

Guide

The 5 Most Common Reasons Developments Fail Drainage Sign-Off

Get It Right First Time: Avoid Costly Rework, Delays & Margin Loss

Drainage failures rarely show up early, they surface at the worst possible moment: sign-off and handover.

By then, every problem becomes:

- More expensive to resolve
- Disruptive to the project
- A risk to margins and completion timelines

The reality: The most expensive drainage jobs are the ones you have to do twice.

1. Installation Issues That Go Unchecked

The problem

Even when systems are installed, issues often go unnoticed until testing. Small defects can easily be missed during construction, but will fail inspection straight away.

What typically shows up

- Incorrect pipe gradients affecting flow
- Joint misalignment or leakage
- Crushed or damaged sections
- Structural weaknesses in pipework
- Cross connections or construction debris

Why it fails sign-off

- Systems fail pressure or flow tests
- Hidden defects are exposed during inspection
- Manhole/chamber defects
- Pump station failures

The impact

- Excavation and rework
- Delays to project sign off
- Additional labour and reinstatement costs

How to avoid it

- Don't wait until the end to identify problems
- Build in verification stages during the project

Our recommendations

Schedule your plot drainage clean and survey two weeks before your NHBC inspection and sign-off.



2. Build Debris & Concrete Entering the Drainage System

The problem

One of the most common, and completely avoidable, causes of failure. Concrete being poured or washed into drains is a major recurring issue on site.

What we see regularly

- Concrete washout hardening inside pipes
- Rubble, silt, and stones restricting flow
- Packaging and site waste entering drainage runs
- Blocked chambers and gullies

Why it fails sign-off

- Reduced or fully blocked flow
- Obstructions identified during CCTV inspection
- Systems fail hydraulic performance tests

Our recommendations

Use high-pressure water jetting to clear debris, combined with CCTV to confirm the system is clean and ready for inspection.



The impact

- Specialist removal required
- Potential excavation if blockages can't be cleared
- Preventable delays and added cost

How to avoid it

- Enforce site controls around waste and washout
- Protect open pipework
- Make it clear: drains are not disposal routes

3. Lack of Maintenance Before Inspection

The problem

Even correctly installed systems can fail if they're not properly prepared before testing. Drainage is often left until the very end, then expected to pass immediately.

What we see on site

- Dirty pipework affecting flow tests
- Silt buildup reduces capacity
- Pumps not serviced or tested
- Tanks not emptied or maintained

Why it fails sign-off

- Systems don't perform under test conditions
- Equipment failures (pumps, tanks) are identified late

The impact

- Avoidable failures and retesting
- Delays at the final stage of the project
- Additional reactive costs

How to avoid it

- Install a gully bag to reduce silt and debris entering the drainage system
- Plan cleaning and servicing ahead of inspection

Our recommendations

Include jetting, pump servicing, and system checks as a standard pre-sign-off step to ensure everything is fully operational.



4. Drainage Infrastructure Cannot Be Verified

The problem

Even when drainage has been installed correctly, developments can encounter delays because the drainage network cannot be easily verified before inspection.

Missing records, inaccurate drawings, or unknown pipe routes can create uncertainty around what has actually been built.

What we see on site

- Debris/site materials in pump stations, hydro brakes and attenuation tanks
- Missing or incomplete as-built information
- Unknown pipe routes and connections
- Drainage assets that are difficult to locate
- Drawing-to-site discrepancies

Why it fails sign-off

- Pump impellers damaged by debris
- Inspectors cannot easily verify the drainage network
- Additional investigation is required
- Approval can be delayed while information is gathered

The impact

- Delays to inspections and handovers
- Additional survey costs
- Lost time investigating drainage assets

How to avoid it

- Clearly identify and locate all drainage assets
- Document pipe routes and connections
- Record any on-site changes as they occur
- Plan cleaning and surveying ahead of inspection

Our recommendations

A drain mapping survey helps verify drainage assets and connections before sign-off and handover.



5. Drainage Problems Identified Too Late

The problem

Drainage issues are often discovered only when sign-off is approaching, leaving little time for investigation or remedial work. Without proactive inspections during the build, hidden defects can remain unnoticed until the final stages of the project.

What typically shows up

- Defects found during final inspections
- Damaged or displaced pipework
- Undetected dips in pipework
- Issues discovered after landscaping or surfacing
- Cross connections or construction debris

Why it fails sign-off

- Environmental incident due to cross-connections
- Issues identified too late
- Limited time for corrective work
- Additional investigations delay approval

The impact

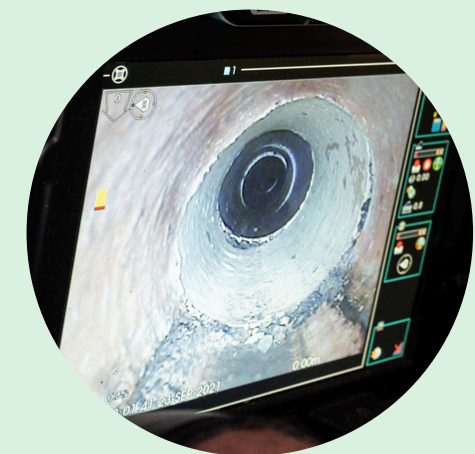
- Delays to handover
- Increased project costs
- Pressure on delivery teams
- Disruption to completed works

How to avoid it

- Carry out inspections during the build
- Don't leave checks until sign-off
- Allow time for repairs if needed

Our recommendations

A pre-sign-off CCTV drain survey helps identify issues early, reducing the risk of delays and costly rework.



Protect Your Margins with Smarter Drainage

Avoid re-digs, delays, and unnecessary cost by identifying issues early and ensuring your drainage is sign-off ready the first time.

Services that support a smooth sign-off:

- CCTV Drain Surveys
- High-Pressure Water Jetting
- Drain Mapping & As-Built Surveys
- Drain Lining & Patching (no excavation)
- Sewage Pump Servicing
- Septic Tank & Cesspit Maintenance
- Manhole Remedial works
- Gully Cleaning
- Tank Cleaning

No hold-ups. No surprises. No rework.

Speak to our team to discuss your project requirements.

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