

REQUEST FOR QUOTE- Rural drainage detailed design – Cracow Road CH58500 RFQ # Q-2122-INF-92

Annexure 1

Section 1 Scope of Works

1.1 Overview of Project Objectives

Improve Banana Shire Council's Cracow Road drainage and flood immunity at Downfall Creek CH58500 (E150.25207, S25.49265), through replacement of the existing structure and road upgrade (low-cost seal) from CH57900-58470 (570m west of the floodway).

1.2 Brief Description of the Works

Banana Shire Council are looking for an engineering consultant to complete rural drainage design for Cracow Road, key project outputs include:

- 'Low flow' culvert design (low-cost structure for low flood immunity)
- DAF approvals
- Floodway approach design

The design will need to be 'for construction' and must be supervised by an RPEQ engineer, the design needs to be supplied in softcopy with survey setout points and electronic data for machine guidance. DAF will need to be consulted during the design process. BSC can supply survey data and can assist with site inspections and subcontractor coordination.

1.3 Background

Cracow Road is located in the Southeast Banana Shire, Queensland. The road links the Cracow community to the north and the Taroom community to the south. The existing road standard is low, the road has little to no pavement, drainage structures are in disrepair and offer little flood immunity. There are numerous hazards on the road and in the road clear zone, there is no edge delineation for the road of drainage structures. The BSC 2017 road network engineering inspection results show that Cracow Road has segments with excessive roughness (international roughness scale greater than 8), and pavement thickness less than 50mm in significant lengths.

1.4 Function to be performed

Drainage detailed design for construction plans that will include:

- Hydraulic analysis
- DAF 'purple creek' water barrier assessment
- Stormwater pipe/culvert/floodway detailed design
- Approach detailed design (Pavement/seal detailed design)
- Linemarking/Signage detailed design
- Survey control and machine guidance for construction

Pavement/seal design, including but not limited to:

- Formation width 8.0m, Pavement width 6.5m, seal width 4m
- Desirable Speed Environment 100km/hr, design speed for individual elements 80km
- Geotech and existing pavement thickness assessment
- Typical sections for road overlay and road widening
- Cross sections at 20m spacing
- Long sections
- Driveway and property access interactions
- Intersection design

1.5 Performance Specifications

All designs to be completed to current CMDG and/or Austroads standards

1.6 Specification of Works to be carried out

Detailed design (as above) for Cracow Road floodway at Downfall Creek CH58500 (E150.25207, S25.49265),

1.7 Specification of Services to be performed

Drainage detailed design for construction, this will include:

- Geotechnical investigation (if required)
- Services location (if required)
- Hydraulic analysis
- Floodway detailed design
- Stormwater pipe/culvert detailed design
- Linemarking/Signage detailed design
- Consultation with DAF

Detailed low-cost road design for construction, this will include:

- Geotechnical investigation
- Hydraulic assessment
- Pavement/seal detailed design
- Stormwater pipe/culvert detailed design (if required)
- Linemarking/Signage detailed design

BSC will supply detailed survey data (design area) and can assist with Lidar survey data and inspections.

1.8 Specification of Goods to be supplied

Detailed design plans (A3 softcopy) including survey control points and set out, AutoCAD, DWG's, electronic survey data for machine guidance.

1.9 Technical Requirements

All designs to be completed to current CMDG and/or Austroads standards

1.10 Pricing/Fee Proposal

Bill of Quantities to be provided with any provisional items and variation hourly rates.

1.11 Insurances

All designs are to be done under the guidance of a Registered Professional Engineer Queensland with appropriate insurances.

1.12 Resources Supplied by Banana Shire Council

BSC can supply survey data and can assist with site inspections and subcontractor coordination.

1.13 Site Preparation

N/A

1.14 Deliverables

Detailed design plans (A3 softcopy) including survey control points and set out, AutoCAD, DWG's, electronic survey data for machine guidance.

1.15 Site Possession Deliverables

Prior to site possession, the Contractor/Service Provider must have completed the following online activities:

Site familiarisation

1.16 Defect Period/Warranty

Engineering consultant to be available to reply to preconstruction design review questions and design queries during construction.

1.17 Delivery Dates or Delivery Period

All designs to be complete 'for construction' by 1/10/2022

1.18 Delivery Address or Work Location

Banana Shire Council email to:

Allan Heit (Manager Infrastructure Technology) - Allan.Heit@banana.qld.gov.au

Daniel Price (Senior Design Coordinator) - Daniel.Price@banana.qld.gov.au

Enquiries – enquiries@banana.qld.gov.au

1.19 Working Hours

N/A

1.20 Key Personnel

The following Key Personnel are anticipated for delivery of the work/services.

Role	Name	Qualifications & Experience	Allocation to Project (FTE %)	Time on Site (% or hours)
Site investigation team				
Design Team				
Registered Professional Engineer Queensland				

1.21 Environmental Requirements

Detail design to include environmental considerations, this may include erosion control during construction and temporary/permanent erosion control post construction.

1.22 Reporting Requirements

Throughout completion of the works, the Contractor must provide written reports

1.22.1 Daily Reports

N/A

1.22.2 Weekly Reports

N/A

1.22.3 Fortnightly Reports

N/A

1.22.4 Monthly Reports

N/A

1.22.5 Other Reports

Final Report on each design

1.23 Site Meeting Requirements

Predesign meetings – video conference or on-site, prior to design

Design progress review meeting - video conference or on-site, prior to detailed drafting

Final design meeting – video conference or on-site for handover

1.24 Other Work

N/A

1.25 Post Completion Support

N/A

1.26 Attachments

The following attachments form part of the Scope of Works:

Banana Shire Council - Cracow Road - Locality Map Q-212-INF-92.pdf - Locality plan and photos

1.27 BSC Policies

The Contractor must comply with the following BSC Policies in the completion of the works:

- Code of Conduct.
- Drug and Alcohol Policy.
- Procurement Policy; and
- Work Health and Safety Policy.
- Complete copies of these policies are available to the public on the BSC website at the following address: <https://www.banana.qld.gov.au>

1.28 Standards

The Contractor must comply with the following standards in the completion of the works: Workplace Health and Safety Regulations 2011.

- This Specification
- Council Policies (specific to the job)
- Capricorn Municipal Development Guidelines (CDMG)
- AustRoads

Section 2 Work Health & Safety Requirements

2.1 Project Safety Management Plan

N/A – Design only

2.2 BSC Inductions

N/A – Design only
