

NEW BUSINESS OF AN URGENT NATURE INTRODUCED BY DECISION OF MEETING

ONSLow TOWN CENTRE MASTERPLAN STREET LIGHTING UPGRADE

FILE REFERENCE:	ED03
AUTHOR'S NAME AND POSITION:	Sean Ripley Project Manager
NAME OF APPLICANT/RESPONDENT:	Not Applicable
DATE REPORT WRITTEN:	20 April 2017
DISCLOSURE OF FINANCIAL INTEREST:	The author has no financial interest in the proposal.
PREVIOUS MEETING REFERENCE:	Not Applicable

Summary

Under the Ashburton North State Development Agreement (Wheatstone), Chevron Australia P/L (CAPL) has committed to a capped contribution of \$3 million for *Town Master Plan and Improvements* in Onslow.

Shire Officers have been working with CAPL, the Department of State Development (DSD) and Horizon Power to progress the Town Master Plan Project, which includes the upgrading of Onslow street lighting. The current town lighting is below modern standards and so the opportunity has arisen to upgrade all lights (referred to as luminaries) to LED to capitalise on the mobilisation of resources currently undertaking installation of the Pilbara Underground Power Project (PUPP) in Onslow.

Consultants have undertaken a detailed design for upgrading the Town Centre lighting to current standards and Horizon Power have provided a cost estimate for the supply and install of LED Luminaries. The upgrade of Onslow street lighting, estimated supply and installation cost and proposed funding model from the State Development Agreement (SDA) Town Master Plan is presented for Council's consideration.

Background

In 2011, Chevron (CAPL) finalised a SDA for the Wheatstone Project, which included investment in social infrastructure improvements. \$3 million was allocated to the Onslow "Town Master Plan and Improvements" project in the Agreement.

Currently, street lighting throughout Onslow is comprised of a mixture of old-style MV (Mercury Vapour), HPS (High Pressure Sodium) and CFL (Compact Fluorescent Light) throughout most of the town but includes the installation of modern LED (Light Emitting Diode) in the new Barrarda Estate. The opportunity has arisen to upgrade all luminaries to LED to take advantage of the mobilisation of resources currently undertaking installation of the PUPP in Onslow.

The Onslow Town Master Plan Steering Committee, consisting of representatives from the Shire of Ashburton (Officers), DSD, CAPL and Horizon Power, has met regularly to progress this project. This has included engaging a consultant to undertake design for the electrical upgrades, investigate options and staging for completion of works and provide cost estimate and timeframes for the supply and install of the upgraded lighting.

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The proposed street lighting upgrades have been separated into three distinct scope areas;

1. LED luminaire supply only to the areas currently being upgraded to underground power as part of the PUPP, this encompasses the majority of the townsite.
2. Completely new street light poles, LED luminaires and upgrading of electrical network on First, Second & Third Avenues.
3. Retro fitting of new LED luminaire only to "Salt Hill" existing street light poles.

ATTACHMENT 18.1A

The upgraded lighting provides significant advantages for the town including;

- Improved vision for pedestrians and vehicles as light intensity is significantly better than older style 42W CFL and 125W HPS luminaires
- Decreases number of light failures
- Increased durability against vandalism
- Considerably lower energy requirements than standard street lighting, therefore lower operational costs and reduced tariff cost to the Shire
- Increased lifespan of the LED bulbs will result in savings on maintenance costs.

Economic benefits;

- Increased energy efficiency
- Decreased power bills
- Reduction in operation and maintenance costs, total long term maintenance costs could be reduced by more than 50%
- Current replacement 3-4 years vs LED life span of 15-20 years

Environmental benefits;

- Reduction in energy use and carbon emissions
- Reduction in mercury pollution
- Reduction in light pollution as well-designed LED application can address light trespass, glare and skyglow.

Safety benefits;

- Improved pedestrian safety
- Increased road safety, LEDs improve driver reaction times to hazards, thereby avoiding accidents

Community social benefits;

- Opportunity to lead by example by installing sustainable technology
- Enhance image of Council as environmentally friendly
- Increased urban desirability

The single biggest barrier to Local Government implementing LED Energy Efficient Lighting is funding due to the high upfront and capital costs. In this instance, 100% of the cost is proposed to be funded by the SDA Town Master Plan allocation of \$3 million.

Similar opportunistic projects have recently been undertaken the town of Port Hedland and City of Karratha with LED upgrades to street lighting.

The proposed upgrades to the street lighting has received in-principle funding support from the Onslow Social Infrastructure Working Group (DSD & CAPL) to the value of \$584,000.00.

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Comment

A preliminary budget for the project has been developed based on the preliminary design and cost estimate provided by Horizon Power. This budget has received in-principle support from the Social Infrastructure Working Group from the Wheatstone SDA Town Master Plan funding.

It should be noted that this cost estimate will be subject to review as the design and work scope is developed and further specifications are known, however it is indicative of the project funding requirements.

Onslow Town Centre -New Street light Poles and LED's to First Second & Third Avenues	\$378,000.00
PUPP- LED Upgrades (supply only to HP) for existing Street Light Infrastructure in Onslow	\$135,000.00
Salt Hill - LED Upgrades/Replacement to Existing Street Light Poles	\$71,000.00
Total Project Estimate	\$584,000.00

Consultation

Executive Manager – Strategic & Economic Development
Jaime Hanrahan -Project Team Lead - Community and Essential Infrastructure (Wheatstone)
Aaron Veale – Project Engineer – Community and Essential Infrastructure (Wheatstone)
Steve Dawson- Department State Development – Project officer

Statutory Environment

Local Government Act 1995 Regulation 6.8 (1) (a)
Local Government Act 1995 Regulation 3.57 (1)
FIN 12 Procurement Policy – Sole Supplier

Financial Implications

If approved, all project upfront expenditure would be recovered through the \$3 million SDA allocated to the Onslow “Town Master Plan and Improvements” project.

The ongoing energy tariff charged to the Shire for Onslow would be reduced by an estimated 27%, equating to \$28 daily, or saving over \$10,000 per annum.

ATTACHMENT 18.1B

Strategic Implications

Shire of Ashburton 10 Year Community Strategic Plan 2012-2022
Goal 02 – Enduring Partnerships
Objective 02 – Enduring Partnerships with Industry and Government
Goal 04 – Distinctive and Well Serviced Places
Objective 02 – Accessible and Safe Towns
Objective 03 – Well Planned Towns

Risk Management

Adoption of this item has been evaluated against the Shire of Ashburton’s Risk Management Policy CORP5 Risk Matrix. The perceived level of risk is considered to be “Minor” risk and will be managed by; 5-10% increase in time or cost or variation in scope or objective requiring manager’s approval.

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Policy Implications

FIN 12 Procurement Policy

ELM 10 Financial Sustainability Policy

Voting Requirement

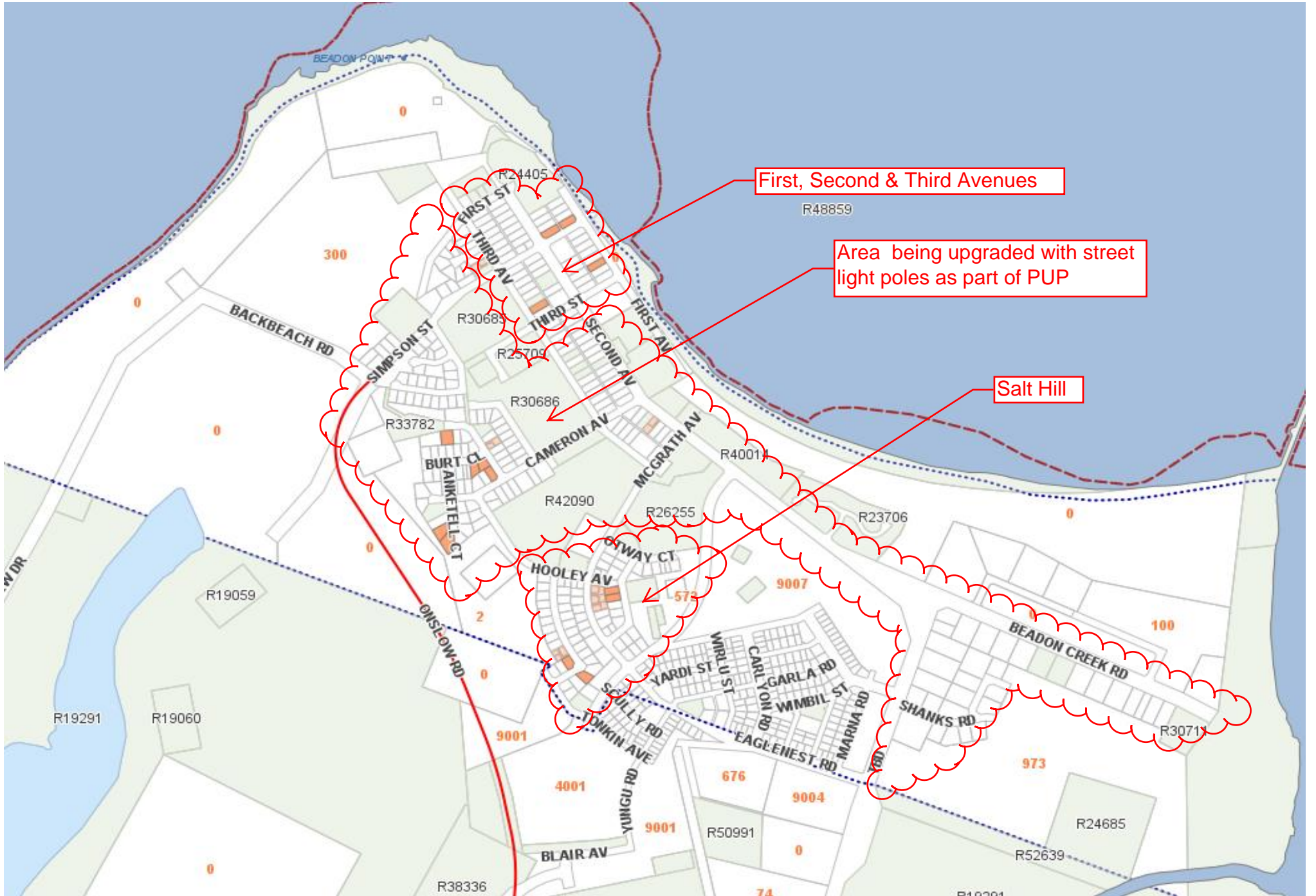
Absolute Majority Required

Officer's Recommendation

That Council approve project expenditure of \$584,000.00 for the 'Onslow Town Centre Street Light Upgrade Works' to be reimbursed from the agreed \$3 Million State Development Agreement funds allocated to the Onslow "Town Master Plan and Improvements" Project and amend the Budget as follows:

1. Create capital expenditure budget line 'NEW', entitled 'Onslow Town Master Plan Improvements' with a value of \$584,000 and;
2. Increase Income Budget Line 11301000 – Contributions & Reimbursements GEN from \$900,000 to \$1,484,000 and;
3. Noting this results in nil change in net current assets as at 30 June 2017 which in turn, retains the forecast surplus at year end 30 June 2017 of \$49,056.

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Manager: Anika Serer	Signature:



Onslow Streetlights	Daily energy consumption of existing street lighting infrastructure				
Tariff	Watt	Type	Number	Cost of unit per day	Total Cost per day
ZE02C	25	LED	128	0.30217	\$38.68
ZE15C	110	LED	7	0.544154	\$3.81
ZE56C	42	CFL	106	0.381516	\$40.44
ZE02C	80	MV	32	0.435266	\$13.93
ZE03C	125	MV	2	0.550077	\$1.10
ZE13C	150	HPS	2	0.563028	\$1.13
ZE15C	250	HPS	38	0.846063	\$32.15
		Total Streetlights	315	Total \$ per day	\$131.23

Onslow Streetlights	Daily energy consumption predicted with change to LED street light luminaires				
Tariff	Watt	Type	Number	Cost of unit per day	Total Cost per day
ZE02C	25	LED	280	0.30217	\$84.61
ZE15C	110	LED	35	0.544154	\$19.05
ZE56C	42	CFL		0.381516	\$0.00
ZE02C	80	MV		0.435266	\$0.00
ZE03C	125	MV		0.550077	\$0.00
ZE13C	150	HPS		0.563028	\$0.00
ZE15C	250	HPS		0.846063	\$0.00
		Total Streetlights	315	Total \$ per day	\$103.65