22 Oct 2015

Giordano Bianco
Environmental Project Engineer
Shoalhaven City Council
PO Box 42
NOWRA NSW 2541

Dear Giordano

Re: West Nowra resource Resource Recovery Park EIS and Master Plan– Capital Investment Value & Employment estimates

As requested we have prepared a preliminary capital cost estimate for the proposed RRP at West Nowra. This advice satisfies the general requirements of the Secretary's Environmental Assessment Requirements (SEARS) for the EIS for the aforementioned project.

This capital cost estimate has been prepared in accordance with GHD's estimating guidelines to a level of accuracy consistent with the current level of project design and definition. A number of assumptions have been developed to inform the basis of this estimate and these consider both design and specific site constraints. Given the stage of the project (concept design prepared and planning approval being sought), appropriate allowances for scope and pricing risk would need to be provisioned and identified. As such the capital cost estimate represents a conservative view on the likely total project costs.

We advise that the estimated capital investment value of Stages 1 and 2 of the project is **$67,000,000** (exc GST), current Sept 2015.

The definition of Capital Investment Value (CIV) adopted by GHD is in accordance with Clause 3d of the *Environmental Planning and Assessment Regulation 2000*. The CIV considers all costs necessary to establish and operate the project, including the design and construction of buildings, structures, associated infrastructure and fixed or mobile plant and equipment, other than the following:

a) amounts payable, or the cost of land dedicated of any other benefit provided, under a condition imposed under Division 6 of 6A of Part 4 of the Environmental Planning and Assessment Act or a planning agreement under that Division,

b) costs relating to any part of the development of the development project that is subject of a separate development consent or project approval,

c) land costs (including any costs of marketing and selling land)

d) GST (within the meaning of the New tax System (goods and Services Tax Act 1999 of the Commonwealth

A summary breakdown of the CIV is provided in the attachment (Table 1). A detailed cost estimate has been prepared in support of the aforementioned advice and can be made available upon request.

Construction job estimates are based on a direct multiplier of 6 jobs being supported for each $1M spent. This estimate of employment support by the proposal has been calculated using factors derived from the 2004-05-I-O table scheduled within the 'Guidelines of estimating employment supported by actions, programs and policies of the NSW Government' document published by NSW Treasury.

It is therefore expected, based on the published multipliers that a construction project value of approximately $67,000,000 would generate direct and indirect employment for approximately 400 jobs (on a full time equivalent basis).

We confirm that the aforementioned values and information provided in support of this advice is accurate at the date of preparation.

If you have any queries or require further information please do not hesitate to contact the undersigned directly.

Sincerely
GHD Pty Ltd

David Lawson (AAIQS) BBldg
Principal Quantity Surveyor
Infrastructure Advisory

Attachment: Table 1 Summary Order of Cost Estimate

Table 1 Summary order of cost estimate

Item	% of total estimate	Basic estimate ($M)
Site preparation	4.57%	$3.06
Civil works	3.54%	$2.37
Building works	29.27%	$19.61
Utilities	3.36%	$2.25
Plant and equipment*	12.81%	$8.58
Miscellaneous	0.07%	$0.05
Indirect costs	12.69%	$8.5
Other costs	7.79%	$5.22
Contingencies	25.91%	$17.36
TOTAL project estimate	**100%**	**$67.00**

*Noting that since the facility has not been designed yet, equipment requirements are only defined at a very high level