



27 June 2025

Graeme Ross



Tēnā koe Graeme

Request for Information – Local Government Official Information and Meetings Act (LGOIMA) 1987

We refer to your official information request dated 28 May 2025, seeking a copy of the report prepared by Malcolm Ross regarding the state of the Hardwick-Smith Lounge building, which was submitted to Council on 26 August 2024. Specifically, you have requested:

On Monday, 26 August the report went via e-mail to Lauren Smith. I haven't seen the report. Is the report now available for the public to see? I would like to see it. Would you please send me a copy? I assume it would be better for me to have a copy which shows the report had been received by the council????

Answer:

Please find a copy of the report attached. This report has been released to you in full, without redaction.

You have the right to seek an investigation and review by the Ombudsman of this response. Information about how to make a complaint is available at: www.ombudsman.parliament.nz or freephone 0800 802 602.

Please note that this response to your information request may be published on
Hutt City Council's website at: Proactive releases Hutt City Council
Naā mihi nui.

Rebekah van der Splinter Senior Advisor, Official Information and Privacy



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19/08/2024

Hutt City Council 30 Laings Road Private Bag 31-912 Lower Hutt 5040

Attention: Lauren Smith - Facilities Manager

Re: Hardwick Smith Lounge - Property Condition Report

Objective:

Review of building premises and isolate cause of failure resulting in mould and subsequent water damage. Suggest remediation methodology and solutions for rectification. Endeavour to find breakdown that resulted in events that lead to current condition of property.

Background:

Following discussions with the concerned members of the community Detec New Zealand contacted the Hutt City Council offering our services to investigate what has happened to lead to the facilities current condition and what needs to be done to return the facilities to its' former 'pre-mould / water damage' condition.

A quick 'Google Search' indicates the facilities were closed at least from July 30th, 2021 – as reported in the NZ Herald by Nick James and Sophie Trigger¹. This appears to have occurred at the same time as mould issues detected in the Petone Library. The article reported:

"Hutt City Council Neighbourhood and Communities director Andrea Blackshaw said the mould had been noticed by someone who worked in the building."

"We undertake regular testing of our building and this issue came about because one of the people working in our building saw mould and pointed it out."

"Further investigations will tell us just how bad the problem is."

She said the council had been aware facilities were ageing.

"It's disappointing but we know we have an ageing set of community facilities and many of them were built around the same time, so they require significant renewal at the same time, including these two facilities."

"We've got a programme underway to address that and now we'll have to look at the priority of these two sites."

Hutt City Council chief executive Jo Miller said the facilities were closed immediately as a "precautionary measure" while further inspections were undertaken.

On the same day, an RNZ² report noted "A mid-week inspection of the Hardwick Smith Lounge in Belmont and the Petone Library also detected high moisture levels". This now begs the question what has caused this "high moisture level" to occur. Wellington. Scoop with Lindsay Shelton³ also picked up the story.

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A further search of the HCC public documents revealed a letter from the Democratic Services Team in relation to a query from Councillor Edwards dated the 16th of September 2022 (nearly 14 months after the initial closure) enquiring as to what was happening with the building in relation to the mould situation, the reopening of the facility and if there was a maintenance oversight considering they noted water leaking from an area of the roofline and water staining on the outside wall. The response noted⁴:

- 1. Air purifiers and scrubbers were being utilised on site to reduce the levels of toxic mould,
- 2. Due to the damage and wear on the building these levels could not be eliminated,
- 3. Contractors have been into assess the damage and provided quote to rectify the damage
- 4. Testing was being carried out regularly to monitor mould levels
- 5. Exterior checks were being carried out monthly by the councils own Maintenance Officer so any maintenance issues can be address.
- 6. An external contractor performs and internal quarterly check with the appropriate PPE equipment.
- 7. A condition assessment of all assets and facilities is being undertaken including this facility to be reported back to the elected councillors by the middle of 2023. As a result of this city-wide assessment, the team were pausing any works at the Hardwick Smith Lounge

From this letter it can be clearly seen there was no investigation to the root cause of the mould and moisture within the building. Councillor Edwards had asked if there was a maintenance oversight to which there was no direct answer. We note there is no mention of attending to the gutters to check their condition. The letter appears to be more concerned with attending to the resulting damage as opposed to the cause of the issue especially considering nearly 14 months had passed since closure and the facility would not receive any maintenance until at least 24 months following closure. In the meantime, it appears the damage would continue to exponentially grow.

This report is not party to the communication between the Maintenance Officer who attended the site and the reports from the contractor undertaking the mould inspections. Our understand is the external contractor had been responsible for the cleaning of the buildings gutters and reporting back on the condition of the buildings' interiors following the closure of the facility. We are not aware if the gutter clearing contractor was advised to provide a condition report of the gutters. We are certain the gutters integrity was the primary suspect.

We have been advised during the facilities closure (and preceding to this event) the building was maintained by an independent contractor operating under the instruction of the Hutt City Council Facilities team. Our understanding is most of that team has subsequently been replaced and the exact maintenance scope of works for the independent contractor is unknown.

Questions raised:

To best understand why the facilities are in their current condition, the number one question to be raised is: "If mould had been discovered back in July 2021, why was not an investigation carried out at the time as to the cause of the mould appearing?" This would have occurred in the initial stages of moisture ingress before extensive damage would have occurred. Discussions with a member of the Belmont Ratepayers Improvements Association Inc. revealed (to the best of their knowledge) there had never been a mould issue in the Hardwick Smith Lounge

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for the 40(ish) years the facility had been in operation until the above-mentioned date; used purely as a reference point as no other information has been provided.

Mould will only appear where it has not been before if there has been a change in the environmental factors making it permissible for the mould to develop and grow in the building envelope somewhere; be it ranging from a modification in the buildings structure to a ventilation system breakdown.

Our understanding of the maintenance of the building during the closure was for the gutters to be cleared on a regular basis and the mould reported upon. Therefore, secondary questions raised include (but are not necessarily limited to):

- What was the scope of works provided to the contractor responsible for clearing the gutters and inspecting the building?
- What information was provided within those reports?
- What action was taken upon the receipt of these reports?
- Were any of the findings resolved?

Other considerations.

A review of the Council-Owned buildings seismic register⁵ found this facility was rated at 70% NBS (Seismic Grade) and comments indicated the facility is "Unlikely to be earthquake prone" – meaning the building is of an acceptable quality. This review was undertaken on the 23rd of August 2019. We understand no seismic works have been undertaken and therefore not considered as a cause of the moisture ingress issue.

Internal Review - 'Cause and Effect'

Modification – sometime between the seismic review and the closing of the facility a modification was made to the internal layout. The wall to the former committee room and the main facility body was removed; providing a larger lounge space. Additionally, the 'cleaners' storage room was halved and a new disabled WC was added between the male amenities and the now reduced cleaners' room. A review of these spaces indicated in no way to have impacted the structure or led to the water ingress.

However, worthy of note the modification works have been completed to the exterior wall with a 'functional' approach which would have reduced the overall project cost by penetrating the rear wall and providing external surface mounted SWV services using 'Aquatite' collars (typically utilised in roofing applications) as an alternative

solution to seal the penetration. As can be seen in the below image the drill support wall anchors remain to the brick veneer cladding with no attempt to remove and seal the mounting collars. Over time these will corrode and cause damage to the exterior.

Right:
Drill bore anchors still present in wall. More
possibly present.



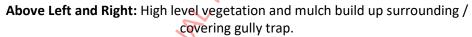
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Debris entering gully trap (Right Image). It is assumed this is the main water feed to the premises. It would be advisable to have a 'vacuum break' (brass image directly left) fitting attached to this hose tap to prevent backflow into the facilities.

(Image courtesy of MacDonald Industries NZ limited)







Far Left:

The beginnings of water ingress with mould appearing to the top corner of the room. Repair works have occurred previously in this area as can be seen by the change in texturing on the raking ceiling.

Left:

Severe wate damage at floor level from water ingress possibly coming in at brick level

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Left:

Opposite side of wall in foyer from former Plunket Rooms, High levels of mould to ceiling above (perceived) security system control box cover.

Additionally, high levels of mould and degradation to floor level bottom plate adjacent to aluminium joinery.

Below:

Condition of exterior garden bed with proximity to large windows. Mould also noted to the base interior of this wall; the former committee room. Note the staining on wall; typical or water ingress locations.





Left:

Garden debris and mulch built up against the side of the facilities rising to at least three brick courses above finished ground level and covering the approx 200mm wide mowing strip. This would have been installed as part of the original construction to ensure flora debris / weeds do not

encroach on the building and lead to moisture ingress. Although there would have been a rebate in the perimeter footing to accommodate the brickwork, material like this up against the building will be either:

- 1) Blocking up the ventilation / discharge gaps between brick allowing for moisture to ventilate within the cavity and
- 2) Providing a pathway for moisture to enter the building as water moves sideways from the garden bed and in through the now obstructed but purpose built / created discharge holes.

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This same issue of built-up material over the mowing strip has caused the same issue throughout the facility. This includes the following locations but is not necessarily limited to:



Left:

Mould to low level of wall or female WC. High level degradation discussed later.





Above: Typical build-up of garden mulch and debris behind toilet wall.

Left:

All WC pan traps have dried out (and assumed sink wastes) allowing sewer odours (typically methane) to enter the premises



Right:

The wall directly behind the female WC heavily covered with staining showing this location has been overflowing for quite some time. Consistent with internal damage.



Above: Water ingress to lobby floor.

Right: Entrance lobby exterior. Flooding to outlet location surrounding downpipe outlet. Note moisture to the left of the entrance door.



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Left:

The same entrance door image from directly in front of the location

Right:

Kitchen with ceiling damage from water ingress of exterior gutter directly outside. Damage alongside valley attributed to gutter overflow.

Below Right:

Image showing directly outside of rear door. Green moss / staining on brickwork directly in line with roof

valley detail seen in ceiling structure and internal damage.









Above left and right:

Same image with the debris removed showing the patch. This material is brittle and breaking down. Its' effectiveness is questionable. This should have only been used as a temporary 'Band-Aid' measure until a more permanent solution was found that being a patch of the same base material as the gutter. It is well past its' usable life, inflexible and is most likely not the solution of the initial fault.





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Right and Far Right:

Kitchen secondary Issue. Water ingress has occurred to the floor below the hot water cylinder. The exact location of where this has appeared from was not clear on the initial site review. A secondary review will be needed to confirm what has occurred here.





Left: Main Lounge internal corner with wet floor.
Below and right: Build-up of garden beds against exterior wall directly behind - also noting downpipe discharge to ground. Debris previously

built up to cover discharge location; see 'ring' on downpipe (removed prior to photo being taken).







Above Left: Water damage to bottom plate of main lounge wall - northern side

Above Centre: Area directly outside the lounge wall. Note there has been a steady stream of water flowing down this wall as can be seen on the brickwork due to the change in colour; marked with the arrow.

Above right: Note the build-up of mulch and debris against the wall directly outside the internal water damage.

Water overflowing from above would have gathers here and remained saturated form the overhead overflow; caused from blocked gutters.

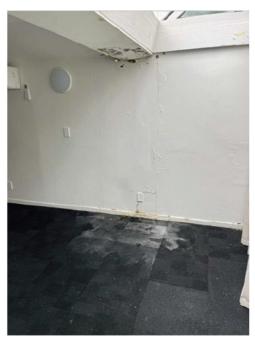
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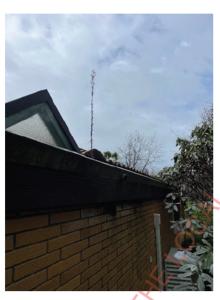
Left:

Severed water damage to the wall directly below this supporting beam. We suspect this is a timber element that may have been compromised as there is no evidence of rust coming through at this time. Propping of this location is recommended until the surface cladding can be opened and investigated.



Left:

Weed seen growing directly above this location through the angular skylights. This weed is over 600mm long and appears to have died as part of its' natural lifecycle. Given this image was taken on the 12th of August (the last month of winter) and snapped like a twig due to its' dry interior we can only surmise it has been here for quite some time – possibly 6 months or more.





Far Left:

External view of tall weed growing directly above location of severe water ingress.

Left:

Condition of gutter with debris building up within the longitudinal skylight. As can be seen grasses and weeds are growing within the gutter itself.

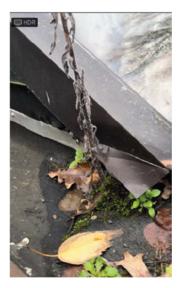
The two weeds at the end of this gutter were pulled out separately to see what condition the gutter lining was in; first the tall left-hand weed followed by the smaller 'grass' right hand. Continues next page.

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Above images taken from video footage (Left to Right) - Removal of the 600mm + weed

The above images evidence of a weed that has managed to grow withing the gutter and has followed the water course underneath the membrane and back into the building. The root system has come between the membrane layers and had anchored itself firmly into position.







Far Left:

The 'grass' had anchored itself into the gutter membrane and was well established to grow to maturity.

Left:

Upon removal of the grass a much clearer indication of the gutter membrane materials condition could be seen in conjunction with the patch repairs that had taken place over time. The membrane layers have separated and allowed

What is evident is these repairs can only be considered as 'patch / Band-Aid' temporary stop gaps as they appear to consist of silicones and mastic materials – not designed to protect the gutter for any extended duration of time given the thickness of the coating and the location; being fully exposed to the elements. This repair (Right) for example should not be considered 'best practice' as a proper waterproofing patch be placed over the entire corner in a compatible material as the system that had been installed.



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More evidence of overflowing gutters. Although not as bad as other locations – this type of water staining only occurs through prolonged saturation of the brickwork surface allowing the moss and algae time to establish itself on the surface.

Gutters.

Throughout the facility multiple examples of the gutters filled with leaves, moss and debris. If gutters were cleaned completely, they have not had this level of moss and material present. We suspect no gutter cleaning has been undertaken for months. The deciduous trees surrounding the area were all bare or foliage indicating this has all dropped.







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As can be seen in the above images the gutters are in a poor state especially where water ingress is occurring the condition of membrane laps is beyond repair and needs to be replaced. Given its' appearance we suspect it is the original lining and has simply lived out its' natural usable life'. Given the materials suspected age, a test for impregnated Asbestos should be undertaken to eliminate the possibility of contamination before any works is completed. Given the complexities of this gutter system replacing with pressed metal is not advised and will have a shorter lifespan than a membrane system especially when considering thermal expansion.

Continues Over.

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Rooftop:

A brief review of the rooftop revealed the roof is in a very poor condition. Assuming this has never been recoated in its' 40 years of existence it is incredible to think it has lasted this long. Issues encountered include but not necessarily limited to: (In a clockwise review of the below images)

The skylights to the amenities areas are in a very poor condition, moss and severe cracking is occurring to ridge capping, surface glaze (assuming it existed) has virtually gone providing for a roughened surface for debris to build up on the surface, lost capping elements that have virtually broken down and failed over time have been reformed in mortar without sealing. These are patches not permanent.



We believe this rooftop with the proper cleaning, repair and coating system applied, is salvageable especially considering the rubberised ponding boards that appears to be in place providing protection when the gutters have overflowed. However, it should be noted this is a heavy concrete tile roof system which the structure would have been designed to accommodate when originally constructed. Consideration may be given to replacement with a lighter alternative option.

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Above: Typical overview of the main building and ancillary structures exterior. Remedial works will be required due to reduced approach on programmed maintenance for this facility.

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Conclusions:

The media sources reporting on this facility comment of the community having aging resources being the issue. However, we see no reason as to why an aging resource that is properly maintained cannot outlast its' initial design life of (for this type of structure) 50 years. Materials have a finite operational 'life' and not monitoring these will result in a structures overall usability being drastically reduced.

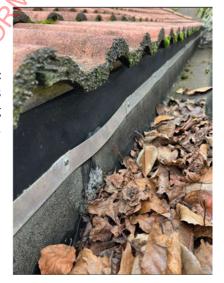
What is clear is the high levels of discolouration to the external brickwork particularly surrounding overflow and downpipe locations where moss and algae has grown on the brick surface. This can only be attributed to gutters overflowing either at the overflow pipes or over the top; releasing water slowly for an extended period. Another possibility is the water rising between the two membrane systems which should be sealed against each other. What appears to have saved most ceilings from greater damage is the initial construction design which has the

black rubber material which is secured between the Concrete Tile puddle boards* and the gutter lining material – as can be seen in the detail to the right.

Right:

The upper black rubber continues up underneath the concrete roof tiles and folds down into the gutter itself where it meets the gutter lining material – joined by a metal strip.

* Puddle boards are designed to prevent water from flowing back inside the building and are lined with a waterproof material. If the gutters completely block (including the overflows) then the water will find a low point over the top of the gutter perimeter itself and release to the building exterior – thus preventing any internal damage.



It is difficult to conclude which entity is to blame for this damage as we have not been made privy to the scope of works the contractor engaged to clear the gutters was given or what reports were provided. Was the contractor instructed to report on the condition of the gutter membrane? Were they to remove all debris from the gutter or just remove the leaves? When was the last time they attended site as the amount of moss present is significant. Moss growth is dependant on many factors including nutrients in the growth medium, light, humidity and temperature. Given how prevalent it was, and this investigation occurred at the end of winter indicates the moss has been present for quite some time.

It is possible the contractor was only asked to clear the gutters of leaves 4 times a year and to be completed quarterly. What is very clear is the extensive build-up of moss within the gutters is this has been here for an extended period. This moss will not only be degrading the gutter membrane but will also be inhibiting water flow – keeping the water stagnant and providing an environment for pests (namely mosquitos) to breed.

In conjunction with gutter cleaning, we have found no evidence of the gutter lining itself being brought into question. From the very beginning when the mould first appeared we cannot understand why the gutter lining was not inspected for failure – especially at the ceiling level locations where the gutters are and not checked for

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lining failure. The response letter to Cr. Edwards questions did not appear to address this as all that was noted was a Maintenance Officer was monitoring the exterior – A simple check of the gutters would have revealed back in 2021 when the facilities was closed an issue with the membrane lining failing. All we have been able to ascertain is scrubbers and purifiers being installed to lower the moisture content within the building in the middle of winter and no consideration to what has caused the mould to occur in the first instance. It is not unreasonable to expect in dealing with a mould issue that was not there before to consider the environment has changed and therefore something has caused the mould to appear – moisture within the building envelope. What is concerning is the facility was to have been left without any further repair for another (potentially) nine months until a review of all council assets was undertaken which by the time this report was written is another 14 months. This resulted in an acceleration in the degradation of the facility.

What is apparent is the gutter lining failure should have been identified early as the primary fault and replaced; if not patched to 'best trade practice' until replacement works could be carried out. Had this been done the facility would most likely be in operation today generating income as opposed to the current dilapidated state with a 'significant repair expenditure ahead.

Recommendations:

Phase One.

- 1) Remove the metal pressure strip, cap flashings and gutter linings to the entire perimeter of the building either in one movement (requiring complete encapsulation of the building) or in stages where tarpaulins are placed up under an upper selected line of concrete tiles and remove the main gutter lining. From our assessment of the exposed edge there is no need to replace the rubber membrane that folds down from under the main roofline leading edge to the entire gutter. This appears to be a form if waterproofing barrier directly underneath the tiles giving one harmonious waterproofing system. As to how extensive and complete this is will require further investigation.
- 2) Remove wet, mouldy or otherwise damage Gibraltar board linings where affected and review substructure. Treat for mould or replace as necessary.
- 3) Assess the gutter lining and replace mouldy / rotten elements with modern treated equivalent; this may be either timber boards or cut to size plywood.
- 4) Reline gutter with conductive primer (such as Truground from Viking Roof Spec) or Controlit GSSP Woven Fibreglass Conductive sheet (available from Proven Membrane Systems) to allow for future proofing with undertaking Electronic Leak Detection. Allow for set test points to ensure ELD is possible according to manufacturer's instructions.
- 5) Reline gutter with new non-conductive single ply or double layer torch on material ensuring all laps and connections are in the correct orientation for flow and installed as per the manufacturer's instructions in association with the Waterproofing Membrane Association Incorporated (WMAI of NZ) Best Practice Guidelines
- 6) Remove perimeter gardens to at least 300mm beyond the perimeter mowing strip and down to ground level typically allowing for enough room to mow the perimeter and keep vegetation away from the structure. Accommodation may need to be made for Gully Traps to the Eastern elevation or elsewhere as appropriate.

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7) Remove (if possible) thread inserts to brick veneer cladding and seal with colour matched silicone / mastic to prevent future damage. If threads are to remain, treat any surface corrosion and seal over with colour appropriate sealant noted above.

Phase Two:

Consideration to the concrete tile roof. This element is in a poor state where the surface condition is allowing for growth within the tiles themselves. Any glaze that existed has predominantly gone, allowing a 'key' surface for moss and the likes to establish itself and grow. A rejuvenation of the roof is needed before continuing with the interior spaces. It is recommended a professional tile roofing recoating company be engaged to undertake this task including repointing the approximately 276 ridge tiles that exist.

Upon completion of this work the gutter cleaning programme should be reestablished to a programme more conducive to the environment. If, for example, only 5 gutter cleans are permissible per year due to budget constraints, these should be focused in the months of Autumn (March, April and May) during heavy leaf falls where the gutters are cleaned every 3 weeks over a 12-week period (giving 4 x cleans) and then one in the spring to remove moss build up and general debris. The instructions should instruct a full gutter clean removing all organic materials. This suggestion is subject to change and should reflect the environmental conditions encountered.

Phase Three:

Demolition of all mould and water ingress affected surfaces be undertaken back to where unaffected framework can be seen. The damaged elements need to be assessed for their structural worthiness and compatibility with New Zealand Standard NZS3604 (For Timber Framed Buildings). We do not believe this will require a structural engineer's input, rather that of a competent builder given the nature of the structures design.

Additionally, during this demolition phase, it would be advisable to remove either:

- a) all carpet to ensure any mould spores are not transferred throughout the site or
- b) all affected carpet that cannot be salvaged (beyond repair) and have all remaining furniture removed and thoroughly cleaned in conjunction with any remaining carpet thought worthy of remaining.

While tenders are sought, dehumidifiers should be installed to dry out the facility concrete slab as during this phase the source of the water ingress which created the situation would have been resolved. Additionally, air monitoring is engaged to ensure mould levels have returned to non-detectable / safe levels allowing for contractors to undertake the rectification works in the next phase.

Continues Over.

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Phase Four:

Rectification of building framework and surfaces. Return the Building to pre-mould conditions as close as practicable including (but not necessarily limited to):

- New framework as required,
- Wiring / electrical checks as required,
- New insulation as required,
- New wall Gibraltar Board linings,
- New texture coatings (to match existing as best as practicable)
- New Paint Finishing,
- New Carpet (recommend carpet tiles for longevity and ease of replacement if necessary)
- Final clean prior to reopening.

Budget:

Due to the extent of damage encountered and nature of the facilities environment it is difficult to estimate rectification costs as we cannot see the extent of any concealed damage to the facilities. Once wall linings are removed and the final scope is established then the final costs can be determined.

In this instance phases two and four can be quoted as these elements will be fully seen and the risk of encountering concealed damage will be low. Phases one and three will have concealed unknown issues. Calling for quotes will not provide a competitive market as all tenderers will be allowing for unknown factors – or tenders will not price the works at all. Any tenderer quoting these concealed damage works will be relying on variations and these will be costly.

It is therefore recommended phases one and three be undertaken on agreed rates and phased two and four be quoted accordingly.

Management of rectification works.

Management Fees for managing the restoration of this facility will be provided for in a separate document upon the request of the Hutt City Council.

Assumptions and Limitations:

- This report has been written on the understanding it is not to be formed as part of any legal proceedings or other such matters and therefore should be regarded as being received 'without prejudice.'
- No plans were provided prior to attending site and as such no specific conclusions could be drawn upon prior to attending site.
- This report is an opinion based on the authors experiences spanning over 27 years within and around the construction industry and as such is not to be regarded as a full and conclusive report as the basis for

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obtaining pricing from – only as a guide of what was observed on site. A site visit of contractors to undertake the works will be required in conjunction with the Phases of Works being undertaken in the correct chronological order.

Should you have any questions or queries regarding this report, please contact the undersigned

Kind regards,

Malcolm Ross

027 693 3832

Detec New Zealand

References: (Online 20th August 2024)

- 1. Toxic mould closes lounge, sections of Petone library in Lower Hutt NZ Herald
- 2. Toxic mould closes community hall and part of library in Lower Hutt | RNZ News
- 3. Wellington.Scoop » Toxic mould closes two Hutt city facilities
- 4. Hardwick Smith Lounge.pdf (hccpublicdocs.azurewebsites.net)
- 5. Council owned buildings | Hutt City Council

About the Author:

Malcolm Ross of Detec New Zealand is a NZ University Qualified Quantity Surveyor who has 27+ years of construction and assets industry experience in both New Zealand and Australia. He has spent the last 16 Years in Western Australia estimating large projects, resolving construction issues with a large variety of commercial assets, sought to alter career paths into Facilities Management as a specialist in problem solving for large commercial assets ranging up to \$500M+ and investigating water ingress related issues. Malcolm and his family have returned to New Zealand to establish Detec New Zealand and bring his wealth of knowledge back to his country of origin.

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