



REEF TRUST PHASE IV
GULLY AND STREAM BANK
EROSION CONTROL PROGRAM

Invite to Tender
Collinsdale Avulsion Remediation

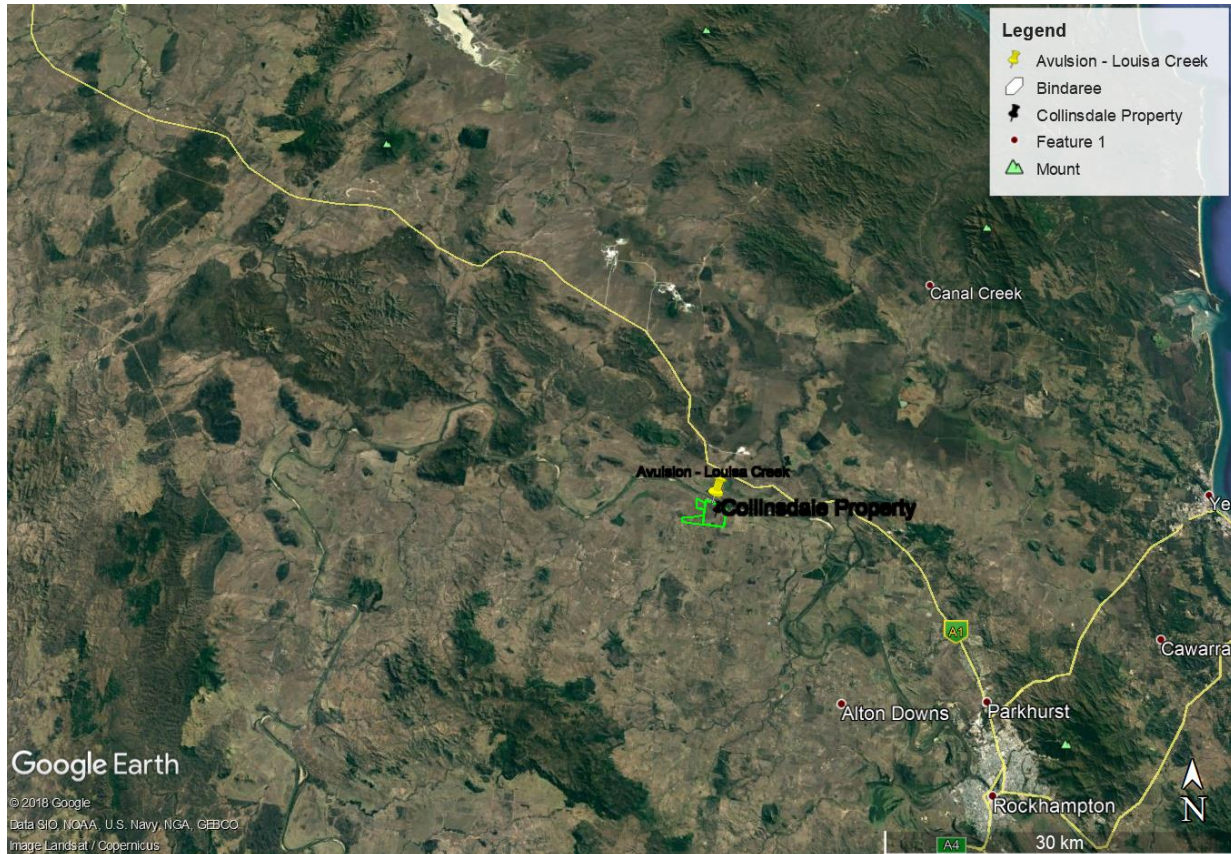
May 2019 – Version 1

INTRODUCTION

Property Description

The Collinsdale property is situated on the southern side of the Fitzroy River about 30 kilometers North of Rockhampton. The Collinsdale property is situated in the Garnant locality, with the project areas on Lots 39 and 40 on LN327 (river and streambank fencing, earthworks and revegetation works).

Figure 1 –Project Location



The main property is the Collinsdale property and is approximately 450 ha of grazing country with a river frontage in the lower Fitzroy. The Collinsdale property is situated at the end of the Louisa Creek catchment. The property owners are Peter and Colleen Bowman.

Collinsdale Avulsion

Collinsdale avulsion is located in the north side of the property in the Fitzroy flood plain area (see Figure 2a and b) – producing black topsoils and fine clays at considerable depth (>10m) over about 1.4 ha avulsion site.

Figure 2a: Collinsdale Project Location

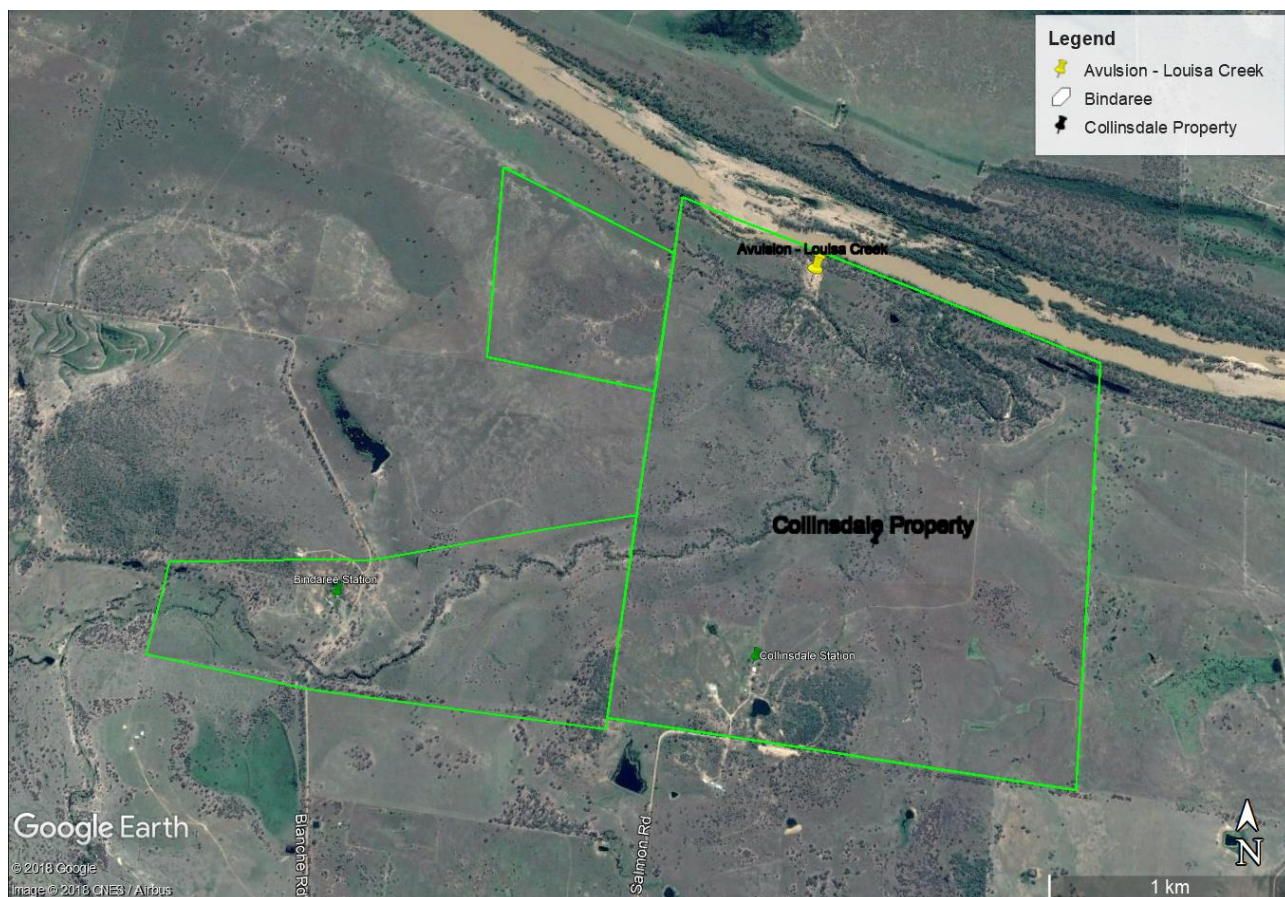
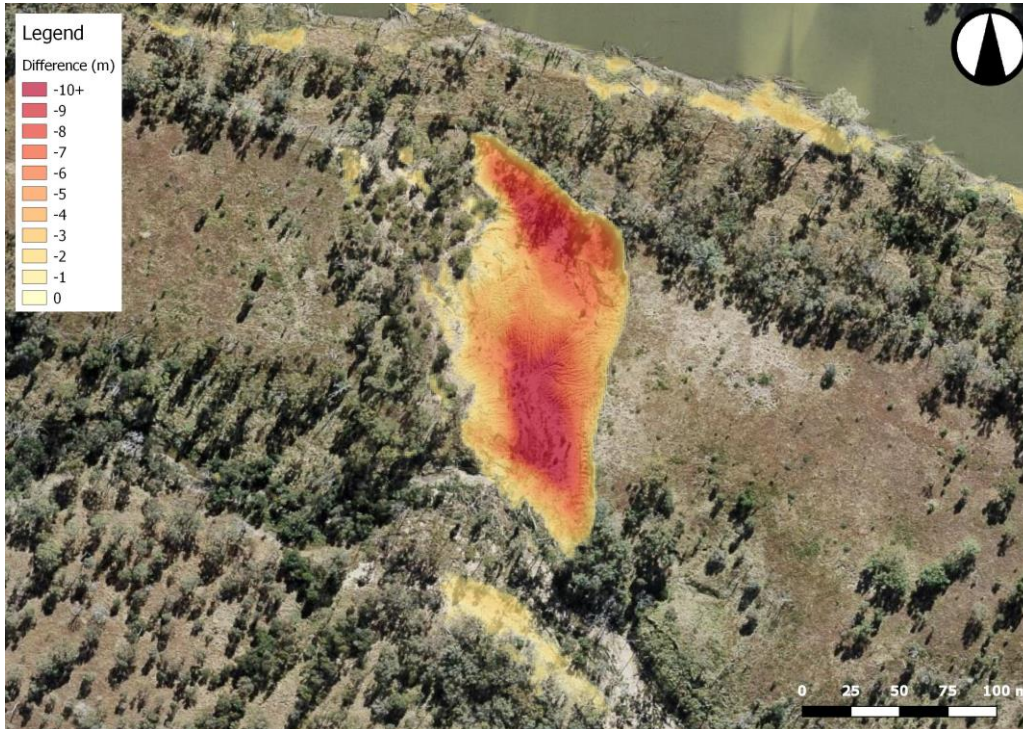


Figure 2b: Collinsdale Avulsion Location



The avulsion situated on Collinsdale station and started over 20 years ago. The avulsion appeared in 1994 (potentially as a result of flooding in 1991, associated with Cyclone Joy) and has progressed in both width and depth over the past twenty-five years (see Figures 5, 6, 7, 8 and 9 showing historical aerial images from 1952). The deepening of the avulsion since 2007 is demonstrated by the Sediment Assessment document (Neilly Group 2018) where LiDar data has been used to show the increasing depth from 2007 until 2015 (see Figure 3).

Figure 3: LiDar Model (Neilly Group 2018)



The surrounding land is grazed at a moderate stock rate (generally 120 standard cattle units over the property) dependent on rainfall and pasture availability. Grazing is undertaken on a broad acre basis with grazing not currently restricted. The project will assist the landholder to move towards rotation and BMP grazing, with the fencing of the Louisa Creek enabling, the subdivision of the landholder's paddocks into several small-scale paddocks allowing the commencement of rotational paddock grazing.

The avulsion creation and ongoing erosion appears to have been influenced by flood inundation from the Fitzroy River possibly commencing in 1991. The more recent, avulsion erosion appears to be associated with the more intensive rainfall patterns, which according to local property owners have resulted in the same annual rainfall but rainfall is now occurring in shorter and more intensive events, resulting in more frequent flood inundation.

EROSION ISSUES:

Collinsdale Avulsion

Based on LiDAR modelling and reflected in the Soil Loss Assessment, the Collinsdale avulsion is losing 10,531 t /year of fine sediment of which 7,056 t is reaching the coast per year, based on Paddock to Reef Modelling.

EROSION MANAGEMENT:

Avulsion

Reshaping of the avulsion using approximately 20,000 m³ cut and fill material (accessed as part of the land reshaping) will be undertaken. The reshaped area will be top soiled using soil sourced from the property, treated with 10 t / ha of gypsum and then hydro-mulched and seeded. The area will also be replanted with mostly native grasses and trees to stabilise the reshaped area. The whole avulsion area will be fenced off – for cattle exclusion until the site has been fully revegetated. Approximately 300 meters of additional fencing is proposed within the Avulsion Paddock area.

In summary the following remediation options are required:

- Batter back the vertical bank on the eastern side of the channel avulsion path to a stable batter slope of 1V:5H;
- Utilise the material won from the battering of the vertical bank to construct a landform in the centre of the avulsion path with a 10m wide crest and 1V:10H batters to reduce the frequency of overtopping from the Fitzroy River;
- Excavate an existing farm dam and creek crossing located to the south of the works and use the excavated material as topsoil for the landform and battering works as the topsoil recovered from the battering of the vertical bank will not be sufficient to cover all works; and
- Undertake top-soiling and hydro-mulching of all works.

A detailed design (with Technical Specification) has been developed by Environmental Engineers (Neilly Group), in consultation with Catchment Solutions' Environmental Scientists.

Project Timing

A detailed design was completed in April 2019 (Neilly Group 2019), with the associated specifications for avulsion restoration works.

Following a review of the State government planning approval requirements, approvals under the *Water Act 2000* is required for the bed level creek crossing upgrade. This approval will be obtained within the next four months, allowing for construction to commence by July 2019. These works must occur during the dry season and be completed before the 1st December 2019 to avoid increased risks of sediment and erosion impacts.

DESIGN REPORT SUMMARY

The detailed design drawings and associated documents has been completed by a Chartered Environmental Engineer, which are attached to this the Invite to Tender.

In order to remediate the avulsion path that has formed between the Fitzroy River and Louisa Creek as a result of flood flows from the Fitzroy River, the following remediation elements are proposed:

- Bank battering of the vertical bank on the eastern side of the channel avulsion path to a stable batter slope of 1V:5H;
- Utilising the material won from the battering of the vertical bank to construct a landform in the centre of the avulsion path with a 10m wide crest and 1V:10H batters to reduce the frequency of overtopping from the Fitzroy River;
- Excavation of an existing farm dam located to the south of the works to win material that will be suitable as topsoil for the landform and battering works, as the topsoil recovered from the battering of the vertical bank will not be enough to cover all works. This includes the construction of a formal rock chute spillway on the modified dam to reduce ongoing erosion risk associated with the dam;
- Rock armouring of key points within the remediations as per design specifications
- Undertaking top soiling and hydro-mulching of all works; and
- Upgrading and maintaining an access track which will be required during construction. The access track crosses Louisa Creek which includes a simple rock lined bed level crossing to ensure it remains trafficable should minor rain events occur during construction. Excavated material from the upgraded crossing must be used as fill and topsoil for the remediation of the avulsion.

An overview of the proposed bank battering and landform works are shown in Figure S-1 below, with the farm dam excavation and rock chute spillway works shown in Figure S- 2. Figure S-3 shows the proposed creek crossing upgrade to allow truck access.

Figure S-1 – Design battering and landform

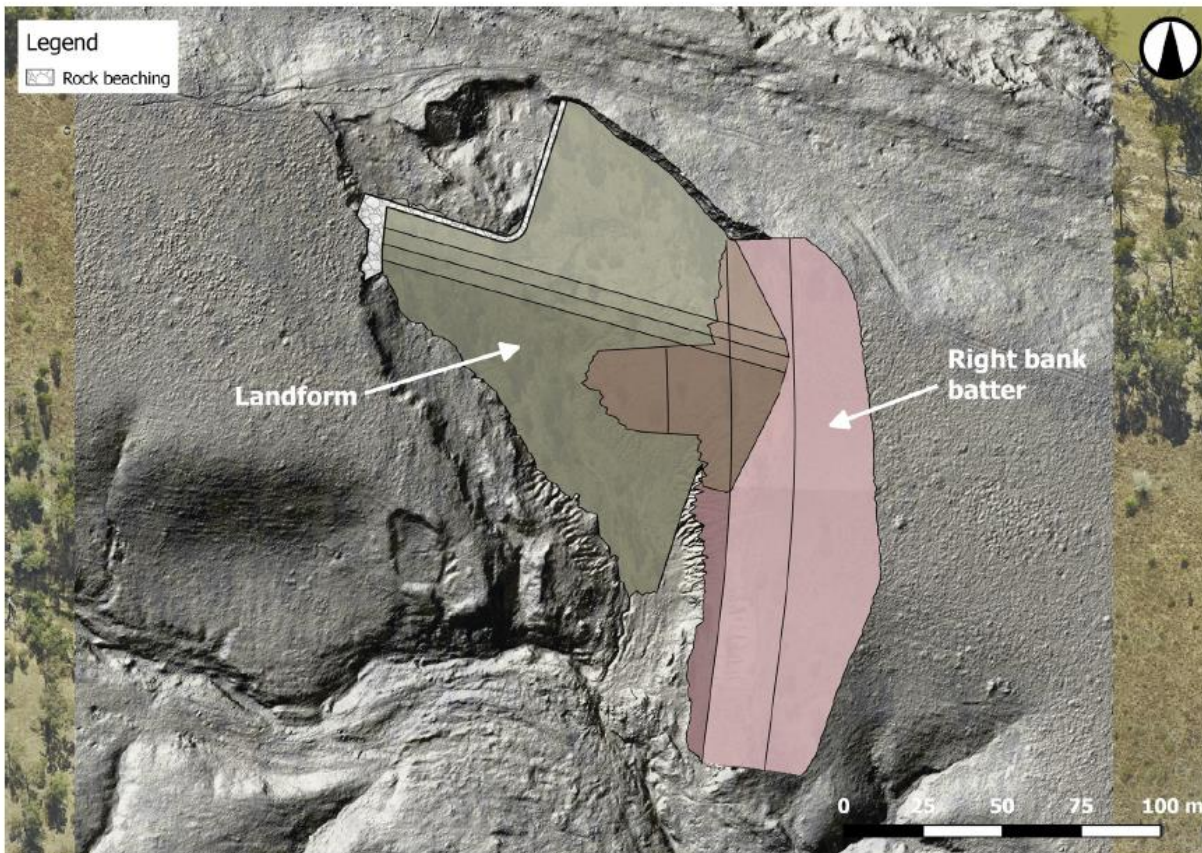


Figure S-2 – Dam Design

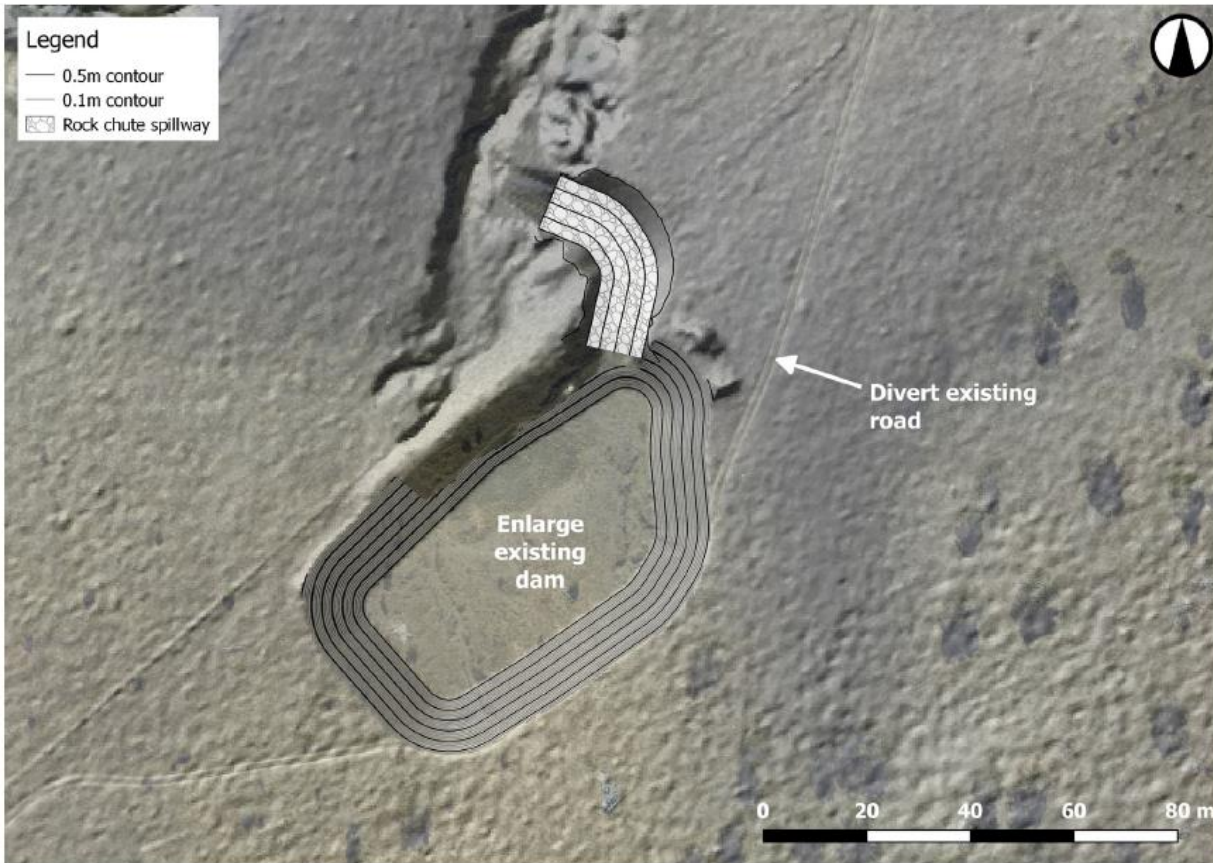
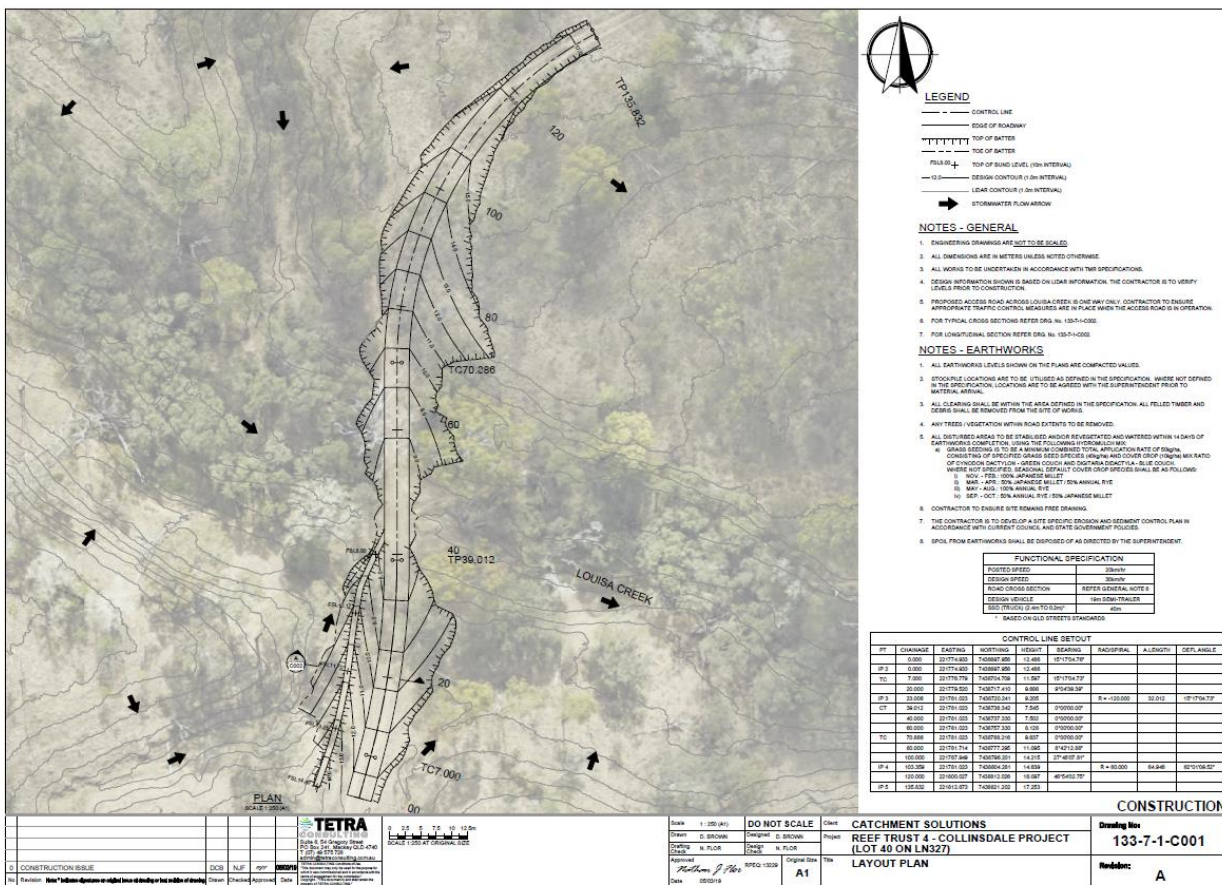


Figure S-3 –Creek crossing upgrade plan



Details

Tenders are invited by the Principal in relation to this Invitation to Tender and are to be submitted on the basis that they are subject to, and conform to, the following sections.

Section 2. Conditions of Tender;
Section 3. Tender Evaluation Process;
Section 4. Principal's Requirements;
Section 5. Conditions of Contract;

Unless the context otherwise requires or the contrary intention appears, terms defined in the Conditions of Tender have the same meaning when used in the Invitation to Tender.

Invitation to Tender number

FEER3110-05 - Collinsdale

For the provision of

The Principal wishes to appoint a suitably experienced, qualified and equipped Contractor to:

Undertake erosion remediation works at the Collinsdale Property (Lots 39 and 40 on LN327), Garnant (near Rockhampton).

Principal

Catchment Solutions Pty Ltd
ABN: 89 158 982 186
85 Gordon Street Mackay Qld 4740

Release to market

Friday, 10 May 2019.

Tender site inspection

An Offer site inspection will be held on

Tuesday, 21 May 2019 at 10.00 am Queensland time.

Location: 251 Salmon Road Garnant (via Ridgeland), QLD 4702

(Meet initially at Ridgeland Community Hall next to the Ridgeland State School – off Ridgeland Road at 11:00am)

The site inspection for this Invitation to Tender is **mandatory for all Tenderers** in order to gain sufficient information to carry out the required works.

NOTE: If you do not attend the site inspection you cannot submit a Tender.

Please email pjeston@catchmentsolutions.com.au to register for the site visit including the names of the two attendees.

Please arrive at the nominated location at least 15 minutes prior to the scheduled commencement time for the Tender briefing/site inspection to allow sufficient time to complete pre-briefing registration activities.

The Tender site inspection is limited to a maximum of two attendees from each Tenderer.

The purpose of the Tender site inspection is to provide Tenderers with the opportunity to view the site and the ability to seek clarifications via questions on notice.

The Tender site inspection assumes that all attendees are familiar with the Invitation to Tender documents.

The Tender site inspection will comprise a presentation by the Principal in respect to the Supply and will provide instruction on the completion of the Invitation to Tender documents.

Clarifications will be answered in writing as an Addendum. Any information provided at, or following the Tender briefing/site inspection, is provided subject to the Conditions of Tender.

Minimum personal protective equipment required by the Tenderer for the Tender briefing/site inspection is:

- Long sleeve shirt - high visibility (preferred), wide brimmed hat, sun protection (sun block), water and safety boots.

Cut-off date for clarifications

The Principal will not respond to any request for information or clarification received later than one week prior to the Tender Closing Date (5pm 10th June 2019).

Closing Date

Tenders must be lodged electronically by 5:00pm Monday, 10 June 2019 Queensland time.

Contact Officer

All requests for information for the Invitation Process must only be directed to the Principal's Contact Officer:

Name: Philip Jeston

Position Title: Project Coordinator

Email: pjeston@catchmentsolutions.com.au

Confidential Information

The information contained within the Invitation to Tender is deemed confidential:

Not Applicable

Tender validity period

Tenders must remain valid after the Closing Date for a minimum period of 90 days.

Nature of Price and Approved Expenses

The Invitation to Tender is for a Lump sum Contract

Lodgement of Tender

Tenders submitted in response to the Invitation to Tender will only be accepted by the Principal via the email (pjeston@catchmentsolutions.com.au), or in hard copy via mail (PO Box 815 Mackay Qld 4740).

Create one folder clearly labelled with the Tenderer's name.

Any additional documents should be saved in ONE separate file, (e.g. insurance certificates of currency, Certificate of Registration of a Company etc.) labelled as

Tenderers Name - Ref Docs.pdf

Maximum file size is **15MB** with the total submission not exceeding **100MB** and

Ensure prior to submitting, a Tender that it is free from viruses and has been checked with an up-to-date virus checking program.

Failure to comply with this requirement will result in the Tenderer's Tender being deemed a Non-Conforming Tender.

Deviations

Deviations will be considered only with the submission of a Conforming Offer.

Tender for parts

Submit a Tender in its entirety as separable portions / parts are not applicable in relation to this Invitation to Tender.

Tender Evaluation Process

Formation and content of legal relationship

In consideration of the Tenderer agreeing to be bound by the terms and conditions of this Invitation to Tender, the Principal agrees to permit the Tenderer to participate in the Invitation Process, subject to and in accordance with the terms of the Invitation to Tender.

The Tenderer agrees that the Principal's obligations in Clause 00 constitute valuable consideration for the Tenderer's agreement to be bound by the Invitation to Tender.

The Principal's obligations to the Tenderer in relation to this Invitation to Tender or the Invitation Process:

- are limited to those expressly set out in the Invitation to Tender; and
- exclude (to the maximum extent permitted by law) any obligations which may otherwise be implied or imposed on the Principal under contract, under law, in equity, by statute or otherwise.

The Principal may amend the Invitation to Tender or any aspect of the Invitation to Tender.

This Invitation to Tender applies to all acts and omissions by or on behalf of the Tenderer in relation to the Invitation Process before, on and after the date that it submits its Tender.

Except for those provisions of this Invitation to Tender that are stated to survive termination, or by implication survive termination, a Tenderer will be bound by this Invitation to Tender until the earlier of the date that:

- the Principal terminates the Invitation Process, except that, subject to the next two paragraphs, this Invitation to Tender will continue to apply to any other process that the Principal undertakes to engage a party to carry out some or all of the Supply, unless the Principal expressly agrees otherwise;
- the Principal notifies the Tenderer that the Principal has ceased considering the Tenderer's Tender or all of the Tenderer's Tenders if more than one Tender was submitted; and
- the Principal notifies the Tenderer, or publishes any notice to the public, to that effect.

The Tenderer acknowledges that:

- this Invitation to Tender does not constitute a Tender by the Principal to enter into the Contract or any agreement;
 - no contract exists or will come into force between the Principal and the Tenderer unless and until the Contract is formed in accordance with the Conditions of Tender; and
 - neither the Principal nor the Tenderer intend to create any legal relationship; and
- the Invitation to Tender sets out the entire agreement between the Principal and the Tenderer in respect of the Invitation Process.

Evaluation Process

The Evaluation Process will, subject to the Principal's rights under the Invitation to Tender, involve an assessment of each Tender received using the same evaluation methodology and the Evaluation Criteria.

The Principal reserves the right to shortlist Tenderers during the Evaluation Process. The Evaluation Process may at the sole and unfettered discretion of the Principal involve, at any stage during the Evaluation Process, a due diligence assessment of risk, including but not limited to legal entity, reference, past performance, financial, confidentiality, financial viability, Deviations and corporate checks, and discussions with Tenderers, demonstrations and site visits.

Tenders will be evaluated by an evaluation team consisting of two or more officers of the Principal and the Principal's Design Engineer (Consultant).

Evaluation methodology

Gate One: Mandatory

The initial gate comprising of mandatory criteria will allow the evaluation team to determine Tenders that do not conform to the mandatory requirements.

- a) Non-conforming Tenders will not be evaluated further as part of the evaluation process for subsequent gates two and three

- b) Incomplete Tenders may be, at the sole and unfettered discretion of the Principal, deemed non-conforming
- c) Complete Tenders that meet the mandatory criteria will be advanced to Gate Two

Gate Two: Scoring Capability Criteria

Tenders are to be shortlisted based on a combination of capability and local business and industry factors to move to Gate Three as follows:

Local Content	10%
Understanding of Scope	20%
Capability criteria	30%
Price	40%
Total	100%

Local business and industry factors

Local Content - The Principal supports the development of local competitive business and industry by including a 10 per cent weighting in the scoring criteria apportioned on a sliding scale as follows:

Score	Description
10	Developing or established Rockhampton or Livingstone business
8	Branch office in Rockhampton or Livingstone areas that the directly employing a minimum of ten full time employees in Central Queensland area
7	Branch office in Rockhampton or Livingstone areas that the directly employing less than ten full time employees in Central Queensland area
5	Central Queensland business (includes Gladstone, Mackay and Emerald areas)
4	Queensland business
1	Interstate business
0	Overseas business

Evaluation Criteria

Mandatory Criteria

Evaluation Criteria	Description	Response required
Work Health and Safety (WHS)	Documented WHS Management System	Work Health and Safety
Environmental Management	Documented Environmental Management System	Environment
Quality Assurance (QA)	Documented QA Management System	Quality Assurance
Licences and Qualifications	Installation accreditation, RPEQ	Licences
Tender Site Inspection	Attendance at Tender Site Inspection	Tender Site Inspection registration

Scoring Capability Criteria

Evaluation Criteria	Description	Response required
Local Content		Local Content
Work Health and Safety	Degree of Compliance of System. Provide Safe Work Method Statements and WHS Management Plans for similar projects with high risk construction activities.	Work Health and Safety
Capability	Demonstrated capability of key Personnel and provide all plant and equipment required to complete the works. Provide current contractual commitments.	Capability of Key Personnel, Proposed Subcontractors. Plant and Equipment; Current Contractual commitments
Methodology	Give sufficient details to demonstrate a clear understanding of the complexities of the works and all the operations necessary to complete the works in accordance with the specification.	Methodology
Preliminary Program	Demonstrate a clear understanding of the works and show capability that the works will be completed within the required timeframes.	Preliminary Program
Technical Products	Demonstrate all technical information are in compliance with specification.	Technical Information
Experience	Detail recent relevant experience in delivering works for similar size and complexity.	Experience and Referees

Non-Scoring Due Diligence Criteria

Due Diligence Criteria	Description	Response to be completed and submitted
Insurances	An assessment of risk based on stipulated insurances	Risk and Insurances
Licences	An assessment of risk based on licence information submitted	Licences

Value

References	An assessment of risk based on reference checks may be used to substantiate claims made	Experience and References
Deviations	An assessment of risk based on the number and types of deviations proposed	Deviations
Conflicts of Interest and fair dealing	An assessment of risk based on perceived or actual Conflict of Interests, confidentiality and fair dealing	Conflict of Interest Declaration and Confidentiality Agreement Declaration of Commission and Incentives, Moral Rights and Collusion

for Money Criteria

Evaluation Criteria	Description	Response required
Price	Value of Money – price compared to design budget estimate	Price Submission

Principal's Requirements

General

The Principal's Requirements have been included to allow Tenderers to respond to the Invitation to Tender.

It is the responsibility of the Tenderer to familiarise themselves with the Principal's Requirements.

Conditions of Contract

Conditions of Contract

The terms and conditions in the Contract Header and Conditions of Contract, will govern any Contract established as a result of the Invitation Process, unless otherwise specified in the Conditions of Tender.

The Principal reserves the right to issue an amended Contract Header and Conditions of Contract prior to entering into a Contract with the Successful Tenderer, as and when required.

It is the responsibility of the Tenderer to familiarise themselves with the current Contract Header and Conditions of Contract.