



Water Forum

Connors River Dam and Early Tenderer Involvement Case Study

Peter MacTaggart & Michael Grosser

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Overview



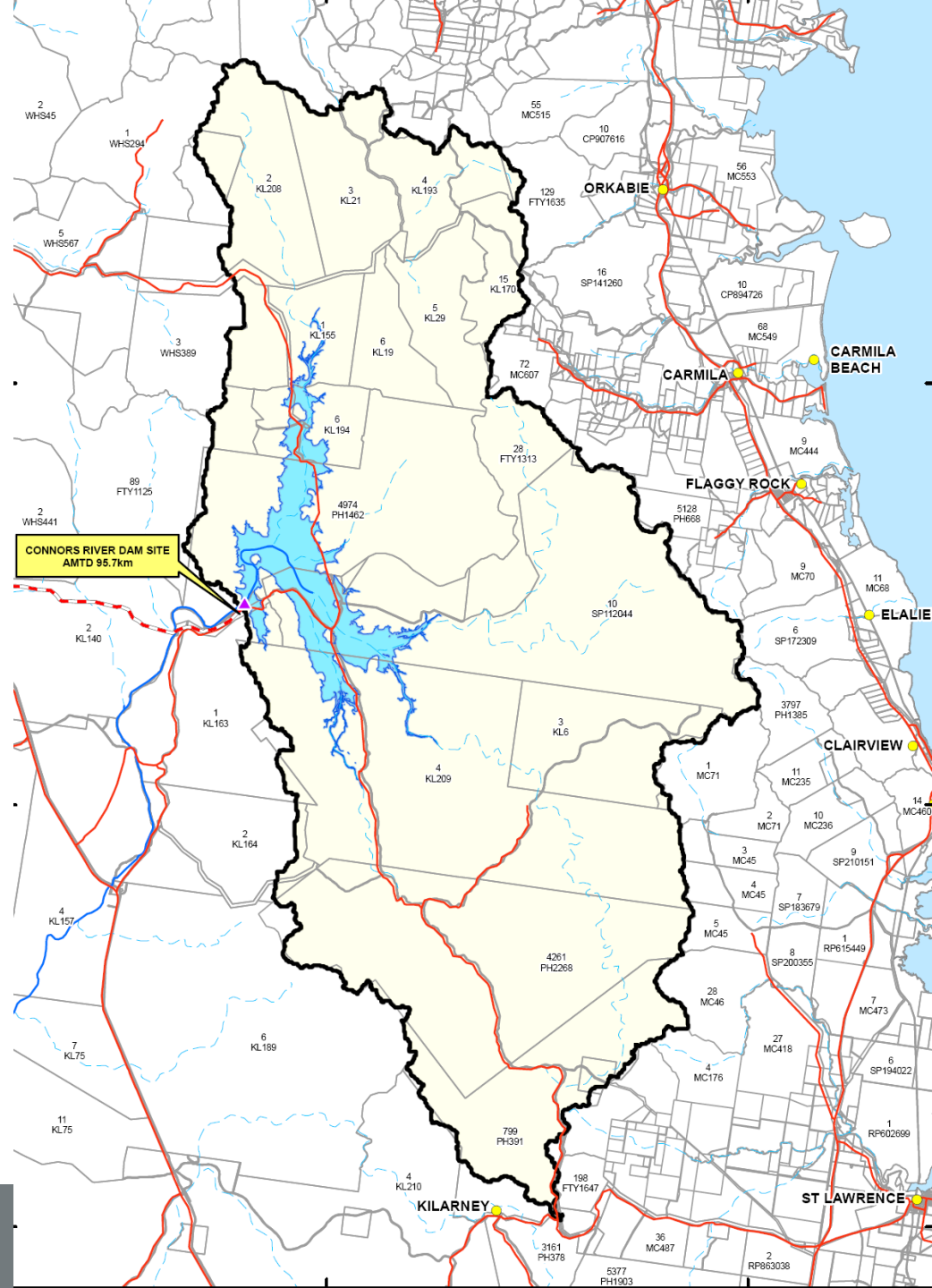
**Overview of the Connors River
Dam and Pipelines Project
Contracting Framework
ETI process
Benefits and drawbacks of ETI
Lessons learned from ETI**





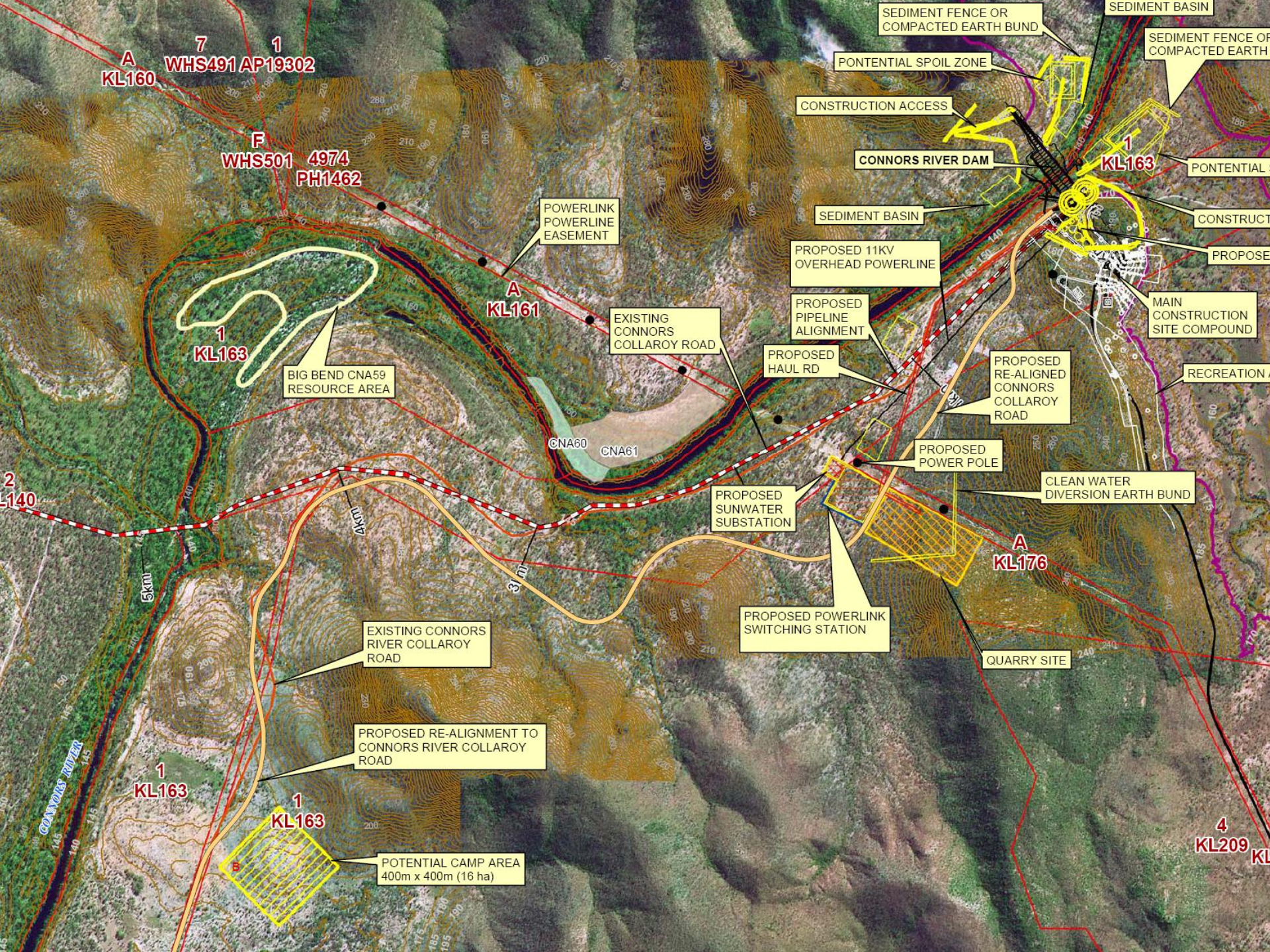
Connors River Dam

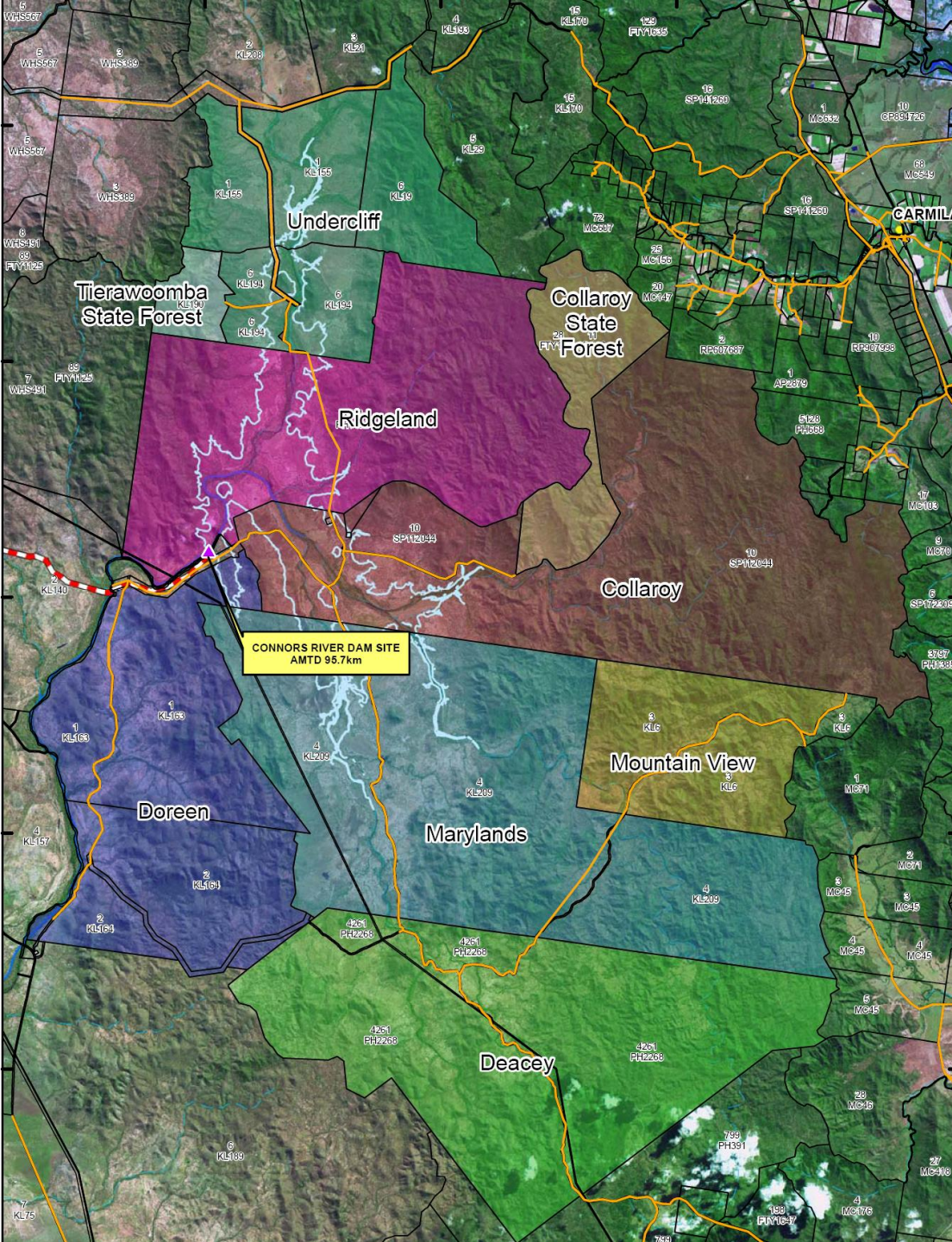
- Dam is located at 95.7km AMTD on the Connors River
- Approximately 100 km due south of Mackay
- 1,300 km² catchment area



- Storage ~ 367,500 ML
- Crest Length ~ 610 m
- Spillway: 250 m wide & 34 m Max height
- RCC Construction ~ 265,000 m³
- CVC Construction ~ 35,000 m³
- Outlet Works: 2 x 2100 mm dia pipes, 16 m³/s
- Fishway for U/S and D/S migration














Property Acquisition

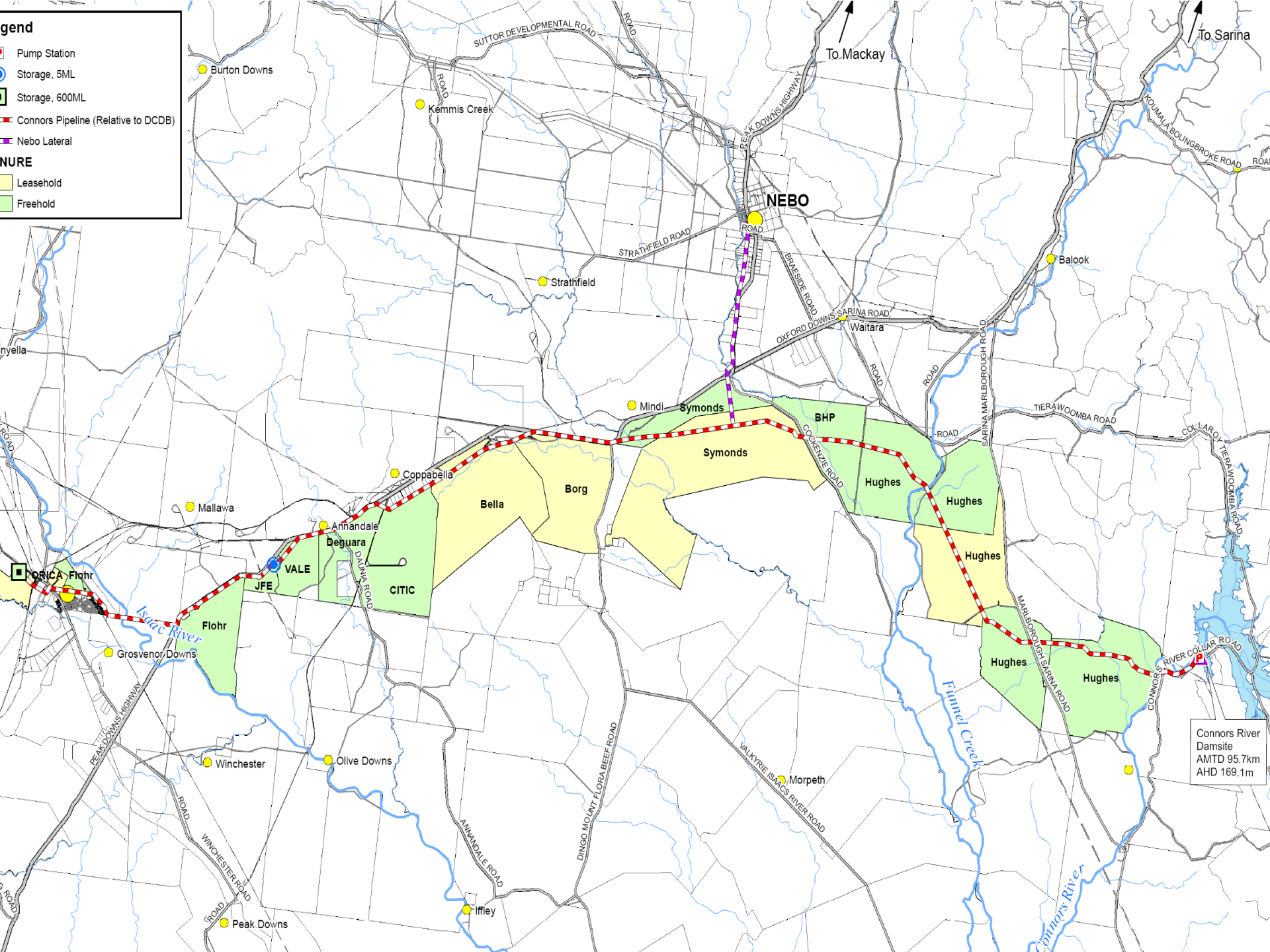
Legend

-  Pump Station
-  Storage, 5ML
-  Storage, 600ML
-  Connors Pipeline (Relative to DCDB)
-  Nebo Lateral

NURE

-  Leasehold
-  Freehold

- LEASEHOLD**
- FREEHOLD**



Project Status



- **CHMP registered August 2010.**
- **ILUA registered September 2011.**
- **State EIS approval received 20 January 2012.**
- **Federal EIS draft decision received. Anticipate approval April.**
- **Detailed design scheduled for completion May 2012.**
- **All properties required for dam construction now purchased. Pipeline easement well progressed.**
- **Preferred tenderers appointed for both dam and pipeline.**
- **Construction start date dependant on funding arrangements; currently expected June 2012.**

Contractor Selection: SunWater's Drivers:



- Value for money
- Allocation of risk
- Design innovation
- Relationship building
- Agreement on responsibility for approvals
- Program locked in
- Informed bids

Contract Framework Options

- **Hard Dollar/Hard Risk Contracts**
- **Alliance Contracts**
- **Early Contractor Involvement (ECI)**
- **Early Tenderer Involvement (ETI)**

Hard Dollar/Hard Risk Contract



- **Standard construction contracts may be negotiated for the construction of a single asset such as a bridge, building, dam, pipeline, road, ship or tunnel.**
- **Hard Dollar/Hard Risk contracts usually have higher risk premiums built into them. However, they are quicker, cheaper and are less process based.**

Alliance Contracts

- An Alliance is an agreement between two or more entities, which undertake to work cooperatively, on the basis of sharing project risk and reward, for achieving agreed outcomes.
- Alliance Contracts are based on principles of good faith and trust with an open-book approach towards costs.
- Alliances are normally reserved for high risk projects, especially where residual risk during the construction or implementation phases cannot be quantified or allocated to industry.
- Alliances are characterised by risk sharing and a no-disputes/no-blame regime.

Early Contractor Involvement (ECI)

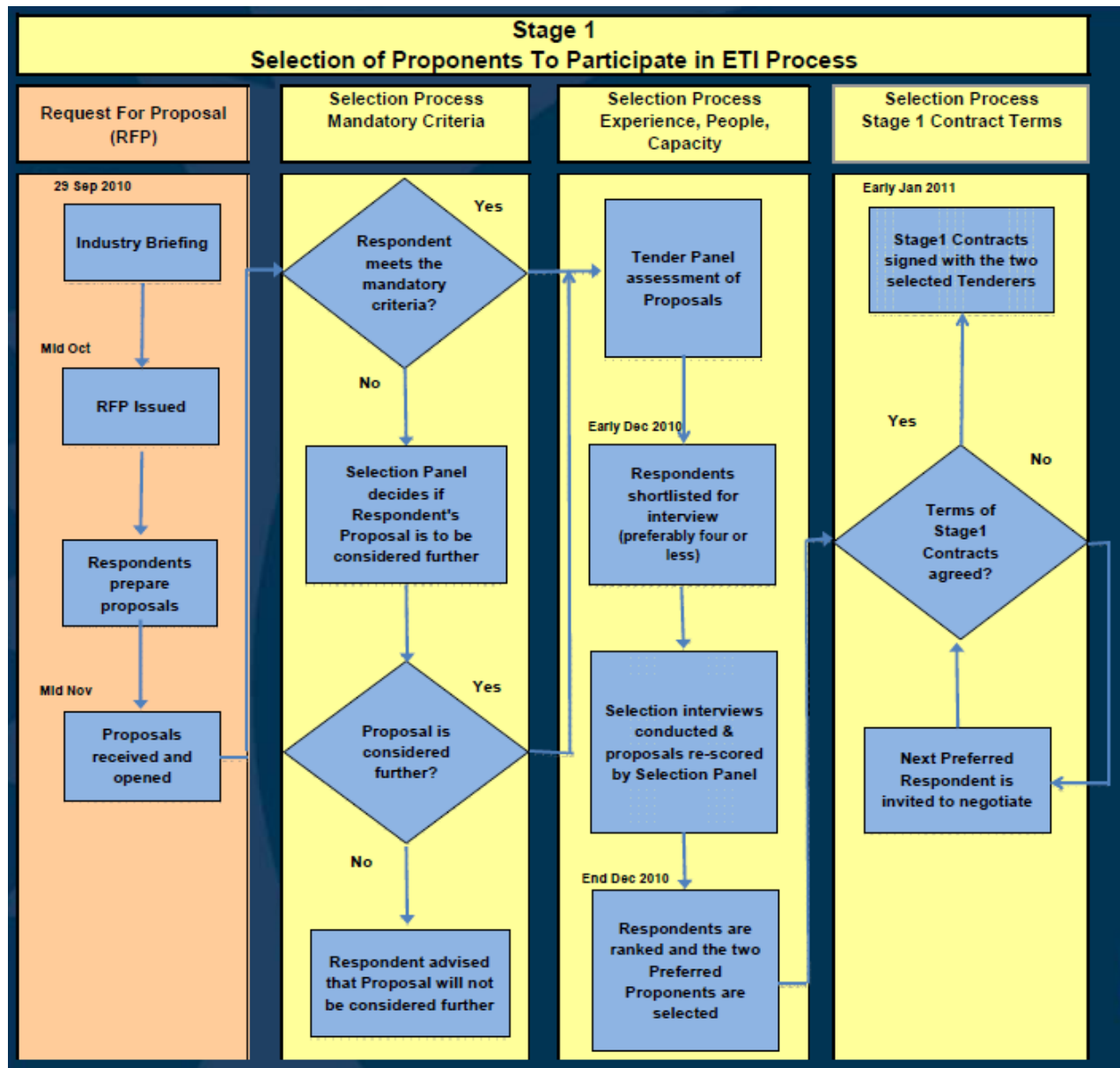
- ECI contracts are a delivery option introduced to achieve value for money, alleviate strain on industry and best utilise market capacity.
- Under an ECI Contract a construction contractor is appointed prior to commencement, or in the early stages of the project to allow it to have a greater influence on the capital costs and project outcomes.
- The ECI approach is favoured by contractors as it allows them to have a team involved throughout project duration.
- An ECI Contract also allows the contractor to retain more knowledge in-house.

Early Tenderer Involvement (ETI)

- ETI is a contract delivery option which aims to fully inform all participants of the nature and objectives of a principal's key drivers in constructing the required infrastructure.
- The ETI process involves selecting two or three competing tenderers to participate in value engineering and refining of a principal's preliminary design.
- The competing tenderers then offer a schedule of rates or a lump sum price based on the refined tender documentation for the principal to make a final determination.

The Early Tenderer Involvement Process

- An Early Tenderer Involvement Process was used by SunWater to select a contractor for the Connors River Dam and Pipeline Project.
- Contractor Selection: SunWater's Drivers
 - Value for money
 - Allocation of risk
 - Design innovation
 - Relationship building
 - Negotiated position on construction
 - Agreement on responsibility for approvals
 - Informed bids
- The intended outcome from the ETI process is a relationship-based contract that is competitively bid where the parties have a clear understanding of the risk allocation and the project's commercial terms.



Stage One: The Early Tenderer Involvement Process



1. Open Request for Proposal (RFP)

The stage one RFP documentation was released by SunWater in early 2011. The RFP involved the briefing of construction firms on the Connors River Dam and Pipeline Project and tender process.

Tenders were evaluated in accordance with the evaluation criteria to determine the two preferred Tenderers to be involved in the ETI process.

Stage One: The Early Tenderer Involvement Process

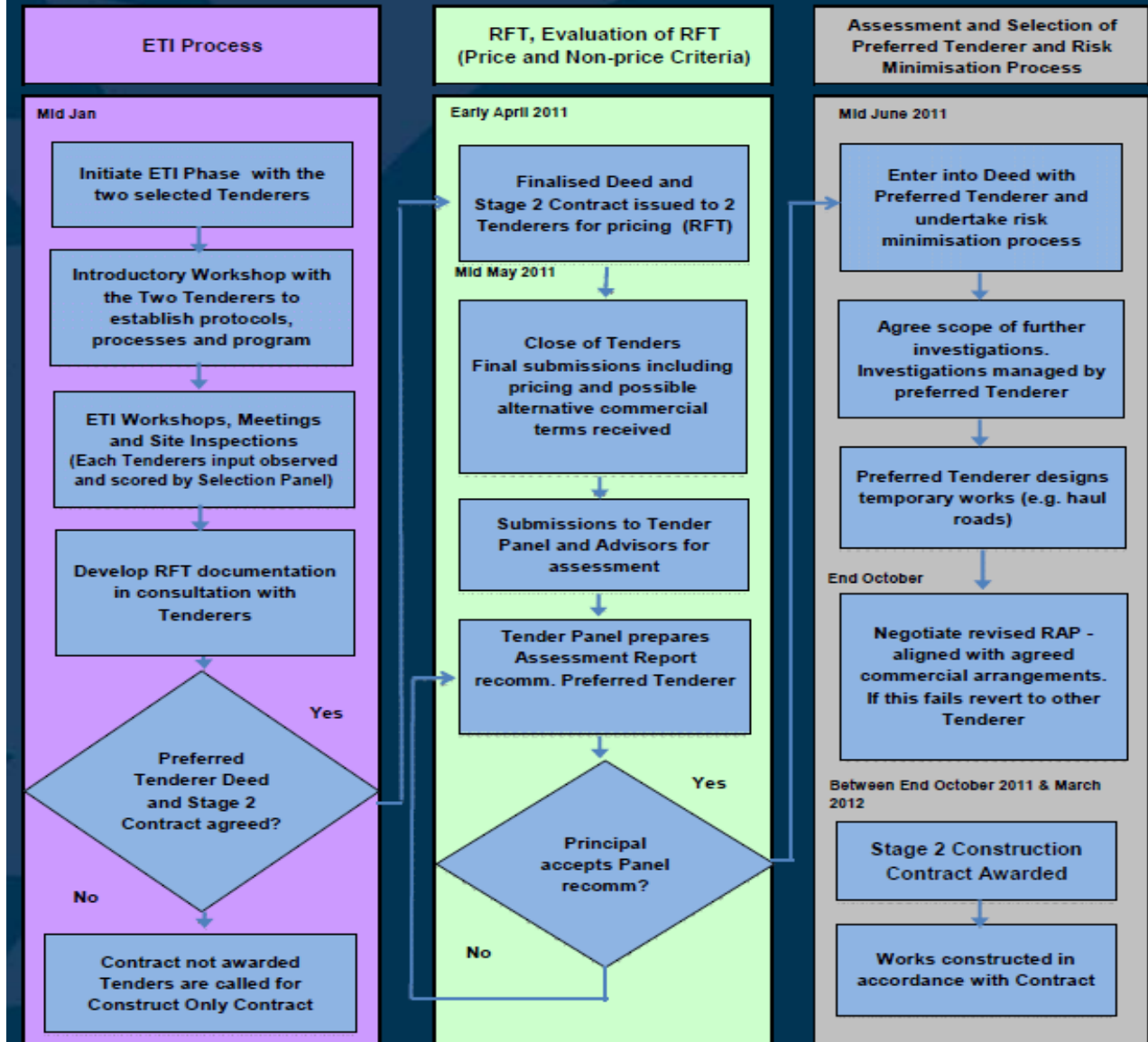


1. Evaluation Criteria

- A. Commitment to, and delivery of, value for money in context of this Project and price certainty.
- B. Experience and track record.
- C. Key Personnel and Project management team and management systems.
- D. Safety track record and approach for this Project.
- E. Community, Environment, Industry and Stakeholder interaction.
- F. Departures.

Stage 2

Collaborative Process: Selection of Preferred Tenderer and Contract Award



Stage Two: Early Tenderer Involvement Process



2. Invitation to the ETI Process

Two Tenderers were chosen from the Stage One RFP and invited to participate in the ETI process.

3. ETI Process

The ETI process involved the clarification and progression of the commercial and legal framework, the identification and allocation of construction risk, identification of KPIs, reviewing and verifying the design and developing technical issues and engineering solutions to areas such as diversions strategies, approvals, detailed program and planning for construction within dry seasons.

Stage Two: Early Tenderer Involvement Process

4. Workshop Process

Workshop topics included:

- I. Project Briefing and Relationship
- II. Open book and construction methodology
- III. Scope of Works Clarification
- IV. Value Engineering, Fabrication and Constructability Review
- V. Construction Risk, Project Risk Review
- VI. Pricing Review and Confirmation of Scope
- VII. Risk Allocation and Risk Review, Risk Adjusted Pricing
- VIII. Risk Allocation Review and Variation Risk Benchmarking
- IX. Legal and commercial discussions
- X. Finalising pricing and all other remaining commercial issues.

Stage Two: Early Tenderer Involvement Process

5. Request for Tender

Tenderers were then given a Request for Tender (RFT) and were required to submit their Tenders in accordance with requirements set out by SunWater.

6. Evaluation

The Selection Panel then evaluated the Tenderers' Tenders in response to the RFT evaluated against the Criteria in the following table:

Stage Two Evaluation Criteria



- A. Price (during the Stage One ETI process there was no evaluation of Price).**
- A. Attendance by appropriate personnel in workshops, site visits and off-line meetings.**
- B. Relationship affinity as evidenced in workshops, site visits and off-line meetings.**
- C. Willingness to put ideas forward for discussion, creativity and responsiveness in workshops, site visits and off-line meetings.**
- D. Alignment with commercial terms of Preferred Tenderer Deed and Stage 2 Contract.**
- E. Quality of Stage Two Offer documents submitted.**

Stage Two: Early Tenderer Involvement Process

7. Stage Two Offer

In July 2011 the Tenderers submitted their Stage 2 Offers in response to the Request for Tender (RFT). SunWater completed the assessment of these offers and selected a Preferred Tenderer.

8. Preferred Tenderer Agreement

SunWater and their Preferred Tenderer then entered into a Preferred Tender Agreement to undertake a risk minimisation phase. The purpose of this stage is to allow both parties further flexibility regarding the construction phase.

Benefits of ETI

- The ETI process develops considerable additional value to project principals including:
 - better design, improved risk identification and management, enhanced performance of tenderer, stakeholder and community engagement planning and better dispute avoidance through improved contract documentation.
- Allows a better and more complete understanding of the risks and constraints and the early formation of project objectives that result from the interactive ETI process.
- The development of a relationship between the tenderers and principal that greatly improves communications early in the contract which is more likely to lead to dispute avoidance and reduce overall business transaction costs for the principal.

Benefits of ETI

- ETI processes often result in the development of alternative construction methodologies that are safer and faster with improved quality outcomes.
- Principals benefit from the ownership of IP and are able to use innovations identified during the ETI process to further enhance the project design and outcomes.
- Improved certainty of pricing due to a much better understanding of the contract on the part of the contractor and a saving (estimated to be between 5 and 10%) on contract price.
- The preferred tenderer has a clearer understanding of the project scope and key issues.

Drawbacks of ETI

- In an ETI process tenderers are spending considerably more than the amount reimbursed.
- The tender costs expended by the Principal for an ETI are significantly greater than those for a traditional tender.
- The tenderer transfers significant amounts of IP and company knowledge into an ETI process which may be shared with the successful Contractor and consultants engaged on the project.
- The ETI process involves considerably more time, effort and design co-ordination than a standard fully documented RFT.



Lessons learned from the ETI process



- Be realistic about the timeframes and effort involved;
- Use a facilitator to guide parties through the ETI process;
- Update documents along the way and issue 'Reliance Material' with the RFT;
- Maintain competitive tension including contract negotiations with both tenderers before selecting the preferred tenderer;
- Encourage and ensure open dialog to refine design and outcomes; and
- Build relationships early and ensure compliance with agreed protocols.

Questions?





Michael Grosser, Partner
Holding Redlich

Tel: 07 3135 0619

Email: michael.grosser@holdingredlich.com.au

Peter MacTaggart, Project Manager
SunWater

Tel: 07 3120 0094

Email: peter.mactaggart@sunwater.com.au