



APPENDIX iv

TEST SITE LOCATION PLAN

O-Approximate borehole locations

Client: BRAND ARCHITECTS

Ref. Number: 19182C **Date:** 21/04/2022

Site: Deans Marsh Community Hub, 10 Pennyroyal Valley Road,

DEANS MARSH, VICTORIA



CONSULTING GEOLOGISTS



APPENDIX v

Client: BRAND ARCHITECTS

Ref. Number: 19182C **Date:** 21/04/2022

Site: Deans Marsh Community Hub, 10 Pennyroyal Valley Road,

DEANS MARSH, VICTORIA

	DEANS MARSH, VICTORIA TEST SITE 1 TEST SITE 2								
EXCAVATION METHOD: HYDRAULIC DRILLING RIG					TEST SITE 2 EXCAVATION METHOD: HYDRAULIC DRILLING RIG				
Depth mm	FILL	SOIL PROFILE	"C"	ABP	Depth mm	FILL	SOIL PROFILE	"C"	ABP
100		VERY SILTY CLAY		100	100		FILL: SAND MIX		
200		grey light grey			200		VERY SILTY CLAY		100
300		slightly moist; firm			300		grey light grey		
400					400		slightly moist; firm		
500		CLAY			500				
600		grey brown orange			600				
700		mottle grey	130+		700				
800		moist; stiff			800		CLAY		
900					900		grey brown orange		
1000					1000		mottle grey	130+	
1100					1100		moist; stiff		
1200					1200				
1300					1300				
1400		orange mottle red			1400				
1500		light grey			1500				
1600					1600				
1700					1700		orange mottle red		
1800					1800		light grey		
1900					1900				
2000					2000				
2100					2100				
2200					2200				
2300					2300				
2400					2400				
2500					2500				
2600					2600				
2700					2700				
2800					2800				
2900					2900				
3000					3000				
3100		END BORE HOLE			3100		END BORE HOLE		
3200					3200				
3300					3300				
3400					3400				
3500					3500				
3600					3600				
3700					3700				
3800					3800				
3900					3900				
4000					4000				

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APPENDIX v

Client: BRAND ARCHITECTS

Ref. Number: 19182C **Date:** 21/04/2022

Site: Deans Marsh Community Hub, 10 Pennyroyal Valley Road,

DEANS MARSH, VICTORIA

	DEANS MARSH, VICTORIA								
EXC	CAVATIO	TEST SITE 3 ON METHOD: HYDRAULIC DRII	LLING R	IG	TEST SITE 4 EXCAVATION METHOD: HYDRAULIC DRILLING RIG				
Depth	FILL	SOIL PROFILE	"C"	ABP	Depth	FILL	SOIL PROFILE	"C"	ABP
mm		FILL: CRUSHED ROCK			mm		FILL: CRUSHED		
100		MIX			100		ROCK MIX		
200		VERY SILTY CLAY		100	200		VERY SILTY CLAY		100
300		grey light grey			300		grey light grey		
400		slightly moist; firm			400		slightly moist; firm		
500					500				
600					600				
700		CLAY			700		CLAY		
800		grey brown orange			800		grey brown orange		
900		mottle grey	130+		900		mottle grey	130+	
1000		moist; stiff			1000		moist; stiff		
1100					1100				
1200					1200				
1300					1300				
1400		orange mottle red			1400		orange mottle red		
1500		light grey			1500		light grey		
1600					1600				
1700					1700				
1800					1800				
1900					1900				
2000					2000				
2100					2100				
2200					2200				
2300 2400					2300 2400				
2500					2500				
2600					2600				
2700					2700				
2800					2800				
2900					2900				
3000					3000				
3100		END BORE HOLE			3100		END BORE HOLE		
3200					3200				
3300					3300				
3400					3400				
3500					3500				
3600					3600				
3700					3700				
3800					3800				
3900					3900				

Page 24 of 24 Reference Number: 19182C A06 Full Geochemical Preliminary Site Investigattion, prepared by Ground Science

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PRELIMINARY SITE INVESTIGATION

10 PENNYROYAL VALLEY ROAD, DEANS MARSH, VICTORIA



PREPARED FOR: BRAND ARCHITECTS

Report Reference: E3171.1 AA

Date: 6 April 2022

ABN 31 105 704 078

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PROJECT DETAILS

Project Reference	E3171.1 Rev		
Project Title	10 Pennyroyal Valley Road		
Project Location	Deans Marsh		
Date	6 April 2022		

CLIENT DETAILS

Prepared For (Client)	Brand Architects			
Contact	Kate Reed	_		
Address	Level 8, 176 Wellington Parade, East Melbourne	VIC		

DISTRIBUTION

Original Held By	Ground Science Pty Ltd
One (1) Electronic Copy	Brand Architects

This document presents the results of the environmental assessment conducted for the above project location and is detailed for the sole use of the intended recipient. Should you have any questions related to this report please do not hesitate to contact the undersigned.

PREPARED BY:

REVIEWED BY:

Priyadarshan (PD) Bapat, ME (Envi) Senior Environmental Engineer Jesse O'Connor, BBiolSc Environmental Scientist



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FIGURES

FIGURE 1: SITE OVERVIEW

APPENDICES

APPENDIX A: AERIAL IMAGERY

APPENDIX B: HISTORICAL CERTIFICATES OF TITLE

APPENDIX C: SITE PHOTOGRAPHS



1. INTRODUCTION

Ground Science Pty Ltd (Ground Science) has prepared this report to summarise the findings of a Preliminary Site Investigation (PSI) undertaken for the parcel of land located at 10 Pennyroyal Valley Road, Deans Marsh, Victoria (herein referred to as 'the site').

Ground Science was engaged by Brand Architects (herein referred to as 'the Client') to conduct the works in general accordance with Ground Science proposal GSPE2022049 AB, dated 22 March 2022.

2. BACKGROUND AND OBJECTIVES

Ground Science understands that the Client has been engaged by Surf Coast Shire Council to prepare the Deans Marsh community hub development plan and the Client is in the process of conducting community consultation in order to develop the plan. The Client wishes to gauge the potential for environmental contamination within the parcel of land to complete their internal due diligence. The site is currently zoned as Public Park and Recreational Zone (PPRZ) and is subject to a heritage overlay (HO46).

This PSI will provide an assessment of the likelihood of site contamination, and its potential to affect the proposed development plan for the community hub.

3. SCOPE OF INVESTIGATION

3.1 DEKSTOP STUDY

A comprehensive desktop study and historical review of the site will be used to provide background information regarding the potential for contamination.

The desktop study will include a review of the following:

- Previous site investigation reports, if available;
- Topographical, geological and hydrogeological information to identify site conditions;
- Current and historical aerial photographs to identify potential sources of contamination;
- Historical land title information to identify potentially contaminating land uses at the site;
- EPA Victoria databases and council records to identify previous environmental assessments;
- Heritage directories and historical mapping; and
- Anecdotal information, where possible.

3.2 SITE INSPECTION

A site inspection will be undertaken to investigate any features of concern outlined by the desktop study and identify any additional areas of potential contamination.

4. ASSESSMENT CRITERIA

Guidance regarding the identification of potentially contaminated land and recommendations for assessment within the planning system is outlined by the Ministerial Direction No. 1 – *Potentially Contaminated Land* (2001) (MD1) and Department of Environment, Land, Water and Planning (DELWP) *Planning Practice Note 30: Potentially Contaminated Land* (2021) (PPN30). PPN30 classifies potentially contaminating activities as having a high, medium or low potential to cause contamination of land and groundwater and recommends a suitable assessment approach for the responsible planning authority.

The protection of ecosystems (modified and highly modified) and human health is considered with reference to National Environment Protection Council (NEPC) National Environment Protection (Assessment of Contaminated Sites) Amendment Measure (NEPM) (1999, as amended 2013).



5. SITE DETAILS

Site details are provided in Table 1.

Table 1: Summary of Site Details

Registered Address	10 Pennyroyal Valley Road, Deans Marsh 3235			
Lot and Plan Number	Lot 1 TP587052			
Local Government Area	Surf Coast			
Planning Zone	Public Park and Recreation Zone (PPRZ)			
Planning Overlay	Heritage Overlay (HO46)			

A site plan detailing topographical features provided in Figure 1.

6. ENVIRONMENTAL SETTING

6.1 TOPOGRAPHY

The site lies at approximately 160m Australian Height Datum (AHD) and according to local contours, is generally flat.

6.2 GEOLOGY

The Visualising Victorian Groundwater (VVG) online database indicates that the site is located on the boundary of two separate geological zones. The south-eastern section of the site is underlain by Eocene to Oligocene aged Demons Bluff Group, consisting of sedimentary silt and clay lithology. The north-western section of the site is underlain with Chattian to Miocene aged Gellibrand Marl group, consisting of marlstone, siltstone and calcarenite lithology.

Mapping presented by the Atlas of Australian Acid Sulphate Soils (CSIRO) indicates the site to have an extremely low probability of occurrence for acid sulphate soils.

6.3 HYDROGEOLOGY

The DELWP online mapping database indicates groundwater within the upper aquifer system at the site is representative of Segment B quality (1001 - 3500mg/L total dissolved solids [TDS]). The State Environmental Protection Policy (SEPP) (Waters) (2018) outlines segments of the groundwater environment based on TDS values and specifies beneficial uses that must be protected. The beneficial uses of groundwater to be protected for Segment A2 quality (conservatively assumed) at the site are outlined in Table 2.



Table 2: Protected Beneficial Uses of Groundwater

	Segments (mg/L TDS)								
Beneficial Uses	A1 (0-600)	A2 (601-1,200)	B (1,201-3,100)	C (3,101-5,400)	D (5,401-7,100)	E (7,101-10,000)	F (>10,001)		
Water dependent ecosystems and species	✓	✓	✓	✓	✓	✓	✓		
Desirable potable water supply	✓								
Acceptable potable water supply		✓							
Potable mineral water supply	✓	✓	✓	✓					
Agriculture and irrigation (irrigation)	✓	✓	✓						
Agriculture and irrigation (stock watering)	✓	✓	✓	✓	✓	✓			
Industrial and commercial	✓	✓	✓	✓	✓				
Water-based recreation (primary contact recreation)	√	√	√	√	√	√	√		
Traditional Owner cultural values	✓	✓	✓	✓	✓	✓	✓		
Cultural and spiritual values	✓	✓	✓	✓	✓	✓	✓		
Buildings and structures	✓	✓	✓	✓	✓	✓	✓		
Geothermal properties	✓	✓	✓	✓	✓	✓	✓		

The Visualising Victoria's Groundwater (VVG) database displays anticipated depths to water tables based on bore construction data and landform interpretations. Typical depths within the investigation area are expected to occur at the minimum depth between 10 and 20 metres below ground level (mbgl) across the entire site.

A search of VVG the database identified one (1) groundwater bore located at the site, that was drilled in 2013 and constructed to the depth of 239 mbgl. Additionally, five (5) registered groundwater bores were identified within 500m of the site, drilled since 1956 (earliest record) to depths between 50mbgl and 197.5 mbgl.

6.4 REVIEW OF AERIAL PHOTOGRAPHS

The following imagery obtained from the DELWP, Google Earth and Nearmap were reviewed.

Table 3: Aerial Imagery

Date	Source	Comments				
2010	Nearmap	 The site appears to exist in its current layout, with a community hub building covering most of the site; It appears that the childcare section is not yet fully constructed in the western section of the site; The BMX bike track and the skate park is visible in the western section of the site; Adjacent school, oval and kids play area are visible within the surrounding area 				
2014	Google Earth	No major changes can be observed at the site and the surrounding area				
2021	Google Earth	No major changes can be observed at the site and the surrounding area				



The earliest images of the site, circa 2010 show the site exist as it currently stands with the community hub building on most of the area at the site. Over the past decade the site appears to have remained largely unchanged.

Copies of the aerial imagery are presented in Appendix A.

6.5 REVIEW OF TITLE INFORMATION

A review of certificate of title information obtained from the Department of Environment, Land, Water and Planning (DELWP) was undertaken to provide historical information.

Table 4: Certificates of Title - 16-20 Dumbarton Street, Reservoir

Registered Proprietor	Date	Vol / Folio	Comments
Surf Coast Shire Council	2012	5131 / 133	Current owner
The President councillors and ratepayers of the shire of Winchelsea	1951	5131 / 133	Previous owner
William Hannam	1951	5131 / 133	Farmer, sole survivor
Edwin Robert Smith, William Hannam, Samuel Clissold and William Charles Hunt	1926	5131 / 133	Farmers

Copies of the historical Certificates of Titles are presented in Appendix B.

6.6 SEARCH OF PUBLIC RECORDS

A search of Victorian Environment Protection Authority (EPA) public records was undertaken to identify potential sources of contamination at or in the vicinity of the site.

Table 5: Public Records Search

Register	Description	Outcome	Comment	
Priority Sites	EPA issued clean up or pollution	No sites within 500m		
Register	abatement notices	NO Sites within 500m	-	
Environmental Audit sites	Sites where a Certificate or Statement of Environmental Audit has been issued	No sites within 500m	-	
EPA licenses	List of facilities operating under EPA licenses	No sites within 500m	-	

6.7 CATHODIC PROTECTION SYSTEMS DANGEROUS GOODS

A search of the Energy Safe Victoria cathodic protection systems database did not identify any protected structures or dangerous goods to be present within the site.

6.8 HISTORICAL AND CURRENT LANDFILL SEARCH

A search of the Environmental Protection Authority's Landfill Register identified the nearest landfill facility to be Power Station Camp Road, Anglesea landfill and is located approximately 22km east of the site. The status of the site is listed as a operating landfill, accepting ceramics based asbestos.



6.9 SUMMARY OF THE POTENTIAL FOR CONTAMINATION

The following summary has been developed based on information obtained from historical resources.

Table 6: Summary of the Potential for Contamination

Land Use	Activity	Contaminants of Potential Concern	Potential for Contamination ¹	Comments
Agricultural use	Cattle grazing	Heavy metals, total petroleum and recoverable hydrocarbons (TPH/TRH), polycyclic aromatic hydrocarbons (PAH), asbestos containing materials (ACM), pesticides (OCP & OPP)	Low	No obvious signs of intensive agriculture
Community Centre	Structures circa 1960s	Heavy metals, asbestos containing materials (ACM)	Low	No obvious signs of presence of ACM

¹⁾ With reference to Table 2 of PPN30 and likelihood of occurrence

Additionally, the site is not considered 'potentially contaminated land' as outlined by the MD1, which defines such land as being used or known to have been used for industry, mining or the storage of chemicals, gas, wastes or liquid fuel

7. SITE INSPECTION

A site visit was conducted on 25 March 2022 by Ground Science personnel to confirm desktop findings and identify any additional areas of potential contamination.

The observed site conditions at the time of soil investigation works included the following relevant details:

- The site was bordered by an oval to the west, primary school on the east and rural residential properties to the north and south;
- A childcare centre operates out of the building onsite;
- The site appeared to have a healthy ground cover of grass, with no areas of discoloured or dying vegetation observed;
- The site was generally flat;
- A wastewater management system was observed to be onsite in the eastern section, closer to Pennyroyal Valley Road; and
- No evidence of Asbestos Containing Material (ACM) or other hazardous materials were observed onsite.

Site photographs detailing the conditions encountered are presented in Appendix C.



8. DISCUSSION

In line with the NEPM (2013), the potential for contamination identified during desktop reviews was used to form a preliminary conceptual site model.

Table 7: Preliminary Conceptual Site Model

Aspect	Conditions
Geology and soil	It is identified that the site is located at the boundary of two separate geological zones. The south eastern section of the site is underlain by Eocene to Oligocene aged Demons Bluff Group consisting of silt and clay lithology. The north Western section of the site is underlain with Chattian to Miocene aged Gellibrand Marl group, consisting of marlstone, siltstone and calcarenite lithology.
Groundwater	Indicative of Segment A2 quality (1001 - 3,500 mg/L TDS) at an anticipated depth generally between 10mbgl and 20mbgl.
Potential contamination	Historical farming activities could result in contamination of heavy metals, total petroleum and recoverable hydrocarbons (TPH/TRH), polycyclic aromatic hydrocarbons (PAH), ACM, dioxins, and phosphates. However, activities appear to be limited to low intensity grazing land.
sources	Building structures circa 1960s activities onsite could result in contamination of heavy metals and ACM.
Potential receptors	Future site workers – development and ongoing operations Site visitors – proposed residential land use of the site
Potential exposure pathways	Direct contact with soils during site developments

The site history detailed in the above conceptual model does not include any land uses or activities that may present a medium or high potential for land contamination, as outlined by PPN30. However, the small, suspected soil stockpile along the northern boundary will require further investigation.

The site inspection undertaken did not identify any potential sources of contamination or occurrences of potentially hazardous materials, such as Asbestos Containing Materials (ACM).

Based on the results of this investigation, Ground Science considers the potential for land contamination at the site to be low, in accordance with PPN30. The potential contamination exposure pathways described in Table 7 will not likely be realised for the proposed developmental plan for the community hub and therefore, no further investigation or environmental audits are considered necessary.



9. LIMITATIONS

Ground Science has prepared this document in accordance with the scope of works and for the purpose outlined in the Ground Science proposal GSPE2022049 AB, dated 22 March 2022.

The advice given in this report is based on the assumption that the conditions anticipated are representative of the overall site and soil conditions. However, it should be noted that actual conditions in some parts of the site might differ from those found. If sampling reveals soil conditions significantly different from those shown in our findings, Ground Science must be consulted.

It is recognised that the passage of time affects the information and assessment provided in this document. Ground Science's assessment is based on information that existed at the time of the preparation of this document. It is understood that the services provided allowed Ground Science to form no more than an opinion of the actual site conditions observed and cannot be used to assess the effects of any subsequent changes in the quality of the site, or its surroundings, or any laws or regulations.

Where data has been supplied by the client or a third party, it is assumed that the information is correct unless otherwise stated. No responsibility is accepted by Ground Science for incomplete or inaccurate data supplied by others.

Any drawings or figures presented in this report should be considered only as pictorial evidence of our work. Therefore, unless otherwise stated, any dimensions should not be used for accurate calculations or dimensioning.

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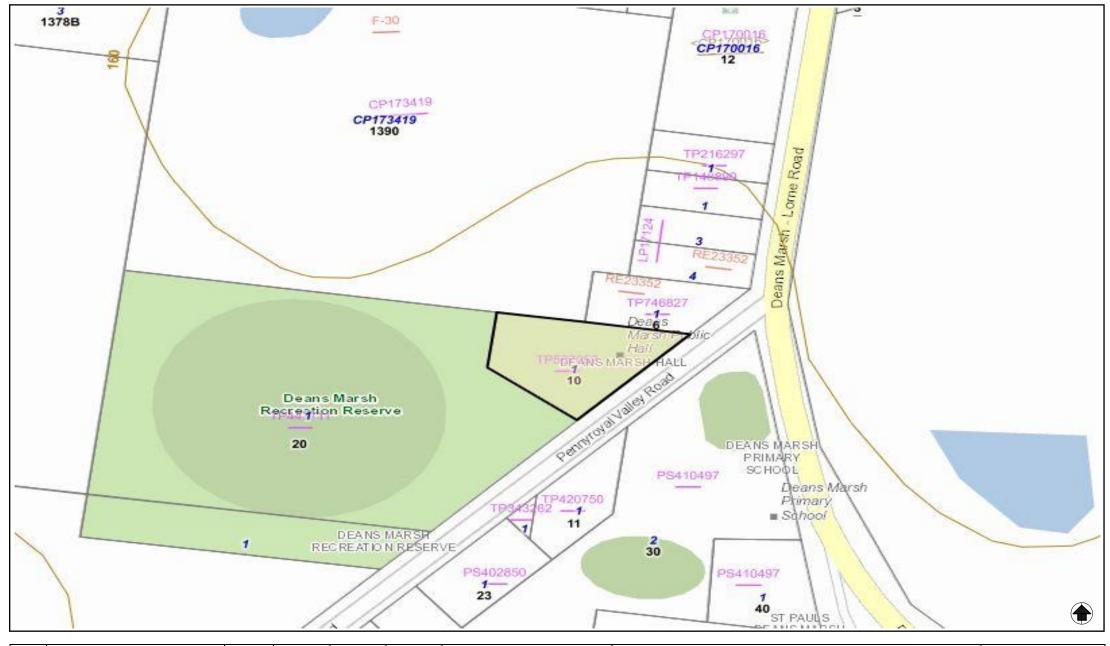


10. REFERENCES

- ANZECC Australian and New Zealand Water Quality Guidelines for Fresh and Marine Waters (2000);
- Australian Standard AS4482.1 Guide to the Investigation and Sampling of Sites with Potentially Contaminated Soil (2005)
- Department of Environment, Land, Water and Planning (DELWP) *Planning Practice Note 30: Potentially Contaminated Land* (2021)
- Federation University Australia Visualising Victoria's Groundwater (VVG) accessed http://www.vvg.org.au/ (2016)
- Heritage Insights Pty Ltd Plenty Valley Cemetery: 2000 Donnybrook Road, Yan Yean Cultural Heritage Assessment (2019)
- Ministerial Direction No. 1: Potentially Contaminated Land (2001)
- National Environment Protection Council (NEPC) National Environment Protection (Assessment of Contaminated Sites) Amendment Measure (NEPM) (1999, as amended 2013)
- National Health and Medical Research Council (NHMRC) Australian Drinking Water Guidelines (2011)
- Planning and Environment Act (1987)
- SEPP (Groundwaters of Victoria) (1997)
- SEPP (Prevention and Management of Contaminated Land) (2002)
- Southern Rural Water Groundwater Atlas (2014)
- Victorian Government Planning and Environment Act 1987 *Ministerial Direction No. 1 Potentially Contaminated Land* (2001)



FIGURE



Rev		Drawn	Date	Checked	Scale	Legend
						SITE BOUNDARY
						—COUNTOURS (10m)
						WATERCOURSE
0	FIGURE 1: SITE OVERVIEW	PB	5/04/22	JO	NTS	

PRELIMINARY SITE INVESTIGATION DEANS MARSH COMMUNITY HUB, 10 PENNYROYAL VALLEY RD, DEANS MARSH

Prepared For: Brand Architects

Job No: E3171.1





Rev		Drawn	Date	Checked	Scale	
] (
						1
						-
0	FIGURE 2: SITE LOCATION	PB	5/04/22	JO	NTS	

Legend

Approx. location of the wastewater tank

PRELIMINARY SITE INVESTIGATION DEANS MARSH COMMUNITY HUB, 10 PENNYROYAL VALLEY ROAD, DEANS MARSH

Prepared For: Brand Architects

Job No: E3171.1





APPENDIX A – AERIAL IMAGERY



Rev		Drawn	Date	Checked	Scale	
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						-
0	AERIAL PHOTO 2010	PB	5/04/22	JO	NTS	

Legend

Approx. location of the wastewater tank

PRELIMINARY SITE INVESTIGATION DEANS MARSH COMMUNITY HUB, 10 PENNYROYAL VALLEY ROAD, DEANS MARSH

Prepared For: Brand Architects

Job No: E3171.1





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TO 2014 PB	5/04/22	JO	NTS	
_	OTO 2014 PB	OTO 2014 PB 5/04/22	OTO 2014 PB 5/04/22 JO	OTO 2014 PB 5/04/22 JO NTS

Legend

Approx. location of the wastewater tank

PRELIMINARY SITE INVESTIGATION DEANS MARSH COMMUNITY HUB, 10 PENNYROYAL VALLEY ROAD, DEANS MARSH

Prepared For: Brand Architects

Job No: E3171.1





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0	AERIAL PHOTO 2021	l PB	5/04/22	JO	NIS	1

Legend

Approx. location of the wastewater tank

PRELIMINARY SITE INVESTIGATION DEANS MARSH COMMUNITY HUB, 10 PENNYROYAL VALLEY ROAD, DEANS MARSH

Prepared For: Brand Architects

Job No: E3171.1





APPENDIX B - HISTORICAL TITLES



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HISTORICAL SEARCH STATEMENT

Land Use Victoria

Page 1 of 4

Produced 29/03/2022 11:21 AM

Volume 5131 Folio 133

Folio Creation: Created as paper folio continued as computer folio

Parent title Volume 04917 Folio 207

THE IMAGE OF THE FOLIO CEASED TO BE THE DIAGRAM LOCATION ON 26/09/2002 05:01:26 AM

RECORD OF HISTORICAL DEALINGS

Date Lodged for Date Recorded Dealing Imaged Dealing Type and

Registration on Register Details

RECORD OF VOTS DEALINGS

Date Lodged for Date Recorded Dealing Imaged

Registration on Register

12/12/2012 28/12/2012 AK077211V Υ

RECORDING OF DISPOSITION OF LAND

FROM:

THE PRESIDENT COUNCILLORS AND RATEPAYERS OF THE SHIRE OF WINCHELSEA

TO:

SURF COAST SHIRE COUNCIL

RESULTING PROPRIETORSHIP:

Estate Fee Simple Sole Proprietor

SURF COAST SHIRE COUNCIL of 1 MERRIJIG DRIVE TORQUAY VIC 3228

AK077211V 12/12/2012

STATEMENT END

VOTS Snapshot

VOLUME 05131 FOLIO 133 124044303614C

Produced 28/12/2012 07:11 am

LAND DESCRIPTION

Lot 1 on Title Plan 5870520 (formerly known as part of Subdivision B Crown Allotment 33 Parish of Bambra). PARENT TITLE Volume 04917 Folio 207 Created by instrument 1237109 20/05/1926

REGISTERED PROPRIETOR

Estate Fee Simple

Title 5131/133 Page 1 of 4



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HISTORICAL SEARCH STATEMENT

Land Use Victoria

Page 2 of 4

Sole Proprietor

THE PRESIDENT COUNCILLORS AND RATEPAYERS OF THE SHIRE OF WINCHELSEA 2424054 02/08/1951

ENCUMBRANCES, CAVEATS AND NOTICES

Any encumbrances created by Section 98 Transfer of Land Act 1958 or Section 24 Subdivision Act 1988 and any other encumbrances shown or entered on the plan set out under DIAGRAM LOCATION below.

DIAGRAM LOCATION

SEE TP587052Q FOR FURTHER DETAILS AND BOUNDARIES

Paper Title Images

5131/133 - Version 1, Date 26/06/2000

Title 5131/133 Page 2 of 4

Delivered by LANDATA®, timestamp 29/03/2022 11:21 Page 1 of 2

Entered in the Register Book



vol. 5131 Fol. 1026133

VICTORIA.

Certificate of Citle,



UNDER THE "TRANSFER OF LAND ACT 1915."

Edwin Robert Smith William Hannam Samuel Clissold and William Charles Hunt
all of Deans Marsh Farmers and Leonard Melbourne Garton Farrell of Carlowrie
now the professor of an Estate in Fee-simple, subject to the Encumbrances
notified herelinder in All that piece of Land, delineated and coloured
red on the map in the margin being part of Subdivision B of Crown Allotment
Thirty-three Parish of Bambra County of Polwarth

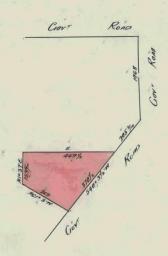
Saled the Twentieth thousand nine hundred and twenty-six.

day of Mey One

Shud leavely

Assistant Registrar of Tiles.

ENCUMBRANCES REFERRED TO.



4917-207



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M.M. H
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Vol. 4917. Fol. 983207.

Transfer. 1237109.

Application

DATED 2 chaques Assistant Registrar of Titles

THE PRESIDENT COUNCILLORS AND RATEPAYERS OF THE SHIRE OF Winchelsea

is now the proprietor of the within described estate by transfer registered on 2 Raqual 1951

and numbered 2424054.

Assistant Registrar of Titles

17/3/52



APPENDIX C - SITE PHOTOGRAPHS



Site conditions – Facing east, photo along the north face of the community building



Site conditions – Facing east, showing the water tanks behind the childcare centre

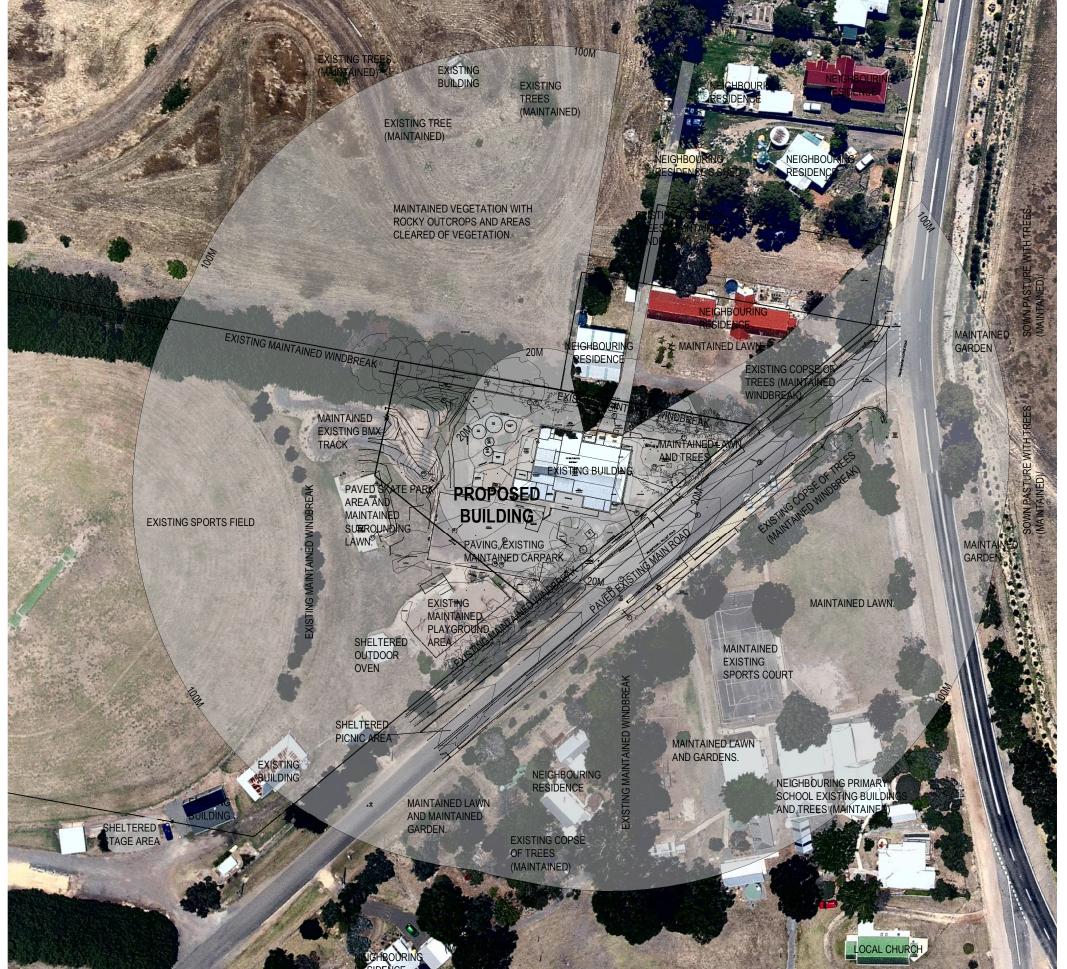


Site conditions – Photo showing the wastewater treatment system



Site conditions – Photo from the carpark showing the community hub building to the north

A07 Bush Fire Attack Level assessment



BAL ASSESSMENT

SITE LOCATION:	FIRE DANGER INDEX:	SITE AREA:	OVERLAY:
VICTORIA (GENERAL)	100	9.97ha	AREA PRONE TO BUSHFIRES

SITE COVERED BY OVERLAY:

PROPOSED BUILDING:

100% SITUATED WITHIN AREA PRONE TO BUSHFIRES

ELEVATION:	EFFECTIVE S	LOPE:	DISTANCE:	CLASSIFIED VEGETATION:	BAL:
NORTH	UP SLOPE	1°	GREATER THAN 100M	GRASSLAND	12.5
EAST	UP SLOPE	1°	GREATER THAN 100M	GRASSLAND	12.5
SOUTH	UP SLOPE	1°	GREATER THAN 100M	GRASSLAND	12.5
WEST	UP SLOPE	1°	GREATER THAN 100M	GRASSLAND	12.5

NOIE:

VEGETATION IN THE VICINITY OF THE PROPOSED BUILDING IS MAINTAINED LAWN AND WINDBREAKS, DETERMINED AS LOW THREAT VEGETATION AND IN ACCORDANCE WITH AS3959 2.2.3.2(F), ARE EXCLUDED FROM CLASSIFIED VEGETATION ASSESSMENT.

CLASSIFIED VEGETATION NOT WITHIN 100M OF PRoPOSED BUILDING

BAL 12.5

PREDICTED BUSHFIRE ATTACK LEVEL OF EXPOSURE: EMBER ATTACK

PROPOSED BUILDING AND SHADE STRUCTURE TO BE BUILT IN ACCORDANCE WITH AS3959 - 3.1-3.11 AND 5.1-5.8.

Brand Level 8, 176 Wellington Parade, East Melbourne, Victoria, 3002
T: 03 9419 3500 F: 03 9419 3544 brandarc@brandarchitects.com.au

SCALE: As indicated@A3

QA: DESIGN DATE: 05/09/22

DEANS MARSH COMMUNITY HUB

20 PENNYROYAL VALLEY ROAD, DEANS MARSH, VICTORIA, 3235

SURFCOAST SHIRE COUNCIL,

A002 [FS]

A08 Full Funcation Survey

CENTRE NAME: Deans Marsh Memorial Hall, Community Cottage and Child Care	QUESTION	Yes/No	Score	MBER OF QUESTIC	NOTES AND FAILURE RATE
Area 1 - Entry Forecourt	Is the Entry Forecourt fenced?	N/A			
	Is the Entry Forecourt secure from the Car Park Area?	N/A			
	Is there an undercover area provided at the entry?	Y			
	Is there sufficient area for Users to congregate prior to entry into building?	N	1		
	Is there out of weather pram parking?	N	1		
	Is the Main Entry clearly identified?	N	1		
	Is there an accessible path of travel to the Main Entry?	Y			
Sub-Total			3	5	3 OF 5
Area 2 - Foyer	Does the Foyer provide an effective connection between the Main Entrance and the Principle Program Rooms?	N	1		
	Is the Main Entry in principle accessible?	N	1		
	Are main doors of compliant width?	Y			
	Is there sufficient space for Parents or Users to gather prior to Children pick-up/Actvity?	N	1		
	Is there sufficient space for signing in and out procedures conducted in this area?	N	1		
	Is the area clear of children's bag storage?	Y			
	If Children's bags are stored in this area. Does this function well for the movement of Children through the Centre during the day and enable access to bags when required by Children?	NA			
	Is there a sitting or waiting area?	N	1		
Sub-Total			5	7	5 OF 7

CENTRE NAME: Deans Marsh Memorial Hall, Community Cottage and Child Care	QUESTION	Yes/No	Score	MBER OF QUESTIC	NOTES AND FAILURE RATE
Area 3 - Children's Program Room 1	How many Children is this room licensed for and is of sufficient area? 14	Y			
	Are main doors of compliant width?	N	1		
	Does the room enjoy good natural daylight levels?	Z	1		
	Does the room enjoy good natural ventilation?	Y			
	Is an effective link achieved between the indoor and adjacent outdoor play areas?	N	1		
	Is the space configured to enable flexible use?	Y			
	Is dedicated storaged provided for Children's bags stored in the room?	N	1		
	Is storing Children's bags in the room desirable and functional?	N	1		
	Is there in principle an accessible path of travel from the Program Room to the Playground?	Z	1		
	Are there sufficient wet/amenities areas within the room for Adults?	N	1		
	Are there sufficient wet/amenities areas within the room for Children?	Y			
	Does the existing heating system operate effectively and comfortably?	N	1		
	Is the operating noise level acceptable?	N	1		
	Does the existing cooling system operate effectively?	N	1		
	Is the operating noise level acceptable?	N	1		

CENTRE NAME: Deans Marsh Memorial Hall, Community Cottage and Child Care	QUESTION	Yes/No	Score	MBER OF QUESTIC	NOTES AND FAILURE RATE
	Is sun penetration and glare in the space well managed? And if so how is it managed?	Y			
	Is there sufficient storage within the Program Room?	Y			
	Are the acoustics in the room workable?	Y			
Sub-Total			11	18	11 OF 18
Area 3A - Child Care Nursery/sleep area	How many Children is this room licensed for and is of sufficient area?	Y			
	Are main doors of compliant width?	N	1		
	Does the room enjoy good natural ventilation?	Y			
	Does the existing heating system operate effectively and comfortably?	N	1		Bar radiator in wall
	Is the operating noise level acceptable?	N	1		
	Does the existing cooling system operate effectively?	N	1		Not sighted
	Is the operating noise level acceptable?	N	1		
	Is sun penetration and glare in the space well managed? And if so how is it managed?	Y			Blinds
	Is there sufficient storage within Room?	N	1		
	Are the acoustics in the room workable?	Y			
Sub-Total			6	10	6 OF 10

CENTRE NAME: Deans Marsh Memorial Hall, Community Cottage and Child Care	QUESTION	Yes/No	Score	MBER OF QUESTIC	NOTES AND FAILURE RATE
Area 4 - Children's Tollet 1	How many Tollet pans are provided?	2			
	How many basins are provided?	1			
	Are main doors of compliant width?	N	1		
	Are there sufficient numbers of Toilets for licenced number of children?	Y			
	Are there sufficient numbers of Basins for licenced number of Children?	Y			
	Is there a shower bath for Children in the Centre?	N	1		
	Are change table facilities provided as required?	Y			Very basic and small. No separate handwash facilities provided for staff
	Are change table facilities functional?	N	1		
	Is provision made for getting Children up on bench?	N	1		
	Are these provisions for getting Children up on bench functional?	N	1		
	Is there a visul and direct connection between the Toilets and the Program Room?	Y			
	Is there visual and direct connection between the Tollets and the Playground?	N	1		
	Are all window sills no greater than 900mm high?	N	1		
	Do hand wash and dry facilities work effectively?	N	1		No adult hand wash
	Is the playground in principle accessible from the Toilets?	N	1		Did not view staff toilet due to bathroom use, presume it is off the childrens toilet
Sub-Total			9	13	9 of 13

CENTRE NAME: Deans Marsh Memorial Hall, Community Cottage and Child Care	QUESTION	Yes/No	Score	MBER OF QUESTIC	NOTES AND FAILURE RATE
Area 5 - Storage Room 1	Is there sufficient storage?	N	1		
	Is there provision for the storage of large objects?	N	1		
	Is all storage below 1800mm high?	N	1		
	Is the Storage Room effectively enclosed?	Y			
	Is the Storage Room directly accessible from the Program Room?	Y			
Sub-Total			3	5	3 OF 5
Area 6 - Kitchenette 1	Do cooking or Kitchen based activities form part of the program offered?	N	1		No Kitchenette provded member has to leave licenced space to access rudamentry facilities in Computer Room
	Does the existing Kitchenette have the facilities to enable this program to be conducted?	N	1		
	Is the layout of the Kitchen efficient?	N	1		
	Is the layout of the Kitchen safe?	N	1		
	Is the Kitchen visually accessible to the Program Room to enable participation by Children?	N	1		
Sub-Total			5	5	5 OF 5
Area 7 - Computer Room					
	Are main doors of compliant width?	N	1		
	Does the room enjoy good natural daylight levels?	Y			
	Does the room enjoy good natural ventilation?	Y			

CENTRE NAME: Deans Marsh Memorial Hall, Community Cottage and Child Care	QUESTION	Yes/No	Score	MBER OF QUESTIC	NOTES AND FAILURE RATE
	Is an effective link achieved between the indoor and adjacent outdoor areas?	N	1		
	Is there in principle an accessible path of travel from the Program Room to the outdoors?	N	1		Access via an adjacent space.
	Are there sufficient wet/amenities areas within the room for Adults?	N	1		
	Does the existing heating system operate effectively and comfortably?	N	1		
	Is the operating noise level acceptable?	N	1		
	Does the existing cooling system operate effectively?	N	1		
	Is the operating noise level acceptable?	N	1		
	Is sun penetration and glare in the space well managed? And if so how is it managed?	N	1		Random drapes over windows
	Is there sufficient storage within the Program Room?	N	1		
	Are the acoustics in the room workable?	Y			
Sub-Total Area 9- Main Hall including stage (Area			10	13	10 OF 13
8 not required)					
	Are main doors of compliant width?	Y			
	Does the room enjoy good natural daylight levels?	N	1		
	Does the room enjoy good natural ventilation?	N	1		
	Is an effective link achieved between the indoor and adjacent outdoor areas?	N	1		

CENTRE NAME: Deans Marsh Memorial Hall, Community Cottage and Child Care	QUESTION	Yes/No	Score	MBER OF QUESTIC	NOTES AND FAILURE RATE
	Is the space configured to enable flexible use?	N	1		
	Is there in principle an accessible path of travel from the Program Room to the exterior?	Y			
	Is there in principle an accessible path of travel from the Hall to the stage?	N	1		
	Does the existing heating system operate effectively and comfortably?	N	1		
	Is the operating noise level acceptable?	N	1		
	Does the existing cooling system operate effectively?	N	1		
	Is the operating noise level acceptable?	N	1		
	Is sun penetration and glare in the space well managed? And if so how is it managed?	N	1		Too dark, no direct sunlight or views out
	Is there sufficient storage within the Program Room?	N	1		
	Are the acoustics in the room workable?	N	1		
Sub-Total			12	14	12 OF 14
Area 10 - Storage Room 3	Is there sufficient storage?	N	1		
	Is there provision for the storage of large objects?	N	1		
	Is all storage below 1800mm high?	Y			
	Is the Storage Room effectively enclosed?	Y			
	Is the Storage Room directly accessible from the Program Room?	N	1		
Sub-Total			3	5	3 OF 5

CENTRE NAME: Deans Marsh Memorial Hall, Community Cottage and Child Care	QUESTION	Yes/No	Score	MBER OF QUESTIC	NOTES AND FAILURE RATE
Area 11 Centre Kitchen 1	Is the Kitchen a registered with SCS?	Y			
	Is the kitchen of sufficenly high standard of ammenity?	N	1		
	Are main doors of compliant width?	Y			
	Is the floor surface sealed and coved to skirts/kickboards?	Y			
	Are there wall tiles/wall vinyl up to 1800 high?	Y			
	Is there a separate knee/foot operable hand basin?	Y			
	Is there stainless steel splashback to stove?	N	1		
	Is there an exhaust hood?	N	1		
	Are light fittings sealed?	N	1		
	Is all storage below 1800mm high?	N	1		
	Are there internal rubbish bins provisions?	Y			
	Are these functional?	N	1		
	Are there external rubbish bin provisions?	Y			
	Do these allow for bin wash down?	N	1		
	Are these functional?	N	1		
Sub-Total			8	15	8 OF 15

SURF COAST SHIRE DEAN'S MARSH MEMORIAL HALL, COMMUNITY COTTAGE AND CHILD CARE FUNCTIONAL REVIEW FACILITIES QUESTIONNAIRE

CENTRE NAME: Deans Marsh Memorial Hall, Community Cottage and Child Care	QUESTION	Yes/No	Score	MBER OF QUESTIC	NOTES AND FAILURE RATE
Area 12 Centre Kitchen 2 _KIOSK	Is the Kitchen a registered with SCS?	N	1		
	Are main doors of compliant width?	N	1		
	Is the floor surface sealed and coved to skirts/kickboards?	N	1		Although coved they are lifting and uneven
	Are there wall tiles/wall vinyl up to 1800 high?	Y			
	Is there a separate knee/foot operable hand basin?	Y			
	Is there stainless steel splashback to stove?	NA			No stove
	Is there an exhaust hood?	NA			
	Are light fittings sealed?	Y			
	Is all storage below 1800mm high?	N	1		
	Are there internal rubbish bins provisions?	N	1		
	Are these functional?	N	1		
	Are there external rubbish bin provisions?	N	1		
	Do these allow for bin wash down?	N	1		
	Are these functional?	N	1		
Sub-Total			9	14	9 OF 14
Area 13 - Office	How many workstations are required?	2			

CENTRE NAME: Deans Marsh Memorial Hall, Community Cottage and Child Care	QUESTION	Yes/No	Score	MBER OF QUESTIO	NOTES AND FAILURE RATE	
	Is there sufficient room to accommodate those workstations?	N	1			
	Are main doors of compliant width?	Y				
	Is there sufficient space for document storage?	Y				
	Does the room have sufficient natural light?	Y				
	Does the room have natural ventilation?	Y				
	Is there functional heating?	Y				
	Is there functional cooling?	Y				
	Is there sufficient space to accommodate client interviews?	N	1			
	Is the Office located to achieve effective spatial relationship to Entrance Foyer?	Y				
Sub-Total			2	9	2 OF 9	
Area 14 - Circulation Areas	Are circulation paths throughout the building clear?	Y				
	Are circulation spaces well lit?	Y				
	Is all signage clear?	N	1			
	Are there no obvious obstructions to access for people with limited mobility?	N	1			
Sub-Total			2	4	2 OF 4	
Area 15 - Public Toilets	Are the Public Toilets readily accessible from the Main Foyer or Circulation Space?	N	1		Off the Main Hall which means all other users have to transverse the hall to access the toilets.	

CENTRE NAME: Deans Marsh Memorial Hall, Community Cottage and Child Care	QUESTION	Yes/No	Score	MBER OF QUESTIC	NOTES AND FAILURE RATE	
	Are the Public Toilets located and configured to minimise security risk?	N	1			
	Are there sufficient number of pans?				HALL 145 SQM =145 PEOPLE, MEETING(COMP ROOM) 22.8SQM @2SQM = 11 PEOPLE, ELC 14 CHILDREN =2 STAFF, OFFICE 9SQM = 1 PERSON, TOTAL 159 PEOPLE: MALE 80: 1 URINAL, 2 PANS 2 BASINS. FEMALE 80: 3 PANS 2 BASINS	
	Are there sufficient number of basins?	N	1			
Sub-Total			3	4	3 OF 4	
Area 16 - Accessible Toilet	Is the Accessible Toilet directly accessible from the Foyer or Main Circulation Space?	N	1			
	Does it achieve luminance contrast?	N	1			
	Does it appear in principle compliant?	Y				
Sub-Total			2	3	2 OF 3	
Area 18 - Accessible Shower	Is an Accessible Shower provided?	N	1			
Sub-Total			1	1	1 OF 1	
Area 19- Cleaner's Store	Is a separate Cleaner's Store provided?	Y				
	Are all cleaning chemicals for the centre stored in the Cleaner's Store?	Y				
	Does the Cleaner's Store have a cleaner's trough?	N	1			
	Does the Cleaner's Store have sufficient storage?	Y				
	Is all shelving below 1800mm high?	N	1			
	Does the Cleaner's Store have direct access to the exterior?	N	1			
Sub-Total			3	6	3 0F 6	
Area 20 - Playground	Does the Playground directly link to the adjacent Program Room with an accessible path of travel?	N	1			

SURF COAST SHIRE DEAN'S MARSH MEMORIAL HALL, COMMUNITY COTTAGE AND CHILD CARE FUNCTIONAL REVIEW FACILITIES QUESTIONNAIRE

CENTRE NAME: Deans Marsh Memorial Hall, Community Cottage and Child Care	QUESTION	Yes/No	Score	MBER OF QUESTIC	NOTES AND FAILURE RATE
	Does the Playground directly link to the Children's Toilets?	N	1		
	Does the Playground enjoy good northern solar access?	Y			
	Does the Playground have provision for shade?	Y			
	Is the shade provided by a mix of shade structures and mature trees?	N	1		
	Does the Playground allow for flexible use of the space?	Y			
	Does the Playground allow for a variety of uses of the space?	N	1		
	Does the playground provide for children of mixed ability and mobility?		1		
	Is the Playground effectively fenced?	Y			Fence a mix of types cobbled together
Sub-Total			5	9	5 OF 9
Area 21 - Outdoor Store	Is the Outdoor Store directly accessible to the Playground?	Y			
	Is the Outdoor Store well located?	Y			
	Does the Outdoor Store have weather protection at its doors?	N	1		
	Does the Outdoor Store have trafficable paving to its main doors?	N	1		
	Is it of sufficient area?				NOT VIEWED INSIDE
	Does it provide for storage of large items?				NOT VIEWED INSIDE
	Is all storage below 1800mm high?				NOT VIEWED INSIDE

CENTRE NAME: Deans Marsh Memorial Hall, Community Cottage and Child Care	QUESTION	Yes/No	Score	MBER OF QUESTIC	NOTES AND FAILURE RATE
	Does it have lighting?	N	1		
	Does it have power?	N	1		
	Is the door operable?				NOT TRIED LOCKED
Sub-Total			4	6	4 OF 6
Area 22 - Car Park	How many car spaces are provided?	20			
	Are there no obvious traffic issues in relation to the access to the Car Park?	Y			
	Is the access from the Car Park to the Main Entrance safe for pedestrians?	Y			
	Is the Main Entrance clearly identified from the Car Park?	N	1		
	Does the Car Park provide sufficient spaces?	N	1		HALL 145 X .3 = 43, ELC CHILDREN 14 X .22=3 COTTAGE: 13 X.4= 5 TOTALSPACES REQUIRED FOR EXISTING USE 51
	Is an accessible car space provided?	Y			
Sub-Total			2	5	2 OF 5
Area 23 - Overall Site Planning	Is the Playground north facing?	Y			
	Is the building oriented for effective passive performance?	N	1		
	Is the Car Park situated close to the building?	Y			
	Is the overall parcel of land well configured?	Y			
	Is there space for the building to be modified to achieve function?	Y			
Sub-Total			1	5	1 OF 5
TOTAL			109	176	62%
NOTES: Add the Nos not the Yes. High score bad, low score good					THE FACILITY HAS A 62% FAILURE RATE OF FUNCTIONAL PERFORMANCE

A09 Heritage Citation

HERITAGE ASSESSMENTS

Site Name: Deans Marsh Public Hall and Recreation Site No:

Reserve

Address: Pennyroyal Valley Road, Deans Marsh

Approx. Date: 1889

Integrity: Fair Significance Level: Local

Survey Date:



163

05/33

History

The Deans Marsh Public Hall was built in 1889 as a Mechanics Institute and Free Library. The original site was on the Deans Marsh-Lorne Road opposite the 1870s Deans Marsh Hotel. (Millard 1985: 22-23)

The Mechanics Institute movement began in Britain in the early 19th century. Its aim was the education and enlightenment of 'mechanics' or workers involved in the new industrial processes. The first Australian institute was founded in Hobart in 1827. Port Phillip (the early name for Victoria) had an institute in 1839, and the first purpose-built building by 1842. (Land Conservation Council 1996)

The Institutes appealed to many social groups. There were lectures for adults, concerts, entertainments, reading rooms and usually a free library. They were built in most country towns of any size and were often the only public building in such towns. Country Mechanics Institutes were usually simple rectangular structures, of brick or timber, with gabled iron roofs. They usually consisted of one or two small rooms, a large hall and possibly a kitchen. A supper room and stage were sometimes added later.

In Victoria, after Melbourne, Geelong and Portland, Mechanics Institutes were established at Warrnambool and Hamilton in the 1850s and Port Fairy in 1865. There was one at Charlton in 1879. A Mechanics Institute was built at Cobden in the 1880s. (Land Conservation Council 1996: 71-72)

The Deans Marsh Mechanics Institute was known until recently as the 'Mechanics Hall'. A free library existed there from 1889 to 1897. The building was also used for dances. The music in

HERITAGE ASSESSMENTS

the period 1910-20 was provided by Ted Lowe (accordion), Emma Smith and Miss Cahill (piano) and 'Nipper' Ryan (piccolo). The MCs were Bert Walter, Mick Brennick and Harry Millard. There were concerts, too, at which local residents performed and, during the First World War, the Rev. Alex Pearce, Church of England Minister at Deans Marsh, organised concerts for patriotic purposes. These included 'farewell' and 'welcome home' dances for soldiers. The churches held Tea Meetings and High Teas in the Hall. (Millard 1985: 49)

The stage curtain in the hall made by members of the Country Women's Association in the 1940s is now in the Museum of Victoria. A new curtain will be produced in 2000-2001 by an Artist-In-Residence, who will organise members to create the work with the assistance of a Government Grant obtained by Julie Dyer, Surf Coast Shire's Arts Development Officer. (Stewart 2000, pers. comm.)

In 1921, the hall was moved to its present site in the Deans Marsh Soldiers Memorial Park in Pennyroyal Valley Road. Those who supported the move "felt that it was too close to the hotel, which was allowed to sell liquor till 9 pm at that time, thus interferring with entertainments in the hall". (Millard 1985: 22)

The hall has undergone several changes in recent times. The supper room was extended in 1955 and a ladies' cloakroom was added in 1960. A new front was added to the building in 1975. Later, in 1985, a new kitchen was built with a grant of \$8,500 from the Red Cross. This was made in recognition of the part the hall played as a relief centre during the Ash Wednesday fires, and to help equip the hall as a base for any future disaster. (Millard 1985: 50) There are memorial plaques in the hall, honouring district men who served in 1914-18 and 1939-45 wars. (Stewart 2000, pers. comm.)

The plaque on the gates of the Recreation Reserve reads: Deans Marsh Soldiers Memorial Park World Wars 1914-1918, 1939-1945. 'Lest We Forget'. The reserve has been used for a number of memorable football matches, including when Deans Marsh became premiers in the Polwarth League in 1911 and 1929. Cricket was also played there for many years. Golf was another sport played on the reserve and, in earlier times, wood chopping and sheaf tossing as well as walk, trot and gallop races. Last year, a Heritage Day was held in the reserve with wood chopping and bullock team events. (Stewart 2000, pers. comm.)

Description

Small weatherboard hall with rectangular floor plan and iron roof. Unsympathetic extensions in brick and fibro sheeting have been added to the front and side elevations, obscuring the original entrance to the hall, although its original form and fabric of the late 19th century building are still evident. The hall is set alongside the Recreation Reserve which comprises an oval, fibro building (c.1920s), memorial gates, and cypress plantings along the side and rear boundaries. A large bundy or long-leaved box tree stands at the front of the site. The plaque on the gates reads 'Deans Marsh Soldiers Memorial Park World Wars 1914-1918, 1939-1945', and 'Lest we forget'.

The public hall is the former Deans Marsh Mechanics Institute (c1889) which was once located on the Deans Marsh-Lorne Road opposite the hotel in 1920. It was shifted due to pressure from the temperance movement because of its location opposite the hotel. The hall was used as a depot during the Ash Wednesday 1983 fires. It once had a stage curtain embroidered by the CWA: the curtain is now in the Museum of Victoria.

Additions and alterations were made to the hall in 2000 (Permit 00/0174) to provide a community house facility for the community. The extension was to the east and south sides comprising

HERITAGE ASSESSMENTS

Hardie weatherboard cladding and skillion style metal zincalume roof.(Surf Coast Shire)

Statement of Cultural Significance

The Deans Marsh Public Hall and Recreation Reserve are of local significance because of their historical, architectural and social values. Despite a series of unsympathetic extensions and modifications, the public hall is recognisable as the former Mechanics Institute and Free Library, moved to the present location in 1921. As a Mechanics Institute and Public Hall, the building has served as an important community meeting place for over a century. Its importance to the Deans Marsh community was underscored in recent times by its important local role in the Ash Wednesday fires in 1983 (criteria A4, G1). The Recreation Reserve is also of local significance for its social values as a memorial to soldiers in both world wars, and its use for football and cricket matches as well as wood chopping and sheaf tossing events (criterion G1). Significant elements include the public hall (particularly its 19th century form and remaining fabric, but not including the mid/late 20th century extensions), the sport grounds, the adjacent fibro rooms, the memorial gates, and the cypress boundary plantings.

References

Land Conservation Council, Historic Places Special Investigation - South-Western Victoria: Internal records - no field survey CL0005, 1997

Land Conservation Council, Historic Places Special Investigation - South-Western Victoria - Descriptive Report, 1996

Millard, R., The Deans Marsh Story, Geelong, 1985

Stewart, L., pers. comm., 2000

Stewart, M., pers. comm., 2000

Surf Coast Shire, Advice from Mark Harwood, 16 September 2002

Recommendations

Planning Scheme





05/34 05/35

A10 Building Condition Report



BUILDING CONDITION REPORT

AT: DEANS MARSH COMMUNITY HALL

20 PENNYROYAL VALLEY ROAD,

DEANS MARSH

PREPARED FOR: Tym Guthridge

Surf Coast Shire

REPORT NO.: 23688 F1 REV 1

REPORT DATE.: 10 September 2021

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Site Details:

DEANS MARSH COMMUNITY HALL, 20 PENNYROYAL VALLEY ROAD, DEANS MARSH

REPORT NAME.: 23688 F1 BUILDING CONDITION REPORT

Client Details:

SURF COAST SHIRE

Attention: TYM GUTHRIDGE

Document Control:

Issue	Date	Prepared By	Issued To
Rev 1	10/09/2021	B. Kirwan	Tym Guthridge

Disclaimer:

Recommendations and opinions contained in this report are based on a limited investigation, including the interpretation of conditions observed on site, and from the engineering knowledge and experience of the professional engineer undertaking the inspection.

The nature and condition of materials on site can be inferred, but it must be appreciated that actual conditions could vary from the assumed conditions. Actual conditions may differ, because no professional, no matter how qualified, can reveal what is hidden without detailed inspections and analysis. Recommendations are provided in the report for further investigation. If conditions other than those described are encountered, this office should be engaged to assess whether recommendations should be revised. We cannot accept responsibility for problems that may occur due to changed factors if not consulted.

This report shall be reproduced in full. The report as a whole presents the findings of the site assessment and the report should not be copied in part or altered in any way.

Recommendations are provided in the report to take action to improve safety. This office accepts no liability of inaction by responsible persons if measures to improve safety are delayed or not undertaken.

Contact Details:

Brian Kirwan Senior Structural/Civil Engineer B.Eng.(CIVIL)(HON)

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APPENDIX A - Previous Reports & Background - Client Supplied

APPENDIX B – Yttrup Investigation Drawings

APPENDIX C - Site Photographs

APPENDIX D - General Notes 1 to 3;

CSIRO Sheet 10-91 – "Guide to home owners on foundation

maintenance and footing performance"

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BUILDING(S) CONDITION REPORT AT DEANS MARSH COMMUNITY HALL 20 PENNYROYAL VALLEY ROAD, DEANS MARSH REFERENCE NO. 23688 F1

1.0 INTRODUCTION

P.J. Yttrup and Associates (Yttrup) were engaged by Tym Guthridge (Surf Coast Shire) to prepare a building condition report on structural performance and condition of the buildings at Deans Marsh Community Hall, 20 Pennyroyal Valley Hall, Deans Marsh.

An inspection was carried out by Brian Kirwan and Ambrose McIntyre, Structural/Civil Engineers, on 23 June 2021.

This report has been prepared by Brian Kirwan and reviewed by Nathan McLaren, Director.

2.0 SCOPE OF ASSESSMENT AND REPORT

The observations, discussions and recommendations made in this report are based on the following level of review:

- Desktop review of relevant site and building information provided by Client, including structural engineering heritage assessment brief (Surf Coast Shire 09/02/21), previous condition audit (Surf Coast Shire 2018), heritage assessment (Context Pty Ltd), Structural condition assessment report (Andrew Cherubin & Assoc 22/01/20). This review is primarily focused the structural engineering aspects of the buildings. The review is not a full compliance or certification review of the original building design or completed construction;
- Meeting with council representative (Tym Guthridge) to discuss any reported building issues, maintenance, repair or alteration works undertaken;
- Approximate measurements of existing building layout;
- Measurement of relative internal ground floor levels;
- Three footing exposures:
- Site inspection, visual only, of existing buildings (primarily structural elements) by an engineer and photographic record of accessible areas of note (Appendix C);
- Drawings presenting investigation results are included in Appendix B;
- Preliminary structural design checks and computations on selected key elements;
- Compliance certification of the constructed building components is beyond this scope of works;

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- A comprehensive review of the adequacy of original building design (Structural or general NCC compliance) does not form part of this scope of works. Only items raised by client/occupants or observed during visual inspection have been reviewed;
- This investigation and report do not cover pest inspection and/or damage;
- This report is not a building heritage assessment as Yttrup are not heritage consultants or specialists;
- This report does not provide a cost estimate of any remedial works as Yttrup are not quantity surveyors.

Note the primary purpose of this report is to identify any visible structural issues and assess their associated risk. Whilst every reasonable effort has been made to inspect all visible/accessible elements, within the limits of the scope of works, this report is not a complete or exhaustive review of every component of the entire building. This report does not assess the overall risk of the operation of the building.

3.0 BUILDING HISTORY & BACKGROUND

The items discussed in this section are based on a review of reports by others related to the history and heritage of the building and interpretation of conditions observed on site. Therefore, they are assumptions, not necessarily fact, and should be independently verified.

It is understood that the original building (Mechanics Hall) was built circa 1889 on a nearby site on the Deans Marsh-Lorne Road. It was then reportedly relocated to the current site around 1921. From the information provided, it is not clear what the exact extents of the original building were. Given the differing floor and roof framing and internal wall and ceiling lining observed it is quite possible only the central portion of the hall (with higher pitched roof) is the original 1889 building, with the northern and southern "lean to" portions being subsequent extensions. Over the years various additions and modifications have been made. Heritage Assessment by Context Pty Ltd notes extensions/renovations in 1955, 1960, 1975, 1985 and 2000. Based on the information available, a summary of the various building development stages and estimated dates where possible is included in Appendix B (23688_F02).

As detailed further in this report modifications and replacement of the various original hall building components has occurred over the years including but not limited to stumps, floor joists, flooring, external cladding, roof framing, roof sheeting. Only some of the original building fabric remains today which may include some of the roof framing, ceiling lining, some of the wall framing and internal lining, some of the floor joists and bearers.

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4.0 OBSERVATIONS

The building is located just off Pennyroyal Valley Road, adjoining Deans Marsh Recreation Reserve (refer to 23688_F01 in Appendix B for overall site plan). The natural topography of the site is very flat with some very gentle slopes from carparking area to the south west towards the southern side of the building and towards the west on the northern boundary.

The hall is generally of traditional timber framed construction with various additions and alterations over the years as detailed in Section 3.0. The main hall consists of a timber floor on stumps. The extensions to the east and south are on raft slabs and the extensions to the north and west are timber floors on stumps. The eastern extension contains a mixture of timber stud and externally rendered brick cavity walls. The newer extensions to the west and south have prefabricated roof trusses. There is corrugated metal roof sheeting to all the various roofs. For further detail of the building's structural elements refer to the framing layouts provided in Appendix B (23688_F07 & F08).

The majority of the building's roof drainage appears to discharge to a series of five interconnected rainwater tanks to the north west of the building.

4.1 DRAINAGE

Overall, the site is relatively flat and drainage of the site and building is poor with multiple issues noted as detailed further below. As the place name suggests the topography and soils in Deans Marsh inherently drain poorly.

4.1.1 Site Drainage

Site drainage is poor with building perimeter surfaces sloping towards the building in several locations.

The carparking area and uphill playground area and recreation reserve general falls towards the building with the relative low point being near the building's southern entry. There is little or no freeboard to the hall southern entry (Photo 02 & 03). Reportedly some concrete pavement works were carried out in this area to provide a localised spoon drain which it would appear directs small amounts of runoff away from the entry. However, there is no outlet or fall away from this low point. Refer to external levels in this area on Drawing 23688_F05 in Appendix B.

There is generally a very slight fall away from the building on the east and southern side and better fall away on the west side. However, there are several areas around the building perimeter where water can pond (eg photo 04) and given the relative flat and marshy soils even with slight surface fall, drainage remains poor with water permeating the upper silty soils and being trapped on the underlying clay as noted in the footing exposures (Photo 10 & 12, Drawing 23688_F09 in Appendix B). There is also likely to be subsurface flow towards the building, following the natural ground slope.

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There is a slight drainage depression along the northern boundary with falls towards the west. However, there is a low point to the north west of the rainwater tanks where this drainage depression and a swale from the south converge (Photo 16). Water ponds in this area until the level rises sufficiently to discharge further west. The overflow from rainwater tanks and roof drainage was not evident during site inspection and Legal Point of Discharge for stormwater was not been provided to date. It is assumed stormwater overflow discharges to this area.

The subfloor area accessed was wet on the surface with extensive signs of ongoing rising damp on concrete and timber stumps with efflorescence prolific (Photo 30-33). Ongoing excessive moisture has caused severe concrete cancer in some concrete stumps with failed stumps observed in two locations. Timber stumps were damp to touch.

4.1.2 Roof Drainage

Roof seals, screw rubber seals and flashing were in fair to poor condition with many poorly constructed. Roof sheeting was corroded in places (Photo 04, 22, 25-27). Signs of water ingress were noted internally in several locations (Photo 54, 56, 59-61, 66).

Gutters on the northern side were falling away from the downpipe outlet, with water ponding in the gutter. Several overflow pops had been retrofitted further reducing the capacity of the gutters, with uncontrolled overflow contributing to the site drainage issues around the building perimeter (Photo 08, 23, 24, 26).

It appears the gutter system to the south east corner regularly overflows, with a build up of algae and staining visible (Photo 04).

There is very little head difference between the eaves gutter levels and the inlet to the rain water tanks. The tanks are at different heights and appear to be interconnected. A detailed assessment on the relative tank levels and connection details was not completed at the time of inspection.

4.2 FOOTINGS

There are various footing systems of different ages across the different building stages. These can be broadly categorised into timber or concrete stumps and raft slabs on ground. Refer to drawing 23688_F07 (Appendix B) for the extents of various footing systems and drawing 23688_F09 for footing exposure observations.

As can be seen from the measured relative floor levels on drawing 23688_F03 & F04 there is an overall tilt of the building, with south east side (uphill) being relatively higher than the north west side. There are also relative level differences within specific areas and footing types as discussed further in the following subsections.

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As discussed in Section 4.1 site and building perimeter drainage is poor.

A row of trees is located along the northern boundary. Some of the trees along this boundary have been removed in recent years.

4.2.1 Raft Slabs

The raft slab to the south west (circa 2000) appears to be performing well with little or no damage visible to the supported superstructure. Up to 14mm of relative level difference was measured across the slab.

There is some internal cracking to the southern kitchen (circa 1985) and the southern external kitchen door is not operating freely (reportedly varies seasonally) which is likely the result of differential movement across the raft slab (Photo 63-65). Up to 32mm of relative level difference was measured across the slab with the relative low point at the southern entry door.

There is some isolated brickwork cracking to the eastern toilets (reported as circa 1975, previously reported as circa 1999) and there is differential movement visible at the northern junction with adjacent hall building on stumps (Photo 07, 55, 56). Similar damage was noted and reported by this office in 2013 (Our ref 21166 Letter dated 1 October 2013). A footing exposure was completed to the east of this area with the edge beam being in excess of 800mm deep. Up to 30mm of relative level difference was measured across the slab with the relative low point at the north east corner.

4.2.2 Stump Footings

The external levels to the majority of the western perimeter were raised close to floor level with little or no subfloor clearance (with synthetic grass surface to childcare outdoor play area – Photo 18). The south and east sides are abutted by raft slabs and paving slab with no subfloor clearance (Photo 01-06). Only the northern side had subfloor clearance and perimeter access (Photo 08, 13-15). External surface levels to a portion of the northern side had been raised (Photo 10, 35).

Hardwood timber stumps were observed through the central portion of the hall (Photo 33). The northern portion of the hall and northern kitchen had concrete stumps (100-125 square). The stumps were damp to touch and efflorescence was extensive. No integrity testing was carried out on the timber stumps. Severe concrete cancer was visible in some concrete stumps with failed stumps observed in two locations (Photo 30-32, 35).

Up to 70mm of relative level difference was measured across the central hall area with the southern side being higher relative to the northern areas. Some relatively minor cracking was noted on the southern wall (Photo 57, 58, 60). A localised level anomaly was observed in the north west corner of child care nursery with up to 60mm level difference between this room and the adjacent hall. Due to limited access at the time

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of inspection it is not clear if floor level was set down lower that the adjacent hall. Some localised damage to the skirting was noted in this location (Photo 62).

Two footing exposures were completed on the northern perimeter (Drawing 23688_F09). Stumps were founded 650-850 below ground level. No pad footing was evident at footing exposure 1 and a small pad footing (Ø225x150 thick) was evident at footing exposure 2. Footings were founded 30-150mm into stiff to very stiff clay with overlying soft fill/silt/silty clay. Founding material was wet (Photo 10 & 12).

The footing system to the childcare area and northern store area was not accessible at the time of inspection but is believed to be timber or concrete stumps with timber floor framing. Up to 25mm and 15mm level differences, respectively, were measured across these areas.

In the area to the rear of the stage an unusual footing and floor system was observed. There appeared to be two strip footings running parallel with walls and stairway behind the stage. This supported floorboards on bearers on stumps/stub wall framing. No floor joists were visible.

No ant caps or other termite inspection system was evident throughout.

4.3 FLOOR FRAMING

As detailed in Section 4.2.2 subfloor clearance, inspection access and natural ventilation to the majority of the timber floor area is poor.

The floor boards to the original hall do not appear to be original. The technology to achieve the machined edges visible from the underside would not have existed at the time the hall was originally constructed (over 130 years ago). It appears the floor boards may be tongue and grooved (Photo 34). The southern wing of the hall has different lighter coloured floor boards to the rest of the hall (Photo 50). The northern kitchen has chipboard flooring underlay with a vinyl finish.

Details of the observed floor framing are detailed on drawing 23688_F07 in Appendix B.

In the area to the rear of the stage an unusual floor system was observed. There appeared to be two strip footings running parallel with walls and stairway behind the stage. This supported floorboards on bearers (FB4) on stumps/stub wall framing. No floor joists were visible.

Floor framing to the childcare area and northern store area was not accessible at the time of inspection but is believed to be timber.

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4.4 WALL FRAMING

Wall cladding varied in material, style and age around the building. The external cladding was mostly fibre cement weatherboard with some traditional timber weatherboard to the southern side. Refer to external photos in Appendix C for further details and extents. Some localised damage and rot were evident in some locations (Photo 09, 15, 19).

Internal wall lining to the main hall area was a mixture of timber panelling (some possibly original) and plasterboard (unlikely original). Elsewhere the internal lining was typically plasterboard with exposed brickwork to the toilet area. Some minor cracking to brickwork and plaster was noted in some locations (Photo 55, 57, 58, 60, 62- 64). There were no other obvious signs of any major structural issues other than some localised signs of moisture ingress (Photo 54, 56, 59-61, 66).

At the time of inspection access to wall framing was very limited. Condition of framing, bracing and connections/tie downs could not be assessed as this would require destructive investigation.

4.5 ROOF FRAMING

The ceiling to the central portion of the hall is lined with timber ceiling boards, possibly original. The rest of the ceiling linings are plasterboard.

Details of the observed roof framing are detailed on drawing 23688_F08 in Appendix B.

A significant dip in the ridge vertical alignment in the area over the stage can be seen externally (Photo 20). The roof framing is this area (original hall) is framed without struts/web members to create a truss, unlike the remainder of the original pitched roof section. It was reported previously by another consultant that the struts visible elsewhere have been removed. On close inspection there were no signs of nail holes or different rafter colouration in the corresponding strut locations, commonly seen when original framing members are removed. The rafters appear to have rotated away from the ridge board. Timber cleats and packers fixed to the rafters appear to have been retrofitted to prop up roof battens and maintain pitch to roof sheeting, which presumably had deflected excessively (Photo 44, 45). The ceiling joists in this area were deflected excessively when partially loaded by a person (approximately 40-80kg).

Two newer prefabricated trusses (TR5) had been constructed in the ceiling space at the edge of the stage, presumably to support the stage curtain.

The remainder of the central hall roof was framed with struts/web members to create a series of trusses. Horizontal tie rods (TB1) and vertical sag rods (SR1) between the ends of the rafters were visible at discrete locations (Photo 43). Rust was noted on vertical sag rods (SR1) within the roof space. Connections typically consisted of two nails between members.

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During the inspection a roof sheet was temporarily removed to the southern "lean to" portion of the hall roof and southern kitchen to assess the roof framing. Access and visibility were limited however the following observations are noted:

- An excessive dip in the roof sheeting is visible externally (Photo 21). The
 reason for this was not explicitly clear on removal of the roof sheet, however
 some of the battens had signs of damage and/or defects (Photo 41). The
 battens were measured as approximately 70x35 on flat at approximately 9001200 CTS;
- The southern kitchen roof consists of prefabricated trusses (Photo 40);
- The junction between the higher pitched roof and the "lean to" roof of the main hall is supported by a steel truss (TR1). There was rust present on much of the truss (Photo 42). Access to accurately measure the truss was limited however approximate dimensions are provided on the attached drawings. This truss spans approximately 10.5m. Columns, likely timber, are visible internally at the ends of the truss with two exposed bolt heads to the underside of the truss bulkhead. The timber panelling to the truss bulkhead appeared to be pine when viewed from the roof space;
- The sarking is in very poor condition and disintegrates when touched.

The western extension consisted of prefabricated roof trusses with a suspended framed ceiling.

As noted on the attached drawing not all roof framing was accessible at the time of inspection.

4.6 BRACING

As wall framing was typically not visible wall bracing could not be assessed. The only wall bracing noted was some steel angle brace to the eastern wall of the childcare activity area which could be seen from the roof space. There are limited internal walls to the hall area, due to the open space.

Other than Speedbrace to the newer extension to the west and the southern kitchen and some isolated timber braces notched into the rafters to original hall roof, no roof bracing was observed.

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5.0 DISCUSSION OF SITE OBSERVATIONS & RECOMMENDATIONS

5.1 DRAINAGE

Poor drainage to the site and building is creating multiple building performance issues, as discussed in more detail in the following sections. Remedial works are recommended to resolve the issues noted and improve the overall building performance.

5.1.1 Site Drainage

Poor site drainage (surface and subsurface) can contribute to building performance issues including excessive footing movement as discussed further in Section 5.2, damp environment which compromises the structural integrity of building components, and rising damp with associated mould and health issues. Ordinarily timber subfloor areas are extremely dry and normally experience deep drying. The wet subfloor area observed is indicative of poor perimeter surface drainage, subsurface water and poor ventilation.

The natural fall of the site results in surface and subsurface runoff from the carpark and surrounding area being directed towards the building with little or no formal drainage systems to direct it away from the building.

It is recommended that a surface (concrete spoon drain or grated trench) and subsurface cut-off drain be installed to the southern and eastern sides of the building (uphill sides). Due to limited fall along the length of the building, an underground collector pipe may be required to achieve sufficient fall to a discharge point (ideally 1:100 or 1:200 for Ø225 pipe). The subsurface drain shall consist of a slotted drain in a filter sock in a screening pocket and the drain shall be embedded a minimum of 100mm into the underlying low permeability clay layer. Given the depth to clay and the very limited natural fall across the site, the subsurface drain will need to be directed to a sump and pumped out to the suitable discharge point.

Fall away from the building shall be improved. This shall be carried out in combination with improved subfloor clearance and ventilation. It is recommended that perimeter paving be installed around the building with a spoon drain to collect and discharge runoff away from the building and ensure water cannot pond adjacent to the building.

Council should confirm the official legal point of discharge. Swale drains and/or piped stormwater discharge should be improved to ensure stormwater is directed well clear of the building and also not directed onto the adjoining property.

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5.1.2 Roof Drainage

The construction quality of many of the flashings, particularly on the northern side of the roof, is poor with multiple attempts made to seal weak points or obvious locations of water ingress with silicone. The use of silicone in lieu of properly constructed flashings is not recommended as a long-term solution as ongoing expansion and contraction and UV degradation leads to failure of the seals. It is recommended that poorly constructed, non-compliant and failing flashings be replaced.

The rubber seals to roof screws are degraded and roof sheeting is showing signs of degradation with age in places and will need to be replaced at some point in the coming years. Given the multiple points of water ingress throughout the building and the poor condition and construction of many of the roofing components, coupled with the need for upgraded roof bracing as discussed in Section 5.5 and 5.6, it is recommended that the roof sheeting be replaced. Particularly to the northern side, along with gutter remedial works and/or replacement discussed further below.

Gutters with negative falls, ad hoc over flows and areas showing signs of regular overflow should be replaced with correctly sized and graded gutters in accordance with AS3500. Additional down pipes may be required to achieve the required gutter capacity.

The limited head between the eaves gutters and the rainwater tanks may not be sufficient to "push" all of the stormwater though the piped system in more intense rain events, resulting in frequent overflow along the building perimeter. Subject to more detailed investigation into the various eaves gutter levels and the rainwater tank levels, the tank inlet level(s) may need to be lowered to ensure sufficient head is available and risk of overflowing is reduced.

5.2 FOOTINGS

A site classification was not completed as part of this investigation. However, this practice has some geotechnical and structural engineering experience in the area and the soils are known to be made up of moderately (Class M) to highly (Class H1) reactive clays. Under "normal moisture conditions" as described in AS2870, a natural characteristic ground surface movement value, ys, in the order of 40 - 60mm (Class M to H1) is likely for this site. Where abnormal moisture conditions exist, due to factors such as trees close to the structure, poor site drainage, leaking or failed services, the ground surface movement is likely to be much greater.

There are multiple factors on this site influencing abnormal moisture conditions which include poor perimeter drainage, leaking and/or overflowing roof drainage and a row of trees to north. All of these factors are likely contributing to ground movements beyond what would be expected under normal moisture conditions.

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The overall tilt of the building is likely caused by swelling of the reactive clays on the uphill side and shrinkage on the relatively drier downhill side. Swelling founding material in response to a build-up of moisture under the footings is common on the uphill side of buildings where surface and subsurface runoff first reach the building and founding material. This is compounded by the presence of rafts slabs and paving which create a naturally humid subfloor environment. This may also be further compounded by leaking roof drainage (Photo 04). The drier subfloor environment created by timber floors and the drying effect of trees causes shrinkage of reactive clay founding material.

Addressing the site and roof drainage and subfloor ventilation issues will help to stabilise the long term moisture conditions in the founding material and is likely to reduce, but not eliminate, ongoing differential movement across the building. If performance issues persist following drainage remedial works, then further mitigation measures such as heavy pruning or removal of trees or installation of an appropriate root barrier may be investigated. Refer to Appendix D for further information on good site management.

Even with the improved site management some ground movement will still occur and likely result in some ongoing damage requiring ongoing repairs. This is a function of natural seasonal ground movements, the ability of each footing system to alleviate the effects of ground movements and different performance between footing systems of different ages and types.

5.2.1 Raft Slabs

As discussed above poor drainage is likely contributing to excessive ground movements in the southern kitchen raft slab which is causing damage and preventing the external kitchen door from freely operating. Given the age of this slab it is quite possible that it was not designed and constructed with sufficient stiffness resist more significant differential movement.

The isolated brickwork cracking to the eastern toilets is relatively minor and within the acceptable performance limits of AS2870, typically less than Damage Category 1 (< 1mm crack width) with some rare instances damage Category 2 (< 5mm crack width). The depth of the raft beam exposed would provide reasonable footing stiffness to mitigate the effects of some ground movements. The differential movement between the toilets on a raft slab and the adjoining hall with timber floor on stumps is to be expected due to the different type and age of footing systems and the different founding material moisture conditions the two footing systems create.

As discussed further in the previous section improvements to drainage may improve the performance of raft slabs, however some ongoing movement and associated minor damage must be expected.

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5.2.2 Stump Footings

Adequate subfloor ventilation to timber floor systems is required to ensure a dry subfloor environment which ensures stability in ground moisture conditions and associated footing movements, adequate durability of timber framing and minimising conditions for rising damp, mould and associated health concerns. Adequate vents on all sides of a building allow natural ventilation via cross flow to occur.

The subfloor area to the central hall area is completely enclosed to the south and the east by raft slabs and partially enclosed to the west and portions of the north by raised external levels. This severely impedes natural cross ventilation. Combined with drainage issues detailed in previous sections, this has resulted in a damp subfloor area. Improvements to ventilation are required to improve subfloor conditions. This includes lowering of external levels to the west and north to provide adequate subfloor clearance and venting and likely the introduction of mechanical ventilation to account for the lack of natural ventilation available on the south and east sides.

The condition of concrete stumps observed was poor with severe concrete cancer evident. This is due to the excessively damp and wet subfloor environment. Replacement of the concrete stumps will be required to ensure the long-term integrity of the floor support system.

Whilst integrity testing of the main hall timber stumps was not carried out, the ongoing damp conditions are likely to have shortened their lifespan. Subject to further more extensive investigation it is likely they would also need to be replaced to ensure the long-term integrity of the floor support system.

Ant caps or other termite inspection system shall be installed during any restumping works as well as allowance for future relevelling.

The measured relative levels across the newer timber floors extensions appeared reasonable. However, they are still affected by the drainage issues and to a lesser extent the ventilations issues.

Poor drainage as detailed in previous sections and subfloor ventilation are likely contributing to unstable moisture conditions and excessive differential footings movements and should be addressed.

The two footing exposures completed to the stumps indicate minimal pad footings and minimal embedment into suitable founding material (stiff to very stiff clay with overlying moist to wet soft fill/silt/silty clay). Based on the footing exposures some stumps/pads supporting a lesser floor area would just have sufficient bearing area to accommodate domestic design loads (1.5kPa/1.8kN) without excessive settlement, if founded into stiff clay. However, stumps/pads supporting a greater floor area and/or roof loads would likely exceed the allowable bearing pressure of the founding

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material. Furthermore, the imposed design loads required by current Standards (AS1170.1) for this building are much higher that domestic (eg B - Communal Kitchen 3kPa/2.7kN; C3 - Museum Floors & Art Galleries for exhibition purposes, C4/5 Dance Halls & Studios/Concert Halls 5.0kPa/3.6kN). Therefore, larger pad footings would typically be required to avoid exceeding the allowable bearing pressure and resultant excessive settlement (as a guide min 200 thick x 450 diameter). Under larger concentrated loads and/or stumps/pads subject to significant uplift forces (eg under columns supporting steel truss - TR1) larger footings would be required.

The minimal embedment into suitable founding material may be an issue particularly when the founding clay material is subject to excessive moisture which can reduce allowable bearing capacity.

Inadequate bearing of footings results in excessive settlement. This may be a compounding factor in the lower floor levels observed on the north side of the building. Drainage improvements coupled with adequate pad footing sizes and embedment (as a guide min 100mm into stiff clay) would ensure adequate bearing capacity

5.3 FLOOR FRAMING

Current Standards (AS1170.1 – Structural Design Actions - Part 1: Permanent, imposed and other actions) require that floors are designed for certain imposed loads based on their intended and/or possible usage. The categories applicable to the different areas in this building by default are as follows:

- B Communal Kitchen 3kPa/2.7kN;
- B Commercial Kitchen 5.0kPa/4.5kN;
- C3 Museum Floors & Art Galleries for exhibition purposes 4.0kPa/4.5kN;
- C4/5 Dance Halls & Studios/Concert Halls 5.0kPa/3.6kN;
- C5 Stages in public assembly areas 7.5kPa/4.5kN;

It is noted that C5 Stage category loads for a small community hall are unlikely to be realised. However adequate signage shall be installed to ensure that very large loads, particularly point loads (eg theatre props or exhibition pieces), are not permitted, as detailed further below.

Preliminary structural analyses were carried out on structural floor framing members shown on 23688_F07. Only a limited sample of floor framing members was accessible during the inspection and have been assumed to be representative of the typical floor framing. Due to the unknown species and grade, members have been assumed to be minimum Grade F7 for obvious pine members and F8 for members likely to be some form of hardwood. The members were typically checked for a design load of 5.0kPa/3.6kN. Typically, members had sufficient stiffness and strength capacity.

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However, FB2 (50x100 and 45x70 on flat) does not have sufficient stiffness or strength to accommodate the required design loads and shall be upgraded to similar to adjacent floor bearers.

Floor joists shall be retrofitted to the area to the rear of the stage as the flooring would not have the capacity to span between bearers (FB4). The exact extent of area requiring floor joist upgrade needs to be confirmed on site.

The chipboard flooring to the kitchen area would not have sufficient capacity to accommodate concentrated point loads, as required by current Standards for either communal (3.0kPa/2.7kN) or commercial kitchens (5.0kPa/4.5kN). It is recommended that this flooring be upgraded, particularly if any upgrades to the kitchen and equipment are proposed.

The timber floor boards to the main hall area are of unknown timber species and grade. For the purposes of preliminary computations, the floor boards are assumed to be hardwood of minimum F14 grade, based on appearance. Subject to confirmation of grade, the floor boards have sufficient strength capacity to accommodate lower loads (4.0kPa/2.7kN). However current Standards would require the main hall floor to be designed for higher loads by default (5.0kPa/3.6kN) and F14 floorboards do not have sufficient capacity to accommodate these higher loads, particularly the concentrated point load. Preliminary computations indicate floor boards of strength grade of F22 or higher would have sufficient capacity. Remedial options include:

- Verification of floor board grade of F22 or higher. This would require species testing and grading by a qualified professional;
- Upgrade the flooring by installing a structural underlay and relaying the floorboards on top (as a guide 15mm F11 structural plywood), or installing structural flooring on top of the existing floorboards;
- Implement strict load controls to avoid larger point loads. This would include appropriate permanent signage stating no concentrated point loads greater than 2.7kN (275kg).

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5.4 WALL FRAMING

Where localised damage and rot is evident, weatherboards should be repaired or replaced as appropriate. During cladding remedial works underlying wall framing shall be inspected to confirm acceptable condition. In older buildings it is commonly found that wall framing behind damaged cladding is also degraded and requires replacement.

Prior to undertaking any plasterwork and brickwork cracking repair, the subsurface moisture conditions should be allowed to largely stabilise following the completion of drainage remedial works detailed in Section 5.1 and 5.2. As a guide this would take a minimum of 12-24 months with normal weather conditions. During this period some cracks may change, open or close.

It is recommended that some additional investigation works be carried out to expose (remove cladding) some key areas of wall framing to assess the wall framing condition and tie down connections. For buildings like this, tie down upgrade works are commonly required.

This section shall be read in conjunction with sections on bracing (Section 4.6 and 5.6)

5.5 ROOF FRAMING

Remedial works are required to the roof framing over the stage area given the clear signs of excessive deflection and poor structural performance. To remedy the existing framing additional struts/web members are required, similar to the remainder of the original central hall roof, to create a truss. All roof and ceiling members will need to be jacked to a level position prior to installing struts/web members.

A preliminary structural analysis of the central hall roof framing/truss (TR2) was carried out. It was found if horizontal restraint was available to ends of the rafters (at TR1 location) the current framing was satisfactory. If horizontal restraint is not available to the ends of rafters, deflections and/or "roof spread" at the ends of the rafters is excessive and members and connections may become overstressed. In its current structural form, horizontal restraint is likely provided by a combination of the steel truss (TR1), the existing lean-to roofs and the discrete tie rods (TB1). However, some issues with the current structural system and adequate horizontal restraint to TR2 include:

- TR1 capacity is already exceeded due to vertical load alone regardless of any additional horizontal load from TR2, as discussed further below;
- Little or no roof bracing to transfer horizonal loads to restraining bracing
 walls. It is likely the ceiling and/or roof sheeting is acting as a diaphragm
 in some form to transfer bracing loads. However current Standards do
 not permit the use of cladding as bracing unless specifically designed to
 do so due to the risk of the cladding being overloaded and damage
 and/or failure occurring;
- The load path between ends of TR2 rafters and TB1 ties rods is currently unknown;

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 Notches in some rafters for timber roof braces resulting in reduced capacity and stress concentrations.

Therefore, remedial measures required include:

- Provision of suitable strap bracing to central pitched roof and adjoining lean-to roofs to transfer horizontal reactions from TR2 into bracing walls (in addition to building bracing loads as discussed in Section 5.6);
- Exposure of TR2 rafter end connections and upgrades as required to ensure adequate load path into restraining lean-to roof members;
- Upgrading of roof and wall bracing to provide additional horizontal restraint (in addition to building bracing loads as discussed in Section 5.6):
- Treatment or upgrade of corroding sag rods (SR1) within roof space with suitable paint protection system;
- Upgrade of discrete rafters where notches for timber braces deemed unacceptable. The exact details and extent of upgrades would need to be determined following more extensive investigation and computations. However, it is likely that an additional similarly sized rafter would need to be nail laminated to the existing where rafters are notched.

The cause of the excessive dip in the southern lean-to hall roof should be further investigated. It is likely that battens in the area will need to be upgraded.

It is possible that the northern and southern "lean to" portions of the hall were constructed after the original central portion of the hall. If this is the case it is likely side walls were removed and replaced with the steel trusses (TR1), with newer pine panelling retrofitted to conceal the truss.

A preliminary structural analysis of the steel truss (TR1) was carried out. It was found that the internal forces in the truss components were excessive for sizes measured on site (with very limited access). Therefore, the truss is deemed structurally inadequate and in need of remedial works or replacement. Given the extent of corrosion visible on the truss it would likely be more economical to completely replace the truss with a new suitably designed truss or beam (including factory applied corrosion protection system) than to attempt upgrade works, including corrosion protection remedial works.

The sarking should be replaced throughout the older portions of roof.

There were no obvious structural issues with the western extension roof framing. No further computations or checks have been completed for this area.

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5.6 BRACING

Given the age of the building and the ad hoc nature of the various modifications and extensions it is quite possible that walls and associated bracing capacity have been removed or modified over the years, thus reducing the overall ability of the building to resist horizontal loads (primarily wind). The limited number of internal walls to the hall results in the relatively high racking forces in the available walls. Given the age of the building and the ad hoc nature of various building modifications it is unlikely that the bracing capacity of the walls in their current condition is sufficient for the required bracing loads. In addition to this, as discussed in further detail in Section 5.5 additional horizontal loads from TR2 need to be restrained by bracing walls.

It is highly likely bracing upgrades, particularly to the hall walls, including provision of structural plywood sheeting, improved tie down and possibly footing upgrades, would be required to provide sufficient lateral restraint in accordance with current Standards. The extent of required upgrades would need to be confirmed following more intensive and destructive investigations and more detailed computations.

Based on the limited investigations it appears that the newer building additions have adequate roof bracing. The extent of wall bracing is unknown, however there is a good distribution of walls to provide bracing restraint. Detailed inspection and design checks of these areas have not been completed.

To ensure the hall roof is adequately braced, retrofitted Speedbrace is required throughout the roof. To determine the exact layout of bracing more detailed design is required, noting the speed brace is also required to ensure sufficient horizontal restraint is provided to pitched hall roof trusses (TR2).

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6.0 CONCLUSION

Numerous issues which require remedial works have been identified as part of this investigation. A non-exhaustive summary of more significant items is as follows:

- Site drainage improvements
- Roof drainage remedial works
- Subfloor ventilation upgrades
- Restumping & pad footing upgrades
- Flooring upgrades and/or load limitation controls
- Possible wall tie down upgrades
- Roof framing remedial works to area over stage
- Steel truss (TR1) replacements
- Wall bracing upgrades
- Roof bracing upgrades

For reference a diagrammatic representation of these items is provided on drawing 23688_F11 in Appendix B. Refer to full report for more comprehensive details.

The recommendations provided in this report are based on limited and preliminary assessment and structural computations. Should the client wish to carry out remedial works, further investigation and design works are required to fully inform and provide definitive details of required remedial works and building approvals.

Whilst this office cannot comment on the heritage values of the building and its various components, we do note that it appears that only a portion of the central hall form and some discrete building components are truly original (1889) with extensive replacement of components, building modifications and ad hoc building extensions conducted over the years.

Considering the extent of required remedial works and ongoing maintenance, to ensure the building remains compliant and suitable for use into the future, the client may find that complete replacement provides better whole of life value. The feasibility of this however is subject heritage assessment, advice and approvals by the relevant authorities as well as a cost comparison by the client.

Hoping the above meets your requirements and please contact the undersigned if you have any further queries.

Brian Kirwan

Senior Structural/Civil Engineer

Nathan McLaren

Mal He

Chartered Professional Engineer

Director

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10 September 2021

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APPENDIX A

Previous Reports & Background - Client Supplied

- Structural engineering heritage assessment brief (Surf Coast Shire 09/02/21),
- Previous condition audit (Surf Coast Shire 2018),
- Heritage assessment (Context Pty Ltd),
- Structural condition assessment report (Andrew Cherubin & Assoc 22/01/20).

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Structural Engineering Heritage Assessment

Deans Marsh Community Hall

Amendment Register

Issue	Date	Details	Ву
1	09/02/2021	2021 Structural Engineering Assessment	T. Guthridge

1 Introduction

Surf Coast Shire own and maintain a number of buildings throughout the region. Based upon our Building Condition Audits and community Customer Request Management (CRM's), some buildings require a further detailed investigation. At times these buildings and building components require a structural assessment to assess for stability, structural integrity, safety, failure mechanisms, where required condition and heritage value/impacts.

2 Purpose

The primary purpose of the structural engineering assessment is to gain an understanding the structural integrity of the building in relation to heritage requirements and whether the ongoing and upcoming renewal and maintenance costs exceed the value of the original structure. The outcome of the assessment may be used to determine whether Council may decommission the building.

3 Project Scope

Undertake a structural engineering assessment of the *Deans Marsh Community Hall* as shown in Figure 1, located at the Deans Marsh Recreation Reserve, Deans Marsh as identified within Table 1.

The structural engineering assessment is to include:

- A statement that the assessment has been carried out according to the conservation practices of the Australia ICOMOS Burra Charter. The Structural Engineering Assessment should especially address Articles 19 and 20 of the Burra Charter and interpret them in relation to the structural analysis being carried out.
- Whether the building fabric is structurally sound even if it may not strictly comply with the relevant Building Legislation (and how it could be made to comply).
- An assessment of the fabric in disrepair and requiring replacement, and particularly whether
 the extent of replacement fabric is substantial (including much of the roof and wall structure)
 or incidental and routine (such as replacement of roof and wall cladding or restumping). The
 method/s of repair should also be outlined.
- A cost estimate for repairing the building and whether this cost could be considered to be reasonable (when compared to a replacement building of the same size and construction, and given the expectation that building repairs are often more expensive). Any cost estimates should include demolition costs for the cost estimate for a new dwelling.

Table 1 Building list for assessment

Reserve	Asset ID	Description	Address
Deans Marsh	39465	Weatherboard, mixed	20 Pennyroyal Valley Road,
Recreation Reserve		foundations	Deans Marsh
– Community Hall			

4 Building History

Deans Marsh Community Hall is located within a heritage overlay and has intrinsic value to the local community and wider region.

In recent years, the maintenance and upcoming renewal requirements are the building are increasing significantly in conjunction with the inclusion of a number of add-on structures over the years with varying foundation types.

This has led to a number of issues noted through Council's CRM maintenance system, condition audits and previous structural assessments.

The following documents have been included for reference:

- Section 7 Previous Condition Audit from 2018
- Section 8 Heritage Citation
- Section 9 2020 Structural Engineers Assessment

4.1 Heritage Advice

The below heritage advice is based on potential demolition of the building:

The Deans Marsh Public (Community) Hall has local significance and is identified as HO46 in the Schedule to the Heritage Overlay in the Surf Coast Planning Scheme. No external paint controls or internal alteration controls apply, so there is no heritage listing (from a planning perspective) in relation to the stage curtain.

The heritage citation prepared by Context Pty Ltd as part of the Selected Lorne/Deans Marsh Heritage Place Assessments Report notes the alterations and additions to the hall building, and yet it was still heritage-listed with these alterations and additions known. Further change was made in 2000, which no doubt was needed at the time (although did not receive heritage support).

The purpose of the heritage overlay at Clause 43.01 of the Surf Coast Planning is:

- To implement the Municipal Planning Strategy and the Planning Policy Framework.
- To conserve and enhance heritage places of natural or cultural significance.
- To conserve and enhance those elements which contribute to the significance of heritage places.
- To ensure that development does not adversely affect the significance of heritage places.

Based solely on the information in the heritage study, complete demolition of the Hall would have an adverse affect on the significance of the heritage place and therefore be contrary to the purpose of the heritage overlay (and not accord with the Decision Guidelines at Clause 43.01-8). A planning permit is required and based solely on the information you have supplied, heritage support is unlikely.

Repairs and restoration including restumping, recladding walls and roofs, and addressing falling and rising damp, are typical conservation issues affecting heritage buildings. Regular maintenance is therefore critical.

There are opportunities to remove existing additions and replace in a manner more sympathetic to the building, as well as retain and repair the principal gabled portion. From a heritage viewpoint, works carried out on or behalf of a Municipality under \$1M are planning permit exempt (but demolition is not).

I am concerned about the message complete demolition of the building will send to the broader Surf Coast community, particularly owners of heritage buildings that are included as heritage overlays.

Aside from the above, if complete demolition is pursued, I would urge you to engage a Heritage Consultant and a Structural Engineer to prepare a Heritage Impact Statement. The heritage impact statement would need to address:

- Significance: whether the documentation to support the significance of the place is accurate. This documentation includes the statement of significance in the heritage study and the heritage clauses in the Surf Coast Planning Scheme.
- *Integrity:* the intactness of the heritage asset and whether this influences the statement of significance in the heritage study.

5 Outcomes

The expected outcome of the structural engineering assessment is as follows:

• Structural engineering report adhering to the requirements outlined in Section 3.

6	Map/Photos of Building	
Figu	ure 1 Deans Marsh Recreation Reserve – Community Hall	6

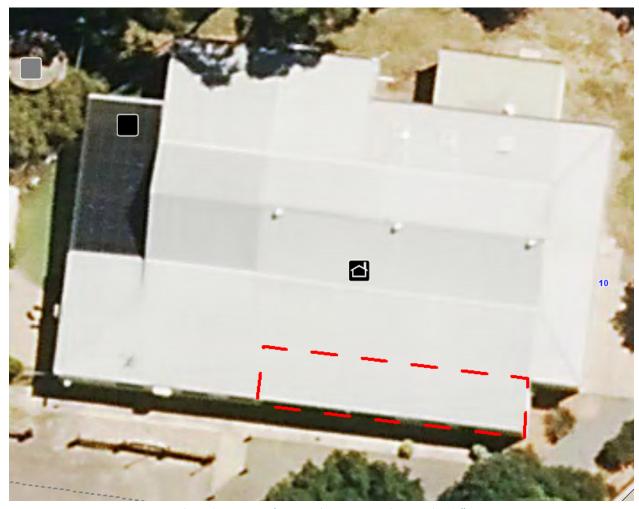


Figure 1 Deans Marsh Recreation Reserve – Community Hall

7 Previous Condition Audit

Table 2 2018 Condition Audit

Component Group	Component Type	Component	Asset ID		Condition Grade (% split) & Assessed Remaining Life										Rate	Comments	Base Life
				,	1	:	2		3	4	4	5					5
Structure	Floor Surface	Carpet	76855	100%	30								126	m2		Damage to fabric.	50
Structure	Floor Surface	Concrete	76856	30%	35			70%	15				70	m2		Main front patio area has some fine surface cracks throughout. Some minor cracks. Some discolouration and minor staining to this area. Has been noted by Council that water during Winter remains under the building.	
Structure	Floor Surface	Timber	76857			100%	20						212	m2		Deteriorating/wearing.	50
Structure	Floor Surface	Vinyl	76858	59%	30	35%	20	4%	15	2%	5		82	m2		Wear & tear and minor to moderate staining.	50
Structure	Internal Wa Surface	ll Laminate	76859			95%	20	5%	15				50	m2		Minor deterioration and some marks. Small holes to one panel.	50
Structure	Internal Wa Surface	ll Plaster	76860	66%	30	25%	20	4%	15	5%	5		472	m2		Wear & tear, paint loss and minor to large dents. Minor to heavy cracks.	50
Structure	Internal Wa Surface	ll Timber	76861			30%	20	50%	15	20%	5		275	m2		Minor deterioration and wear & tear. Some bubbling of paint, damage. Many large cracks in the joints of timber panels. Some large cracks through some timber panels.	
Structure	External Wa Surface	ll Timber Facia	76862			100%	25						115	m2		Weathered.	50
Structure	Internal Wa Surface	ll Brick	76863	100%	30								42	m2		In good condition.	50
Structure	External Wa Surface	ll Rendered	76864	98%	40			2%	15				41	m2		3mm cracks observed.	50

					Co	ondition Gr	ade (% spl	lit) & Asse	essed Ren	naining Lif	fe						Dana
Component Group	Component Typ	oe Component	Asset ID		1		2		3		4	5	Qty	Unit	Rate	Comments	Base Life
Structure	External V Surface	Vall Timber Painted Weatherboards	76865	30%	30	40%	20	20%	15	10%	5	;	320	m2		Minor deterioration and wear & tear. 5 Minor splitting in corners of walls. Minor staining and cracking of weatherboards. Cracks/splits and some dislodged on the west elevation. Large gaps/cracks in corners of walls. A section missing on back wall lower area.	50
Structure	External V Surface	Vall Timber Floor Void Cladding	76866			70%	20			30%	5	:	320	m2		Some panels have rotted and are 5 damaged.	50
Structure	Doors	Timber (x23)	76867	50%	30	20%	20	25%	15	5%	5	,	68	m2		Wear & tear. Weathering. Door 5 slightly difficult to close. Paint loss, chips, dents and loose handles & hinges. Corrosion on handles, closers and hinges. Disconnected lock. Latch missing. Doors do not close.	50
Structure	Doors	Aluminium / Glass (x2)	76868			80%	20	20%	15			,	4	m2		Minor wear & tear and deterioration. 5 Minor corrosion to some fixtures and fittings. Some damage to powder coating finish of aluminium frames, around door locks.	50
Structure	Doors	Retractable Flyscreen Doors (x1)	76869	80%	30	20%	20					:	2	m2		Minor issues with the operation, 5 mesh bulges when closing.	50
Structure	Doors	Security Doors (x2)	76870	30%	30					70%	5		4	m2		Torn flyscreen mesh, required 5 replacement. Door binds on internal floor surface. The kitchen flydoor jambs on frame and catches with door handle.	50
Structure	Windows	Aluminum / Glass (x30)	76871	80%	40	10%	20	5%	15	5%	5	,	55	m2		Minor wear & tear and deterioration. 5 Minor cracks in joints to timber window frames and sashes. Some loose timber window winders. Rotting of timber sills. Some damaged aluminium flyscreen frames.	50
Structure	Windows	Aluminium Roller Shutters (x3)	76872	90%	30			10%	15				4	m2		Minor surface corrosion to outside 5 fittings of external roller shutter. All shutters unable to operate. Unsure on how to operate.	50
Building Fit Out	Window Furnishings	Blinds	76873			40%	20			60%	5	•	7	Each		Venetian blinds working with minor 5 wear & tear. Roller blinds not working, require replacement or repair.	50

Component Group	Component Type	Component	Asset ID	Condition Grade (% split) & Assessed Remaining Life										Unit	Rate	Comments	Base Life
				1	1	2	2		3	4		5					
Building Roof	Internal Surface	Plastic - Laserlite	76880	100%	30								50	m2		In good condition.	50
Building Roof	Internal Surface	Plaster	76881	87%	30			10%	15	3%	5		281	m2		*Main Hall area - no measurement provided in 2015 data. Bulging from movement of trusses. Mould and cracks.	
Building Roof	Internal Surface	Timber Ceiling	76882			50%	15	35%	10	15%	5		20	m2		*Main Hall area - no measurement provided in 2015 data. Paint in good condition. Minor cracks in timber panes. Spits and gaps in joints. A few cracks present.	
Building Roof	External Surface	Metal - Steel	76883			90%	20	10%	15				614	m2		Weathering, surface corrosion and dents.	50
Building Roof	External Surface	Plastic - Laserlite	76884			100%	20						614	m2		Weathering.	50

8 Heritage Citation

HERITAGE ASSESSMENTS

Site Name: Deans Marsh Public Hall and Recreation Site No: 163

Reserve

Address: Pennyroyal Valley Road, Deans Marsh

Approx. Date: 1889

Integrity: Fair Significance Level: Local

Survey Date:



05/33

History

The Deans Marsh Public Hall was built in 1889 as a Mechanics Institute and Free Library. The original site was on the Deans Marsh-Lorne Road opposite the 1870s Deans Marsh Hotel. (Millard 1985: 22-23)

The Mechanics Institute movement began in Britain in the early 19th century. Its aim was the education and enlightenment of 'mechanics' or workers involved in the new industrial processes. The first Australian institute was founded in Hobart in 1827. Port Phillip (the early name for Victoria) had an institute in 1839, and the first purpose-built building by 1842. (Land Conservation Council 1996)

The Institutes appealed to many social groups. There were lectures for adults, concerts, entertainments, reading rooms and usually a free library. They were built in most country towns of any size and were often the only public building in such towns. Country Mechanics Institutes were usually simple rectangular structures, of brick or timber, with gabled iron roofs. They usually consisted of one or two small rooms, a large hall and possibly a kitchen. A supper room and stage were sometimes added later.

In Victoria, after Melbourne, Geelong and Portland, Mechanics Institutes were established at Warrnambool and Hamilton in the 1850s and Port Fairy in 1865. There was one at Charlton in 1879. A Mechanics Institute was built at Cobden in the 1880s. (Land Conservation Council 1996: 71-72)

The Deans Marsh Mechanics Institute was known until recently as the 'Mechanics Hall'. A free library existed there from 1889 to 1897. The building was also used for dances. The music in

HERITAGE ASSESSMENTS

the period 1910-20 was provided by Ted Lowe (accordion), Emma Smith and Miss Cahill (piano) and 'Nipper' Ryan (piccolo). The MCs were Bert Walter, Mick Brennick and Harry Millard. There were concerts, too, at which local residents performed and, during the First World War, the Rev. Alex Pearce, Church of England Minister at Deans Marsh, organised concerts for patriotic purposes. These included 'farewell' and 'welcome home' dances for soldiers. The churches held Tea Meetings and High Teas in the Hall. (Millard 1985: 49)

The stage curtain in the hall made by members of the Country Women's Association in the 1940s is now in the Museum of Victoria. A new curtain will be produced in 2000-2001 by an Artist-In-Residence, who will organise members to create the work with the assistance of a Government Grant obtained by Julie Dyer, Surf Coast Shire's Arts Development Officer. (Stewart 2000, pers. comm.)

In 1921, the hall was moved to its present site in the Deans Marsh Soldiers Memorial Park in Pennyroyal Valley Road. Those who supported the move "felt that it was too close to the hotel, which was allowed to sell liquor till 9 pm at that time, thus interferring with entertainments in the hall". (Millard 1985: 22)

The hall has undergone several changes in recent times. The supper room was extended in 1955 and a ladies' cloakroom was added in 1960. A new front was added to the building in 1975. Later, in 1985, a new kitchen was built with a grant of \$8,500 from the Red Cross. This was made in recognition of the part the hall played as a relief centre during the Ash Wednesday fires, and to help equip the hall as a base for any future disaster. (Millard 1985: 50) There are memorial plaques in the hall, honouring district men who served in 1914-18 and 1939-45 wars. (Stewart 2000, pers. comm.)

The plaque on the gates of the Recreation Reserve reads: Deans Marsh Soldiers Memorial Park World Wars 1914-1918, 1939-1945. 'Lest We Forget'. The reserve has been used for a number of memorable football matches, including when Deans Marsh became premiers in the Polwarth League in 1911 and 1929. Cricket was also played there for many years. Golf was another sport played on the reserve and, in earlier times, wood chopping and sheaf tossing as well as walk, trot and gallop races. Last year, a Heritage Day was held in the reserve with wood chopping and bullock team events. (Stewart 2000, pers. comm.)

Description

Small weatherboard hall with rectangular floor plan and iron roof. Unsympathetic extensions in brick and fibro sheeting have been added to the front and side elevations, obscuring the original entrance to the hall, although its original form and fabric of the late 19th century building are still evident. The hall is set alongside the Recreation Reserve which comprises an oval, fibro building (c.1920s), memorial gates, and cypress plantings along the side and rear boundaries. A large bundy or long-leaved box tree stands at the front of the site. The plaque on the gates reads 'Deans Marsh Soldiers Memorial Park World Wars 1914-1918, 1939-1945', and 'Lest we forget'.

The public hall is the former Deans Marsh Mechanics Institute (c1889) which was once located on the Deans Marsh-Lorne Road opposite the hotel in 1920. It was shifted due to pressure from the temperance movement because of its location opposite the hotel. The hall was used as a depot during the Ash Wednesday 1983 fires. It once had a stage curtain embroidered by the CWA: the curtain is now in the Museum of Victoria.

Additions and alterations were made to the hall in 2000 (Permit 00/0174) to provide a community house facility for the community. The extension was to the east and south sides comprising

HERITAGE ASSESSMENTS

Hardie weatherboard cladding and skillion style metal zincalume roof.(Surf Coast Shire)

Statement of Cultural Significance

The Deans Marsh Public Hall and Recreation Reserve are of local significance because of their historical, architectural and social values. Despite a series of unsympathetic extensions and modifications, the public hall is recognisable as the former Mechanics Institute and Free Library, moved to the present location in 1921. As a Mechanics Institute and Public Hall, the building has served as an important community meeting place for over a century. Its importance to the Deans Marsh community was underscored in recent times by its important local role in the Ash Wednesday fires in 1983 (criteria A4, G1). The Recreation Reserve is also of local significance for its social values as a memorial to soldiers in both world wars, and its use for football and cricket matches as well as wood chopping and sheaf tossing events (criterion G1). Significant elements include the public hall (particularly its 19th century form and remaining fabric, but not including the mid/late 20th century extensions), the sport grounds, the adjacent fibro rooms, the memorial gates, and the cypress boundary plantings.

References

Land Conservation Council, Historic Places Special Investigation - South-Western Victoria: Internal records - no field survey CL0005, 1997

Land Conservation Council, Historic Places Special Investigation - South-Western Victoria - Descriptive Report, 1996

Millard, R., The Deans Marsh Story, Geelong, 1985

Stewart, L., pers. comm., 2000

Stewart, M., pers. comm., 2000

Surf Coast Shire, Advice from Mark Harwood, 16 September 2002

Recommendations

Planning Scheme





05/34 05/35

9 2020 Structural Engineers Assessment

Condition Assessment Report

Client:

Surf Coast Shire

Attent:

Timothy Guthridge

Project;

Deans Marsh Community Hall **Structural Investigation**

Site Addresses:

20 Pennyroyal Valley Rd, Deans Marsh

Inspection By:

Andrew Cherubin

Report Date:

22nd January 2020

ACA Project Reference No. 19-336

Inspection Date:

31st October 2019

Report No:

Rept-01



EAST SIDE



NORTH SIDE

Andrew Cherubin & Associates P/L 19-336 Rept01.docx

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1.0 EXECUTIVE SUNMMARY

The overall structural stability is satisfactory and safe.

There are elements of the building that require remediation and modification that will have a reasonably significant cost, such as surface drainage and sub-floor ventilation.

The roof sheeting has not been installed correctly. The north side of the pitched roof area does not have a bottom support batten. This has resulted in sheet deformations due to persons accessing the roof. This batten should be installed or the area excluded for access until the roofing is eventually replaced and the batten can be installed.

The roof of the west addition was installed at a lower pitch than the original and some ad hoc work was undertaken to align the two planes on the south side. On the north side, this alignment work was not undertaken and there is a "step" in the roof planes. If no leaks are apparent, this is a visual flaw rather than a structural defect.

Some modifications to the original trusses appears to have been undertaken at some point in the history of the building. These modifications do not appear to have any detrimental effect at this stage.

The hall area has a "tilt" in its floor, high at the south and low at the north. Although a line of trees are located on the north boundary and these trees are expected to be significantly contributing to the tilt, it appears that relatively shallow stump pad founding may also be the cause of the settlement. The upper soils appear to become saturated during wet periods and they would then lose their bearing capacity resulting in footing settlement. It is this authors opinion that a combination of shrinkage due to the trees and periodic low bearing capacity may be the cause of the uneven settlement.

The sub-floor ventilation is poor and may result in future issues of sub-floor timber decay.

The carpark area surface water flows towards the building without effective drainage. The carpark should be provide with a surface drainage system. Sub-surface drains may be required to lessen the potential for soil saturation under the building.

The concrete floors to the east of the building have also moved significantly. Some have been underpinned in 2016/2017. The outcome of the underpinning should be monitored and can be used as a guide for future remedial works.

2.0 CLIENTS SCOPE:

Andrew Cherubin & Associates was engaged to undertake a condition assessment of community hall at number 20 Pennyroyal Rd Deans Marsh.

The specific scope is to assess the following items as a minimum;

- Foundation movement
- Roof leakage leading to reduction to structural integrity
- Stability of the structure
- Expected remaining useful life
- If any component is unsafe, how to make and maintain until rectification works can be undertaken and
- Recommendation of potential future solutions to be investigated.

The results of the assessment is anticipated to identify and highlight any issues such as risks, safety concerns and reduced useful life and the expected outcomes are;

- Stability and expected remaining useable life of the structure
- Any identified issues
- Recommendations of potential future solutions to be investigated and
- Remediation recommendations to make safe if required.

2.0 GENERAL LIMITATIONS:

The inspection undertaken was generally a visual non-destructive inspection. Furniture, fixings and the like were not moved during the inspection, except at one location, where a floor vent was removed to gain access to the sub-floor area for review.

Refer Appendix B for limitations and disclaimers.

A hazard assessment was not undertaken as part of this report. It is understood that an asbestos assessment is not required.

If a hazard, other than presence of asbestos, was noted during the inspection, then this will be included in this report for completeness and safety.

3.0 INSPECTION AND DOCUMENTATION:

Andrew Cherubin undertook the site inspection on the 31st October 2019. The weather on the day of the inspection was "dry and fine".

The inspection was a non-destructive visual inspection. Refer Appendix B for general information on limits on locations accessed.

Floor and paving levels were taken to ascertain the degree of movement of the building. It is assumed that the original building and extensions were all level at time of construction. It is expected that buildings will move to some degree over time. This movement may result in building distress, however the degree of distress is dependant on the building fabric and degree of movement. Current footing standards allow some degree of movement without being considered as defects.

Levels of the external paving to the south were also recorded. The paving is expected to have falls to allow rainwater to flow away from the building. The levels were examined to determine if sufficient falls has been provided to protect the footings.

The following document relating to the building was provided or available;

- Deans Marsh Structural assessment (part only). Version 1.0 October 2019. Provided by Surf Coast Shire.
- Site Inspection Report dated 16 June 2016 by Andrew Cherubin and Associates.

4.0 GENERAL DESCRIPTION:

The subject building is a located at the north east corner of a council reserve at 20 Pennyroyal Road Deans Marsh. When originally constructed, the building appears to have been a simple rectangular structure with an approximately 30 degree pitched gable ended roof and timber weatherboard clad external walls. The internal wall cladding is timber lining boards and the floor is of timber frame construction.

The building has had multiple extensions and renovations over the intervening years. As yet the dates of these alterations are unknown to this author.

An extension has been added to the west end of the original building. The extension 'wraps' around the south and north sides. The extension has mostly a timber floor system with a concrete floor to the south side. The roof is partly flat and partly pitched. The pitched section is an

extension from the original building roof line. The flat roof section is approximately 3.0 metres wide on the south, west and north sides. At the south this extension has an office, a entry foyer and a baby sleeping room. At the east is a child-minding area and at the north are toilets and a kitchen.

Extensions to the building were also added at the east end on the south, east and north sides. The roof mimics the west end with flat roof on the outer sections of the extension.

At the east the extension houses toilets to the north and east, a storeroom to the north and a storeroom and a second kitchen to the south with a covered porch area between the kitchen and the foyer. The hall entry doors are located under the porch.

The floor of the extensions to the south and east toilet areas are concrete and the remainder are timber floor systems.

The east extension walls are generally masonry with the remainder of the extension's walls cement sheet weatherboard cladding.

The evidence indicates that the floor in the area of the hall, but excluding the stage area, has been provided with new flooring boards. Re-stumping appears to have been undertaken at some stage of the building's history. This is deduced because the stumps are concrete, whereas the original stumps would more than likely have been timber.

It was noted that some packing of some stumps has been undertaken, most likely post installation.

The structure is located at the north east of a larger reserve. The general fall of the land is from south to north. A gravel carpark is located to the south of the building and the carpark surface walls towards the building with no surface drainage provided.

On the south side between the carpark and the building concrete paving has been provided with a minor fall away from the building. The paving finished surface level is equal to the building floor level. Some recent modifications have been made to the concrete paving to create a shallow spoon drain south of the hall entry doors.

At the east concrete paving exists and falls away from the building. At the south east corner of the building is a garden bed that has poor surface drainage with parts falling towards the building. At the west, a child outdoor play area has been created and the surface is covered in a synthetic grass. It is unknown if the synthetic grass is laid over concrete or soil. The surface has been raised to within approximately 200mm of the floor surface level.

The north side is all grass with a general fall away from the building. Between the north kitchen and north storeroom, the soil surface has been raised to approximately the bearer level.

Although the grass area to the north of the building falls away from the building, the area is poorly drained and areas of soft soil were evident.

A septic system exists northeast of the building. The septic has a pump system to maintain the levels in the underground tanks. The distribution field area is not known. It has been reported that this system has had multiple failures in the past with resulting overflowing to the soil surface of the tanks.

A pit is located directly north of the north storeroom. The purpose of the pit in unknown, but it has been fitted with a pump to keep the pit empty of water. It is unknown if the pit is for rainwater or if part of the septic system.

A line of significant trees are located along the north boundary on the neighbour's property. Other significant trees are located near to the southeast corner of the building.

5.0 CONDITION ASSESSMENT;

The following is a list of building issues noted during the inspection. Some may be considered as building defects while others are issues that may contribute to existing or future building distress.

Given that the inspection was a visual non-destructive inspection and not a dilapidation report, this list should not be considered as exhaustive as removal of items such as carpet or wall hangings may reveal additional issues.

Generally, and damage that appears to be solely due to vandalism will not be included in the

report.

Assessment	Description	Comment	Issue	Photo
Item				
1	Concrete paving levels, south side	The concrete paving on the south side of the building opposite the hall entry doors falls towards the building at the east and centre of the porch. The fall is away from the building near the hall entry doors. This will have caused ponding in front of the doors and water entry under the floor at the south west corner of the south kitchen. The concrete has had adhoc works undertaken to form a shallow spoon drain.	Spoon drain may cause minor safety issue – (twisting of ankle) Water entry under the building will result in possible footing movement.	2
2	Gravel carpark level and fall	Gravel falls towards the building. No drainage provided.	The minimal falls in the south apron paving will allow water flowing from the carpark to enter under the building in high rain events.	
3	Lack of ventilation under building.	The sub-floor ventilation is nil on the south and east sides. It is minimal on the west side.	Lack of ventilation may cause "dry rot" of subfloor frame members. High moisture levels in the soil will contribute to footing movement.	

Assessment Item	Description	Comment	Issue	Photo
4	Raised garden bed at south east corner. Overflowing roof gutter in south east corner. South kitchen door gaps	The garden bed "traps" water next to building due to lack of drainage / falls away from building. Water overflowing from the gutter will add the localised moisture levels in the soil. The overflow is due to lack of fall in gutter and lack of downpipes.	Water ponding near buildings cause high localised moisture levels and result in footing movement. The soil will heave if clay and moisture level raises compared to other locations. The building will settle if the moisture level in the soil is high and the soil loses bearing capacity. The levels taken during the inspection shows that the floor along the south kitchen south wall are low relative to the building re-entrant corner. The area below the metre box is relatively high.	
5	Gutter to east side of building.	The gutter from the southeast re-entrant corner and along the east side has only one downpipe, located at the northeast corner of the building.	The number of downpipes is less than recommended for this length of gutter. Overflowing at the southeast re-entrant corner is evidenced by green algal growth on the wall of the building, particularly near the ground.	3, 4
6	Modifications to sewer drains.	The concrete paving to the east of the building has had a section removed and relaid.	The reason for this modification is unknown. If due to a pipe leak, then this may have effected the footings in the past.	
7	Northeast corner underpinning.	The concrete slab for the toilets at the northeast of the building has had underpinning works undertaken post 2016.	The footings of the slab were found to have subsided and underpinning was recommended. See report by Andrew Cherubin & Associates number 16- 142 SIR01	

Assessment Item	Description	Comment	Issue	Photo
8	East entry door large gaps and distorted.	The entry door on the east side of the building has large gaps and is significantly distorted.	It appears that this door may have been vandalised in the past. The gaps are assumed to be partly due to footing movement and partly due to vandalism.	
9	External crack in render – north east corner	This crack was present when the inspection for the 2016 report was undertaken	See item 7 above.	
10	Disused septic waste pipe north side east end.	This pipe is an indication that the septic system and associated pipework has been modified in the past.		
11	Reported septic tank pump failures.	The reported failure of the septic tank pumps are accompanied with tank overflow to the surface.	Any failure of the septic system that leads to leakages or overflows will increase the soil moisture levels for a short time. If the occurrence is during wet periods, then soil saturation and consequent loss of soil capacity may occur.	
12	Surface water ponding.	There are indications that water is permitted to pond near the building on the north side. This is more noticeable at the east of the building.	Water ponding can be a significant cause of footing movement.	5
13	Overflow outlets in roof gutter — north side	The need for overflow outlets indicate the downpipe system is not functioning effectively	Excessive overflow from the gutters will be adding additional water to the soil surface near the footings during rain events. The downpipes are a sealed system to the rainwater tanks. The need for the overflows indicate that the downpipes are not effective, which may be due to the height of the rainwater tank in relation to the gutter.	6

Assessment Item	Description	Comment	Issue	Photo
14	High soil surface level in north courtyard.	The soil surface in the north side courtyard has been built up to approximately the level of the underside of the floor bearer.	There has been no provision for water drainage from under the building and it appears that at times rain surface water flows under the building.	7
15	North side plinth boards and subfloor access door.	Very poor condition		
16	Scoria fill hole	A hole below the gas HWS on the north side of the building has been filled with scoria. The purpose of the hole mis unknown.	The hole depth is unknown. The hole will fill with water during rain events and introduce the water into the soil profile. This may lower the local soil capacity or create soil heave, depending on the amount of water held and how long before dispersion.	8
17	North kitchen – indications of floor / footing movement	The walls of the north kitchen are of cement sheet with flexible joints between sheets. This will limit the degree of cracking. Wall cracks are evident on the east side of the kitchen and the external door has uneven gapping.	The	
18	North kitchen roof leaks	Drip marks on east wall indicate current or past roof leaking.	It appears that this leaking may be due to poor roofing or roof flashing installation.	
19	North Kitchen roof beam settlement	The wall cracking and east side door gapping and floor levels indicate that settlement has occurred under the stump supporting the kitchen's roof beam at the east end.		

Assessment Item	Description	Comment	Issue	Photo
20	Southeast storeroom. Roof leak and wall cracking.	In the northeast corner of the storeroom there is moderate wall cracking. The ceiling has mould at the southeast of the room.	These defects appear to be a result of floor movement and from leaking roofing. The floor movement is noted in items 4 and 5 above. The roofing is poorly installed in this area allowing for intermittent rainwater entry. The corrugation on the upper portion before the barge flashing directs water under the flashing with the possibility of water 'spilling' onto the internal plasterboard.	
21	Floor ground clearance	The floor ground clearance at the south side of the hall has very minimal ground clearance.	Along with the poor ventilation of the subfloor, the minimal ground clearance may result in dry rot or similar timber deterioration or in high soil moisture levels for extended periods.	
22	East wall, north end; Gapping between post and wall	A steel post installed as part of the hall's previous north extension has a gap between the post and the east wall.	This gapping appears to be associated with the slab footing movement of the east toilet slab.	
23	Southeast toilets (male) roof water leak	Water marks were noted on the south wall of the east toilet room.	These leaks are due to the overflowing of the gutter on the south side of the building mentioned previously.	
24	Roof leak over south side of stage	The timber ceiling lining has indications of a roof leak. It appears that this leak is minor or intermittent.	Long term leaking of roofing may cause deterioration of frame members and wall cladding.	
25	Stair passage at rear of stage has ad hoc repair to cornice.	The cause of the need for the cornice repair is unknown, but does not appear to be of significant structural concern.		

Assessment Item	Description	Comment	Issue	Photo
26	Significant indentations to roof sheeting - north side	The lower parts of the roof sheeting of the 30 degree portion of the roof have significant deformations, apparently due to persons trafficking the roof.	The inspection has revealed that there is no roof batten for approximately the last 600mm of the steeper roof sheets. These roof sheets sit onto the lower pitch roof sheets at the ends. Therefore the upper roof sheets are effectively unsupported for the lower 600mm. Any loading to the sheets has resulted in deformations. This could lead to water leaks, particularly by wind driven rain.	
27	Dip in alignment of roof sheets	Investigations indicate that the new trusses provided for the pitched roof west of the stage area were installed with a lower pitch than the original roof line. On the south side, the roof battens were locally raised to provide a appearance of a straight roof alignment. On the north, this lifting of the battens was not undertaken and s dip in the roofing is noticeable.	Possible roof leaking may result from poorly 'seating' roof sheets. Tie downs may not have been installed correctly.	
28	Poorly installed roof flashing on south side at change of roof pitch.	The flashing installed at the change of roof from 30 to 10 degree is buckling in places.	May allow wind blown rain to enter.	
29 Deflection in south verandah roof		The roof over the south verandah has a noticeable deflection downwards. It is possible the rafters were undersized when installed.	Not apparent issues at present.	

Assessment Item	Description	Comment	Issue	Photo
30	No tension release on roof sheets.	Low pitched roof sheets are normally provided with a drip release method to prevent water backflowing on underside of sheeting.	Possible result of no drip release is that water may backflow on underside of sheets and drip into internal of building.	
31	Corroded roof sheet	The roof sheet and flashing below the aerial at the east end of the roof is corroded. This appears to be due to bird droppings.	Roof sheet and flashing will need replacement earlier than remainder of roof.	
32	Silicone on roof sheet joins.	It was noted that some roof sheet lap joints had silicone along the joints. This was possibly due to detected leaks.	The effectiveness of the silicone on such joints is limited due to sheet expansion and contraction breaking the seal.	
33	Pit on north side of building.	The purpose of this pit is unknown. It has a pump installed for removal of water.		
34	Floor levels.	Floor levels taken within the hall during the inspection indicate that the floor has a variation of up to 63mm. The floor is generally high at the south and low at the north. No floor levels were taken in the child minding areas or associated office and foyer.	The floor levels indicate that footing settlement and possible soil heave have occurred resulting in wall cladding cracking, windows and doors sticking or gapping and other issues associated with floor footing movement.	
35 Truss modifications		The original roof appear to have had some truss modification at the stage end of the hall. These modifications are by way of removal of "webs". It could not be confirmed if the trusses were built different to the remainder or if modified.	The modifications, if confirmed as modifications, do not appear to currently be having a detrimental effect on the structure.	

The soils for this site are expected to be complex when moisture levels and soil heave and shrinkage are considered. The upper layer is a sandy clay to clayey sand, whilst the lower layer is clay. This results in the upper soils possibly becoming saturated in wet weather.

If the upper soils become moist, any clay will tend to develop a heaving profile, however if the soil is very sandy or if the clay becomes overly saturated, the soil will lose its bearing capacity. Heaving soils may result in floors heaving upwards, whereas loss of soil capacity would result in settlement. The clays below the upper layer will form an impermeable barrier, holding moisture in the upper layer.

The trees around the building are likely to cause the lower clay soils to shrink during dry periods. This shrinkage would further cause the building to settle.

6.0 DISCUSSION AND RECOMMENDATIONS;

The following discussions and recommendations are intended to address the requested scope of the inspection.

Stability and expected remaining useable life of the structure

It is my opinion that the building at a structure is stable and suitable for continued use. The floor in the hall area has a fall of approximately 55mm from high near the hall entry doors at the south to a low at the southeast corner. Across the hall width at the west end the fall is approximately 40mm but the southwest is approximately 15mm low relative to the south entry doors.

The building can therefore be considered to have a "tilt" from high at the south to low at the north. Although the inspection was not definitive, it appears that the most likely cause of this deviation from level is due to the type of founding soils and the depth of footings and due to the trees lining the north boundary.

The trees will extract moisture from the clay soils during dry periods which will result in footing settlement.

The founding soils are subject to saturation during wet periods and if fully saturated, the soils will lose bearing capacity resulting in footing settlement.

A soil investigation was not undertaken as part of this inspection, however underpinning works were undertaken on the footings of the northeast toilet extension and in April 2017, the excavations were inspected by myself and the profile was noted as follows;

Surface to 900 deep - Silty sandy clays or sandy clays.

Below 900 deep - Clays

The upper soils are very sandy and with the clays below are likely subject to saturation, particularly near the depth of the clay layer which is relatively impermeable.

The depth of stump pads was not determined during the inspection, however it is likely that they were founded into the upper soil layers and possibly close to the clay layer, a layer with lowered bearing capacity during wet periods.

Building Structure - general;

Given the issues causing footing settlement, the building is expected to continue to have movement issues, however with ongoing maintenance, replacement of claddings as necessary and if the recommendations below are implemented, the building is expected to be usable for a significant time into the future.

The absolute cause of the building settlement has not been fully determined at this stage, however it is this author's opinion that the significant trees along the north boundary and to a lesser extent at the south east corner, have caused the underlaying clays to shrink. This settlement has possibly

been exaggerated by the saturation of the upper sandy clays during wet periods causing loss of bearing capacity and the resulting footing settlement.

The floor slab for the south east toilets has settled at the south and east relative to the original floor level. This has resulted in the toilet addition "pulling away" from the main building structure at the top, noted by gaps in wall claddings both internal (east wall gap at east beam post and masonry gaps to weatherboards on north face at east end).

Wall claddings

Some of the timber weatherboard wall claddings are expected to require replacement in the near future

The cement based wall claddings (Hardieplank) are expected to have a very long lifespan. The internal claddings are a mix of plaster, masonry and timber lining boards. These are all generally in good order and only minor repairs are required.

The plinth boards around the base of the north side are in poor condition and replacement should be considered.

Roof Trusses

There is possibility that the roof trusses over the stage area may have modified at some time in the past. Deflection of the roof over this area is apparent and where the remainder of the trusses have webs, these trusses do not have any webs.

Further investigation is recommended.

Roof Sheeting

The roof sheeting will require some rectification work to prevent the recent leaking and a corroded flashing at the east end needs to be addressed.

The north side 30 degree pitch roof sheets are improperly supported at their lower end. This can be rectified by installing a timber batten either in the short term or if access is limited, then the batten can be installed when the roof sheets are replaced.

The sheet joints that have silicone sealants will require modifications.

Given the apparent condition of the sheets, their lifespan is expected to be in the order of 5 to 10 years. This will be dependant on the prevailing weather conditions.

Any identified issues

The issues noted during the inspection have been listed in the condition assessment above.

Recommendations of potential future solutions to be investigated

Prior to allocating significant funds, it is recommended that a monitoring regime be implemented to confirm the assessment in this report relating to the building movement.

The following particularly should be determined.

- Is the upper soil becoming saturated during wet periods.
- Is water being permitted to pond near the footings.
- Has the stumps been founded at a suitable depth.

The following recommendations are for future monitoring or verification purposes;

- It is recommended that a detailed floor level survey be undertaken and recorded. This will aid in future assessments to determine the extent of any continued building movement.
- Investigate the depth of stumps to establish if founded into stiff clay or into sandy clay.

• Undertake geotechnical investigations during wet periods and dry periods to determine the soil characteristics.

The following recommendation are to rectify issues or maintain the building in good condition. Some of the recommendations are necessary irrespective of the outcomes of the footing monitoring, while others are dependant on the monitoring outcomes. If an item is recommended irrespective of the monitoring outcome, an "R" has been added to recommendation number.

Recommendation	Recommendation
No.	
1 R	 Undertake landscaping works to ensure that water cannot pond near building. This will include; Regrade north side surface to provide falls without ponding from under the building to near the north boundary. Undertake works to ensure the area at the south east falls away from the building and has sufficient surface drainage to prevent water ponding near footings. Provide a catch drain system between carpark and building. This may require sub-surface and surface drainage. Reassess the south paving and ensure water flows away from building and is discharged away from building. Remove the soil in the north courtyard and regrade to allow any water from under the building to flow away from the building and prevent water entering under the building. Andrew Cherubin and Associates P/L can provide a fee for a drainage plan on request.
2	If the monitoring indicates that clay settlement due to clay shrinkage is causing movement, then the installation of a root barrier between the trees to the south and the building may alleviate this issue at the south east. It is NOT recommended to install a tree root barrier at the north unless it has been determined that the upper soils are not becoming saturated. If they are saturated at wet times, then sub-surface drainage should also be provided a the same time as any root barrier.
3 R	Determine the location of the septic dispersion field and if within an influence zone of the building, it is recommended to move the dispersion area.
4 R	Undertake further investigations to determine the purpose of the pit located north of the north storeroom. Investigate if any leakage from the pit is occurring and repair as necessary. Investigate the discharge location of the pit pump and modify if possibility of causing soil saturation near the footings. If the pit is found to be redundant, it is recommended it is decommissioned by filling with concrete or removed and the hole filled with a compacted 5% cement stabilised clay soil.

Recommendation No.	Recommendation
5 R	Review all the gutters and downpipes. Ensure all gutters have
	appropriate falls.
	Install additional downpipes as necessary (South east corner of
	building requires a downpipe to prevent overflowing).
	Remove the gutter overflows to the north storeroom gutter and modify
	downpipes to ensure proper flows to prevent overflows to ground.
	Alternatively, connect overflows outlets to a new pipe system and
	discharge away from building to prevent saturating the soil near the
	building.
6 R	Investigate the scoria filled hole below the HWS on the north side of
	the building. If not purpose is apparent, remove the scoria and replace
	with compacted 5% cement stabilised clay soils.
7 R	Review the roof flashings.
	Replace corroded sections.
	Modify the flashings at the south east corner of the building and the
	east side of the north kitchen.
	Review the roof sheet silicone joints and modify the roof sheets or
	flashings as necessary. It appears that the water may be entering above
	the joint, not into the joint. If proven into the joint, then replace roof
	sheets immediately each side of joint so a greater lap of sheets is
	provided.
8 R	Check the sub-floor timber for dry rot or other forms of decay.
	Replace timbers as necessary.
9 R	Provide sub-floor ventilation, particularly at the south end. Seek
	further advice from engineers on methods of ventilating the sub-floor
	area.
10 R	There are indications that the north kitchen roof beam has support
	settlement at the east end. This does not appear to be a frame defect,
	but rather appears to be settlement of the supporting stumps under the
	beam. If the above reasons for settlement are confirmed, then
	replacement of this stump may be required.
11 R	The east entry door has significant gapping and deformations. It
	appears that this door has been vandalised for possible forced entry.
	The door should be replaced.
	Unless the door needs to open outwards for emergency egress
	purposes, it is recommended that the door and frame be replaced with
	a door that opens inwards and that a security door installed on the
10 D	outer side. Three hinges will help to prevent buckling of the door.
12 R	Investigate if the trusses over the stage have been modified. If yes, the rectification is recommended. If no indication of original truss
	modifications, then monitoring or roof and ceiling deflection is
	recommended.
	recommended.

Remediation recommendations to make safe if required.

The building structure can be considered as generally safe for continued use. No immediate remediation is required for overall structural safety.

For localised safety concerns, the access stairs at to the north kitchen and to the north store should be reviewed and replaced as necessary.

The stage access stairs are not fixed to the building and were not included in the report. Nor was the electrical or plumbing. These do not form part of the report and should be inspected separately if deemed necessary.

Provided continued maintenance is undertaken, the minor safety issues, such as strain from exerting against a sticking door, can be avoided.

Re-assessments should be undertaken when major building elements are replaced or modified, such as checking roof batten tie downs when roof sheets are replaced.

End of Report

Andrew Cherubin & Associates P/L

Andrew Cherubin BEng (Hons) MIEAust

Chief Executive Director

RBP No; EC 23451 RPEQ No. 19888

Appendix A

Photos



Photo 1; Nearmaps aerial view of site.



Photo 2; South of hall. Arrows show direction of paving fall.



Photo 3; Building south east re-entrant corner.

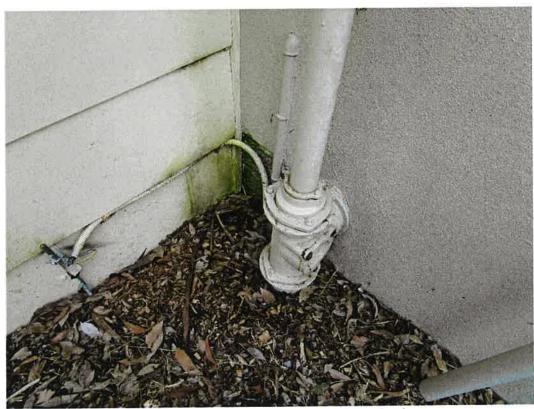


Photo 4; South east re-entrant corner. Algal growth indicating high moisture levels.



Photo 5; Septic tank location, within bollards. Uneven soil surface allowing for water ponding.

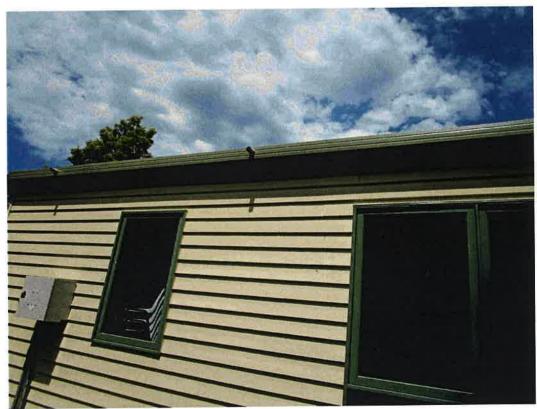


Photo 6; North gutter showing overflow outlets.



Photo 7; North courtyard; soil surface level higher than under building.



Photo 8; North side. Scoria filled hole. Purpose unknown.



Photo 9; North side of roof

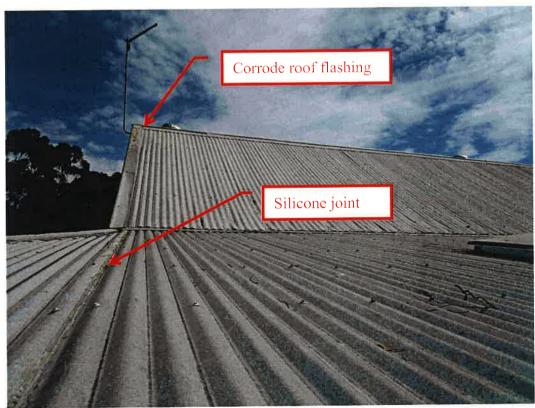


Photo 10; North side roof. Silicane joint. Corroded roof flashing.



Photo 11; Example of poorly installed flashing. Missing roof screw and no pop rivits to hold sections together. Flashing not wide enough to extend to next corrugation fully. Screw at top not into top of corrugation.

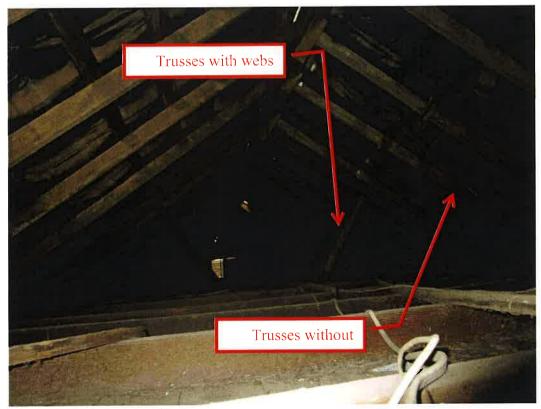


Photo 12; Original roof structure looking to east.

Appendix B

The Purpose of the Inspection and Report

- 1. This report is a response to the client's stated purpose for the inspection and scope.
- 2. To identify a list of issues for information or for discussion, action and resolution.
- 3. Inform the client of any fault or condition that otherwise can be determined by a visual inspection but may not be apparent to persons with no technical or building knowledge.

Inspection Limitations and Report Disclaimer

This report is not an Expert Witness VCAT Report and as such it does not have all the additional details, references and declarations that are required from an expert witness VCAT report (a VCAT report requires more time and research to prepare and it is therefore not within the limited scope).

Advice Limitations: This report does not contain legal advice. For legal advice contact a lawyer. Anything pertaining to legal aspects are for discussion only.

Safe Access Limitations: The Inspector's decision about safe access to any area on the day of inspection is final.

Property inspection can be extremely dangerous due to: work in progress, presence of chemicals (pesticides), asbestos dust, unsafe access, confined spaces, rick of falling, dilapidation of buildings and other hazards. Due to OH & S requirements to provide safe working environment for the inspection the policy of Andrew Cherubin and Associates is to inspect only safely accessible areas as defined in AS 4349.1. Where an inspection of unsafe areas is required, and the risk to the inspector is assessed and deemed to be controllable by special precautions, then an additional separate special inspection booking is required. (eg: access to high roof can be achieved with scissor lift or cherry picker). Re -inspection of inaccessible/ unsafe area requires an additional booking and will attract additional fees.

Visual Inspection Limitations: This report is limited to visual inspection of the property (unless otherwise stated and no measurements or testing were carried out which are considered outside the limits of the report). This report addresses issues that are visible or may be reasonably deduced or inferred from the visual inspection and the inspector kept to safe areas and unobstructed access was possible at the time of inspection. The inspection is non-invasive (unless otherwise stated). The inspection policy and procedure is not to move furniture, stored materials etc and there is no interference with personal items.

Residual Risk of Undetected Defects:

There is no expressed or implied guarantee that there are no defects in the property that were not mentioned in the report. Defects that cannot be reasonably discovered by visual inspection such as when: inspection is obstructed, defects are concealed by renovations, are deliberately concealed or are concealed by nature of construction, may not be listed in the report. The client should clearly understand that because of inspection limitations significant residual risks of undetected defects remain. The clients should always consider additional follow up inspection or invasive inspection (at additional cost) to access areas that previously could not have been accessed. Typical examples of special additional inspections are; re inspection of property when vacant, re inspection when obstructions are removed, re inspection when inaccessible areas are opened up by additional manholes, invasive termite damage inspection when wall lining is removed to assess damage.

This is not a termite inspection report.

Assumptions:

It is assumed that the structures were constructed from a set of detailed drawings that had been assessed by an engineer or other competent person and that the construction was in accordance with those drawings. Eg; that footings were designed for the loads expected.

Note: All findings and comments in this report are subject to veracity of information supplied by the clients and their agents. The report proceeds on the basis that the clients and their agents act in good faith.

REFERENCES;

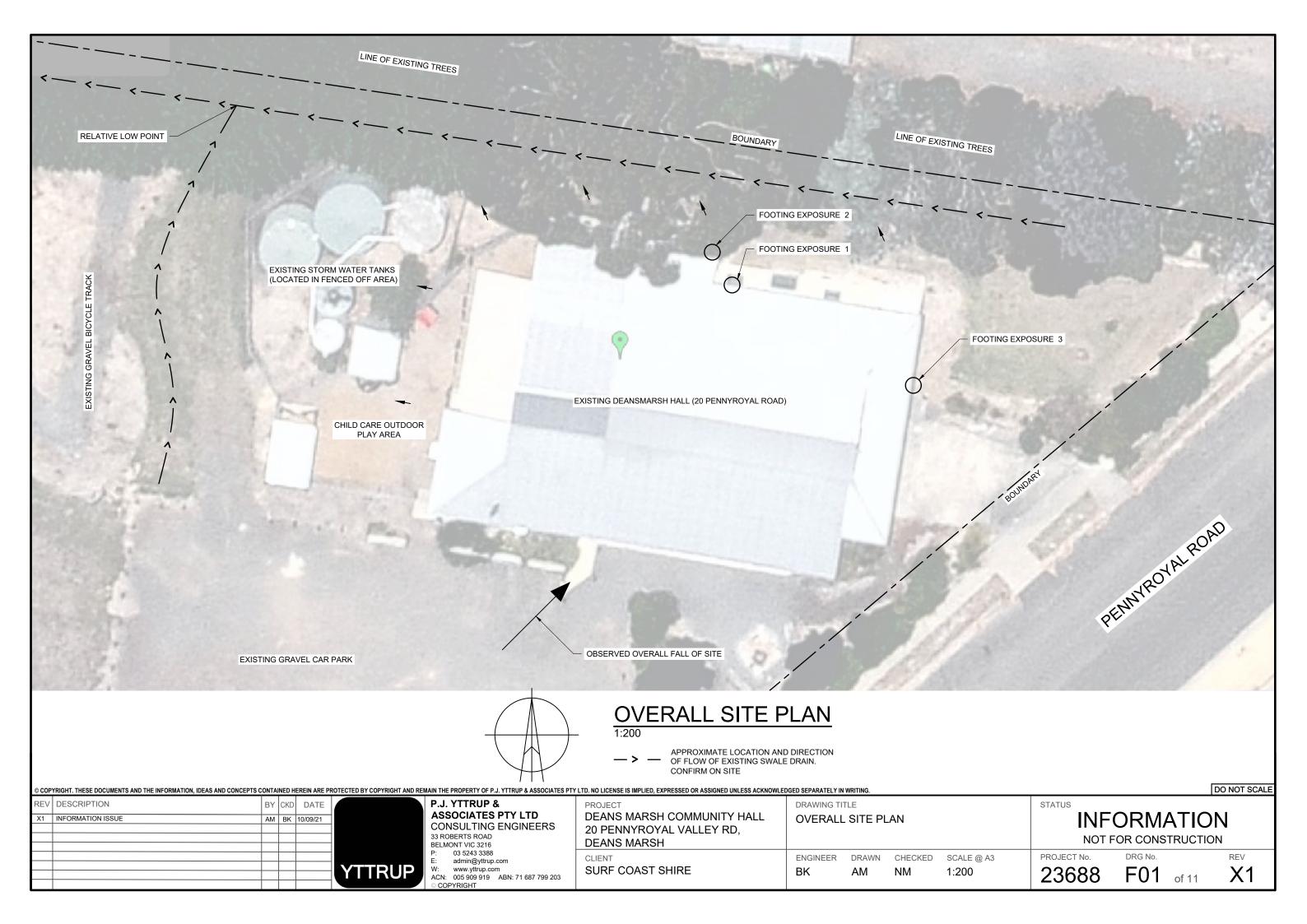
AS1684 Residential Timber Framed Construction AS1720 Timber Structures – Design Methods AS1720 Timber Structures – Timber properties AS2870 Residential Slabs and Footings NCC - Building Code of Australia.

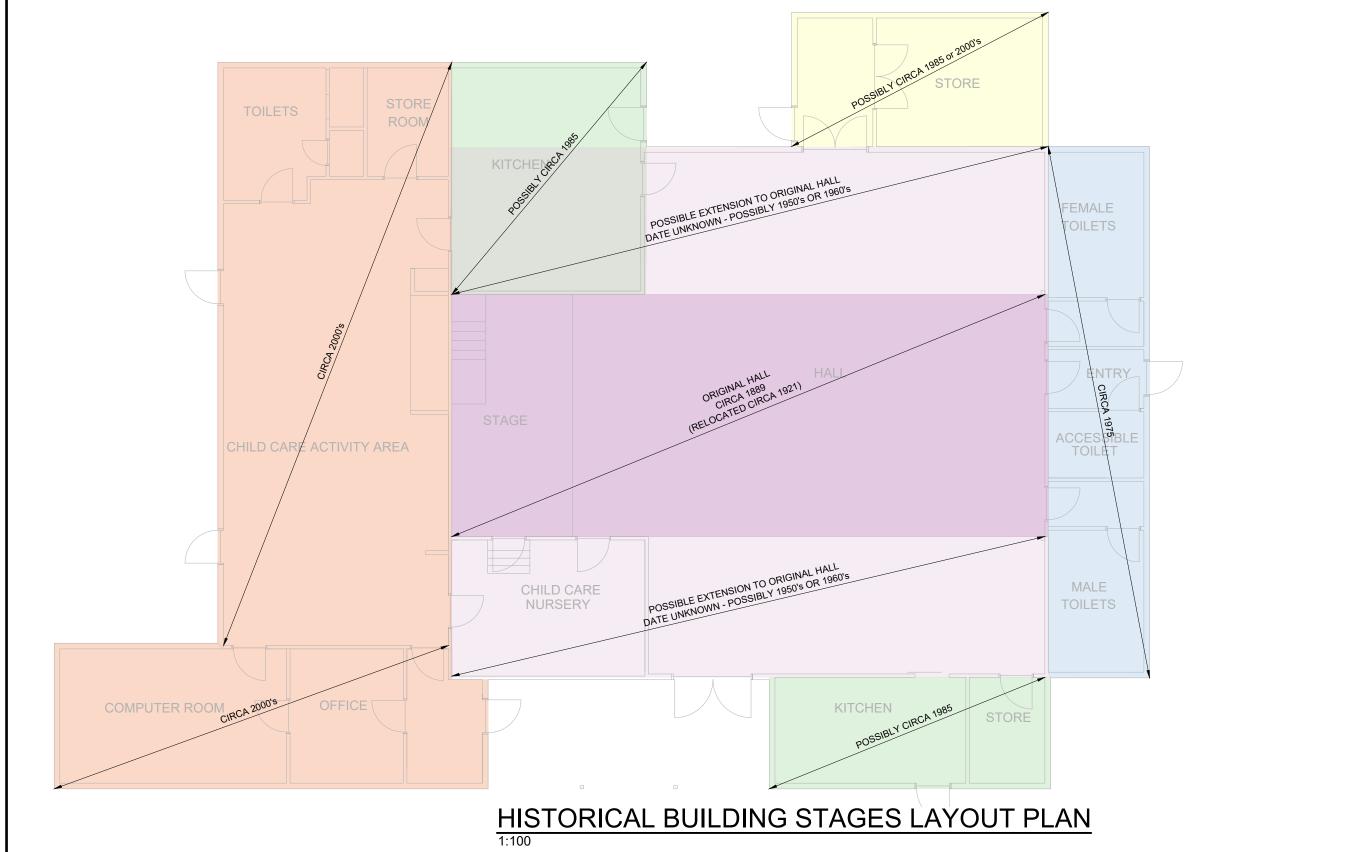


APPENDIX B Yttrup Investigation Drawings

• 23688_F01 - F11

CONSULTING ENGINEERS

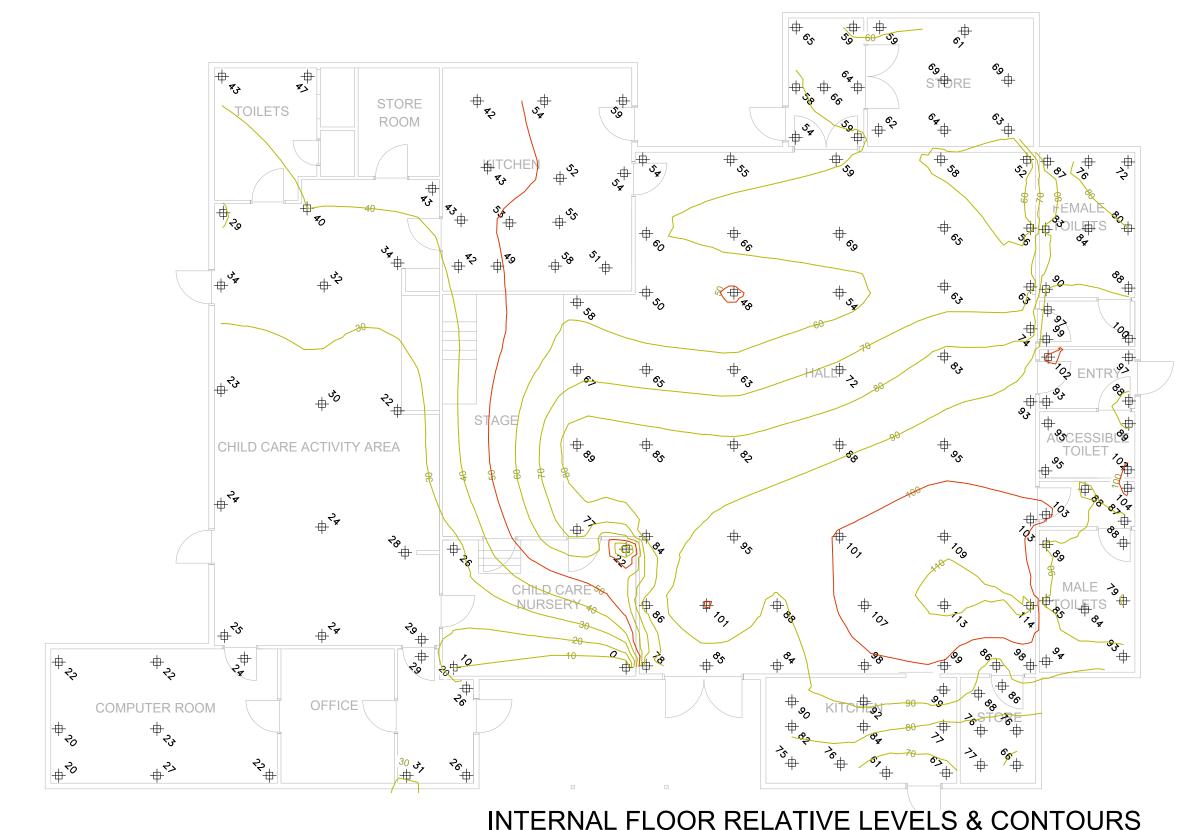




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INTERNAL FLOOR RELATIVE LEVELS & CONTOURS

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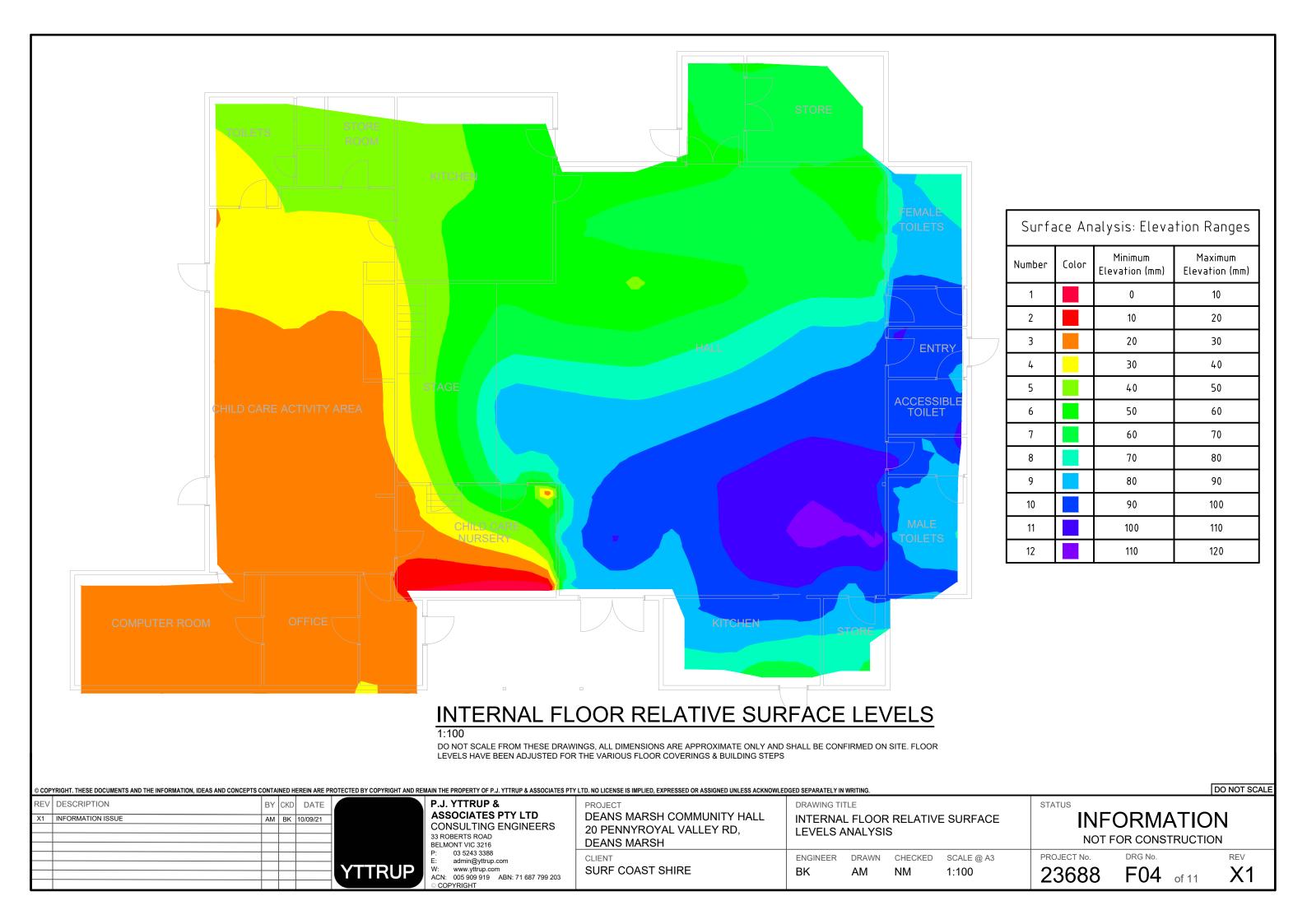
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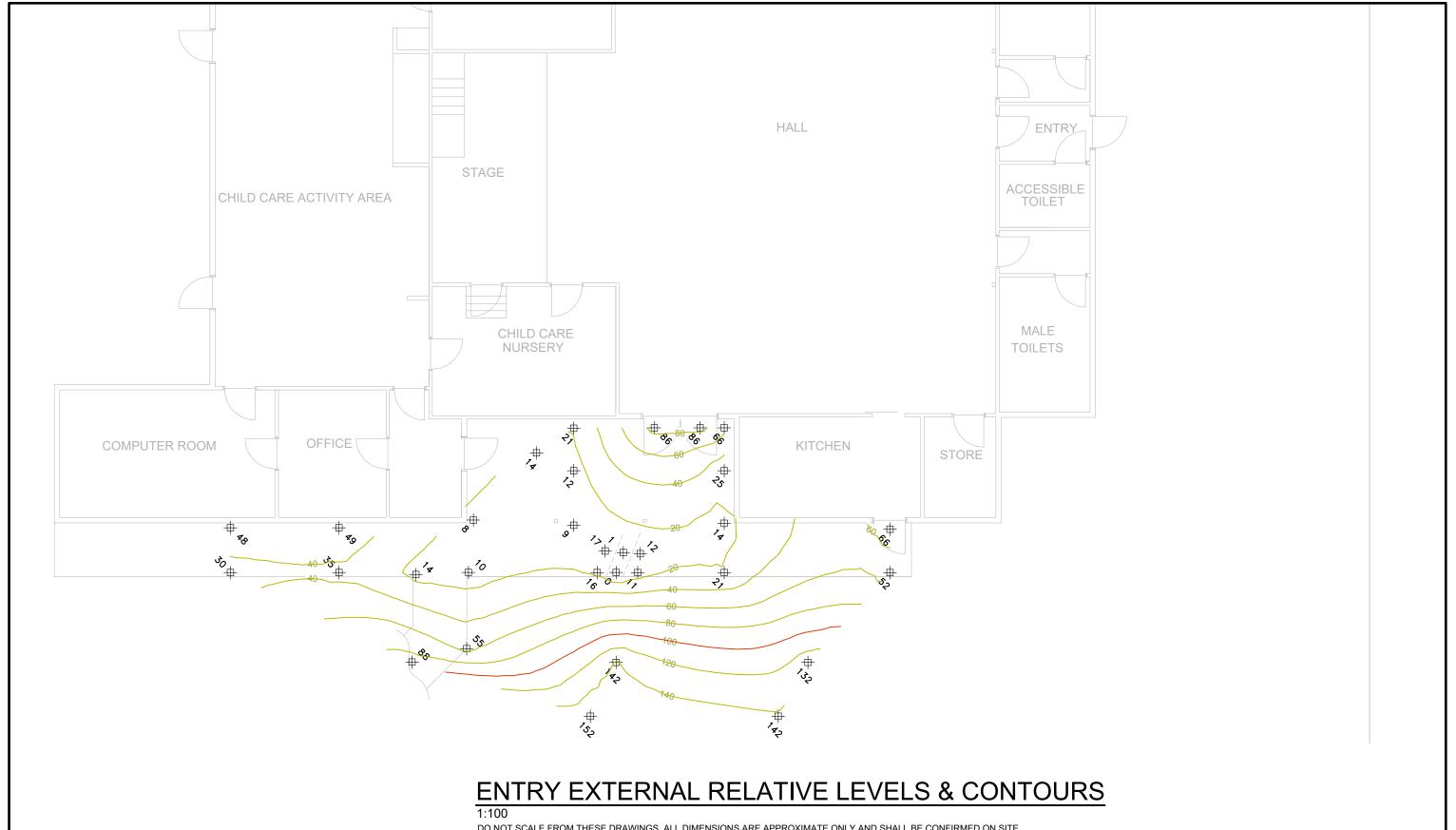
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RELATIVE LEVEL, IN MILLIMETERS

FLOOR LEVELS HAVE BEEN ADJUSTED FOR THE VARIOUS FLOOR COVERINGS & BUILDING STEPS

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EXISTING FLOOR MEMBER SCHEDULE								
MARK	DESCRIPTION	SIZE	REMARKS					
FB1	FLOOR BEAM	90x70 (UNKNOWN GRADE)	APPROX. 1200 SPAN (CONTINUOUS) APPROX. 1100 cts					
FB2	FLOOR BEAM	50x100 (UNKNOWN GRADE) + 45x70 (UNKNOWN GRADE)	MEMBERS ON FLAT APPROX. 1100 SPAN (CONTINUOUS)					
FB3	FLOOR BEAM	90x70 (UNKNOWN GRADE)	APPROX. 1100 SPAN (CONTINUOUS) APPROX. 1100 cts					
FB4	FLOOR BEAM	90x70 (UNKNOWN GRADE)	APPROX. 1500 SPAN (CONTINUOUS) APPROX. 1000 cts NO FLOOR JOISTS EVIDENT					
FJ1	FLOOR JOIST	90x45 PINE (UNKNOWN GRADE)	APPROX. 1100 SPAN (CONTINUOUS) 450 cts					
FJ2	FLOOR JOIST	120x50 (UNKNOWN GRADE)	APPROX. 1200 SPAN (CONTINUOUS) 400 cts					
FJ3	FLOOR JOIST	110/120x45 (UNKNOWN GRADE)	APPROX. 1100 SPAN (CONTINUOUS) 450 cts					
FJ4	REPLACEMENT FLOOR JOIST	120x45 PINE (UNKNOWN GRADE)	REPLACEMENT JOISTS IN LIEU OF FJ3 JOISTS IN SOME LOCATIONS APPROX. 1100 SPAN (CONTINUOUS) 450 cts					

EXISTING WALL & ROOF MEMBER SCHEDULE					
MARK	DESCRIPTION	SIZE	REMARKS		
CJ1	CEILING JOIST	100x45 (UNKNOWN GRADE)	HARDWOOD ASSUMED 600 cts		
CJ2	CEILING JOIST	90x35 PINE (UNKNOWN GRADE)	WITH 70 x 35 x 500 LONG PINE HANGERS FROM BTM CORD OF TR2 OVER AT 3200 cts JOISTS AT 1200 cts		
CJ3	CEILING JOIST	130x35 (UNKNOWN GRADE)	400 cts		
R1	RAFTER	85x35 (UNKNOWN GRADE)	HARDWOOD ASSUMED 600 cts		
R2	RAFTER	150x45 (UNKNOWN GRADE)	1200 cts		
RB1	RIDGE BOARD	200x25 (UNKNOWN GRADE)			
RB2	ROOF BEAM	2-400x50 LVL (UNKNOWN GRADE)			
TB1	TENSION BRACE	Ø20 ROD			
TR1	STEEL ROOF TRUSS	90W x 70D x 6 THICK WELDED 'T' TOP & BTM CHORD Ø20 ROD DIAGONAL WEB MEMBERS 450 OVERALL DEPTH			
TR2	TIMBER ROOF TRUSS	R1 TOP CHORD CJ1 BTM CHORD 100x35 (UNKNOWN GRADE) DIAGONAL WEB MEMBERS	600 cts		
TR3	PREFABRICATED TIMBER ROOF TRUSS	90x35 TOP CHORD 70x32 DIAGONAL STRUTS 90x35 BTM CHORD	1200 cts 35x70 BATTENS AT 1000cts OVER		
TR4	PREFABRICATED TIMBER ROOF TRUSS	CONFIRM ON SITE			
TR5	PREFABRICATED TIMBER ROOF TRUSS	CONFIRM ON SITE	2 x PARALLEL TRUSSES IN CEILING SPACE OVER STAGE CURTAIN		
TR6	PREFABRICATED TIMBER ROOF TRUSS	CONFIRM ON SITE			
SR1	SAG ROD	Ø20 ROD			

* ALL MEMBER LOCATIONS AND SIZES ARE APPROXIMATE ONLY AND SHALL BE CONFIRMED ON SITE.

* TIMBER PROPERTIES/GRADE UNKNOWN AT THE TIME OF THE INSPECTION.

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DEANS MARSH COMMUNITY HALL 20 PENNYROYAL VALLEY RD, **DEANS MARSH** CLIENT

SURF COAST SHIRE

EXISTING FLOOR AND ROOF MEMBER **SCHEDULES** ENGINEER DRAWN CHECKED SCALE @ A3

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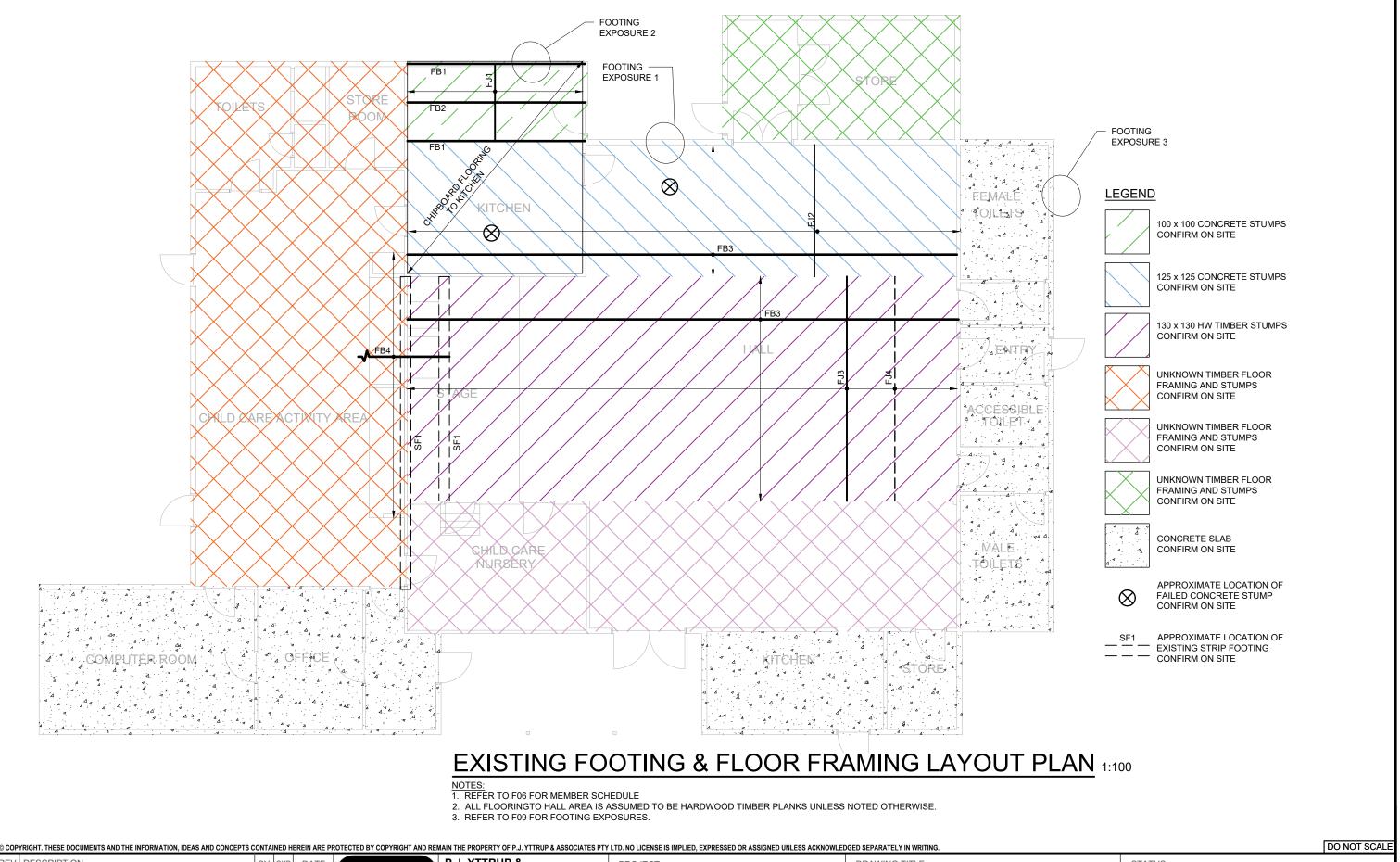
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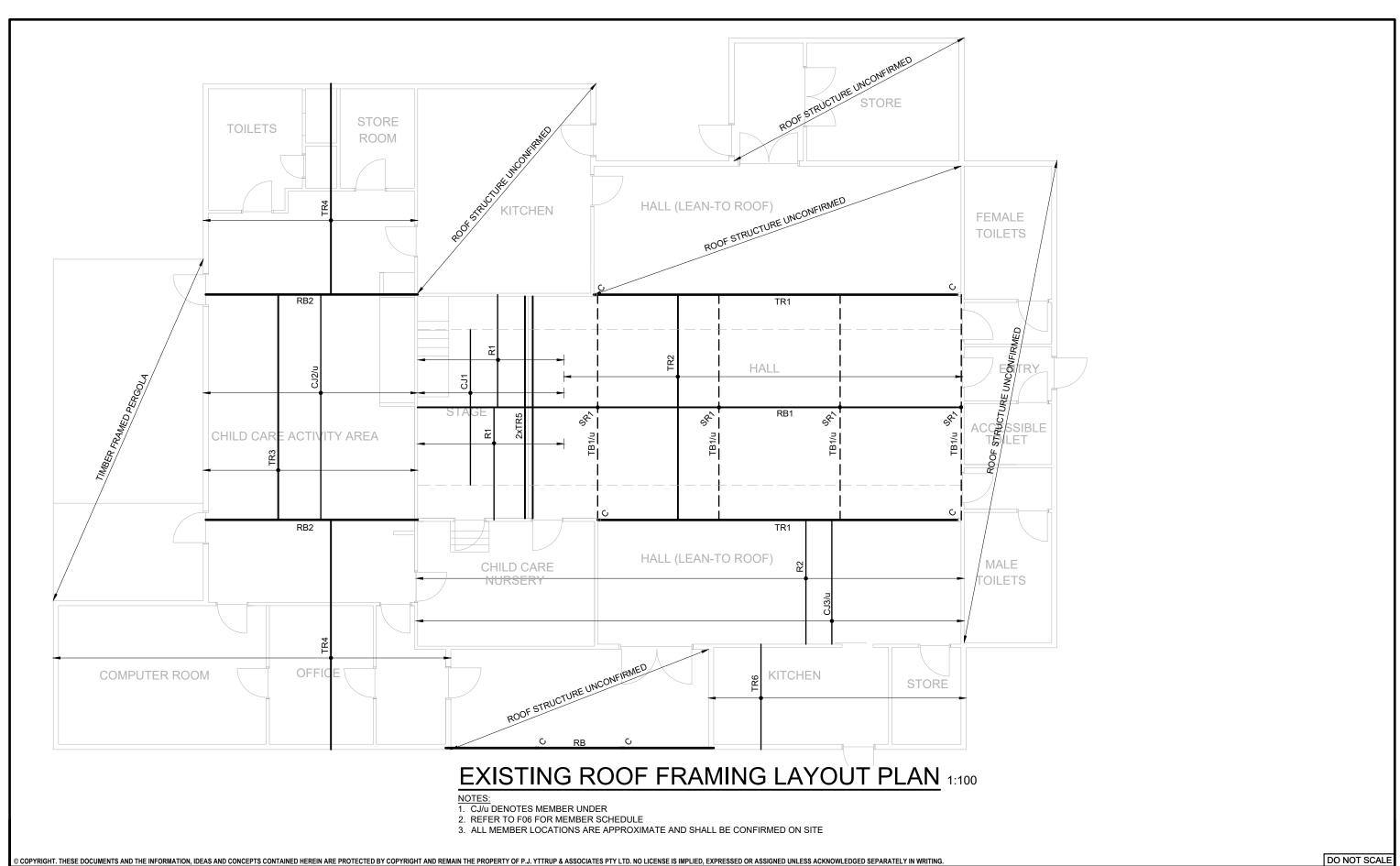
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^{*} ALL MEMBER LOCATIONS AND SIZES ARE APPROXIMATE ONLY AND SHALL BE CONFIRMED ON SITE.

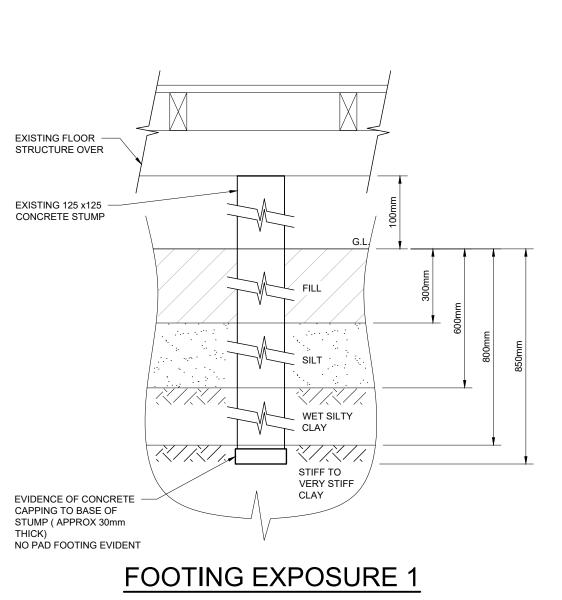
^{*} TIMBER PROPERTIES/GRADE UNKNOWN AT THE TIME OF THE INSPECTION.

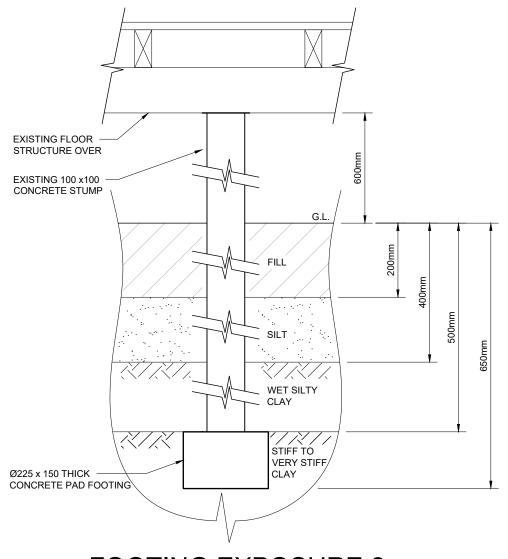


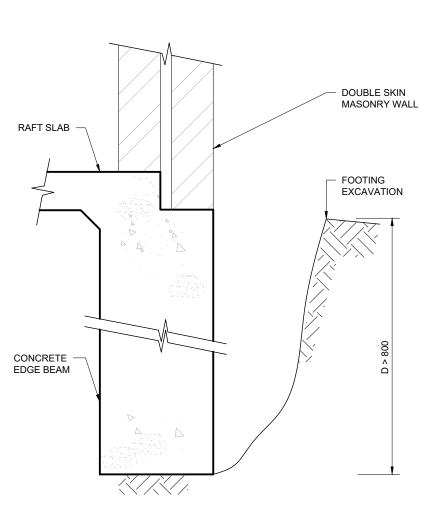
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			YTTRUP	P: 03 5243 3388 E: admin@yttrup.com W: www.yttrup.com ACN: 005 909 919 ABN: 71 687 799 203 © COPYRIGHT	CLIENT SURF COAST SHIRE	ENGINEER BK	DRAWN AM	CHECKED NM	SCALE @ A3 1:100	PROJECT No. 23688	F08 of 11	X1



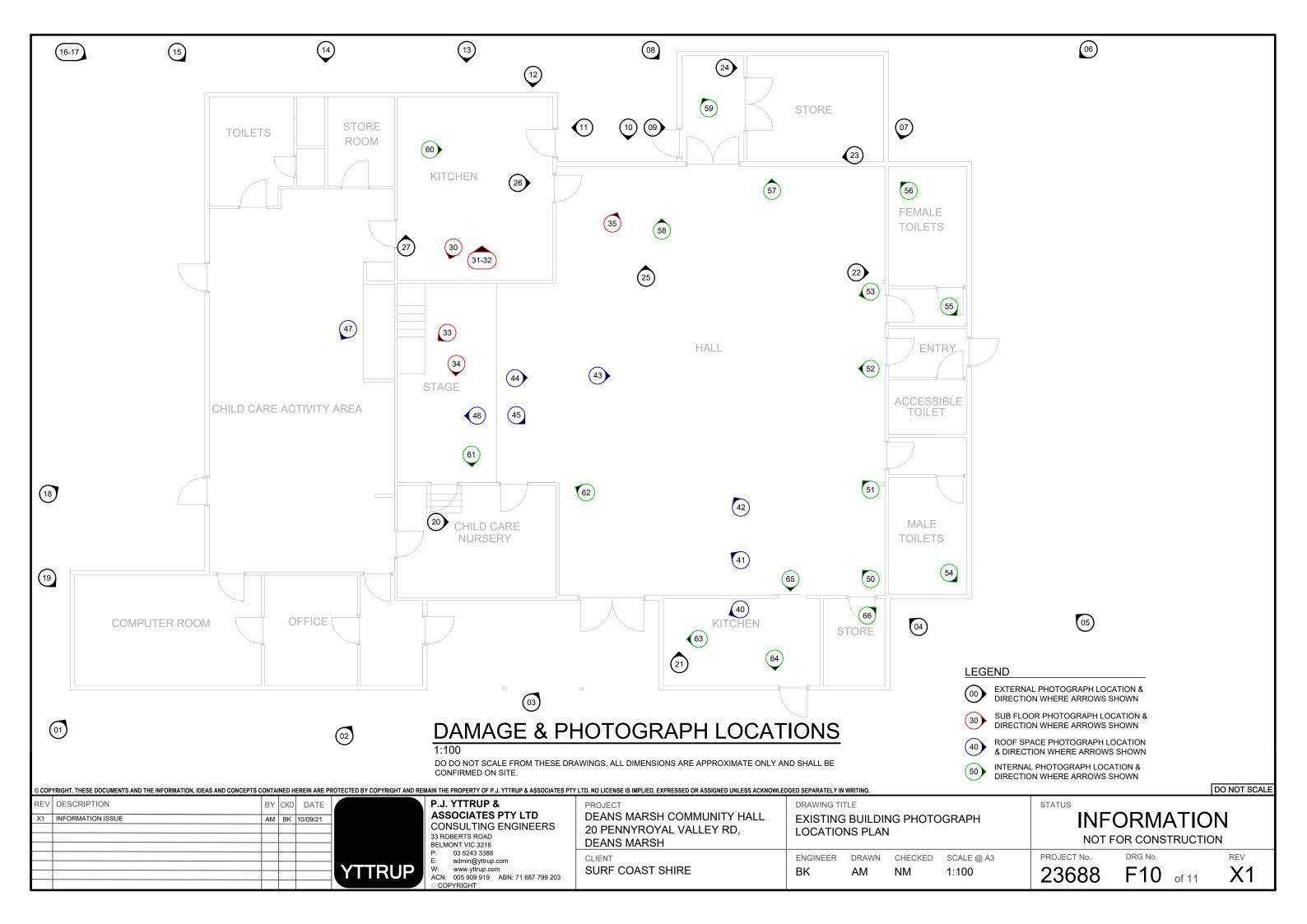




FOOTING EXPOSURE 2

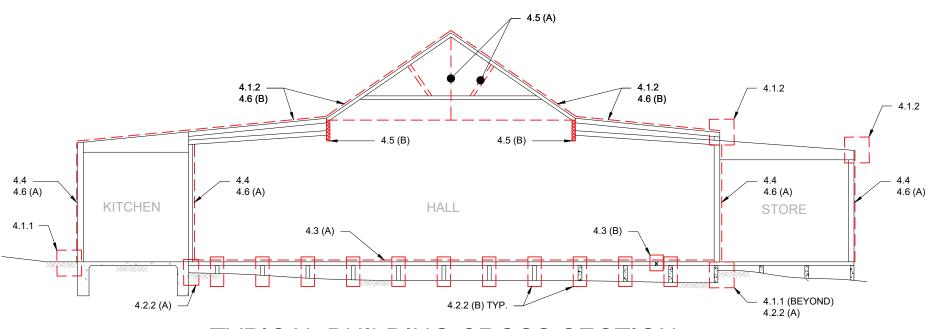
FOOTING EXPOSURE 3

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OBSERVED ISSUES				
REPORT SECTION (REFERENCE #)	DESCRIPTION			
4.1.1	POOR SITE / PERIMETER DRAINAGE.			
4.1.2	ROOF DRAINAGE ISSUES.			
4.2.2 (A)	POOR SUBFLOOR CLEARANCE AND VENTILATION.			
4.2.2 (B)	STUMP FAILURE/DEGRADATION AND/OR MOISTURE ISSUES.			
4.3 (A)	LIMITED FLOORING CAPACITY			
4.3 (B)	FB2 INADEQUATE			
4.4	WALL FRAMING CONDITION & TIE DOWN (UNKNOWN - FURTHER INVESTIGATION REQUIRED)			
4.5 (A)	INADEQUATE TRUSS FRAMING TO R1 & CJ1 (OVER STAGE AREA)			
4.5 (B)	TR1 STEEL TRUSS ISSUES			
4.6 (A)	INADEQUATE WALL BRACING			
4.6 (B)	INADEQUATE ROOF BRACING			
	-			

NOTE: THE OBSERVED ISSUES NOTED ABOVE IS A NON-EXHAUSTIVE LIST. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE BUILDING CONDITION REPORT (REFERENCE 23688_F1).



TYPICAL BUILDING CROSS SECTION 1:100

NOTES:

- 1. THE ABOVE SECTION IS DIAGRAMMATIC REPRESENTATION OF SOME MAJOR OBSERVED ISSUES (NOTE: NOT ALL OBSERVED ISSUES SHOWN).
- 2. REFER TO BUILDING CONDITION REPORT 23688 F1 FOR FURTHER DETAILS.

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APPENDIX C Site Photographs

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Photo 01 - External.jpg



Photo 02 - External.jpg

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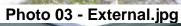




Photo 04 - External.jpg

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Photo 06 - External.jpg

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Photo 07 - External.jpg



Photo 08 - External.jpg

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Photo 09 - External.jpg



Photo 10 - External.jpg

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Photo 11 - External.jpg



Photo 12 - External.jpg

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Photo 13 - External.jpg



Photo 14 - External.jpg

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Photo 16 - External.jpg

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Photo 18 - External.jpg

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Photo 19 - External.jpg



Photo 20 - External.jpg

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Photo 22 - External.jpg

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Photo 23 - External.jpg



Photo 24 - External.jpg

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Photo 26 - External.jpg

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Photo 30 - Subfloor.jpg

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Photo 31 - Subfloor.jpg



Photo 32 - Subfloor.jpg

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Photo 33 - Subfloor.jpg



Photo 34 - Subfloor.jpg

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Photo 35 - Subfloor.jpg



Photo 40 - Roof Space.jpg

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Photo 41 - Roof Space.jpg



Photo 42 - Roof Space.jpg

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Photo 44 - Roof Space.jpg

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Photo 45 - Roof Space.jpg



Photo 46 - Roof Space.jpg

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Photo 47 - Roof Space.jpg



Photo 50 - Internal.jpg

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Photo 51 - Internal.jpg

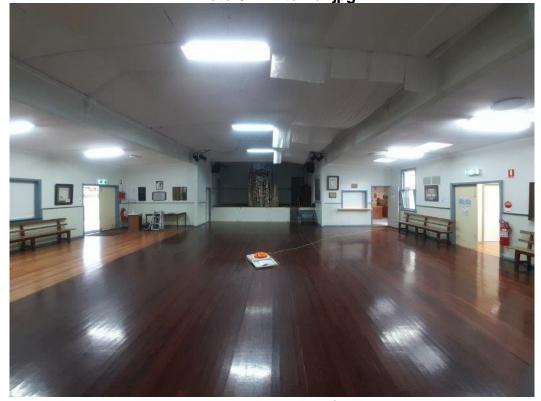


Photo 52 - Internal.jpg

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Photo 53 - Internal.jpg



Photo 54 - Internal.jpg

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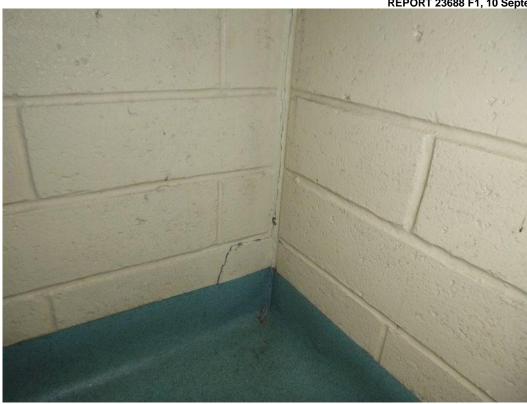




Photo 56 - Internal.jpg

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Photo 57 - Internal.jpg



Photo 58 - Internal.jpg

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Photo 59 - Internal.jpg



Photo 60 - Internal.jpg

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Photo 61 - Internal.jpg



Photo 62 - Internal.jpg

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Photo 63 - Internal.jpg

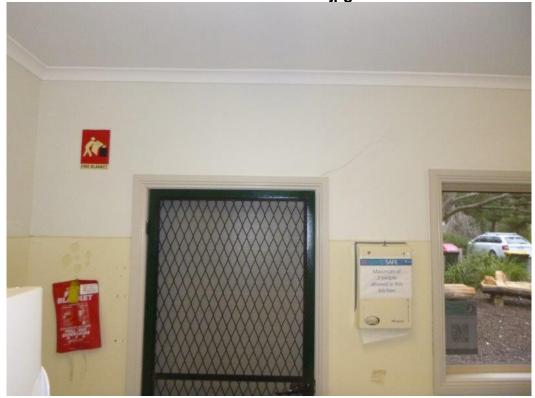


Photo 64 - Internal.jpg

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Photo 65 - Internal.jpg

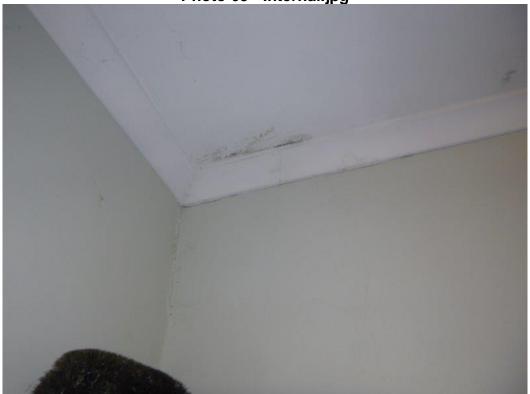


Photo 66 - Internal.jpg

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APPENDIX D

General Notes 1 to 3; CSIRO Sheet 10-91 – "Guide to home owners on foundation maintenance and footing performance"

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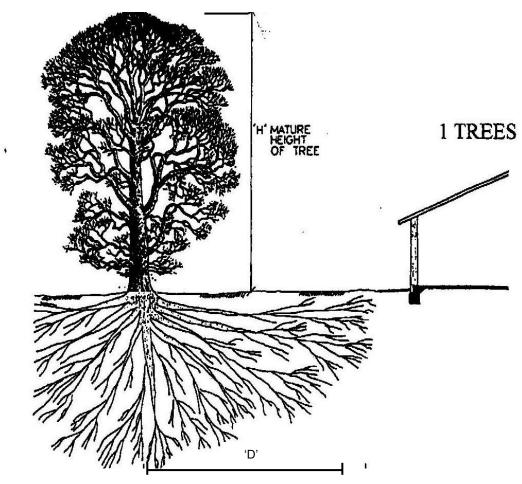


GENERAL NOTES - SHEET 1

It is important to prevent the development of localised wet or dry areas at the perimeter of the proposed building.

In domestic or light weight construction, built on clayey soil, these wet or dry areas can result in differential ground movement and cause distress to the super-structure.

For this reason it is important for the <u>builder and home owner</u> to understand and realise the necessity of the following precautions.



Possible Zone of Soil Significantly Affected by Root System.

One Tree D up to 1H Class M Sites D up to ¾ H Class H Sites D up to 1H Class E Sites D up to 1½ H For a Row of Trees Increase H by 50%

IN CLAYEY SOILS

- Trees should be planted at a reasonable distance away from the proposed dwelling. A distance equivalent to the expected mature height of the tree is considered reasonable.
- Trees should be selected with the above information in mind.
- Information can be obtained from nurserymen on the selection of, and possible growth characteristics of, most trees and shrubs.

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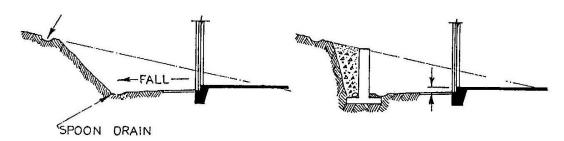


GENERAL NOTES - SHEET 2

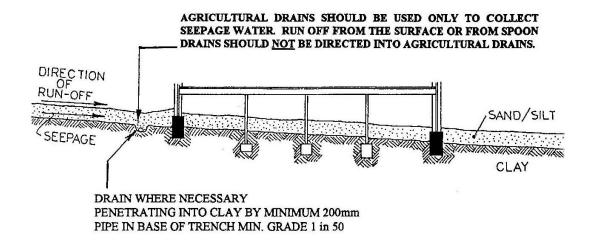
2 DRAINAGE

It is essential that the site be well drained to prevent any excessive build-up of moisture under footings or slabs. (In clayey soil, localised wetting up or drying out of the soil can result in heave or settlement within the soil foundation. Brickwork and / or structural damage can result from such movement).

SPOON DRAIN TO COLLECT RUN OFF WATER AND PREVENT SCOURING TO FACE OF CUTTING



• On slope or low lying sites concrete slabs must be raised off the ground and adequate drainage provided so as to prevent any possibility of storm water inundations.



Problems can occur at sloping sites where topsoil, silts, and sands overlay stiff clay. The downhill flow of seepage water can be stopped at a footing which is excavated into the clay. This dammed up water can produce undesirable wet areas. It may prove necessary to provide an agricultural drain to remove this water (see sketch above).

SCHEMATIC DRAWING NOT TO SCALE

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GENERAL NOTES - SHEET 3

3 PATHS AND PAVING

- The soil around the perimeter of all dwellings should be graded to fall away from the external walls.
- <u>In Highly Reactive clay areas</u>, perimeter paving is recommended. This provides some degree of protection to the foundation soils from seasonal moisture change.
- All paths should be graded to shed water away from the dwelling.

4 FLEXIBILITY OF CONSTRUCTION

For dwellings built on clayey soils the house super-structure should be designed to have some degree of flexibility in order to cope with possible footing movement that may occur.

Flexibility of the super-structure is achieved by articulating the brickwork to the Cement and Concrete Association Technical Note 61, "Articulated Walling". Following are some example locations of joints.

- Use floor to ceiling windows and doors where possible.
- Use timber panels above windows in place of brickwork.
- Provide movement joints at
 - Half-height windows.
 - Large expanses of brickwork.
 - Between old and new construction.
 - Between one and two storey sections.
 - Between wing walls and the main structure.

The above "movement joint locations" are examples only. The number and location of joints must also be considered from an aesthetic viewpoint. Where joints are considered unsuitable it may prove necessary to provide additional reinforcement to the brickwork.

5 SERVICE TRENCHES AND EASEMENTS

To avoid the detrimental and unwanted formation of wet or dry areas close to the building, particularly in clay soil, and to avoid interference to footings and slab beams, it is important that all service trenches be located well clear of the building perimeter and be kept to minimum acceptable depth.

The building footings must be capable of catering for the effects of any easements on this property or the neighbouring properties.

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Improving the Built Environment

Sheet No. 10-91 Revised August 1996

Guide to home owners on foundation maintenance and footing performance (updated for AS 2870-1996)

Introduction

This guide was prepared by Dr P.F. Walsh, formerly of CSIRO and now with the University of Newcastle, with advice from the Standards Australia Committee on Residential Slabs and Footings, to provide guidance to home owners on their responsibilities for the care of clay foundations, and to discuss the performance that can be expected from a footing system. (The ground that supports a house is called a foundation, and the concrete structure that transfers the load to this foundation is the footing system.)

The best information about the design and construction of footing systems is contained in the Australian Standard AS 2870 'Residential Slabs and Footings'. The Standard gives a system of site classification, prescribed footing and slab designs, and construction methods that provide an excellent footing system for Australian houses. However, a warning is given that the chance of a footing failure is higher if extreme site conditions are permitted to occur, viz.:

- growth of trees too close to a footing;
- excessive or irregular watering of gardens adjacent to the house;
- · lack of maintenance of site drainage; and
- · failure to repair plumbing leaks.

The Standard further states that compliance with this guide is a way to avoid extreme site conditions.

Clay foundations are the cause of major problems for houses. Clays are very fine-grained soils that are plastic and sticky when wet, and hard and strong when dry. All clays swell or shrink to some degree as they become wet or dry out. 'Reactive' clays swell or shrink to such an extent that foundation movements can damage houses.

All house sites are classified. Reactive-clay sites are classified as S, M, H or E, in order of increasing reactivity. Proper maintenance of such clay sites requires that the moisture content of the clay should be kept reasonably constant.

Some minor cracking of masonry walls on reactive clay sites is almost inevitable despite proper design, construction and maintenance. Very slight cracks (up to 1 mm wide) could be expected in most houses. Larger cracks (up to 5 mm) may occur in some houses with properly designed and constructed footings if reactive clay sites have been subject

to large changes of moisture. Cracks larger than 5 mm are regarded as significant damage.

Non-reactive sites – sands, silts and certain clays of class A or S – need only be protected from becoming extremely wet. This requires adequate attention to site drainage and prompt repair of plumbing leaks.

Further information on these topics is given in the following sections. The guide has been updated to be consistent with the revised edition of AS 2870 (1996).

Site classification

AS 2870 requires all sites to be classified. The emphasis has been placed on reactive clays that swell and shrink with changes of moisture content, because these are the most common cause of problems. The classification system is fairly complicated but, as a general guide, the following may be helpful in understanding the system for clay sites.

- S Clays that have not given trouble in the past.
- M Moderately reactive clays that may cause minor damage to brick houses on old-style light strip footings. Moderately reactive clays are common.
- H Highly reactive clays that often damage houses, paths and fences.
- E Extremely reactive clays that frequently damage houses even with strong footings. Generally rare in major cities except Adelaide. Other occurrences include outback NSW, Darling Downs, Geelong and Horsham.

Since the precautions necessary depend on the reactivity of the site, the owner should check the classification that is shown on the house plans.

The maintenance of the building and the site is the responsibility of the owner, and so the owner should be familiar with the requirements of this guide.

Care of clay foundations

All clays move with changes of moisture content, so the aim is to minimise such changes in the clay by:

- draining the site;
- · keeping gardens and trees away from the house;
- · adequate but moderate garden watering; and
- repairing plumbing leaks.

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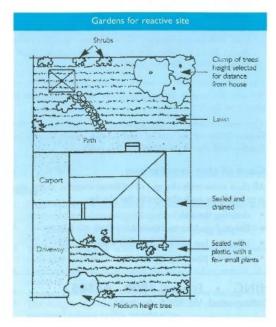


On a reactive-clay site there are some restrictions on the way the owner can safely develop the garden around the house. These restrictions apply mainly to brick houses. In most cases, only minimal precautions are justified for framed houses clad with timber or sheeting.

The site must be well drained. Under no circumstances should water be allowed to lie against the house or even near the house. The ground immediately next to the house should be graded away with a slope of about 50 mm over the first metre. Suitable surface drains should be provided to take the surface water away from the house. Where topsoil is brought in, it should not interfere with the site drainage, nor should it raise the ground level enough to block the weepholes in the brick walls or any subfloor vents. Even the subfloor of houses with timber floors should be drained so that water does not collect under the house.

Large garden beds are best not located near the house. This will avoid the possibility of introducing too much moisture to the foundation clay by overwatering. The zone near the house should be planned for paths or covered with gravel





and plastic sheeting. Small shrubs may be planted at reasonable spacings.

Gardens and lawns should be watered adequately but not excessively. Uniform, consistent watering can be important to prevent damage to the foundation during dry spells such as droughts or dry summers.

Trees and large shrubs require substantial amounts of water, and if the soil near the tree dries out, the roots will extend in search of soil moisture. Tree watering is important in late summer and in drought. The use of slow-drip watering systems may be appropriate. It has also been found useful to drill holes near trees and fill them with gravel to allow water better access to the tree roots. Otherwise, clays will shrink as they dry, and a house may settle as shown below.

Removal of large trees creates the opposite problem. As soil moisture is gradually restored, clays swell and may lift shallow footings.

Many factors determine the extent of clay drying by trees. The more important include soil type, and the size, number and species of trees. Trees obtain moisture from roots that spread sideways, and the drying zone is influenced by the extent of these roots. For single trees, the drying zone is usually half to twice the tree height, but the zone may be larger for groups or rows of trees. Although it is known that the species can influence the extent and severity of the drying zone, little definite information is available. Some Australian trees are particularly efficient in extracting water from very dry soils and can be more dangerous than non-Australian species that use large amounts of water in normal conditions. The effect of tree drying on the amount of movement is also related to the reactivity of the clay. To minimise the risk of damage, trees (especially groups of trees) should not be planted near the house on a reactive clay site, and the following limits are recommended:

d = 1.5 h for Class E sites

d = 1 h for Class H sites

d = 0.75 h for Class M sites

where d is the distance of the tree from the house, and h is the eventual mature height of the tree. These values should be increased by 50% if the trees are in a dense group. These rules mean that on the average suburban block, trees that grow higher than 8–9 m are often impractical unless the owner accepts the risk of some damage to the house. If large trees are desired, it may be practical to adopt a specially designed footing system, e.g. a piled footing system.

A leak in the plumbing can cause the footings of a house on a reactive clay to move. The water seeps into the clay causing it to swell and push the footing system upwards. Any obvious leaks in stormwater, drainage or sewerage pipes should be investigated. Leaking water pipes can be detected by turning off all the taps and checking if the water meter records any flow.

The above restrictions may seem onerous for new home owners, but lack of site maintenance on a reactive clay can cause damage to the house. The whole issue should be kept in some perspective. The damage to houses caused by reactive clays is mostly unsightly cracks in the brickwork. In the typical Australian brick-veneer house, the brickwork does not support the structure. It is the timber frame that

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carries the walls and roof loads, so brick cracks do not affect the structural safety of the house.

If owners choose to disregard some of the above restrictions and, say, plant large trees all around the house, they should not blame the builder, the engineer or the Council if the house suffers some cracking.

Performance of footing systems

All building materials move. Concrete and timber shrink, bricks grow, and so on. Many building practices have been evolved to reduce the damage that such movements cause, and the minor difficulties that arise are usually repaired without significant problems.

Where footings are designed by an engineer, the basis of the design is the limitation of any vertical movement that might occur between the centre of the wall and a line joining the ends of the wall. This is termed the differential movement and limits are given in AS 2870 for various forms of house construction. For example, a masonry veneer house with articulation joints is designed for a movement limit of 30 mm. The amount of this movement at a house can be checked using a level or even a string line along a brick course in the wall. If the vertical differential movement is less than the prescribed limit then the footing system has performed up to standard.

Masonry wall cracking can have many causes other than footing movement, including bricks growing as they absorb moisture, the structural or shrinkage movements of the frame within the veneer skin or even accidental damage during construction. If the cracking is less than a few millimetres it is virtually impossible to determine the cause. Certainly if there is no evidence of excessive differential movement then footings should not be regarded as the cause of the cracking.

However, it must be accepted that on reactive clay sites, particularly Class H and E, some movement is likely and for some sensitive houses cracking may occur even for footings performing within expectations. In order to set realistic expectations, AS 2870 contains Appendix C which is included in this report.

The performance requirement of AS 2870 suggests that Category 0 to 1 damage may be expected for houses on a reactive-clay site, but that the damage is of little consequence. Category 2 damage (isolated cracks up to 5 mm wide) is clearly not satisfactory, but it still does not constitute significant failure and could be expected to occur under adverse environmental conditions.

For these categories of damage, it is the intention of AS 2870 that consequent repairs are part of the normal house maintenance, although during the warranty period this may be the responsibility of the builder.

Nonetheless, to ensure that the damage does not proceed to a more serious state, the owner should take some action.

- Check that the recommendations on site treatment, drainage, garden arrangement, trees etc., have been observed.
- Keep a record of the crack width against the time of the year. If the damage is as high as Category 2 and seems to be increasing, the owner should consult the builder who

- may be able to offer more specific advice. If this does not prove satisfactory, the owner should engage a consulting engineer who specialises in house footings.
- Engage a plumber to check for leaks if this is suspected to be the cause.
- Replace soil moisture in dry spells by watering. Such
 watering can be more effective if holes or trenches are
 dug into the clay. The holes or trenches should be filled
 with compacted crushed rock or gravel and moderately
 watered. Some trees may need to be removed or kept
 pruned.

Complete stability is difficult to achieve, so repairs to damaged walls should include methods that will disguise further movements. Extra joints should be included in external masonry walls and further cracking in internal walls can be concealed by flexible paints, wall paper or panelling. Repairing of cracks with brittle fillers should be avoided unless the cracks have stabilised.

For the more serious categories of damage, the steps to be taken are similar, but there should be little delay in seeking advice. Remedial action for significant failure may still only include attention to stabilising moisture conditions as described above, but could also involve constructing a concrete path or a wall in the ground to stop drying of the foundation clay. Walls may even be designed to span over sagging footings or to cantilever beyond sagging footings. Underpinning is usually not satisfactory in reactive clays.

Experience indicates that lack of maintenance is responsible for many failures. Even with proper design and site maintenance the occasional failure may still occur because footing behaviour is so complex.

Shrinkage of concrete floors

Concrete needs water. Firstly to allow the fresh concrete to flow, and secondly to develop strength during its first few weeks. As a slab starts to dry, it shrinks and tries to contract. Some of this movement is restrained or resisted by friction on the bottom of the slab and by the beams in the ground. This restraint causes tension or stretching forces in the slab and these forces are often large enough to crack the slab.

Shrinkage cracking is almost inevitable and does not represent failure. Most owners never notice the cracks because they often do not occur until after the carpets are laid. Cracks under brittle or sensitive floor coverings are of concern, but the risk of damage can be reduced by using flexible mortars and glues for fixing slate and tiles etc. Also it helps to delay installing the floor covering until after the shrinkage has occurred. The length of delay should be at least three months after the slab has started to dry (i.e. from the time the slab is last wet from rain or during construction).

Adhesive-fixed floor coverings

A concrete slab takes a long time to dry. For example, under temperate conditions a slab will take about three months to dry. Moisture in the concrete can interfere with the bond or break down the adhesive used to attach floor coverings. However, a range of adhesives is available for various floor coverings and these should perform quite well on slabs that have been allowed to dry sufficiently. If there is any doubt, the moisture condition of the slab should be assessed before coverings are placed.

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Conclusion

This guide has been prepared to advise owners on how to care for the foundation of their houses and what to expect from a well-designed footing system. The main concern with foundation maintenance is to prevent the foundation soil becoming too wet or too dry, and a variety of recommendations are given to achieve this.

Further information

Cameron, D. A. & Earl, I. 1982, Trees and Houses: A Question of Function, Cement & Concrete Association, Melbourne.

Cameron, D. A. & Walsh, P. F. 1984, Damage to Buildings on Clay Soils, Technical Bulletin 5.1, Australian Council of National Trusts.

CSIRO 1995, House Cracking in Drought Periods, Information Sheet No. 10–88, CSIRO Australia, Division of Building, Construction and Engineering, Melbourne.

Martin, K. G., Lewis, R. K., Palmer, R. E. & Walsh, P. F. 1983, Floor Coverings on Concrete Slab-on-ground, CSIRO Australia, Division of Building Research Report, Melbourne.

Disclaimer

The information in this and other Information Sheets is advisory. It is provided in good faith and not claimed to be an exhaustive treatment of the relevant subject. Further professional advice needs to be obtained before taking any action based on the information provided.

Appendix C of As 2870

Description of typical damage and required repair		Approximate crack width limit (see Note 3)	Damage
-larrline cracks		<0.1 mm	0
Fine cracks which do not need repair		nun</td <td>1</td>	1
Cracks noticeable but easily filled. Doors and windows stick slightly		<5 mm	2
Cracks can be repaired and possibly a small amount of wall will need to be replaced. Doors and windows stick. Service pipes can fracture. Weathertightness often impaired		5–15 mm (or a number of cracks 3 mm or more in one group)	3
Extensive repair work involving breaking-out and replacing sections of walls, especially over doors and windows. Window and door frames distort. Walls lean or bulge noticeably, some loss of bearing in beams. Service pipes disrupted		15–25 mm but also depends on number of cracks	4

Description of typical damage	Approximate crack width limit in floor	Change in offset from a 3 m straight edge centred over defect (see Note 5)	Damage category
Hairline cracks, insignificant movement of slab from level	<0.3 mm	<8 mm	0
Fine but noticeable cracks, Slab reasonably level	<10 mm	<10 mm	1
Distinct cracks. Slab noticeably curved or changed in level	<20 mm	<15 mm	2
Wide cracks. Obvious curvature or change in level	2-4 mm	15–25 mm	3
Caps in slab. Dicturbing curvature or change in level	4-10 mm	>25 mm	4

Notes:

- 1 Crack width is the main factor by which damage to walls is categorised. The width may be supplemented by other factors, including serviceability, in assessing category of damage.
- 2 In assessing the degree of damage, account shall be taken of the location in the building or structure where it occurs, and also of the function of the building or structure.
- 3 Where the cracking occurs in easily repaired plasterboard or similar clad-framed partitions, the crack width limits may be increased by 50% for each damage category.
- 4 Local deviation of slope, from the horizontal or vertical, of more than 1/100 will normally be clearly visible. Overall deviations in excess of 1/150 are undesirable.
- 5 Account should be taken of the past history of damage in order to assess whether it is stable or likely to increase.
- 6 The straight edge is centred over the defect, usually, and supported at its ends by equal height spacers. The change in offset is then measured relative to this straight edge.

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A11 Building Regulations 233



Victorian Consolidated Regulations

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BUILDING REGULATIONS 2018 - REG 233

Alteration to existing building

- (1) Building work to alter an existing building must comply with these Regulations.
- (2) Subject to <u>regulations 234</u> and <u>236</u>, if the proposed alterations to an existing building, together with any other alterations completed or permitted within the previous 3 years, relate to more than half the original volume of the building, the entire building must be brought into conformity with these Regulations.
- (3) Despite subregulations (1) and (2) and subject to subregulation (6), the relevant building surveyor may consent to partial compliance of building work or an existing building with subregulation (1) or (2).
- (4) In determining whether to consent to partial compliance with subregulation (1) or (2) in respect of any alteration to a building, the relevant building surveyor must take into account—
 - (a) the structural adequacy of the building; and
 - (b) the requirements necessary to make reasonable provision for—
 - (i) the amenity of the building and the safety and health of people using the building; and
 - (ii) avoiding the spread of fire to or from any adjoining building.
 - (5) Any consent to partial compliance under subregulation (3) must be in the <u>form</u> of <u>Form</u> 18.
- (6) If any part of the alteration is an extension to an existing building, the relevant building surveyor may only consent to partial compliance in respect of the extension if the floor area of the extension is not greater than the lesser of—
 - (a) 25% of the floor area of the existing building; and
 - (b) 1000 m^2 .

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A11 Traffic Engineers Advice

Subject:

FW: 220510_5102_Deans Marsh existing building uses

From: Tony Dinh <tonyd@tatsolutions.com.au>

Sent: Tuesday, 24 May 2022 4:31 PM

To: Kate Reed < KateR@brandarchitects.com.au>

Cc: Sandra Lin <SandraL@brandarchitects.com.au>; Michael Marsicovetere <michael@tatsolutions.com.au>

Subject: RE: 220510 5102 Deans Marsh existing building uses

Hi Kate,

We have completed the parking assessment for the Deans Marsh Community Hub in accordance with Clause 52.06 of the Surf Coast Shire Planning Scheme and provide our findings below.

Existing Use:

- > The Deans Marsh Memorial Hall consists of the following on site uses:
 - o Child Care Centre 12 Children capacity, operating Monday to Friday 7am to 6pm.
 - Multipurpose Hall 159 Patron capacity. operating Monday to Friday 5pm to late, and Weekends 9:00am to late.
 - Community Cottage Operating Tuesday to Thursday 8am to 4pm.
 - Adult education facility 11 Student capacity.
 - Office space 12sq.m Net Floor Area.
- An off-street gravel car park with capacity for 20 vehicles serviced the Deans Marsh Memorial Hall.
- On-street parking is provided on Pennyroyal Valley Road as follows:
 - North side 7 No. parallel car parking spaces.
 - South side 12 No. 45 degree angled car parking spaces.

Existing Car Parking Requirement

- ➤ Based on Clause 52.06-5 of the Surf Coast Shire Planning Scheme the Deans Marsh Memorial Hall has an existing car parking requirement equivalent to 54 car parking spaces.
- ➤ Clause 52.06-7 of the Surf Coast Shire Planning Scheme allows a reduction in the number of car parking spaces required under the planning scheme, provided it is accompanied by a car parking demand assessment. Considering that the existing on-site uses operate at different times during the weekday, it is expected that the sites peak demand for parking is likely to occur between 5pm and 6pm when both the child care centre and multipurpose hall are operating simultaneously. During this time the site has a car parking requirement equivalent to 50 car parking spaces (3 No. for the childcare centre & 47 No. for the multipurpose hall).
- ➤ Taking into account that the site has provision of an off-street car park with capacity for 20 vehicles, it can be concluded that Deans Marsh Memorial Hall has an approved car parking reduction equivalent to 30 car parking spaces.

Proposed Use:

- The proposal consists of constructing a Community Hub to replace the Memorial Hall that will consist of the following on site uses:
 - o Child Care Centre 22 Children capacity, operating Monday to Friday 7am to 6pm.
 - Multipurpose Hall 150 Patron capacity. operating Monday to Friday 5pm to late, and Weekends 9:00am to late.
 - Community Room 1:
 - 22 Children capacity Kindergarten operating two half days per week, and Out of School Hours Care Monday to Friday 7:00am to 9:00am and 3:00pm to 6:00pm.

- Adult activities 20 patron capacity all other times.
- o Adult education facilities Operating Tuesday to Thursday 8am to 4pm.
 - Community Room 2 25 Student capacity.
 - Meeting Room 1 15 Student capacity
 - Meeting Room 2 8 Student capacity.
- MCH & Allied Health Consulting 2 Practitioner capacity, operating Monday to Friday 9:00am to 4:00pm.

Proposed Car Parking Requirement

- ➤ Based on Clause 52.06-5 of the Surf Coast Shire Planning Scheme the proposed Deans Marsh Community Hub will have a car parking requirement equivalent to 82 car parking spaces.
- Considering that the proposed on-site uses will operate at different times during the weekday (as per the existing conditions), it is expected that the site's peak demand for parking will likely to occur between 5pm and 6pm when the child care centre, community room 1 and multipurpose hall are operating simultaneously. During this time the proposal has a car parking requirement equivalent to 53 car parking spaces (4 No. for the childcare centre, 4 No. for community room 1, & 45 No. for the multipurpose hall). When compared to the existing requirement this equates to an extra three (3) car parking spaces.
- Therefore, it is recommended that an extra three (3) car parking spaces be provided either on-street or offstreet to meet the extra demand in car parking likely to be generated by the Deans Marsh Community Hub. It is noted that and extra three car parking spaces could be provided on street by converting the existing parallel car parking bays located on the north side of Pennyroyal Valley Road, to 45-degree angle car parking.

Bicycle Parking Facilities

- Based on Clause 52.34 of the Surf Coast Shire Planning Scheme the proposed Deans Marsh Community Hub will have a bicycle parking requirement equivalent to:
 - o 2 bicycle parking spaces for visitor use for the Multipurpose Hall and Community Room 1.
 - 2 bicycle parking spaces for student use for Community Room 2, Meeting Room 1 and Meeting Room 2.
 - o 1 bicycle parking space for visitor use to the MCH & Allied Health.
- Therefore, it is recommended that six bicycle parking spaces via three bicycle hoops be provided on site for visitor use.

Let us know if you have any questions.

Kind regards,

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