

11.2 Tender - Waste Water Treatment Plants Upgrade

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File Reference	Tenders & Quotations, Ballina Sewage Treatment Plant, Lennox Head Sewage Treatment Plant
CSP Linkage	Responsible and efficient use of resources
Delivery Program	Sewer Services
Objective	To report to council on the Tender to Design and Construct a new Waste Water Treatment Plant at Ballina, and a Recycled Water Plant at Lennox Head WWTP

Background

In 2000, Council commenced a process to develop the Ballina Shire Urban Water Management Strategy (UWMS). The purpose of the Strategy was to establish the long-term direction for policies and infrastructure related to integrated urban water cycle planning for Ballina Shire. Council endorsed the UWMS in September 2003.

Following this the Ballina / Lennox Head Recycled Water Master Plan was adopted by Council in September 2007. The Master Plan includes a commitment to provide urban dual reticulation (UDR) to all new major subdivisions in Ballina and Lennox Head. The Master Plan targets 80% dry weather re-use of treated wastewater from the Ballina and Lennox Head Waste Water Treatment Plants by the year 2026. This is to be achieved by providing UDR to an estimated 7,242 new lots. The recycled water, subject to final Council approval, will be used for garden watering, toilet flushing, car washing and the cold tap of washing machines.

In addition to the Urban Dual Reticulation (UDR), Urban Open Space (UOS) irrigation will be expanded to some 173 ha including playing fields, parks/gardens and the Ballina Golf Club, and 160 hectares of Vegetation Regeneration (VR) is proposed in order to meet the 80% reuse target.

The 2026 dry season water balance in the Master Plan 2026 is as follows:

Urban Dual Reticulation (UDR)	24%
Urban Open Space (UOS)	29%
Vegetation Regeneration (VR)	27%
Discharge to ocean	9%
Discharge to estuary	11%

UDR re-use is considered to have the highest value of the three streams nominated in the Master Plan, as it directly replaces potable water use and supplements Rous's water supply.

At the October 2009 Council Meeting a report was presented to Council regarding the procurement strategy and the proposed technology for the replacement of the Ballina WWTP and the construction of the Lennox Head Recycled Water Plant.

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At that meeting a Design and Construct (D&C) procurement methodology was endorsed for a Membrane Bio-Reactor type WWTP at Ballina. Micro or Ultra filtration is proposed for Lennox Head RWP with the details to be determined during the design and construct stage.

Subsequent to these decisions an Expressions of Interest (EOI) and an Early Tender Involvement (ETI) phase was conducted with the development of suitable documentation to allow the tender process to proceed in a timely manner.

Twelve submissions were received during the EOI and a panel of four were selected to be involved in the ETI process. The four selected were:

- Haslin Construction Pty Ltd
- John Holland Pty Ltd
- EGL Infrastructure Pty Ltd
- Tenix Australia Pty Ltd

Selective tenders were sent out to the ETI participants on 6 August 2010 closing on the 8 October 2010.

The development application process has been running in parallel with the EOI, ETI and tender phases. A part five application was lodged with Council's Development Services and a conditioned approval was granted at the October 2010 Council Meeting.

The report that now follows details the outcomes from the tender process.

Key Issues

- Award the tender in accordance with the Local Government (General) Regulations (2005)
- Engage suitably qualified and experienced contractors that having regard to the circumstances provides the most advantageous tender.

Information

Selective tenders were called following the EOI and ETI phases on the 6 August closing on 7 October 2010. The following information is a summary of the tender assessment process.

Tenders Received

Tenders were called on 06 August 2010 and closed at 9.30 am on 07 October 2010. Four tenders were received as follows:

Tenderer	A.B.N.	Tender Amount ⁴	Assessed Tender Amount ¹	Total Score ²	Recommended Tender Amount ³
Haslin Constructions P/L	85 051 102 124	\$45,007,464	\$55,631,551	98.31	\$45,437,315
John Holland P/L	11 004 282 268	\$50,549,644	*Minimum \$61,986,752	91.65	
UGL Infrastructure P/L	96 096 365 972	\$49,319,234	*Minimum \$62,824,677	87.42	
Tenix Australia P/L	65 075 194 857	\$36,336,911	Non-conforming	N/A	

Notes:

1. The 'Assessed Tender Amount' is the Tender Amount plus (or minus) the Assessed Values of qualifications and departures (anomalies) in the tender, any loadings that apply, including NPV. *Also refer Section 4.3.
2. The 'Total Score' includes the scores for price and non-price criteria.
3. The 'Recommended Tender Amount' is the Tender Amount plus (or minus) adjustments offered by the Preferred Tenderer to withdraw qualifications and departures plus the accepted options – Refer to Section 5.1.
4. Tender Amount is the submitted price for the whole of the works.

Examination of the Tenders

Pre-Evaluation Actions and Background

The tendering process was required to comply with the *Local Government (General) Regulation 2005 (the Regulation)*.

Council decided to call tenders from contractors shortlisted following an Expressions of Interest process, in accordance with clause 168 of the *Regulation*.

The evaluation method included weighted price and non-price criteria with a price: non-price ratio of 85:15. A two envelope system was adopted, that is, where price information was held by an independent officer and not provided to the Tender Evaluation Committee (TEC) until the evaluation of non-price criteria was completed.

Tenderers submitted an overall price for the whole of the works made up as follows:

- New Ballina WWTP (Milestone 1)
- Decommission and demolish old Ballina WWTP (Milestone 2)
- Lennox Head Recycled Water Plant (RWP) (Milestone 3)
- Ballina WWTP Sludge Dewatering Facility (Milestone 4)
- Schedule of Rate Items for removal of sludge and placement of topsoil.

Tenderers also submitted a compulsory separable price for a Bio-solids Dryer (Solar dryer).

Tenderers were required to submit four Mandatory Alternative Tenders as follows:

No.	Mandatory Alternative Tender	Tender Evaluation Methodology
1	Whole of Works plus Biosolids Solar Dryer	Considered if viable over 20 year life cycle
2	Whole of Works less decommissioning and demolition of old Ballina WWTP (Milestone 2)	Considered if price for whole of works exceed Councils Budget
3	Whole of Works less Lennox Head RWP (Milestone 3)	Considered if price for whole of works exceed Councils Budget
4	Whole of Works less decommissioning and demolition of old Ballina WWTP and Lennox Head RWP (Milestones 2 and 3)	Considered if price for whole of works exceed Councils Budget

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A Tender Evaluation Plan (TEP) consistent with the *Regulation* and the Conditions of Tendering in the RFT documents was prepared and endorsed by the Tender Evaluation Committee prior to close of tenders. The TEP allowed for consideration of Alternative Tenders in view of Councils Budget.

Six addenda were issued during the tender period. They included additional information and drawings, and clarifications of items within the tender document without changing the scope of the works. Therefore the pre-tender estimate was not revised.

Initial Evaluation

All tenders were received prior to the closing time. All tenders acknowledged the six addenda that were issued.

Except for the issue identified in the Evaluation of Non-price Criteria below, and the qualifications and departures dealt with in Evaluation of Price, all tenders met the requirements of the RFT documents in respect to submission. As discussed below the tender from Tenix was not sufficiently conforming to be considered after significant departures were identified.

Non-Price Criteria

The information submitted by the tenderers was evaluated against the specified non-price criteria, in accordance with the Tender Evaluation Plan.

The total non-price scores are summarised below.

Tenderer	Total normalized non-price score	Rank
Haslin Constructions P/L	13.31	2
John Holland P/L	15.00	1
UGL Infrastructure P/L	11.88	3
Tenix Australia P/L	10.59	Non-conforming

During the course of the non-price assessment it became evident that the tender of Tenix Australia P/L departed significantly from the requirements of the specification, and therefore scored low in the assessment.

The TEC unanimously determined in accordance with the TEP that the tender of Tenix Australia P/L was not sufficiently conforming (Section 3.4 Tendering Guidelines for NSW Local Government) and did not meet the minimum requirements of the Request for Tender, and was subsequently passed over.

Evaluation of Price

The amounts tendered for the Whole of the Works and Alternative Tenders are summarised in the table below.

Item	Description	Amount Tendered			
		Tenix \$	UGL \$	John Holland \$	Haslin \$
A	Whole of Works	36,336,911	49,319,234	50,549,644	45,007,464
B	Biosolids Solar Dryer	-	Included above	475,469	412,534

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Item	Description	Amount Tendered			
		Tenix \$	UGL \$	John Holland \$	Haslin \$
C	Mandatory Alternative Tender 1 - Whole of Works plus Biosolids Dryer	-	49,319,234	51,025,113	45,419,998
D	Mandatory Alternative Tender No.2 - Whole of Works less decommissioning and demolition of existing Ballina Wastewater Treatment Plant	-	48,482,375	49,267,296	44,202,972
E	Mandatory Alternative Tender No.3 - Whole of Works less Lennox Head RWP	-	40,399,922	41,889,909	36,590,230
F	Mandatory Alternative Tender No.4 - Whole of Works less decommissioning and demolition of existing Ballina Wastewater Treatment Plant and Lennox Head RWP	-	39,844,463	41,041,470	36,299,280
G	NPV Values	-	13,505,443	11,437,108	10,578,847

The tender of UGL Infrastructure P/L did not include the schedule of rate items in the total provided on the Tender Form. These amounts have been included in the Tendered Amount above.

The tender of UGL Infrastructure P/L included a biosolids solar dryer as standard within their base tender, therefore did not provide a separate price within the mandatory alternative schedule for this item.

Item 4.1 - Assessment of Mandatory Alternative Tenders

The viability of Mandatory Alternative 1, the Biosolids Solar Dryer, was determined by comparing the difference between the 20-year Life Cycle Cost of the inclusion of the alternative compared to its exclusion.

The significant life operational cost associated with the assessment is the transport cost for removal of the dried sludge.

As these are comparatively very low for Ballina Shire Council, Council staff have concluded that the inclusion of the solar dryer was not viable, no further consideration of the option to include the solar drier was conducted.

It is noted that this decision did not affect the relativity of the tenders.

As the Tendered Amount of all tenderers was within Council's budget, the Assessed Tender Amount shall be based on the 'whole of works' in accordance with the TEP. The remainder of the mandatory alternative tenders were therefore not considered in terms of selecting a preferred tender.

The option to award the tender based on one of the alternatives remains open to Council.

Item 4.2 - Examination of Tendered Amounts and Rates

The amounts tendered in the Prices Schedule were compared with the pre-tender estimate (see Appendix A). The total tender amounts are relatively consistent with the pre-tender estimate. The comparison revealed significant differences in some of the individual line items (eg: all other items not included elsewhere), however as this schedule is for a guide for payment purposes, these variances are not of concern.

The rates tendered in the Schedule of Rates were also compared with the pre-tender estimate. The comparison revealed no differences of concern.

A sensitivity analysis confirmed that the relativity of tenders is not affected by changes in the scheduled quantities, within the expected range.

Item 4.3 - Assessment of Qualifications and Departures

Each of the tenders contained qualifications and departures (anomalies) and did not fully meet the requirements in the RFT Documents. Clause 178 of the *Regulation* requires Council to accept the most advantageous tender. In order to identify which tender was 'most advantageous' for the specified work, the qualifications and departures were assessed and added to the original Tender Amounts.

The qualifications and departures of Haslin Constructions P/L were mainly of a technical nature, typical relating to the equipment to be supplied. These were noted for information purposes and were technically conforming as noted in the Qualifications and Departures Tables.

The tenders of John Holland P/L and UGL Infrastructure P/L contained thirty-two and two hundred and forty qualifications and departures respectively.

These were reviewed, however the TEC determined that there was no reason to fully assess the financial value of these qualifications and departures as it would only increase the value of their assessed tender amount, and would not change the relativity of the tenderers. The qualifications and departures did not raise issues that would affect the other tenders.

The qualifications of John Holland P/L have been noted for information in the Qualifications and Departures Tables. The Qualifications and Departures from UGL did not identify any commercial risk or problem with the tender document.

The TEC determined to continue the assessment based on a Minimum Assessed Tender Amount for the tenders of John Holland P/L and UGL Infrastructure P/L.

Item 4.4 - Determination of Loadings

Council has not adopted a local preference policy for its procurement activities, and no other loadings were applicable to any of the tenders.

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Item 4.5 - Normalised Price Scores

The tenders were compared on the basis of the Assessed Tender Amounts, calculated by adding the NPV values (calculated by the Tenderers themselves) and the assessed values of qualifications and departures to the original Tender Amounts for the Whole of the Works.

The Assessed Tender Amounts were used to calculate the weighted and normalised price scores using the method set out in the Tender Evaluation Plan. The price scores are summarised below.

Tenderer	Weighted price score	Ranking
Haslin Constructions P/L	85.00	1
John Holland P/L	76.65	2
UGL Infrastructure P/L	75.54	3

Selection of the Most Advantageous Tender

Total scores were obtained for each of the three tenders by adding the normalised total non-price score and weighted price score. The total scores are summarised below.

Tenderer	Total normalized non-price score	Weighted price score	Total score	Ranking
Haslin Constructions P/L	13.31	85.00	98.31	1
John Holland P/L	15.00	76.65	91.65	2
UGL Infrastructure P/L	11.88	75.54	87.42	3

The tenderer with the highest total score was Haslin Constructions P/L and was therefore identified as the most advantageous.

Haslin Constructions P/L's Adjusted Tender Amount is 8.0% below the pre-tender estimate which is considered reasonable.

Item 5.1 - Post Tender Discussions and Additions and Deductions

After the identification of the most advantageous tenderer, a detailed technical review of the concept report and technical schedules was completed to identify any outstanding issues with the tender of Haslin Constructions P/L.

The tender of Haslin Constructions P/L also included a number of options for Council to consider. These options included upgrades of equipment, the provision of standby equipment, the removal of potentially unnecessary equipment, and are considered improvements to the works.

Council acceptance of some of the options plus an agreed payment to Haslin for extended tender validity results in a Recommended Tender Amount of \$45,437,315. This is detailed at Appendix B, and is summarized as follows:

Tender Amount – Whole of Works	=	\$45,007,464
Extended Tender Validity	=	\$ 24,200
Additions from Accepted Options	=	\$ 579,771
Deductions from Accepted Options	=	(\$ 174,120)
Total		<u>\$45,437,315</u>

Haslin Constructions P/L has confirmed their agreement to the Recommended Tender Amount, and has confirmed the validity of their tender until close of business (COB) Monday 28 February 2011.

Tenderer's Capability

Referee reports indicate satisfactory past performance by Haslin Constructions Pty Ltd on recent contracts.

A financial assessment by Kingsway Financial Assessments Pty Ltd is currently being completed on Haslin Constructions P/L.

Haslin Constructions P/L has OHS and Environmental Management Systems accredited by the NSW Government, and has demonstrated satisfactory Occupational Health and Safety management and satisfactory environmental management on previous projects. This is recorded in the completed *Checklist for Reviewing Tenderer's OHS Management Performance* and the completed *Checklist for Reviewing Tenderer's Environmental Management Performance*.

The resources proposed for the work have been reviewed and the Tender Evaluation Committee considers Haslin Constructions P/L capable of completing the contract satisfactorily.

Sustainability Considerations

- **Environment**
Upgrade of the Ballina WWTP and provision of a Recycled Water Plant at Lennox Head will reduce the load on the environment whilst reducing the demand for potable water to those properties served by the recycled water infrastructure.
- **Social**
Upgrades to critical infrastructure assist Council to achieve social benefits and public health outcomes.
- **Economic**
The economic benefits of the contract include stimulus to the economy during the construction stage of the project.

Legal / Resource / Financial Implications

This report is provided to assist Council to meet its statutory requirements in regard to procurement.

As indicated, these works form some of the key components for the delivery of the UWMS. The facility at Ballina is at capacity and significant inflows from West and North Ballina are currently diverted to Lennox Head for treatment.

Furthermore, Council is not able to commence the supply of dual reticulation services without this upgrade.

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In addition to this program of works, provision has been made for project management of the construction works. This has been provided for in the program budget and suitable staff to resource our requirements are currently being sought (two engineering staff to be employed on two year fixed term contracts).

In preparing the tender specification, attempts were made to identify separable portions of work that could allow deferral if the total capital expense was not the preference of Council at this time. These options are discussed below.

The first option relates to the decommissioning and demolition of the existing Ballina WWTP. This would avoid a cost now (using the Haslin tendered amounts) of \$804,492. Whilst it is preferable to complete this task now satisfactory operation arrangements can be made if the work was deferred. Given site re-establishment, supervision and other costs it is reasonable to expect that deferral would increase the cost of this activity.

The second option relates to works at Lennox Head. The tender value for these works is \$8,417,234. This is a substantial project in itself and therefore the economies of scale for site establishment and deferral are not as significant.

The impact of not doing the work is to delay the provision of recycled water to the dual reticulation service. If that delay is acceptable to the Council, the main consideration is price inflation versus loan interest costs. This is difficult to predict, although it is fair to say that interest costs are relatively low at this time and further the construction market is relatively competitive at the moment and favourable to the Council.

As indicated in this report, the tender outcomes are consistent with the planned expenditure for this work and the financial implications for this project are discussed as follows.

One of the models presented to the Finance Workshop held in November 2010 indicated that the key factor, amongst several, to managing the impact on sewer charges going forward was the retention of an operating surplus and a gradual draw done on reserves. This objective can be achieved and was relatively insensitive to the extent of capital works proposed in the earlier separable portions.

A further Finance Committee meeting is scheduled for February 2011 where it is intended to confirm the financial planning strategy for Council's Sewer Operations. Council had approximately \$16 million available in Sewer Reserves and Section 64 contributions available as at 1 July 2010 to assist in funding this work.

Approximately \$7.5 million of the \$16 million represents funding from an interest free loan provided by the NSW State Government.

As per earlier reports to Council and as discussed at the workshop held in November 2010 it will be necessary to finance a major component of this works program from loan funds. The loan borrowings required for the total program are estimated at approximately \$70 million.

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Council has not yet secured this entire level of loan funding from a financial institution and it is intended to call expressions of interest during the next three months to secure a portion of these funds.

As advised to Council at the November 2010 workshop there have been instances (i.e. Tweed Council) where councils have not received any response to expressions of interest for loans. Therefore there is a risk that Council could approve a tender and then not be in a position to secure loan funds.

Overall this is considered to be a relatively low risk for the following reasons:

- Councils who have **not** been successful in obtaining loan funding have typically already had significant loan indebtedness
- Ballina Council is not in that position as we have a low overall level of debt
- The financial strategy for sewer operations endorsed at the November 2010 workshop was based on using a combination of loans and a gradual drawdown of reserves. This means that Council will be able to spread out its loan borrowings over the life of the contract, rather than having to borrow substantial funds up front
- Access to loan funds continues to improve as the world economy makes a slow economic recovery
- Discussions by staff with financial institutions indicates there is interest in responding to an expression of interest
- The works in this tender represent approximately \$45 million out of a total program estimated at approximately \$75m to \$80m and a large component of the remaining works relate to the components that can be deferred (i.e. open space reuse, vegetation regeneration).
- This tender will take at least two years to implement which provides time for Council to continually review its financing options.

On this basis it is considered that Council can be confident that loan funds will be available for the tender, as and when required.

Consultation

A public tender process was conducted.

Options

1. Under the Local Government (General) Regulations 2005 Council must either accept the tender that appears to be most advantageous or decline to accept any of the tenders.
2. The tender of Haslin Construction Pty Ltd has been assessed as most advantageous to Council, and as such Council has the option of accepting Haslin's tender for the works including:
 - The new Ballina WWTP (Milestone 1)
 - Decommissioning and demolition of the old Ballina WWTP (Milestone 2)
 - The new Lennox Head Recycled Water Plant (Milestone 3)
 - The schedule of rates items for removal of sludge and placement of topsoil.

This recommendation is made on the basis that the works have been programmed for some time and are considered to be essential infrastructure. The current treatment plant servicing Ballina is operating at capacity and significant flows from north and west Ballina are currently being diverted to Lennox Head WWTP for processing. The UWMS has been endorsed by Council on numerous occasions and the construction of both the Ballina WWTP and Lennox Head RWP are crucial to allowing the delivery of the objectives of that program.

3. As discussed in the above report, Council may also opt to only commission components of this work. Given the delay in providing services and additional costs this is not recommended.

The recommendation that follows is to accept this tender. It is also recommended that Council hold a further workshop to discuss the scope of works in this project which will further assist in Council's understanding of the depth of the works involved in what is a total estimated expenditure of \$45 million.

RECOMMENDATIONS

1. That the tender submitted by Tenix Australia P/L be passed over as not meeting the minimum requirements; and
2. That Council accepts the tender being RFT / Contract Number 0902774 being for Design and construction of MBR WWTP at Ballina and submitted by Haslin Constructions P/L for the Recommended Tender Amount of \$45,437,315.00 including GST, for Contract No. 0902774 for the Ballina WWTP Upgrade subject to finance.
3. That Council authorises the General Manager to sign the contracts and attach the Council seal to the documents.
4. That a workshop be convened to present to Council information regarding the risk management approach prepared for this project and to examine any questions regarding the design and scope of works.

Attachment(s)

- Appendix A. Itemised tender amounts as against estimates (separate A3 attachment provided)
- Appendix B. Revised cost of Haslin tender including inclusions and exclusions

Tender - Wastewater Treatment Plants Upgrade

Attachment A

A	BALLINA WASTEWATER TREATMENT PLANT	ESTIMATE (INCL GST)	UOI	JOHN HOLLAND	HASLIM
1 General (Milestone 1)					
1.1	All work and obligations under the Contract for Milestone 1 NOT INCLUDED ELSEWHERE in this Schedule.	\$ -	-	\$ 8,596,629.00	\$ 6,991,100.00
1.2	Compliance with Environmental Management Plan, Site Specific Sales and Quality Assurance systems.	\$ 18,507.00	-	\$ 227,794.00	\$ -
1.3	Site establishment	\$ 575,009.00	-	\$ 770,259.00	\$ 138,250.00
1.4	Environmental protection methodologies and erosion control.	\$ 74,037.00	-	\$ 162,353.00	\$ 19,000.00
1.5	All necessary works necessary for construction of the wastewater treatment plant superstructure and ensuring civil and operation of the treatment plant throughout the construction period.	\$ -	-	\$ 227,794.00	\$ -
1.6	Site establishment	\$ 31,810.00	-	\$ 77,474.00	\$ 15,400.00
	TOTAL FOR ITEM 1:	893,000	5	9,695,256.00	7,264,800.00
2 CONCEPT DESIGN FINALISATION (Milestone 1)					
2.1	Provision of Concept Design for Ballina WWTTP	\$ 133,000	5	\$ 386,973.00	\$ 490,620.00
	TOTAL FOR ITEM 2:	133,000	5	386,973.00	490,620.00
3 DETAIL DESIGN (Milestone 1)					
3.1	Engagement of a Level 1, 2 and 3 service provider to design the power requirements for the WWTTP site outside for the upgrade works with allowance for future loads.	\$ 18,000.00	-	\$ 12,621.00	\$ 29,670.00
3.2	Civil and structural design	\$ 1,055,002.00	-	\$ 860,746.00	\$ 321,800.00
3.3	Process design	\$ 413,376.00	-	\$ -	\$ 230,800.00
3.4	Design of mechanical items	\$ 674,319.00	-	\$ -	\$ 920,383.00
3.5	Electrical design, gas manufacturing activities and electrical accessories	\$ 382,704.00	-	\$ 337,542.00	\$ 412,523.00
3.6	Telephony design and documentation and installation	\$ -	-	\$ 2,996.00	\$ 5,200.00
3.7	Design review meetings	\$ 95,403.00	-	\$ 22,205.00	\$ 121,284.00
3.8	HAZOP & CHAIR Workshop	\$ 97,403.00	-	\$ 4,188.00	\$ 36,384.00
3.9	Any design items not listed above	\$ -	-	\$ -	\$ -
	TOTAL FOR ITEM 3:	2,750,000	5	2,713,616.00	3,241,960.00
4 CONSTRUCTION CIVIL (Milestone 2)					
4.1	Earth works including pipework and fittings, earthwork and all civil works.	\$ 1,189,412.00	-	\$ 1,045,483.00	\$ 777,900.00
4.2	Other control facilities at the inlet works including detritus and oil coalescence tank	\$ 397,912.00	-	\$ 86,007.00	\$ 200,200.00
4.3	De-aeration, aeration and anoxic tanks, including pipework and fittings, micro-aerobic chambers and riser	\$ -	-	\$ 2,229,139.00	\$ 2,381,883.00
4.4	Mechanical tanks including pipework, flow distribution channels and stabilisers	\$ 4,125,918.00	-	\$ 687,480.00	\$ -
4.5	Mechanical structures of lower rooms/underpass building including building services and drainage.	\$ 2,164,732.00	-	\$ 2,347,647.00	\$ 687,684.00
4.6	Civil works for chemical dosing facilities (tanks, liquid storage tanks and clarifiers), including brine containment and valve cleaners	\$ 648,718.00	-	\$ 299,108.00	\$ 141,748.00
4.7	Civil works for anoxic zone recirculation water system including stream tank, recirculation and flow valves.	\$ -	-	\$ 27,990.00	\$ 1,236,825.00
4.8	Storm drainage pond including storm water retention tanks	\$ -	-	\$ 482,222.00	\$ 225,728.00
4.9	Civil works for supernatant return channels	\$ -	-	\$ 41,800.00	\$ 36,884.00
4.10	Civil works for recycled water storage tank	\$ 34,209.00	-	\$ 8,180.00	\$ 5,444.00
4.11	Anoxic digester tanks including all structure	\$ -	-	\$ 758,250.00	\$ 102,883.00
4.12	Sludge dewatering facility including building	\$ 478,698.00	-	\$ 687,520.00	\$ 280,383.00
4.13	Effluent treatment reservoir	\$ 268,578.00	-	\$ 1,985,386.00	\$ -
4.14	Chlorination system	\$ 161,521.00	-	\$ -	\$ 83,199.00
4.15	All pipework associated with the construction of WWTTP to the limit of Contract including works on existing works	\$ 1,903,048.00	-	\$ 1,277,000.00	\$ 1,699,335.00
4.16	Earthwork and civil works necessary to construct the plant including site foundations	\$ 1,574,097.00	-	\$ -	\$ 828,715.00
4.17	Temporary access road	\$ -	-	\$ 181,000.00	\$ 16,580.00
4.18	Roadworks including kerbing, drainage and drainage	\$ 193,678.00	-	\$ 746,150.00	\$ 481,684.00
4.19	Landscaping	\$ 12,348.00	-	\$ 142,280.00	\$ 60,280.00
4.20	Site services not included elsewhere.	\$ -	-	\$ 91,140.00	\$ -
4.21	Any items not listed above	\$ 110,072.00	-	\$ -	\$ 120,611.00
	TOTAL FOR ITEM 4:	15,680,000	5	15,422,683.00	9,982,965.00
5 CONSTRUCTION - MECHANICAL (Milestone 2)					
5.1	Strip screen and associated conveyor system	\$ 578,526.00	-	\$ 127,373.00	\$ -
5.2	Fine screen and associated conveyor system	\$ 235,960.00	-	\$ 221,223.00	\$ 450,133.00
5.3	Other control mechanical equipment for Inlet Works	\$ 187,225.00	-	\$ 436,912.00	\$ 72,864.00
5.4	Flumes for Inlet Works flow measurement	\$ -	-	\$ 9,874.00	\$ 11,000.00
5.5	Flow measurement including air calibration	\$ 168,036.00	-	\$ 154,350.00	\$ 271,672.00
5.6	Motors for de-aeration tanks	\$ 26,527.00	-	\$ 4,382.00	\$ -
5.7	Motors for anoxic tanks	\$ 925,734.00	-	\$ 46,480.00	\$ 131,195.00
5.8	WAB pumps, alignment and valves	\$ 48,902.00	-	\$ 53,663.00	\$ 71,283.00
5.9	Rotary linear pumps, pipework and valves	\$ 203,802.00	-	\$ 924,188.00	\$ 109,494.00
5.10	Alignment and oil associated equipment	\$ 1,629,408.00	-	\$ 1,594,693.00	\$ 3,232,530.00
5.11	Aeration system for biological and stabilisation reactor including pipework and valves	\$ 1,156,078.00	-	\$ 1,336,181.00	\$ 1,547,526.00
5.12	Peracetic pumps, pipework and valves	\$ 424,372.00	-	\$ 1,066,677.00	\$ 157,914.00
5.13	UV disinfection equipment and instrumentation including all pipework	\$ 368,608.00	-	\$ 181,391.00	\$ 421,634.00
5.14	Recycled water storage system for Onsite use	\$ 48,838.00	-	\$ 225,217.00	\$ 239,199.00
5.15	Recycled water storage, pipework, flow meter and valves	\$ 688,888.00	-	\$ 179,683.00	\$ 372,840.00
5.16	Mounting brackets for stabilisation valves and actuators for flow control for Inlet and Recirc	\$ -	-	\$ 17,315.00	\$ 48,715.00
5.17	Anoxic digester tank mixer and anoxic system decanter	\$ 689,914.00	-	\$ 138,031.00	\$ 235,413.00
5.18	Sludge feed pumps, pipework and valves	\$ -	-	\$ 32,741.00	\$ 96,019.00
5.19	Sludge dewatering system Delt flow pump, reverse motor	\$ 187,442.00	-	\$ 255,675.00	\$ 364,965.00
5.20	Belgian pressure tankbacking and loading system	\$ 16,351.00	-	\$ 163,381.00	\$ 102,675.00
5.21	Storm water pumps, pipework and valves	\$ 78,571.00	-	\$ 390,331.00	\$ 76,130.00
5.22	Decanter return pumps, pipework and valves	\$ 28,688.00	-	\$ 138,664.00	\$ 25,149.00
5.23	Chemical dosing system	\$ 654,225.00	-	\$ 57,372.00	\$ 42,101.00
5.24	Micro-aerobic chamber system	\$ -	-	\$ 782,551.00	\$ 444,154.00
5.25	Micro-aerobic chamber system	\$ -	-	\$ 64,700.00	\$ 105,365.00
5.26	Any items not listed above	\$ 791,802.00	-	\$ 889,180.00	\$ 517,472.00
	TOTAL FOR ITEM 5:	15,480,000	5	15,528,928.00	8,969,887.00
6 CONSTRUCTION - ELECTRICAL (Milestone 2)					
6.1	Power Supply Level 2 Service Provider work	\$ 32,833.00	-	\$ -	\$ 3,179.00
6.2	Power Supply Level 1 Service Provider work	\$ 189,938.00	-	\$ 156,182.00	\$ 278,243.00
6.3	Liaising with Country Energy partners of files and management of the Level 1 and Level 2 Service Provider	\$ 8,250.00	-	\$ 6,012.00	\$ 14,134.00

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6.4 Fixed Generator	\$	177,937.00	\$	392,686.00	\$	641,290.00
6.5 Stone joints and Culvert	\$	25,637.00	\$	29,882.00	\$	11,288.00
6.6 Manufacture of PTPs & Switchboards	\$	967,627.00	\$	118,181.00	\$	395,981.00
6.7 Field Instrumentation	\$	340,006.00	\$	192,587.00	\$	591,982.00
6.8 SCADA Hardware including Licenses and installation	\$	221,642.00	\$	76,733.00	\$	31,738.00
6.9 SCADA Software including development and testing of Visual Displays	\$	269,983.00	\$	130,078.00	\$	133,747.00
6.10 Building Services	\$	215,471.00	\$	73,183.00	\$	127,332.00
6.11 Electrical Installation	\$	621,706.00	\$	2,406,153.00	\$	1,870,511.00
6.12 Any items not listed above	\$	-	\$	244,771.00	\$	22,000.00
TOTAL FOR ITEM 6	\$	2,649,880	\$	3,383,991.00	\$	3,897,830.00
7 TELEMETRY (Milestone 1)						
7.1 Radio Service	\$	86.00	\$	864.00	\$	-
7.2 Supply and installation of an additional RTU at the Ballina WWTP	\$	13,639.00	\$	18,233.00	\$	4,177.00
7.3 Configuration of the existing Ballina Data Console Reporter to accommodate the additional RTU	\$	-	\$	243.00	\$	-
7.4 Configuration of the existing CMF and the existing RMP	\$	-	\$	675.00	\$	-
7.5 Renewal and relocation of the existing IT Cabinet	\$	689.00	\$	1,923.00	\$	-
7.6 Reconnection of the existing IT Cabinet	\$	689.00	\$	1,653.00	\$	-
7.7 Configuration of the SCADA computer (supplied as part of the electrical) for IT Services	\$	-	\$	6,563.00	\$	7,660.00
7.8 System testing	\$	-	\$	2,086.00	\$	-
7.9 Revision of O&M Manuals	\$	-	\$	2,574.00	\$	-
7.10 Any items not listed above	\$	-	\$	-	\$	-
TOTAL FOR ITEM 7	\$	18,500	\$	17,881.00	\$	14,780.00
8 TESTING, COMMISSIONING AND PROCESS PROVING (Milestone 2)						
8.1 Testing including factory/site testing of equipment including electrical equipment	\$	22,554.00	\$	19,068.00	\$	19,621.00
8.2 Demonstration	\$	185,094.00	\$	6,307.00	\$	74,745.00
8.3 Commissioning	\$	3,523,667.00	\$	639,770.00	\$	270,820.00
8.4 Validation and verification (Process proving)	\$	389,429.00	\$	-	\$	142,594.00
8.5 Training of operators Stage 1	\$	17,214.00	\$	19,912.00	\$	63,497.00
8.6 Training of operators Stage 2	\$	8,638.00	\$	19,912.00	\$	25,963.00
8.7 Training of operators Stage 3	\$	8,638.00	\$	19,912.00	\$	25,963.00
8.8 Operation and maintenance manuals	\$	29,613.00	\$	34,285.00	\$	137,263.00
8.9 Work-as-executed drawings	\$	25,722.00	\$	46,013.00	\$	137,260.00
8.10 Designers report	\$	1,887.00	\$	10,307.00	\$	88,938.00
8.11 Any items not listed above	\$	-	\$	-	\$	-
TOTAL FOR ITEM 8	\$	385,860	\$	4,194,978.00	\$	925,889.00
Total Lump Sum tendered for MILESTONE 1	\$	37,856,590	\$	36,893,700.00	\$	38,887,482.00
9 EXISTING PLANT DECOMMISSIONING (Milestone 2)						
9.1 Decommission existing plant	\$	58,538.00	\$	23,992.00	\$	30,942.00
TOTAL FOR ITEM 9	\$	459,810	\$	58,538.00	\$	23,992.00
10 DEMOLITION OF EXISTING PLANT (Milestone 2)						
10.1 Demolition of structures	\$	497,141.00	\$	269,275.00	\$	298,530.00
10.2 Removal/recycling of all material	\$	-	\$	283,221.00	\$	-
10.3 Levelling and landscaping works	\$	-	\$	208,851.00	\$	-
TOTAL FOR ITEM 10	\$	497,141.00	\$	552,496.00	\$	298,530.00
Total Lump Sum tendered for MILESTONE 2	\$	862,980	\$	555,439.00	\$	348,432.00
11 Constructive Sludge Storage Facility (Milestone 4)						
11.1 Dewatered sludge storage facility - Civil works	\$	1,704,239.00	\$	1,586,133.00	\$	1,357,286.00
11.2 Dewatered sludge storage facility - Mechanical works	\$	675,548.00	\$	534,890.00	\$	747,650.00
11.3 Dewatered sludge storage facility - Electrical and all other works	\$	262,974.00	\$	62,955.00	\$	-
TOTAL FOR ITEM 11	\$	2,642,761.00	\$	2,183,978.00	\$	2,104,936.00
Total Lump Sum tendered for MILESTONE 4	\$	1,659,009	\$	1,642,741.00	\$	1,353,988.00
12 POST COMPLETION - ONGOING SUPPORT PACKAGE						
12.1 2 Year ongoing support package	\$	336,022.00	\$	67,841.00	\$	226,782.00
TOTAL FOR ITEM 12	\$	118,000	\$	340,022.00	\$	67,841.00
TOTAL TENDERED FOR BALLINA WWTP	\$	46,466,480	\$	49,295,922.00	\$	41,956,958.00
Mandatory alternative tender (Nett)	\$	0	\$	0	\$	0
LENNOX HEAD RECYCLED WATER PLANT						
1 General (Milestone 2)						
1.1 All work and obligations under the Contract NOT INCLUDED ELSEWHERE in this Schedule	\$	-	\$	642,272.00	\$	552,891.00
1.2 Compliance with Environmental Management Plan, Site Specific Safety and Quality Assurance systems	\$	-	\$	31,705.00	\$	-
1.3 Site establishment	\$	172,895.00	\$	88,806.00	\$	29,986.00
1.4 Environmental protection works/soil/erosion control	\$	-	\$	8,545.00	\$	11,000.00
1.5 All temporary works necessary for construction of the wastewater treatment plant expansion and maintaining continued operation of the treatment plant throughout the construction period	\$	-	\$	21,125.00	\$	-
1.6 Site establishment	\$	5,979.00	\$	10,944.00	\$	8,900.00
TOTAL FOR ITEM 1	\$	178,874.00	\$	803,407.00	\$	583,777.00
2 CONCEPT DESIGN FINALISATION (Milestone 3)						
2.1 Provision of Concept Design for Lennox Head RWP	\$	74,129.00	\$	439,255.00	\$	178,400.00
TOTAL FOR ITEM 2	\$	55,000	\$	74,129.00	\$	439,255.00
3 DETAIL DESIGN (Milestone 2)						
3.1 Engagement of a Level 1, 2 and 3 service provider to design the power requirements for the WWTP site suitable for the upgrade works with allowance for future loads	\$	8,968.00	\$	-	\$	50,251.00
3.2 Civil and structural design	\$	320,471.00	\$	484,150.00	\$	222,200.00
3.3 Process design	\$	246,332.00	\$	-	\$	167,588.00
3.4 Design of mechanical items	\$	322,863.00	\$	-	\$	77,343.00
3.5 Electrical design, pre manufacturing activities and electrical submittals	\$	223,743.00	\$	104,436.00	\$	108,638.00
3.6 Telemetry design and documentation and submission	\$	119,878.00	\$	3,923.00	\$	-
3.7 Design review meetings	\$	56,202.00	\$	34,348.00	\$	34,682.00
3.8 HAZOP & CHAIR Workshop	\$	36,202.00	\$	4,398.00	\$	22,478.00
3.9 Any design items not listed above	\$	-	\$	-	\$	-
TOTAL FOR ITEM 3	\$	1,384,260.00	\$	621,857.00	\$	772,302.00
4 CONSTRUCTION - CIVIL ITEMS (Milestone 3)						
4.1 Removal of existing UV disinfection system	\$	-	\$	-	\$	48,972.00
4.2 Civil works for UV system for release flow and UV system for RWP	\$	468,496.00	\$	-	\$	298,348.00

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4.3 A2 necessary stopwatches, stoplogs, screens and penstocks for flow measurement/distribution including miscellaneous chambers and RTU	\$	-	\$	-	\$	-	\$	-
4.4 Civil, hydraulic and structural works for the building	\$	-	\$	373,823.00	\$	-	\$	36,200.00
4.5 Civil works for inlet station works	\$	464,935.00	\$	-	\$	-	\$	-
4.6 All pipework associated with the construction/modification of R/W of the Link of Corcoran	\$	73,154.00	\$	983,411.00	\$	-	\$	63,833.00
4.7 Roadworks including kerbing, curbsides and drainage	\$	-	\$	893,334.00	\$	-	\$	57,332.00
4.8 Site services and industrial standards	\$	-	\$	187,300.00	\$	-	\$	-
4.9 Chemical dosing facilities	\$	344,698.00	\$	291,313.00	\$	-	\$	413,780.00
4.10 Any items not listed above	\$	294,091.00	\$	1,317,287.00	\$	-	\$	1,525,621.00
TOTAL FOR ITEM 4:	\$	3,295,141	\$	3,846,154.00	\$	3,899,931.00	\$	3,479,488.00
5 CONSTRUCTION - MECHANICAL (Milestone 3)								
5.1 UV disinfection equipment and instrumentation including all pipework	\$	1,219,400.00	\$	477,760.00	\$	-	\$	57,335.00
5.2 Mechanical tertiary filters and all associated equipment	\$	1,084,480.00	\$	864,590.00	\$	-	\$	801,971.00
5.3 Pumps and Valving	\$	454,880.00	\$	178,875.00	\$	-	\$	253,389.00
5.4 Flow meters	\$	-	\$	1,535.00	\$	-	\$	34,752.00
5.5 Any items not listed above	\$	806,700.00	\$	195,380.00	\$	-	\$	374,200.00
TOTAL FOR ITEM 5:	\$	3,889,860	\$	2,845,234.00	\$	2,984,415.00	\$	2,483,896.00
6 CONSTRUCTION - ELECTRICAL (Milestone 3)								
6.1 Power Switch Level 1 Service Provider work	\$	7,011.00	\$	-	\$	-	\$	-
6.2 Power Switch Level 1 Service Provider work	\$	7,040.00	\$	-	\$	-	\$	-
6.3 Lining with Chantry Storage, protection of loss and management of the Level 1 and Level 3 Service Providers	\$	-	\$	-	\$	-	\$	-
6.4 Design, site manufacture, installation and electrical substation	\$	-	\$	12,881.00	\$	-	\$	-
6.5 Flood Chamber	\$	224,977.00	\$	174,491.00	\$	-	\$	359,240.00
6.6 Spare parts and Cabins	\$	7,244.00	\$	28,711.00	\$	-	\$	11,289.00
6.7 Manufacture of PTPs & Switchgear	\$	391,659.00	\$	44,680.00	\$	-	\$	91,352.00
6.8 Field termination	\$	262,534.00	\$	67,166.00	\$	-	\$	331,494.00
6.9 Issues of the existing SCADA Hardware as is	\$	-	\$	22,256.00	\$	-	\$	1,391.00
6.10 Addition to the existing SCADA including development and testing of Visual Displays	\$	139,782.00	\$	28,222.00	\$	-	\$	56,385.00
6.11 Building Services	\$	52,188.00	\$	19,217.00	\$	-	\$	32,873.00
6.12 Electrical hardware	\$	208,259.00	\$	413,285.00	\$	-	\$	339,476.00
6.13 Any items not listed above	\$	-	\$	-	\$	-	\$	-
TOTAL FOR ITEM 6:	\$	943,000	\$	1,308,636.00	\$	1,058,251.00	\$	1,119,434.00
7 TELEMETRY (Milestone 3)								
7.1 Modification of the existing RTU	\$	-	\$	7,344.00	\$	-	\$	1,800.00
7.2 Configuration of the existing Ballina Shire Council Regenerators to accommodate the additional RTU	\$	-	\$	387.00	\$	-	\$	-
7.3 Configuration of the existing DMF and the existing RME	\$	-	\$	1,620.00	\$	-	\$	-
7.4 Service toolkits	\$	-	\$	723.00	\$	-	\$	-
7.5 Revision of O&M Manuals	\$	-	\$	170.00	\$	-	\$	-
7.6 Any items not listed above	\$	-	\$	-	\$	-	\$	-
TOTAL FOR ITEM 7:	\$	21,800	\$	9,374.00	\$	1,800.00	\$	1,800.00
8 TESTING, COMMISSIONING AND PROCESS PROVING (Milestone 3)								
8.1 Testing including factory/works testing of equipment including electrical commissioning	\$	8,075.00	\$	7,962.00	\$	-	\$	18,470.00
8.2 Demonstration	\$	83,097.00	\$	8,580.00	\$	-	\$	26,110.00
8.3 Commissioning	\$	538,591.00	\$	63,894.00	\$	-	\$	84,236.00
8.4 Validation and verification (Process Proving)	\$	228,317.00	\$	-	\$	-	\$	74,000.00
8.5 Training of operators Sites 1	\$	14,222.00	\$	7,548.00	\$	-	\$	18,219.00
8.6 Training of operators Sites 2	\$	5,580.00	\$	7,548.00	\$	-	\$	3,176.00
8.7 Training of operators Sites 3	\$	9,580.00	\$	9,549.00	\$	-	\$	3,176.00
8.8 Commission and maintenance manuals	\$	12,789.00	\$	23,323.00	\$	-	\$	30,859.00
8.9 Work re-commissioning duration	\$	19,322.00	\$	11,200.00	\$	-	\$	58,595.00
8.10 Commission report	\$	2,381.00	\$	3,486.00	\$	-	\$	48,824.00
8.11 Any items not listed above	\$	-	\$	-	\$	-	\$	-
TOTAL FOR ITEM 8:	\$	151,688	\$	187,311.00	\$	143,871.00	\$	219,521.00
9 POST COMPLETION - ONGOING SUPPORT PACKAGE								
9.1 Two monthly report reviews	\$	182,208.00	\$	16,300.00	\$	-	\$	96,900.00
TOTAL FOR ITEM 9:	\$	182,208	\$	16,300.00	\$	16,300.00	\$	96,900.00
TOTAL TENDERED FOR LEMNOX HEAD R/W (Milestone 3)	\$	6,070,971	\$	6,637,912.00	\$	6,242,586.00	\$	6,891,802.00
TOTAL CONTRACT COST (EXCLUDING MANDATORY ALTERNATIVE TENDERS 1 to 4 and schedule of rate items L1 and L2)								
	\$	48,531,411	\$	49,697,834.00	\$	39,195,536.00	\$	44,694,664.00
Schedule of Rates								
All work and obligations under the Contract not included elsewhere in the schedule	\$	-	\$	-	\$	-	\$	44,344,864.00
Rate items	\$	-	\$	-	\$	-	\$	-
L1 Deposition and placement of gravel (1,000 cubic metres)	180,000	\$	176,400.00	\$	192,013.00	\$	147,600.00	
L2 Excavating and Removal of Sludge from the sludge lagoons (2,300 cubic metres)	880,000	\$	105,000.00	\$	69,075.00	\$	275,800.00	
Total of Schedule of Rates	1,060,000	\$	281,400.00	\$	261,088.00	\$	423,400.00	
TOTAL CONTRACT COST (including schedule of rate items L1 and L2 (EXCLUDING MANDATORY ALTERNATIVE TENDERS 1 to 4))	\$	49,591,411	\$	50,009,234.00	\$	39,546,644.00	\$	45,118,064.00
Mandatory Alternative Tender No. 1 (Penstock Solar Drive)								
TOTAL CONTRACT COST (INCL MANDATORY ALTERNATIVE TENDER 1)	\$	48,851,411	\$	49,339,234.00	\$	39,053,133.00	\$	44,919,960.00
Mandatory Alternative Tender No. 2 (penstock decommissioning and demolition of existing Ballina Wastewater Treatment Plant)								
TOTAL CONTRACT COST (INCL MANDATORY ALTERNATIVE TENDER 2)	\$	48,482,375.00	\$	49,267,296.00	\$	44,202,972.00	\$	44,202,972.00
Mandatory Alternative Tender No. 3 (penstock Lagoon Head R/W)								
TOTAL CONTRACT COST (INCL MANDATORY ALTERNATIVE TENDER 3)	\$	49,284,922.00	\$	49,389,906.00	\$	44,318,200.00	\$	44,318,200.00
Mandatory Alternative Tender No. 4 (penstock decommissioning and demolition of existing Ballina Wastewater Treatment Plant and Lemnox Head R/W)								

**Should equal Tender Form Total Below

Tender - Wastewater Treatment Plants Upgrade

TOTAL CONTRACT COST (INCL MANDATORY ALTERNATIVE TENDER 4)	\$	39,844,463.00	\$	41,041,470.00	\$	36,259,230.00	
TENDER FORM TOTAL	48,931,411	\$	49,037,834.00	\$	55,549,644.00	\$	48,807,464.00
Does not include \$0R							
NPV Life Cycle Running Costs of Ballina WWTP	\$	11,228,450.00	\$	10,419,385.00	\$	9,771,732.60	
NPV Life Cycle Running Costs of Lennox Head RWP	\$	2,276,593.00	\$	587,723.00	\$	806,104.50	
Total NPV for Both Plants	\$	13,505,043.00	\$	11,007,108.00	\$	10,577,837.10	

Tender - Wastewater Treatment Plants Upgrade

Attachment B

Additions and Deductions		All Inclusive of GST
Tendered Price		\$ 45,007,464.00
Extension of Tender Validity Date		\$ 24,200.00
Additions - Ballina		
	Amount	
1 Additional Drum Screen	\$ 92,950.00	
2 Scum Harvesting System	\$ 36,520.00	
3 Turbo Blowers	\$ 192,000.00	
4 Uninstalled 3rd RAS Pump	\$ 19,194.00	
5 Chlorination of on-site recycled water	\$ 16,570.00	
6 Septage receival flowmeter arrangement	\$ 13,660.00	
7 Penstocks in lieu of Stopboards	\$ 66,583.00	
8 Additional pipework for alteration of LOC on Ballina Heights mains	\$ 58,058.00	
9 Additional access stairs to top of MLR channel	\$ 21,580.00	
0 Fill bottom of storm return pump station with concrete	\$ 9,900.00	
	Agreed Additions - Ballina	\$ 527,015.00
Additions - Lennox Head		
1 Uninstalled Amiad screen	\$ 27,003.00	
2 Uninstalled stanby air scour blower	\$ 11,648.00	
3 Uninstalled standby backwash pump	\$ 9,900.00	
4 Uninstalled standby sodium hypochlorite dosing pump	\$ 1,682.00	
5 Uninstalled standby caustic dosing pump	\$ 1,682.00	
6 Uninstalled standby citric acid/Sodium Metabisulphite dosing pump	\$ 841.00	
	Agreed Additions - Lennox Head	\$ 52,766.00
	Total Additions	\$ 579,771.00
Deductions - Ballina		
1 Delete fixed membrane cranes	-\$ 92,400.00	
2 Recycled water pumps - Grundfos in lieu of Goulds	-\$ 49,500.00	
	Agreed Deductions - Ballina	-\$ 141,900.00
Deductions - Lennox Head		
1 Delete new low lift pumps	-\$ 32,220.00	
	Agreed Deductions - Lennox Head	-\$ 32,220.00
	Total Deductions	-\$ 174,120.00
	Revised Tendered Price	\$ 45,437,315.00

Figure 5-5 Plan of RWR Infrastructure in 2026 for Masterplan Preferred Option

