



BEYOND THE PIPE

THE STRATA PLUMBING HANDBOOK

Practical insights into diagnosis, judgement and the decisions that protect buildings.

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INSIDE THIS HANDBOOK

What is in here, and where

01	FOREWORD FROM CHRIS	3
02	HOW TO USE THIS HANDBOOK	4
03	WHY THIS GUIDE EXISTS	5
04	PREVENTATIVE MAINTENANCE	13
05	UNDERSTANDING PLUMBING REPORTS	15
06	CHOOSING AND WORKING WITH A PLUMBER	17
07	THE KELLY WAY	19
08	ABOUT CHRIS	22
09	CASE STUDY ONE	24
10	CASE STUDY TWO	29
11	THREE THINGS TO REMEMBER	32
12	THE PRINCIPLES BEHIND THE WORK	34
13	A FINAL THOUGHT	36

Foreword from Chris

Strata managers are expected to make decisions about plumbing work without being plumbers themselves. You are often working from a resident's description, a work order, a quote and whatever explanation the contractor has provided.

I created this handbook to explain how I think about strata plumbing and what I believe good plumbing support should look like. I like to find the root cause of an issue, not just fix the immediate problem. I also do not believe in recommending unnecessary work simply because it creates a larger sale.

Sometimes the right answer is a straightforward repair. Sometimes spending more now prevents the Owners Corporation from paying twice later. Sometimes a plumber cannot confirm the cause without further investigation. The important thing is that those distinctions are explained clearly, supported by evidence and documented.

My aim is to give strata managers enough useful information to make a sound decision, then complete the work properly and report back without creating more work for them.

How to use this handbook

This manuscript brings Chris Kelly's interview material into one structured source. It covers diagnosis, repair-versus-replace decisions, preventative maintenance, reporting, working with plumbers, the Kelly approach and two detailed strata case studies.

- Use the diagnostic sections to interrogate recommendations before approval.
- Use the reporting section to assess whether findings are complete enough for a committee.
- Use the case studies to understand how access, previous repairs and incomplete information can change the right decision.

Why this guide exists

Good strata plumbing is not only about the repair. It is about reducing uncertainty for the person responsible for approving it.

What Strata Managers Commonly Misunderstand About Plumbing

One of the main things strata managers need to understand is that plumbing is not always black and white.

The same problem can sometimes be approached in multiple ways and on different scales. Because of that, when comparing plumbing quotes, it is important not to compare them purely on price. The scope of work needs to be compared as well.

- A strata manager should be able to understand:

How has the plumber come to the conclusion that this work is necessary?

How will the proposed work address the problem that has been diagnosed?

If those questions cannot be answered from the quote or the supporting information, the work probably should not be approved until further clarification is provided.

Plumbing isn't black and white.

When you're comparing quotes, don't just compare the price. Compare the scope.

Plumbing in Strata Buildings Versus Standalone Houses

From a technical plumbing perspective, strata buildings and houses are not necessarily completely different. They still contain the same basic types of systems: water, waste, sewer and gas, although the systems in a strata building can obviously be on a larger scale.

One of the significant differences is responsibility and communication.

If an issue reported through strata turns out to be the responsibility of an individual lot owner rather than common property, I would generally refer that back to the strata manager and ask how they want me to proceed.

Common property is different. If there is a plumbing problem affecting common property, it needs to be dealt with.

The plumbing itself may be similar, but in strata there are

additional considerations around who is responsible, who approves the work and who needs to be kept informed.

Northern Beaches Conditions

I cannot say with certainty that particular plumbing problems are more common on the Northern Beaches compared with other parts of Australia because most of my plumbing experience has been on the Northern Beaches.

What I can say is that coastal conditions need to be considered.

There is a high salt content in the air around parts of the Northern Beaches, particularly properties close to the ocean. Corrosion therefore needs to be considered when selecting and installing plumbing equipment and materials.

The environment can influence the materials you choose and potentially the expected lifespan of equipment.

Publication note: Avoid making unsupported claims that particular failures occur more frequently on the Northern Beaches than elsewhere. Chris can speak confidently about the need to account for coastal corrosion but has deliberately not claimed comparative failure rates.

Isolation Valves

Isolation valves are an important part of reducing damage when something goes wrong in a strata building.

For example, if there is a major leak inside an apartment and the resident is away, the ability to isolate that individual apartment or section of the building can make a major difference.

If there is no suitable local isolation, the alternative may be shutting the water off to the entire building.

For buildings that do not have adequate isolation, particularly buildings with a history of burst pipes or similar failures, it can be worthwhile considering retrofitting additional isolation valves in accessible locations.

At an absolute minimum, existing isolation valves should work.

There is also an argument for having a more formal program of checking isolation valves rather than waiting until an emergency to discover that one does not operate properly.

I suggested approximately every five or six years as a possible starting point, although the appropriate frequency should ultimately depend on the building and its condition rather than treating that interval as a universal rule.

Key principle

Isolation is not just a plumbing convenience. Effective isolation can reduce the amount of property affected when something fails.

Diagnosing Leaks

The investigation generally starts by speaking with the resident and understanding what they have observed.

- Depending on the circumstances, further diagnostic methods can include:

Pressure testing pipework

Moisture readings

Thermal scanning

Physical inspection and other investigation appropriate to the location

It is important to distinguish between suspecting a cause and having evidence that confirms it.

For example, if a pressure test produces a measurable pressure loss, that provides evidence of a leak within the system being tested.

The broader principle is that the diagnosis should be based on evidence wherever reasonably possible rather than assumption.

The diagnostics should justify the repairs.

Repair Versus Replace

Age and expected lifespan are important, but they are not the only factors when deciding whether something should be repaired or replaced.



Excavation and new access point. A real KPD job, Northern Beaches.

- Other considerations include:

The condition of the equipment

The complexity of the repair

The cost of repairing versus replacing

Availability of replacement parts

Access

The likelihood of another failure

How much labour is involved in accessing and repairing the equipment

Whether replacing now avoids duplicating substantial work later

Sometimes it can actually be more expensive or less sensible to repair something than replace it.

The recommendation should be based on the overall cost-benefit and the likely outcome for the client, rather than automatically choosing whichever job is larger.

Recommending a Repair When Replacement Would Be More Profitable

Toilet repairs are a good everyday example.

A customer may assume a toilet needs replacing when the problem can actually be repaired using readily available or generic replacement parts.

There are also practical considerations.

If somebody only has one toilet in the property, replacing the entire toilet can mean additional work and potentially leaving that toilet unavailable while installation work and sealants are completed.

If the existing toilet can be properly repaired and there is no good reason to replace the whole suite, repairing it can be the better option.

The fact that replacement would be a larger job for the plumbing company is not a reason to recommend it.

Temporary Repairs and Client Choice

When there are multiple reasonable options, my approach is to give the client the information I have and explain the options available.

That includes explaining the likely risks and implications of choosing the cheaper or more temporary option.

Ultimately, the Owners Corporation or client can make the decision about how far they want to go.

My role is to give them enough information to make an informed decision and recommend the option I believe is best.

If a temporary solution is selected, the risks and relevant information should be documented in the written report or email so there is a clear record of what was discussed.

Preventative maintenance

Plumbing Assets Worth Maintaining

Some of the plumbing assets strata buildings should consider inspecting or maintaining include:

Hot-water systems

Sewer drains

Stormwater drains

Stormwater pits

Isolation valves

The appropriate maintenance schedule should depend on the property.

An older building, a property surrounded by established trees, a coastal building or a property with a history of particular plumbing failures may require more frequent attention to certain assets.

For example, the condition of hot-water systems in an exposed coastal environment may justify closer monitoring.

Avoiding Maintenance for Maintenance's Sake

Maintenance can be overdone.

I do not think there should necessarily be a blanket schedule applied to every building simply because somebody wants to sell a maintenance program.

A better approach is to inspect the property, assess the condition of its plumbing assets and provide a condition report.

A maintenance program can then be developed based on what is actually there and what condition it is in.

The appropriate frequency should be determined case by case.

Maintenance should be based on the condition of the property, not just done for the sake of doing maintenance.

Understanding plumbing reports

What a Useful Plumbing Report Should Contain

A plumbing report needs to give the strata manager enough information to understand the issue and relay that information to the committee.

- Depending on the job, supporting evidence should include things such as:

Written findings

Photographs

Test results

Locations of defects

Work completed

Recommended next steps

Importantly, the report should make it clear what has actually been established.

- There is a difference between:

What the resident or strata manager reported

What the plumber observed

What the plumber suspects may be causing the problem

What testing or other evidence has actually confirmed

Those should not be presented as though they are all the same thing.

If there is a suspected issue that requires further investigation, the strata manager should be told that.

For example, the plumber may say that there is evidence suggesting a particular problem, but further investigation is required to confirm it and that investigation will involve an additional cost.

That gives the strata manager the opportunity to make the decision rather than simply having costs accumulate without approval.

The plumber should be guiding the strata manager towards making the best informed decision possible.

You want them making informed decisions, but you're guiding them towards the best informed decision.

Choosing and working with a plumber

What a Strata Manager Should Check

At a basic level, a strata manager should ensure the plumber is appropriately licensed and insured.

Experience with strata work is also important because the communication, approval and responsibility issues involved in strata can differ from ordinary residential work.

Signs the Underlying Problem May Not Have Been Addressed

It can be difficult for a strata manager to know immediately whether a plumber has correctly identified an underlying cause.

One of the clearer warning signs is repeated call-outs for the same problem.

If the same issue keeps coming back and the plumber keeps being called back to deal with it, it may indicate that the symptom is being addressed without the underlying cause being resolved.

That does not mean every unresolved plumbing problem is evidence of incompetence. Some faults genuinely require

staged investigation.

The important distinction is whether the plumber is investigating methodically, communicating what has and has not been established, and explaining why further investigation is required.

The Kelly Way

Arriving On Site

When I arrive at a strata property, the work order gives me the starting point, but I still need to understand the property and the plumbing system before deciding exactly what needs to happen.

For example, if the work order is for a blocked sewer, I will look for inspection points and try to establish roughly where the sewer runs through the property and how different fixtures connect into it.

I am effectively building a rough map of the system in my head.

Understanding the layout gives me a better chance of locating the problem and resolving it efficiently.

Knowing When to Stop and Seek Approval

Where possible, I will diagnose an issue within the initial period on site without unnecessarily running up costs.

If I can investigate and establish the problem within an hour or two without using particularly expensive diagnostic equipment, I will generally do that.

If it becomes clear that more advanced diagnostics, specialised

equipment or substantially more time will be required, that is the point where communication becomes important.

- I will contact the strata manager, explain:

What I have done so far

What I have found

What remains unknown

What I propose doing next

Why the additional investigation is necessary

I then obtain approval before proceeding with that additional work.

The idea is that the strata manager should not receive an unexpected bill for hours of additional investigation without understanding why it was required.

What Kelly's Plumbing & Drainage Will Not Do

We will not try to upsell something that is not necessary.

If a repair is the sensible option, we will recommend the repair even if replacing the equipment would result in a larger job for us.

The recommendation should be based on what makes sense for the property and client.

We would never try to upsell something that isn't necessary.

About Chris

Professional Background

Chris started a four-year plumbing apprenticeship in 2011, with a small plumbing company on the Northern Beaches. He grew up here, which is why the business and the area are so closely connected.

Finishing a trade qualification lets you work as a plumber. It does not let you hold your own licence. New South Wales requires a further qualification for that, Certificate IV in Plumbing and Services, which covers the contracting and business side alongside the technical one. [CONFIRM: Chris completed this, which is why Kelly's Plumbing & Drainage exists rather than Chris working for someone else.]

Licence 346268C. You can check any plumbing licence yourself on the public register at verify.licence.nsw.gov.au.



Chris Kelly. Northern Beaches, Sydney.

Case study one

Dee Why - Recurring Sewer Blockages and Previous Patch Repairs

Original problem

The first visit was an emergency Saturday call-out to a strata property in Dee Why.

The building had experienced repeated sewer blockages, with sewage overflowing into a first-floor apartment.

Because it was a Saturday emergency call-out, my immediate priority was to stop the overflow and restore the drain without having the Owners Corporation unnecessarily spend a large amount on weekend investigation costs.

I cleared the blockage and advised that I should return on Monday to investigate properly because there appeared to be a number of underlying issues.

Investigation

On Monday I returned and carried out more thorough drain cleaning and a detailed CCTV camera inspection.

The sewer had previously been worked on in multiple locations. Some sections had been cut out and repaired and other sections

had been relined.

From memory, we identified approximately three areas of concern.

One issue was associated with an existing relined section. Roots had penetrated around a defect and tracked along the relined area.

Other sections had root intrusion around rubber connections where PVC pipe transitioned to older earthenware pipe.

The previous installation appeared to have allowed movement between the different pipe materials. This had compromised the connection and provided an opportunity for roots to grow into and around the sewer.

During excavation to prepare access for further relining, another problem was discovered on the branch of a junction.

That particular defect had not been visible during the initial inspection of the main line because it was located further up the branch.

Finding it while the area was already open meant it could also be addressed before it became another future blockage.



Opening up to find the cause. The stain was in the next room.

Repair

We excavated and replaced the defective joint associated with the existing relined area and reinstated it appropriately.

We also installed additional upstream access to allow further sections of sewer to be relined.

When the additional branch defect was discovered, another access point was installed so that section could also be repaired.

The sewer was subsequently relined, with the relevant junctions reinstated.

Instead of leaving the building with what had effectively become a series of different patches, the aim was to address the known defects together and leave the Owners Corporation with

a much more complete solution.

Chris described the previous condition as essentially a "Frankenstein of a sewer."



Excavation and new access point. A real KPD job, Northern Beaches.

Lesson for strata managers

It is difficult to criticise the previous strata manager or committee without knowing what information previous plumbers had provided them.

A strata manager can only make decisions based on the information they receive.

That places significant responsibility on the plumber.

If a plumber gives the strata manager incomplete information, the strata manager may take a quote to the committee believing

it will resolve the issue, only to have the problem return.

Where possible, plumbers should give the strata manager the complete picture and a sensible range of options.

- For example, there may sometimes be:

An option that addresses all known defects

A more limited option that addresses the highest-priority defect

Other staged options where technically appropriate

The important thing is for the committee to understand what each option does and does not achieve.

Give the committee all the information you can
and all the options.

Case study two

Narrabeen - Replacing Two Common-Property Hot-Water Systems

Two common-property hot-water units were installed in a small storage area at a strata property in Narrabeen.



A common-property hot water unit opened for inspection.

One of the systems failed and began leaking.

The failed unit was positioned behind the second hot-water system.

To remove and replace the failed rear system, I had to disconnect, drain and physically remove the front system

anyway.

The front system was approximately three years newer than the failed system.

I explained to the committee that a substantial amount of the labour required to replace that second system was already being performed because it had to be removed simply to access the failed unit.

The practical question therefore became whether it made sense to reinstall an ageing hot-water system or spend the additional amount on the second tank and replace both while everything was already disconnected.

The property was also close to the beach, so coastal exposure and corrosion were relevant considerations.

The second system was approaching the later part of its expected service life.

My recommendation was therefore to replace both.

- The reasoning was not simply, "one failed, therefore replace two."
- It was that:

The second system already had to be disconnected and removed

Much of the labour was therefore unavoidable

The second system was only a few years younger

It was approaching the later stage of its expected service life

The property was in a coastal environment

Reinstalling it created the possibility of paying substantial labour costs again if it failed relatively soon afterwards

The committee accepted the recommendation and both systems were replaced.

The objective was to spend slightly more while the work was already happening rather than potentially paying twice for substantially the same access and labour.

Potential handbook wording from Chris's reasoning

"Given the age, exposure and the fact that we had to remove it anyway, replacing both avoided paying twice and reduced the risk of another near-term failure."

Three things to remember

Diagnostics should justify the repair

Kelly's Plumbing & Drainage aims to carry out detailed diagnostics and provide written findings that support the proposed repair.

The quote should make sense because the investigation has established why the work is required.

Pride in workmanship

Chris takes personal pride in the standard of his work.

The aim is to complete every job to the highest standard reasonably possible rather than simply completing the quickest repair and moving on.

Direct access to the plumber who knows the job

Chris wants strata managers to know they can call Kelly's Plumbing & Drainage and speak directly with him.

Because he remains closely involved in the work, he aims to know the history and circumstances of the job rather than having the strata manager repeatedly explain the issue to

different people within a large organisation.

The practical benefit is continuity of communication.

When they call Kelly's Plumbing, they're going to get Chris, and Chris is going to know what they're talking about.

The principles behind the work

- The strongest themes running through Chris's answers so far are:

Diagnose before prescribing.

Do enough investigation to understand why the problem is occurring rather than simply responding to the visible symptom.

Give clients options.

Where multiple technically reasonable approaches exist, explain them rather than assuming the most expensive option should automatically proceed.

Explain the consequences.

The Owners Corporation should understand the cost, likely outcome and risk associated with each option.

Document temporary decisions.

If a cheaper or temporary solution is selected, record the limitations and risks.

Avoid unnecessary upselling.

Recommend a repair when repair genuinely makes more sense.

Think beyond today's call-out.

A successful job should reduce the likelihood that the strata manager and residents are dealing with the same problem again.

Give strata managers information they can actually use.

The report needs to help the strata manager explain the issue and recommendation to the committee.

A final thought

Strata plumbing becomes easier to manage when the information is clear.

The strata manager does not need to know every technical detail. They need to know what was reported, what was found, how the diagnosis was reached, what the options are and what each option is likely to achieve.

Good diagnosis reduces guesswork. Good reporting reduces confusion. Good judgement helps the Owners Corporation spend money where it will make the greatest difference.

That is the standard Kelly's Plumbing & Drainage aims to bring to every strata job: investigate properly, explain the decision, seek approval before the scope expands and complete the work with pride.

I like to find the root cause of issues, not just fix the problem.



My name goes on every job.

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