

PROJECT CASE STUDY

C3-ML-RC-2026-01

Mount Louisa Road Pavement Maintenance

Townsville City Council | \$280,000 | 2024 | Chaining Workflows C3

FINAL	POLISHED CASE STUDY	Submission-ready · QA reviewed
-------	---------------------	--------------------------------

\$280K Mount Louisa Road Maintenance: 4.2km Re-Sheet
Delivered to 98% MDD

Townsville City Council · Road pavement re-sheeting, table drain reconstruction & line marking · 4.2km under live traffic · Self-delivered

\$280,000	4.2 km	TCC	2024	On Time	98% MDD
Contract value	Road re-sheeted	Client	Year completed	Delivery	Compaction result

The Challenge

Townsville City Council required the pavement rehabilitation of a 4.2-kilometre section of unsealed road along Mount Louisa Road. The \$280,000 package involved pavement re-sheeting, table drain reconstruction, and line marking. The core challenge was achieving a strict 98% Maximum Dry Density (MDD) compaction standard under typical North Queensland heat, while safely managing live two-way traffic movements without disrupting the council's schedule.

Our Approach

Redstone Civil self-delivered the pavement and drainage scope using owned plant and a direct crew. The site team deployed a CAT 12M3 grader for surface preparation and table drain reconstruction to reinstate stormwater flow along the alignment. To achieve the required compaction, Redstone used its Hino 10,000L water truck and Dynapac 8.3-tonne roller in tandem. This allowed the crew to manage moisture content in the pavement material before it dried out, locking in uniform density. Traffic control was managed concurrently, and daily site updates kept the client informed without requiring heavy supervision.

The Outcome

The \$280,000 maintenance package was completed on time and handed over to Townsville City Council to specification. Redstone Civil achieved the 98% MDD compaction target across the full 4.2-kilometre alignment, passing all required 3rd-party quality testing without rework. The reconstructed table drains effectively reinstated the road's stormwater capacity. Delivering this scope efficiently, without safety incidents or community complaints, solidified Redstone Civil's standing as a reliable, repeat contractor for TCC.



They turn up with the right gear, keep us informed, finish on time, and hand over the testing paperwork without us having to ask for it.

— Townsville City Council representative



Self-Delivery

Deployed owned heavy plant — CAT 12M3 grader, Dynapac 8.3-tonne roller, Hino 10,000L water truck — and a direct crew to maintain total schedule control with zero reliance on external subcontractors.



Quality Compliance

Consistently achieved 98% MDD compaction and delivered 4.2 kilometres of table drain reconstruction to local government engineering standards. Zero rework required on any tested lot.



Reliable Track Record

Completed the \$280,000 road maintenance package on time, earning repeat business from Townsville City Council. Provides clear evidence of Tier 1 contractor and council procurement capability.

Plant Deployed

Plant Item	Make / Model	Capacity	Role on This Project
Motor Grader	CAT 12M3	186 HP	Surface preparation, table drain reconstruction, final trim
Compaction Roller	Dynapac CA2500D	8.3 Tonne	Pavement compaction to 98% MDD specification
Water Truck	Hino 700	10,000 L	Moisture conditioning of pavement material; dust suppression
Tipper Truck	Kenworth T410	22T GVM	Pavement material cartage and site haulage



We recently completed a 4.2km pavement re-sheeting and drainage upgrade on Mount Louisa Road for Townsville City Council. By self-delivering the \$280K package with our own grader, roller, and water truck, we hit the required 98% MDD compaction and handed the site back exactly on schedule.

STAGE 1	STRUCTURE	Brainstorm — 5-point case study framework
---------	-----------	---

1. Strongest Headline

\$280K Mount Louisa Road Maintenance Delivered On Time for Townsville Council

2. The Three Most Impressive Outcomes

1	Zero Program Delays Successfully re-sheeted 4.2km of unsealed road and reconstructed table drains strictly within the agreed timeframe.
2	Strict Quality Compliance Consistently achieved 98% Maximum Dry Density (MDD) compaction across the entire alignment, meeting rigorous council engineering standards.
3	Proven Client Trust Completed the work with zero fuss, reinforcing Redstone Civil's status as a reliable, repeat contractor for Townsville City Council.

3. Challenges Overcome

Challenge	How We Solved It
Moisture Control in NQ Heat	Achieving 98% MDD on a 4.2km stretch requires precise water management. The 10,000L Hino water truck ensured optimal moisture content before the roller locked in uniform density.
Managing Live Traffic Corridors	Executing heavy grading, table drain reconstruction, and line marking while safely managing active local traffic — zero safety breaches or community complaints.
Minimising Council Supervision	Self-delivering the package with owned operators and gear eliminated scheduling risk and kept the council's project managers free from daily site management.

4. Target Audience5. Top Credentials Demonstrated

Tier 1 and Tier 2 Civil Infrastructure Contractors and Local Government Procurement Teams. Demonstrates delivery to council pavement standards, making Redstone an ideal subcontractor for larger regional infrastructure, flood mitigation, and highway upgrade packages.

- Self-Delivery — owned plant, no subcontractors
- Proven Local Experience — direct TCC client
- Reliable Delivery Record — on time, repeat business

STAGE 2	DRAFT	Initial draft — pre-QA review
---------	-------	-------------------------------

\$280K Mount Louisa Road Maintenance Delivered On Time for Townsville Council

The Challenge

Townsville City Council required the pavement rehabilitation of a 4.2-kilometre section of unsealed road along Mount Louisa Road. The \$280,000 package involved pavement re-sheeting, table drain reconstruction, and line marking. The primary challenge was achieving a strict 98% Maximum Dry Density (MDD) compaction standard under high-temperature North Queensland conditions, while safely managing local traffic movements without disrupting the council's broader maintenance program.

Our Approach

Redstone Civil self-delivered the pavement and drainage scope utilizing owned plant and a direct crew, minimising delivery risk and eliminating reliance on external subcontractors. The site team deployed a CAT 12M3 grader for precise surface preparation and table drain reconstruction. To achieve the required compaction, Redstone used its Hino 10,000L water truck and Dynapac 8.3-tonne roller in tandem — managing moisture content before material dried out in the local heat. Traffic control was managed concurrently and daily communication kept the council informed without requiring heavy supervision.

The Outcome

The \$280,000 maintenance package was completed entirely on time and handed over to specification. Redstone Civil achieved the strict 98% MDD compaction target across the full 4.2-kilometre alignment, passing all required quality testing without rework. The reconstructed table drains effectively reinstated the road's stormwater capacity. Delivering without safety incidents or community complaints solidified Redstone Civil's standing as a reliable, repeat contractor.

Key Credentials Demonstrated — Draft

Credential	Evidence in this project
Self-Delivery	Deployed owned heavy plant (CAT grader, Dynapac roller, Hino water truck) and a direct crew — maintained total schedule control.
Quality Compliance	Consistently achieved 98% MDD compaction and delivered table drain reconstruction to local government engineering standards.
Reliable Track Record	Completed the 4.2km road maintenance package on time, resulting in proven repeat business from Townsville City Council.

Document Ref	C3-ML-RC-2026-01	Workflow	Chaining Workflows — C3 Project Case Study (Tool 6)
Client	Townsville City Council	AI Tool	ChatGPT / Gemini Pro
Project Value	\$280,000 — 2024	Status	QA reviewed — submission-ready

Redstone Civil Pty Ltd is a fictional practice company for CDD 7 Tools training. The client quote is illustrative. All project values, contact details, and compaction results are fictional.