

## MINUTES OF THE SPECIAL MEETING OF THE HINCHINBROOK SHIRE COUNCIL

# HELD IN THE COUNCIL CHAMBERS INGHAM ON WEDNESDAY 10 OCTOBER 2018 AT 2.00 PM

### **ATTENDANCE**

- Present were Councillors R Jayo, AJ Lancini, KS Milton, WG Skinner and MG Tack
- Also present was the Chief Executive Officer (AJ Rayment), Executive Manager Infrastructure Services Delivery (J Stewart), Executive Manager Development, Planning and Environmental Services (R Pennisi), Acting Infrastructure Engineer (M Schembi) and Executive Assistant (BK Edwards)

### **APOLOGY**

An apology for non-attendance was received from Councillor ME Brown

Queensland Reconstruction Authority Regional Liaison Officer, Glen Mellor was also present when the meeting commenced

### 1. INFRASTRUCTURE SERVICES DELIVERY

1.1 TENDER HSC 18/09 – DESIGN AND CONSTRUCTION OF THE WALLAMAN FALLS ROAD LANDSLIP Consideration of Report to Council from Program Manager – NDRRA Program Delivery dated 3 October 2018 regarding findings of the Design and Construction of the Wallaman Falls Road – Landslip Restoration Works tender evaluation and provides a comparative analysis of the tender submissions received.

Moved Councillor Skinner Seconded Councillor Milton

### That Council:

APPROVED and adopted on 29 October 2018

- 1. Award the contract HSC 18/09 Design and Construction of the Wallaman Falls Road Landslip to Keita Services, Option 2 for the value of \$2,346,609.50 (excl. GST).
- 2. Delegate authority to the Chief Executive Officer in accordance with the Local Government Act 2009 to enter into contract, negotiate, finalise and execute any and all matters associated with or in relation to this contract.

Carried - 5-0 101018-01

2.	CONCLUSION -	This con	cluded the	business	of the	meeting	which	closed	at 2.	10 i	om

MAYOR	





### TENDER HSC 18/09 DESIGN AND CONSTRUCTION OF THE WALLAMAN FALLS ROAD LANDSLIP

### **Executive Summary**

This report outlines the findings of the Design and Construction of the Wallaman Falls Road – Landslip Restoration Works tender evaluation and provides a comparative analysis of the tender submissions received. In addition to the tender evaluation, the report also identifies the recommendations and justifications behind these recommendations to assist the Council in the decision making process.

### Council Decision – Recommendation

It is recommended that Council:

- Award the contract HSC 18/09 Design and Construction of the Wallaman Falls Road Landslip to Keita Services, Option 2 for the value of \$2,346,609.50 (excl. GST).
- Delegate authority to the Chief Executive Officer in accordance with the Local Government Act 2009 to enter into contract, negotiate, finalise and execute any and all matters associated with or in relation to this contract.

### Background

Tenders for the Design and Construction of the Wallaman Falls Road Landslip closed 2.00pm on Friday, 21 September 2018. The submission included the restoration of three land slip sites on Wallaman Falls Road at chainages:

- Site 4 (CH.19.5 CH.19.55)
- 2. Site 2 (CH.20.03 - CH20.06)
- Site 3 (CH.20.28 CH.20.32)



Author: Keith Metcalfe Position: Program Manager – NDRRA Program Delivery

Date: 3 October 2018

This project is being funded jointly by the Commonwealth and Queensland Government funded NDRRA Program governed through the Queensland Reconstruction Authority (QRA), Natural Disaster Relief and Recovery Arrangements (NDRRA) grant assistance for restoration works for the Severe Tropical Cyclone Nora and Associated Flooding, 24-29 March 2018 event. The cost for this project is \$2,346,609.50 (excl. GST) funded by the Queensland Reconstruction Authority and based on the funding available. The tender documentation requested applicants submit a lump sum price to complete the project in its entirety.

A number of briefings regarding the possibility of different procurement methodologies were held with Council. A design and construct procurement methodology was selected primarily because it was considered that this would gain valuable time to get the tender to the market and awarded over other procurement methodologies. It is also considered that there may be reduced risk of significant contract variations because the Design and Construction methodology is prepared and owned by the tenderer and the tenderer's partners.

### Tender Evaluation Criteria

Price	50%
Methodology and project appreciation	15%
Construction program and current commitments	10%
Local Content	10%
Key personnel, sub-contractors and relevant experience	10%
Environmental management and quality assurance systems	5%

### **Tender Evaluation Scores**

There were a total of two conforming offers submitted by the closing time, both from Keita Services.

Keita Services Option 1	Keita Services Option 2
\$2,677,666.50	\$2,346,609.50
Option 1 does not provide any security that should the area receive any notable rainfall that Wallaman Falls Road will be required to be closed and that additional damage to the sites may occur, until the works are fully completed (with the exception to Site 4).	Option 2 does provide security that should we receive any notable rainfall that Wallaman Falls Road will not be required to be closed and that traffic can continue to use the road and construction works can continue with minimal delay.

Both options are very similar and are expected to take a similar length of time to complete. The major difference between the two options is that in Option 2, all the sites are secured by soil nails by mid December 2018. Hence Wallaman Falls Road will be temporarily safe and functional prior to the Christmas shutdown (ie. mid-December 2018) with the remaining works (to provide the permanent remedial solutions) to continue after the Christmas break.

In the opinion of the contractor, once these sites are soil nailed that they will be protected against rainfall and a possible wet season which equates to achieving a major milestone in protecting the works.

The following contingencies have been included in the construction program timings:

- A two (2) week shutdown over Christmas has been included.
- All Public Holidays have been included.
- All required concrete curing times have been allowed for.
- The timings allowed for a realistic if not slightly conservative.
- Assumed that works required on Sites 2 and Site 3 will not proceed concurrently and will be undertaken
  independently. However there may be some opportunities to undertaken works on Site 2 and Site 3 concurrently
  which will either create some float on the critical path or allow the works to be completed sooner than
  programmed.

Please note that no allowance for wet weather delays have been allowed for in the construction program.

The Tender Evaluation was carried out by independent external assessment team. The results of the assessment are provided in a consolidated format and provided as per attachment 1.

### Summary

Keita Services Option 2 has the lowest conforming offer price. The methodology for this option has the installation of soil nails on all sites immediately to provide stability to the sites, maintain trafficability and provide protection against the upcoming weather events. The Construction Program has a completion date of 25 February 2019 based upon a start date of 8 October 2018. The contractor is available for an immediate start. The completion date will be adjusted accordingly depending on commencement.

### Attachments

- 1. Lonergan Project Services Tender Evaluation
- 2. HSC 18/09 Tender Evaluation Spreadsheet
- 3. Keita Services Tender Submission
  - a. HSC 18/09 Reference Document Keita Jacobs Langtree Consulting
  - b. Non-Price Forms

### Statutory Environment

- Local Government Act
- Local Government Regulation 2012
- Natural Disaster Relief and Recovery Arrangements (NDRRA) Determination 2017
- Queensland Disaster Relief and Recovery Arrangements Guidelines (QDRRA) October 2017
   7.6.11 Value for money

In line with supporting eligible Restoration of Essential Public Assets (REPA) measures, applicants are required to achieve an efficient allocation of resources and to ensure that reasonable measures are being used for restoration and reconstruction projects. The efficient and reasonable allocation of resources is achieved through a value for money approach that ensures, as far as practicable, efficiency, transparency, and effectiveness at local and state levels.

### Policy Implications

This tender has been completed in accordance with Council's Procurement Policy.

### Consulted With

Acting Infrastructure Engineer Executive Manager Infrastructure Services Delivery Chief Executive Officer

### Financial and Resource Implications

As per submission HSC 178.18 for the Wallaman Falls Road Landslip, the approved project funding approved by QRA is \$2,528,451.00 (excl. GST).

The recommended construction value (Keita Services) is \$2,335,949.50 (excl. GST). This is below the current QRA approved value of \$2,528,451.00.

The recommended offer of Keita Services also includes an amount of \$10,660.00 (excl. GST) for provisional quantities such as removal of unsuitable material and road subgrade replacement. During the tender assessment process the provisional quantities provided for were considered to be understated and that it would be more realistic to allow for additional quantities. Subsequently doubling the quantities were considered more appropriate and the cost for provisional quantities therefore increased to \$10,660.00 (excl. GST). With the provisional costs added, the tender value is \$2,346,609.50. Provisional costs are based on estimated quantities that could not be entirely foreseen, defined or detailed when the tender was prepared. Provisional costs are required to be paid to the Contractor if instructed by the Superintendent to carry out the works and therefore incur the estimated costs. If the provisional works are not approved by the Superintendent, the provisional costs are not payable.

### TENDER HSC 18/09 DESIGN AND CONSTRUCTION OF THE WALLAMAN FALLS ROAD LANDSLIP

### Risk Management Implications

It is necessary the offeror can deliver the project in accordance with relevant safety, quality and environmental management systems. Without the offeror having these systems in place Council would be exposed to high risk from a safety and environmental management perspective and the project deliverables could be of poor and/or unacceptable quality.

Due to the time of year there is a risk of further wet weather that could impact the jobsite.

An additional implication for the project is that Council has a strong desire for the works to be completed prior to the Christmas shutdown 2018.

As the project is funded jointly by the Commonwealth and Queensland Government through the Natural Disaster Relief and Recovery Arrangements (NDRRA) it is necessary the offeror can deliver the project in line with the requirements set out in the tender documentation expecting the project outcomes to be conforming to the set design, standards and guidelines that are relevant for the type of work involved and as per the Queensland Disaster Relief and Recovery Arrangements Guidelines October 2017.

### Strategic Considerations

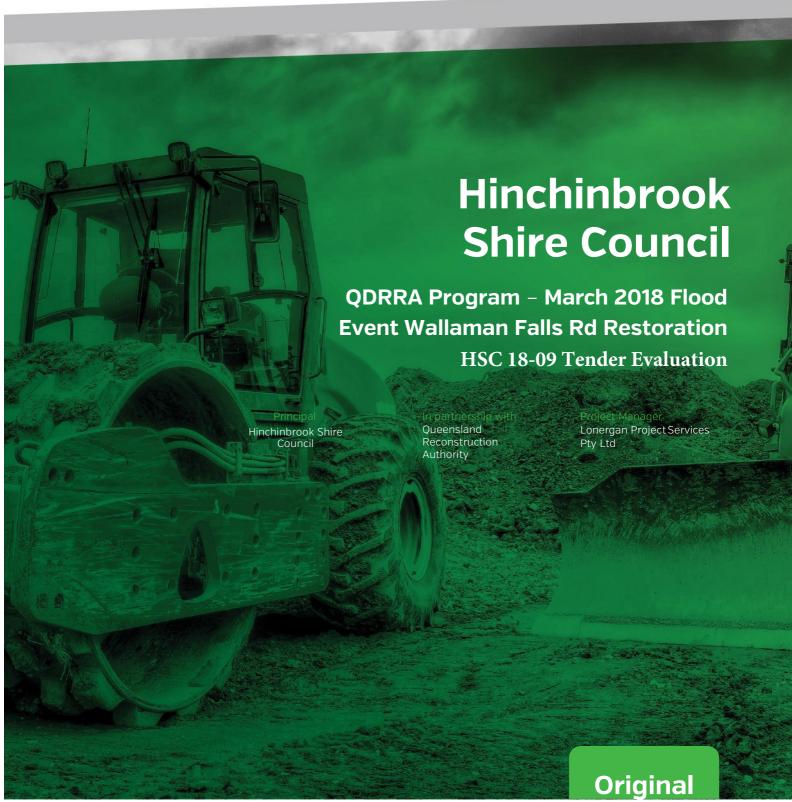
Corporate Plan

- 3.4. Policy and Procedure
- 5.2. Support for business diversity and employment growth
- 5.3. Tourism Development
- 5.4. Natural Disaster Management

### Officers Comment

It is the opinion of the officers that Option 2 provides best value for money to Council and mitigates the risk of further damage to Wallaman Falls Road in the event of further rain events, therefore this is the preferred option.

### LonerganProjectServices



mobile 0437 513 505email chris@lonerganprojects.com post PO Box 1006, Oonoonba Q4811

### **TENDER EVALUATION REPORT**

### [DESIGN AND CONSTRUCT]

**PROJECT NO: HSC18-09** 

PROJECT NAME: Design and Construction of the Wallaman Falls Road Landslip

CONTRACTOR PRE-TENDER ESTIMATE: \$2,346,609.50 ex GST PREFERRED TENDERER PRICE: \$2,346,609.50 ex GST TOTAL PROJECT COST: \$2,346,609.50 ex GST

### Tender Evaluation Panel Recommendation

The Tender Evaluation Panel (TEP) recommends that Keita Services Pty Ltd be awarded HSC 18-09 Design and Construction of the Wallaman Falls Road Landslip for a contract price of \$2,346,609.50 ex GST including the allowance for provisional quantities (e.g. removal of unsuitable material and road subgrade replacement). Negotiations and finalisation of the construction contract and any contract variations that arise through the contract period be delegated to the Chief Executive Officer for decision and approval.

### **Executive Summary**

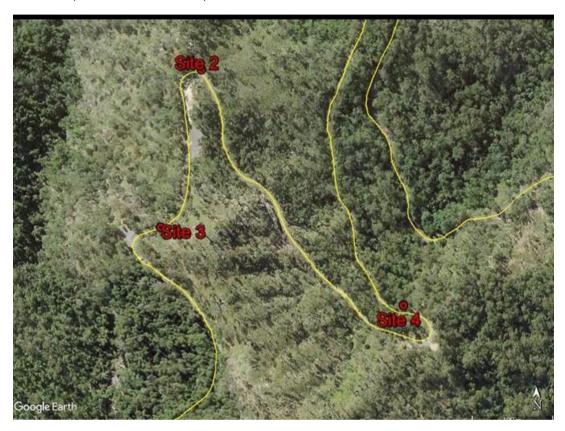
- 1. This Tender Evaluation Report (TER) is for rectification works to three land slip sites on the Wallaman Falls Road at the Chainages listed below:-
  - Site 4 (CH.19.5 CH.19.55)
  - Site 2 (CH.20.03 CH20.06)
  - Site 3 (CH.20.28 CH.20.32)
- 2. The Request for Tender HSC 18-09 Design and Construction of the Wallaman Falls Road Landslip was released on TenderLink on Saturday, 18 August 2018 and subsequently advertised in the Townsville Bulletin, The Herbert River Express and on Council's Website. The wide coverage of sourcing was considered the most effective strategy to give local contractors the best opportunity to tender.
- 3. Tenders closed on Friday, 21 September 2018.
- 4. The Tender Evaluation Panel consisted of Keiran Mau (Orion Project Consulting), Rudd Rankine (Trinity Engineering and Consulting) and Keith Metcalfe (Lonergan Project Services).
- 5. The Tender Evaluation Panel recommends that Keita Services Pty Ltd be awarded the Design and Construct Tender for HSC 18-09 Design and Construction of the Wallaman Falls Road Landslip for a contract price of \$2,346,609.50 excl. GST. The contract price includes an amount of \$5,330 for provisional quantities such as removal of unsuitable material and road subgrade replacement.

### **Description of the Project**

6. Due to the recent heavy rainfall and associated flooding in March 2018, there were 3 landslips on the Wallaman Falls Road in the Hinchinbrook Shire. These sites are considered significant and require stabilisation structures. The Principal has conducted Preliminary Slope Stability Risk Assessment to identify the significance of each landslip, along with subsequent field survey and detailed geotechnical investigation. The findings of these assessments and investigations were completed and conceptual designs of slope stability structures to restore and stabilise each of the affected slopes were undertaken by Jacobs.

The Contracts works have been divided into three Separable Portions with the following site locations:

- Site 4 (CH.19.5 CH.19.55)
- Site 2 (CH.20.03 CH20.06)
- Site 3 (CH.20.28 CH.20.32)



The Principal requires one or more suitably experienced and resourced Contractors to undertake the design, construction and certification of the remedial works to a number of landslips.

7. The scope of works is defined in the attached Jacobs Report.

Design Phase: Inspection, engineering assessment and Preliminary Design (including any additional investigation) for each landslip area. As part of the design phase, confirm the survey information provided by the Principal and erect pegs over the property boundaries. Detailed design documentation for the proposed works at each Site.

Construction Phase: Construction Works include – Earthworks, Retaining structures and Restoration and revegetation.

Close Out: Defects monitoring, any remediation required, final inspection and the provision of as Constructed Documentation.

### **General Description of Works**

### Site 4 - Chainage: 19.5 - Chainage: 19.55

A downslope slip has occurred due to the heavy rainfall and flooding which has undercut the road embankment resulting in the loss of the road shoulder. The remediation work operations are anticipated to include:

 General Site preparation, traffic control, Site access, clear and grub, set out, removal of unstable failed soil and flood debris.

- Bulk excavation.
- Slope Stabilisation
- Reinstate any essential services, pavement, road furnishings and wire fence.
- Reinstate and revegetate areas affected by construction.

### Site 2 - Chainage CH.20.03 - CH.20.06

A downslope slip has occurred due to the heavy rainfall and flooding which has undercut and infiltration resulting in the loss of the road shoulder and part of the road. The remediation work operations are anticipated to include:

- General site preparation, traffic control, site access, clear and grub, set out, removal of unstable failed soil and flood debris.
- Bulk excavation and removal of existing culvert.
- Slop Slabilisation.
- Reinstate drainage structures.
- Reinstate pavement, road furnishings.
- Reinstate areas affected by construction.

### Site 3 - Chainage: 20.28 - Chainage.20.3

The Site 3 failure resulted in the loss of the outer 1.3m of road edge and further downslope failure of the filled

(side cast) and natural downslope. The remediation work operations are anticipated to include:

- General site preparation, traffic control, site access, essential services location, clear and grub, set out, removal of unstable failed soil and flood debris.
- Bulk excavation.
- Slope Stabilisation.
- Reinstate pavement, road furnishings.
- Reinstate areas affected by construction.
- 8. As per submission HSC 178.18 for the Wallaman Falls Road Landslip, the approved project funding approved by QRA is \$2,528,451.00 exclusive of GST.

### **Request for Tender**

- 9. Listed within the pricing schedule of the Request for Tender was a Provisional Sum for \$10,660.00 excluding GST for provisional quantities such as removal of unsuitable material and road subgrade replacement.
- 10. A Tender information session was held on Wednesday, 29 August 2018 for this project.
- 11. During the Tender Period the following Requests for Information (RFI's) were received. An outline of RFI's is shown below, including the date received;
  - Can you please confirm that the evaluation process is going to be in Three Stages based on one original complete submission from proponents including design to a suitable level to enable full pricing.
  - b. Please provide the following Attachment E concept design drawings, Attachment F Standard Conditions for Construction Activities within Parks and Reserves
  - c. Can you please provide the traffic data for Wallaman Falls Road, can you please provide the LIDAR survey data for the entire Wallaman Falls stormwater catchment.
  - d. We note Section 12 of the Pr Principals Project Requirements', AS4300 requires continuous operation of normal traffic along public roads, however Section 13 indicates that approval may be allowed for partial or full road closure via submission of a TMP. Can HSC please confirm that full road closure will be allowed during the construction/remediation works and if so, provide further clarification as to the maximum timeframes full road closure would be acceptable to Council.

We seek clarification of the above to confirm our construction methodology.

- 12. The (TEP) can confirm that all were responded to via an Addendum on TenderLink. Details of each Addendum published are outlined below.
- 13. During the tender period there were four Addenda issued. An outline of each Addendum is below;
  - a. Notice to Tenderer NTT1 30 August 2018 RFI response a. above.
  - b. Notice to Tenderer NTT2 30 August 2018 RFI response b. above
  - c. Notice to Tenderer NTT3 31 August 2018 RFI response c. above.
  - d. Notice to Tenderer NTT4 14 September 2018 RFI response d. above.

### **Selection Process**

14. The Tender was uploaded to TenderLink and alerts were issued to 1913 users were issued and email containing details of the tender notice for HSC 18-09.

### **Tender Receipt and Opening**

15. Tenders closed at AEST 2:00pm on Friday, 21 September 2018 via TenderLink and subsequently all tender submissions were downloaded and forwarded to the (TEP) for assessment

### **Tender Assessment**

16. The Tender Evaluation Panel consisted of Keiran Mau (Orion Project Consulting), Rudd Rankine (Trinity Engineering and Consulting) and Keith Metcalfe (Lonergan Project Services).

### **Evaluation**

- Stage one Individual Assessments: Members of the (TEP) independently completed individual score sheets.
- 18. **Stage Two Agreed Evaluation**: Members of the (TEP) confirmed that they did not require additional time to assess the tenders. The individual scores were consolidated into one scoresheet as attached (Attachment #2). A value for money decision was then made taking into account the technical score and the tendered prices submitted by each tenderer.

### **Provisional Sum**

19. A Provisional Sum of \$5,330.00 ex GST for Keita Services Pty Ltd was submitted for provisional quantities such as removal of unsuitable material and road subgrade replacement. During the tender assessment process the provisional quantities provided for were considered to be understated and that it would be more realistic to allow for additional quantities. Subsequently doubling the quantities were considered more appropriate and the cost for provisional quantities therefore increased to \$10,660.00 excluding GST.

### **Tender Risk Assessment**

### Risk assessment/treatment

Risk	Likelihood	Consequences	Risk Rating	Mitigating Actions
Council understanding and taking "ownership" of all aspects of the reconstruction of the assets	Possible	Major	High	Engage council elected members and corporate staff in all aspects and phases of the scoping, design and construct Identify opportunities where council can benefit from and leverage off the construction contract

Risk	Likelihood	Consequences	Risk Rating	Mitigating Actions
Cultural Heritage – noncompliance with Legislative Requirements	Possible	Major	High	Consideration of Cultural Heritage issues that might arise during construction. Compliance with Cultural Heritage requirements during construction. Contractors may be required to attend Cultural Heritage training prior to commencement on site as a condition of contract (if desired).
Adequacy of project and contractual management arrangements	Possible	Moderate	High	Read contract conditions and ensure supplier has received, understood and agreed on terms and conditions.  Ensure contracts, superintendency functions, and comments on certification claims are undertaken to minimise risks associated with contractual disputes including BCIPA claims.  Separate contracts for Construction and superintendent functions.
Cost of works exceeds available budget and/or is not value for money	Possible	Major	High	Infrastructure reconstruction are aggregated or disaggregated to ensure best value for money Prioritise the programming of projects to ensure that constructions are completed within the NDRRA guidelines and timeframes Ensure contractors are adequately skilled and experienced, to ensure value for money Undertake extensive scoping and functionality reviews during the design and construct process utilising inputs from operators and other relevant stakeholders, including technologies proven in similar locations during the scoping and design phases Undertake a criterion reference assessment of preferred options for slope stabilisation.
Contractor insolvency	Possible	Major	High	Undertake an assessment of contractor to ensure contractor financially viable for the duration of the contract Ensure contractor has necessary insurances in place Obtain bank guarantees and Retentions

Risk	Likelihood	Consequences	Risk Rating	Mitigating Actions
Contractor accommodation	Unlikely	Minor	Low	Large number of low cost accommodation available within 40km radius
Inflated pricing in tender process	Unlikely	Moderate	Medium	Market research undertaken Release tender to open market
Stakeholder communication	Possible	Minor	Medium	Update and disperse milestone tracker to stakeholders on a monthly/bimonthly basis. Engage in meetings related to the upgrade as required
Business continuity and contract administration	Possible	Major	High	Maintain consistency with management of upgrade and ensure adequate and consistent staffing and contract administration
Weather events that may impact on construction phase	Possible	Moderate	Medium	Sequence works in flood prone area outside the local wet season

Table 1 – risk rating matrix

-	Almost certain	Medium	Medium	High	High	Extreme	
00	Likely	Low	Medium	Medium	High	Extreme	
ikelih	Possible	Low	Medium	Medium	High	High	
	Unlikely	Low	Low	Low	Medium	High	
_	Rare	Low	Low	Low	Medium	Medium	
		Insignificant	Minor	Moderate	Major	Catastrophic	
	Consequence						

Table 2 - risk likelihood of occurrence

Assessed likelihood of occurrence	Rate of occurrence
Almost certain	Several times within the next year
Likely	Once within the next year
Possible	At least once within the next 1 – 5 years
Unlikely	Once within the next 5 – 10 years
Rare	Less than once in the next 10 - 20 years

### Geotechnical Treatment of the Sites on Wallaman Falls Road

### **Documents Reviewed:**

All Tender Documents, returnable schedules, technical drawings, calculation and reports associated with the tender and provided as part of the review. A detailed list has been provided in the attachments.

### **Assessment**

In reviewing the options, preference and recommendation is for **Option 2**. This involves initial stabilisation of the sites by the installation of soil nails prior to additional stabilisations works which include rock buttressing and toe reinforcement (on sites 2 and 3) and rock protection on site 4. I have reproduced the drawings from the Tender documents at the bottom of this email ease of reference and clarity.

Support for this option is based on a number of considerations which primarily include technical merit, safety and cost, which have been outlined below. In addition to these – additional social and community benefits provided, such as the maintained trafficability of the roads, but these were not the driver of the recommendation - they are ancillary benefits.

### 1. Technical Merit

- a. The inclusion of the soil nails in the design provides a number of benefits, including increase stability and protection of the works throughout the construction period.
  - Increased stability occurs as a result of the soil nails providing extra support to the existing soil mass which has failed in the vicinity of the road. This is through mechanical means (i.e. the steel and concrete in the soil nails providing extra shear resistance to the soil), and by reducing the effect of water on the soil mass
    - The proposed solution includes 180mm of shotcrete over the soil nails (red line). This essentially provides a barrier to moisture ingress on the failed face. This is important as an increase in moisture content in failure will have the effect of "lubricating" the failed material...
  - II. The geotechnical explanation for this is that the pore pressure in the soil increases which decreases the effective stress in the soil. The effective stress relates to how much the soil matrix interacts with each other think of this as basically the interlocking of particles... If water is included into the mix, then the water/ pressure pushes the soil particles apart (reducing the effective stress), this essentially weakens the interaction between the soil particles giving the effect of "lubricating" the soil.
  - III. The geotechnical review in the proposal basically says as much when it references a negative pore pressure keeping the existing sites stable (see excerpt below).

### 4.8 Basis of Temporary Design

Temporary design scenarios (i.e. during construction cases) have generally been designed prescriptively because detailed analysis of these cases using slope stability software is unlikely to yield practical results. Slope stability analysis for these temporary cases would tend to yield lower than acceptable factor so safety cases (i.e. where soil strength material is benched at 1V:1H) despite the fact that negative pore pressures will keep these slopes standing in the short term. This becomes obvious when the existing slopes (in the current post-failure condition) give FoS of less than unity, so any stabilisation works will improve the situation.

The temporary works cases for where soils nails may be acting in both short and long term in combination with excavation of spoil on the slopes and placement of rockfill embankment options have been assessed in terms of slope stability to check the achieved short term FoS. This is mostly done for informative purposes rather than to control the design. For example, for Site 3, the FoS for the soil nails installed prior to excavation for rockfill may be 1.25 but drops to near unity (when not accounting for negative pore pressures) once the soil below is excavated in preparation of placement of rockfill to reinstate the permanent slope solution.

### 2. Safety

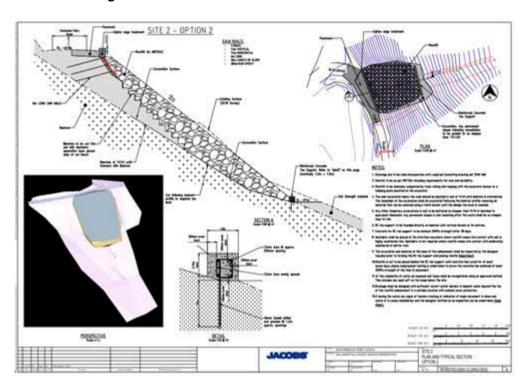
a. The introduction of the soil nails at close to the crest of the failure will inherently make the site more stable (as discussed above). This is true in the short term – during the works and in the longer term also. The benefits to the interim works is non-trivial. If there are any persons who are required to work beneath the level of the failure (e.g. installing the reinforced toe support, or removing the failed material), then they benefit from this additional support. In terms of providing a safe work environment – Option 2 is by far superior to option 1.

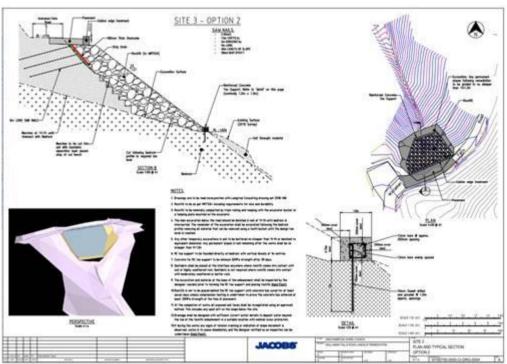
### 3. Cost

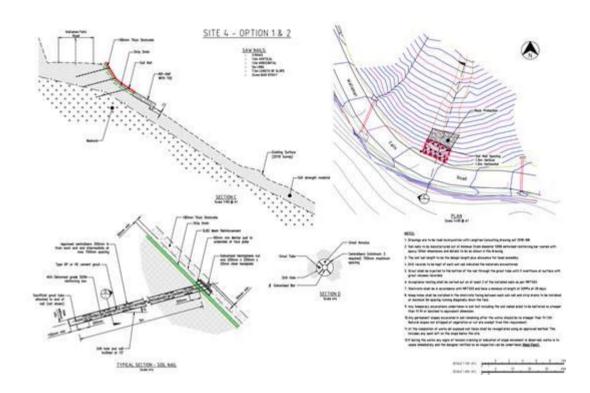
Notwithstanding all the non-price benefits, the price for installing Option 2 is less than the price for installing option 1. From a practical point of view this does not make sense (more works would be

delivered for less money). From the Tenderer's risk mitigation point of view – this makes perfect sense. The Contractor would be required to "protect the works" in option 1 and will price the (significant) additional risk in as cost.

### **Tender Drawings**







### **Summary**

Option 2 provides a solution which is technically superior, provides increased safety for the works crews undertaking the works, ensures roads remain trafficable and is a greater value for money option. This option also reduces risks by providing the more appropriately protect works against any upcoming weather events (i.e. Wet Season).

### **Interviews / Tender Clarifications**

20. No interviews/ tender clarifications were carried out.

### **Referees Reports**

21. The (TEP) did not consider it necessary to obtain referee reports to confirm information contained in submissions. It was considered that given the experience of Keita Services Pty Ltd with Hinchinbrook Shire Council that this was unnecessary.

### **Value for Money Assessment**

- 22. A Value for Money (VFM) assessment was undertaken by the (TEP). VFM relates not only to the tendered price, but also to non-price factors such as fitness for purpose, reliability, timely delivery, life cycle costs, fair market prices, excess capability offered and effective warranties.
- 23. The tender provided by Keita Services Pty Ltd (option two) was considered to represent the best value for money it scored the highest technical worth score at 95.69% and submitted the lowest price/was priced competitively of \$2,346,609.50 excluding GST.

The Construction Estimate is as follows:-

Schedule	Brief Description	Lump Sum / Schedule Total
SQP	Location Site 4 (CH.19.5 - CH.19.55)	\$ 177,163.00
SQP	Location Site 2 (CH.20.03 - CH.20.06)	\$ 1,253,625.50
SQP Location Site 3 (CH.20.28 - CH.20.32)		\$ 905,161.00
Total Lump	Sum Amount	\$ 2,335,949.50

### **Conclusion / Recommendations**

24. It is recommended that Keita Services Pty Ltd (option two) be awarded the contract based on their tender submission. The recommended project cost is:

Project Number:	HSC 18-09
Lump Sum (ex GST)	\$2,335,949.50
Provisional Sum (ex GST)	\$10,660.00
Total	\$2,346,609.50

### **Attachments**

- A. Jacobs Report
- B. Evaluation Summary

### **EVALUATION SUMMARY** REQUEST FOR QUOTATION

Design and Construction of the Wallaman Falls Road Landslip Geotechnical Remediation of site on Wallaman Falls Road (Design and Construct) Tender Description:

HSC Ref No: HSC 18/09

Tender Closing Time: 21/09/20182:00 p.m

Evaluated By: Independent External Assessor

Date: 27-Sep-18

			*lowest to highest price					
Evaluation Criteria		Weighting (%)	Conforming Offers					
Offerers			Keita S (Opti	services on 2)	Keita Services (Option 1)			
	Total Price excl GST		\$2,346	,609.50	\$2,677,666.50			
Price	Comments Score 50%		Keita Services is a locally based company. This price wa	as the cheapest of the two submitted conforming offers.	Keita Services is a locally based company. This price was t	he most expensive of the two submitted conforming offers.		
			50	.00	43	.82		
Local Content	Comments		\$2.0M nominated for local suppliers and subcontractors to be utilised as part of the project. \$161,900 has been removed as Keita Services nominated themselves.	\$1,838,100 nominated for local suppliers and subcontractors to be utilised as part of the project including Keita Services nominated amounts.	\$2.0M nominated for local suppliers and subcontractors to be utilised as part of the project. \$161,900 has been removed as Keita Services nominated themselves.	\$1,838,100 nominated for local suppliers and subcontractors to be utilised as part of the project including Keita Services nominated amounts.		
	Score	10%	9.02	7.89	7.65	7.24		
Methodology	Comments	Install soil sails on all sites immediately to provide stability to the sites, maintain trafficability, and provide protection against upcoming weather events.  Site 2: Soil Nails only + drainage works  Site 3: Soil Nails (initially) + Rock Buttressing + Toe Reinforcement + drainage works;  Site 4: Soil Nails (initially) + Rock Buttressing + Toe Reinforcement + drainage works;  Note: Preferred Methodology as it provides the better technical solution, with immediate and ongoing safety and trafficability benefits. Provides protection against risk of upcoming weather events.		age works; age works;	Site 2: Soil Nails only + drainage works Site 3: Rock Buttressing + Toe Reinforcement + drainage works; Site 4: Rock Buttressing + Toe Reinforcement + drainage works  Note: No installation of soil nails on site 3 and 4.			
	Score	15%	11	.00	7.33			
Construction Program and Current Commitments	Comments		Construction Program Completion = 25/2/2019 Current Commitments of Key Personnel (Geotech/ Civil) are appropriate, as increased levels of certainty of the Contractor being able to commence and		Construction Program Completion = 22/2/2019 Current Commitments of Key Personnel (Geotech/ Civil) are appropriate, a increased levels of certainty of the Contractor being able to commence imm	9 .		
	Score	10%	8.	67	7.	33		
Key Personnel, SubContractors and Relevant Experience	Comments		Geotechnical RPEQ (Highly Competent) - Significant relevant and recent his construction will be critical to ensuring that the design intent is delivered in Civil RPEQ (Highly Competent) - Relevant and recent history in civil infrastru requirements previously. Compliance engineer to work closely with Geotec Geotechnical design intents.  Principal Contractor - previous experience with HSC, using specialist Geotec works previously)	I field conditions. Interconditions and deliver. Has dealt with NDRRA hnical Engineer to ensure quality of geotechnical construction - meets	Geotechnical RPEQ (Highly Competent) - Significant relevant and recent his construction will be critical to ensuring that the design intent is delivered in Civil RPEQ (Highly Competent) - Relevant and recent history in civil infrastrurequirements previously. Compliance engineer to work closely with Geotec Geotechnical design intents.  Principal Contractor - previous experience with HSC, using specialist Geoteworks previously)	field conditions.  acture design, documentation and deliver. Has dealt with NDRRA  hnical Engineer to ensure quality of geotechnical construction - meets		
	Score	10%	8.0	00	8.	00		
Environmental Management and Quality Assurance Systems	Comments		Keita Constructions has Environmental and Quality Management Systems i QA system is not independently certified Environmental Management plans to be updated for site based projects.		Keita Constructions has Environmental and Quality Management Systems QA system is not independently certified Environmental Management plans to be updated for site based projects.	in place.		
	Score	5%	4.0	00	4.00			
	F	INAL SCORE	90.69	89.56	78.13	77.72		
Local Preference		5%	95.69	94.56	83.13	82.72		

Recon		Council award the contract for HSC 18/09 Design and Construction of the Wallaman Falls Road Landslip to Keita Services for the value of \$2,346,609.5 (excluding GST). This price includes a construction value of \$2,335,949.50 and an allowance for provision al quantities of \$5,330 (Includes removal of unsuitable material and road subgrade replacement). Negotiations and finalisation of the construction contract and any contract variations that arise through the contract period be delegated to Executive Manager Infrastructure Services Delivery for decision and approval.
Comm	nents	Option 2 (initial stabilisation of the sites by the installation of soil nails) prior to additional stabilisations works (rock buttressing and toe reinforcement) on sites 3 and 4 is the recommended option. The solution is technically superior, provides in creased safety for the works crews undertaking the works, ensures roads remain trafficable and is a greater value for money option. This option also provides the ability to protect works against any upcoming weather events (i.e. Wet Season)  The Key technical staff (Geotechnical and Civil RPEO's) nominated in this project have recent and relevant experience. Designs for each of the sites are well advanced. Works are able to commence immediately with the expected completion prior to the end of February 2019. The risks of wet weather occurring prior to the completion of the project is considered moderate - high, which support this design approach.  The principal subcontractor has undertaken work in the HSC region before and is aware of the standards required. Keita Services has employed the services of a specialist sub-contactor to undertake the soil nailing.