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Anglo Coal Australia Pty Ltd

Report for Dawson Valley Pipeline Cost Estimate

Cost Estimate Basis

16334-G-CE-001_0

October 2006

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Appendices

1. Executive Summary

By using the cost breakdown from the 1996 Works program for the Dawson Valley facilities, and applying multipliers to account for subsequent movement in material and construction costs, coupled with some Vendor pricing and GHD's recent pipeline project design and cost estimating experience, the capital cost estimate for the Dawson Pipeline and Metering facility has been determined as [redacted] km) in Q3 2006 Australian dollars.

This estimate has an accuracy of ±25%. Various assumptions on the design of the current facilities have had to be made, because of the limited design information that has been provided. These assumptions have been based on similar projects that GHD has been involved with. Estimates of increases in the cost of labour have also been undertaken.

2. Introduction

The Dawson Valley Pipeline (DVP) and Facilities were designed and installed in 1996, incorporating compression and dehydration at Dawson and Moura facilities and metering at the inlet to the Wallumbilla to Gladstone State Gas Pipeline.

Anglo Coal (Dawson) Limited (Anglo) now own and operate these facilities as a participant in a joint venture, and require a current cost estimate for construction and operation of the Dawson Valley pipeline (excluding compression and dehydration facilities).

GHD are assisting Anglo Coal (Dawson) Limited with the preparation of a current Capital Cost estimate for constructing this pipeline, by providing an equivalent cost breakdown as presented in the 1996 Works Program, and which reflects current pricing, to an accuracy of ±25%.

Anglo Coal (Dawson) Limited will be responsible for obtaining the cost estimate for Operations and Maintenance.

3. Pipeline & Metering Overview

3.1 Input Documents

The list below in section 3.1.1 itemises what information has been obtained, which along with some reasonable assumptions and DVP operations information, are considered to be sufficient for preparing an indicative estimate of the pipeline construction cost.

3.1.1 1996 Works Program

The following information is available from the 1996 Works Program:

1. *Monthly Report, September 1996*

   This report was produced by CMPS&F when the pipeline was at 96% completion and contains the following information:

   - Project Summary by Key Discipline, including cost control
   - Photographs
   - Detailed Project Schedule
   - Detailed Cost Report, including commitments to date and forecast at completion, which is separated into Pipeline (including metering) and Facilities

   It should be noted that although costs have been allocated separately against "Pipeline" and "Facilities", there will be some costs that have been allocated against facilities, where a proportion should be applied to the pipeline cost estimate. For example, civil works, valve procurement and project telemetry system installation/setup. The method for determining how costs should be allocated for obtaining an equivalent cost estimate in current prices, is discussed in section 4.2 of this report.

2. *Procurement Status Report*

   Dated May 1997, which contains the following information:

   - Register of Invitations to Quote
   - Register of Contracts / Purchase Orders

3.1.2 Other Information Available

- GHD recently undertook a Dawson Seamgas Optimisation Study for Anglo Coal. The information extracted from this optimisation study is primarily about the process component for the whole system, rather than the physical facilities associated with the Dawson Valley Pipeline alone. However, a current gathering system Process Flow Diagram was obtained, which shows the diameter and approximate length of the pipeline, as well as the location of the gathering and compression facilities and design maximum gas flow (in TJ/day) of each stream. This information is presented in Appendix B of this report.
- As part of the abovementioned Optimisation Study for Anglo Coal, a Closeout Report by CMPS&F had been obtained, as well as a photo album of current facilities (although mainly concentrating on the compressor station). This closeout report noted some key project data (although limited), lessons learnt, key documents and financial summaries.

3.2 Pipeline Summary

Based on the information available, the following has been determined about the Pipeline:

Table 1 Existing Pipeline Summary

Item	Description	Basis / Clarification
Pipeline Diameter	DN150 (OD 168.3mm)	Closeout Report S2.3
Pipeline Length	47 km	Different documents slightly contradict this length, based on whether it is inclusive of the laterals to Moura and Dawson, however this figure is considered to be suitable for the accuracy level of this cost estimate.
Pipeline Grade	API 5L X65	1996 P&IDs
Facilities	Moura Comp and Dehyd Station ("Central Facilities") Dawson Comp and Dehyd Station Metering Station at inlet to the PGT Pipeline	Closeout Report S1 and Current Gathering System PFD
Pipeline Coating	HDPE "Yellow Jacket"	Pipeline Construction Photography (consistent with typical pipelines installed in 1996)
Pipeline Line Pressure	9.5 MPa	Current Gathering System PFD

4. Cost Estimate

4.1 Cost Basis and Method

As discussed in Section 3, although there is limited information available regarding the actual facilities at Dawson, there is sufficient information, coupled with GHD's experience of current typical pipeline design standards and corresponding pipeline construction costs, to determine an equivalent pipeline construction cost estimate, within ±25% accuracy.

The basis for determining the capital cost estimate is the cost breakdown from the 1996 Work Program. An equivalent cost breakdown, to reflect 2006 prices, has been determined by applying a scaling factor to various components, as applicable, based on current experience.

This original cost breakdown can be seen in Appendix A of this report.

It is common industry practice to present capital costs as a function of pipeline diameter (inches) and length (km). The results of the scaling up of the costs can then be compared (in $/in-km) to GHD's previous project cost experience, as an indicator of accuracy of the scaled up cost estimate.

As the line pipe material costs and the pipeline construction costs are the two controlling factors in an overall capital cost estimate, budget Vendor pricing was obtained for line pipe from Orrcon and for pipe coating from Bredero Shaw, and experienced construction cost estimators (both within GHD and external) were also consulted.

4.2 Cost Estimate Key Assumptions

Assumptions and specific line item costs, as applied to the 2006 cost estimate breakdown, are explained in Table 2. A cost estimate reference number is noted against each item, for ease of reference in the cost estimate spreadsheet in Appendix A.

Table 2 Capital Cost Estimate Assumptions

Component	Basis / Assumption	Cost Est. Ref. No.
General Assumption .	Central Facilities are referred to in works program 1996. This has been assumed to incorporate the Moura facilities, hence costs against this item have not been included in the estimate	11
Pressure Class	Operations have advised that the pipeline is Class 900 (MAOP of 14.6 MPa). There is a pressure cut at the meter station and the meter station will be Class 600 (MAOP of 10.2 MPa).	
Valves - Quantities	The 1996 Work Program cost breakdown did not incorporate a separate line item for valves at the pig traps nor metering facilities (only Pipe & Fittings and Safety Relief Valves). It was assumed that 20% of the valve purchases for the overall project would apply to the pipeline and metering facilities. A CL600, DN150 valve cost is in the order of $7k, so it is reasonable to assume equivalent of 8 large valves plus miso smaller valves for	12, 13, 43

Component	Basis / Assumption	Cost Est. Ref. No.
	vessel isolation, pig trap operation and metering. This further supports the estimate for valves.	
Civil Works	It is presumed that the Civil works costs include concrete costs, labour, and mobilisation, as well as 24 km of road construction (as mentioned in the closeout report) for the entire project, including gathering facilities. It has therefore been assumed that 20% of the total civil works costs are applied to the pipeline. The general labour scaling factor was then used - refer section 4.2.3.	23
Telemetry / Power Supply	The labour costs for the Power Supply and Telemetry would mainly have been incurred as a result of the gathering, compression and dehydration facilities. A small percentage of the total power supply and telemetry costs would have been incurred by the pipeline and metering. However, if this item were to be looked at in complete isolation from the other facilities, there would be additional set up costs involved. It was assumed that 20% of the costs of this line item would apply to pipeline and metering. An average of the I&E scaling factor and the labour scaling factor was used (ie 1.5 - refer section 4.2.3) for this item, to account for materials and labour.	24, 27, 79
Line pipe grade	The Closeout Report indicates that the pipeline grade was API 5L X56 (which is not a common grade by today's standards), whereas the P&IDs indicate that the grade is X65. This is a more common pipe grade for an equivalent pipeline built today in CL 900. Refer table note 1.	40
Line pipe wall thickness	Wall thickness is taken as being the nearest value to 5 mm that is readily obtainable, to cover constructability, corrosion allowance and pressure design. This wall thickness would correspond to a pressure design factor of less than 0.6 (maximum of 0.72 is the standard maximum pressure design factor to AS 2885 1997). Through Vendor consultation, Orrcon have advised that the nearest standard thickness for this diameter and grade is 4.8 mm. As this thickness is more than necessary for a design factor of 0.72 (approx 0.57), this wall thickness is an acceptable assumption.	40
Line pipe pricing	Refer also to section 4.2.1 It should be noted that the budget pricing obtained from Orrcon of $48.75/m includes coating. In order to translate this cost to incorporate the line pipe alone, the coating costs from the coating Vendor have been subtracted from the total $48.75/m cost. This budget also includes transportation to central Queensland.	40
Other line pipe materials purchasing	Refer section 4.2.3	41 - 45
Line pipe coating	An HDPE coating (ie "yellow jacket") of 1 mm thickness has been assumed. Not only is this coating common for this diameter pipe, but yellow jacket can be inferred from the construction photographs viewed from CMPS&F information. 1 mm is the minimum thickness required in the HDPE coating standard, AS1518, and is commonly	46

Component	Basis / Assumption	Cost Est. Ref. No.
	selected by design engineers and pipeline owners	
ROW / Permits costs	The costs for this line item have been incorporated in the pipeline construction cost item – refer section 4.2.2 – and therefore have been excluded from this cost breakdown.	47 – 51
SCADA & Metering costs	I&E items in general have not varied in cost, due to technology improvements resulting in better and smaller devices. Refer section 4.2.3 for scaling factor.	53 – 65
Engineering labour	Project experience has overridden the labour scaling factor of 2.0, as it is common, for current pipeline projects, for the total Engineering labour costs to be within 3.5 – 5% of the total capital cost. This 1996 price is currently 7% of the total capital cost. This cost has therefore not had a scaling factor applied.	67
Construction Labour & Contractor expenses	The costs for this line item have been incorporated in the pipeline construction cost item – refer section 4.2.2 – and therefore have been excluded from this cost breakdown.	68 – 71 82 – 83
Construction Labour	For pipeline construction costs – refer section 4.2.2	75 – 77
Construction Labour	Refer section 4.2.3 for scaling factor	78 – 79

Note 1: At the time that the Vendor pricing was first conducted, a pipeline grade of X42 and wall thickness of 4.8 mm was used, as the pipeline was initially assumed as being a pressure class of CL600. Hence the Vendor information for the line pipe pricing has been revised to X65 and 4.8 mm to cover the CL900 pipeline.

The major factors associated with the resulting 2006 cost estimate, as referred to in the above table, are summarised below.

4.2.1 Vendor pricing

Two Vendors were approached for budget pricing for line pipe and linepipe coating as coated linepipe typically makes up a large proportion of the overall capital cost and is an item that has gone through a significant price increase, due to steel and HDPE price escalation.

The two Vendors were Orrcon, for the line pipe procurement and transportation, and Bredero Shaw for the coating. The budget pricing is presented in Appendix C of this report. Although this total price has been given per metre, this data can be simply presented as follows in terms of a steel cost / tonne:

Line pipe weight, kg / m: $m = (D - t)0.02466t = 19.3kg/m$

Coating cost, per m: $\$/m = 419{,}710/47000 = 9$ or $16.9\$/m^2$

Freight @ $300 / tonne: $M = 910 tonnes; \therefore \$/m = \frac{910 * 300}{47000} = 6$

Line pipe cost / tonne: $48 - 9 - 6 = 33\$/m = 1551\$/t$

Although Vendors were not consulted directly for obtaining instrument and electrical device pricing for the pipeline and meter station, prices for equivalent items were looked at from previous projects in 2005. More specifically, these items were Gas Chromatograph, Metering Systems and Moisture Analyser. No significant price difference between 1996 and 2005 was found. This is discussed in more detail in section4.2.3.

4.2.2 Pipeline Construction Costs

In addition to the line pipe procurement costs, the costs for pipeline construction is the second most significant element of the capital cost. This can be difficult to estimate in detail without construction drawings and specifications, and the direct input by an experienced construction contractor is essential. Construction costs can vary greatly based on the pipeline length, constructability (e.g. rock quantities and other impediments) and the general risks associated with construction (e.g. weather).

Through consulting GHD engineers and external estimators, a figure of between $16,000 and $ 18,000 per inch per kilometre, dependent on the quantities of rock and other constructability issues, has been adopted. As this pipeline is located in a rural area, a relatively small amount of rock and relatively easy constructability has been assumed. This assumption has been confirmed by DVP Operations. In addition, the pipeline location is relatively close to Brisbane and hence mobilisation and demobilisation costs would be relatively small. This results in an estimated construction cost of $16,000 / in / km being used.

This cost includes items such as survey, clear & grade, stringing, trenching, laying, backfill and reinstatement, as well as miscellaneous construction costs like accommodation, mobilisation and management. This cost also incorporates a standard number of simple road and water crossings, inclusive of one single line rail crossing as advised by DVP Operations, however does not allow for any major crossings that would require Horizontal Directional Drilling or other costly construction methods.

Excluded in this estimate are any additional costs that a contractor may allow for construction risk.

4.2.3 Scaling factors

Based on the line pipe budget price, a scaling factor of 1.5 was determined for material costs. This is the factor that relates the original line pipe costs and the current budget prices received for this study. This scaling factor was used for all mechanical & piping material costs.

The increase for the coating price was significantly less than that of the steel (at a factor of 1.2 instead of 1.5), however this is the only item where this factor of increase is expected, and therefore it has not been applied to any other line items.

The Instrument and Electrical (I&E) materials could have had a similar scaling factor applied for similar reasons above, however, due to the significant technology improvements over the past 10 years this 1.5 times cost increase is generally not the case, as devices are significantly smaller and simpler to manufacture. For this reason, no scaling factor has been used for solely I&E components (note: pressure relief valves have been counted for cost purposes as a mechanical component with 1.5 scaling factor). This is also supported by the indicative pricing of similar items from previous projects in 2005, as mentioned in section 4.2.1.

The only remaining scaling factor to be applied is the construction labour. Although again, contractors were not contacted specifically for this project, a scaling factor of 2.0 was used to represent labour

increases in the past 10 years, for the mechanical, civil and instrument and electrical works. This factor was obtained by consulting experienced engineers (Instrument and Electrical) within GHD, as well as by reviewing known labour costs for similar project works in 2005 (for both Civil and Instrument and Electrical).

4.3 Cost Estimate Result

The results of the 2006 construction cost estimate are presented in the spreadsheet in Appendix A of this report. These results were based on the assumptions / clarifications that are detailed in section 4.2 of this report.

The resulting capital cost has been estimated as /This estimate incorporates the pipeline costs (for design and construction), as well as the associated metering facilities.

Some of the key driving factors behind the significant increase in costs over the past 10 years are noted below:

- Steel costs – as presented earlier in this report, current costs are in the order of $1500 / tonne (previous project experience of 2005-6 prices is $1460/tonne, although it varies slightly with grade and quantity of order) when compared to previous costs that have been as low as $840 / tonne, which leads to a significant factor.
- Labour rates – estimated increase up to a factor of 2 times.
- Fuel increases – fuel was as low as 50c/litre in 1996. When compared to current price of $1.25 /litre and taking an estimated usage of 15litres/m (and assuming similar rate of fuel usage in 1996), gives a fuel cost increase alone from $350k (1996) to $880k (2006).
- Plant rate increases – an estimated 25% increase

It should also be noted that there can be additional risks that affect the costs for construction, such as the following:

- Volatile labour rates
- Currency risk – ie plant/machinery supplies are typically American
- Fuel cost escalation

4.3.1 GHD Past Project Comparison

It is considered standard practice for pipeline projects for their costs to be represented as a function of diameter and length. As noted above, the capital cost estimate for the DVP is

The DVP can be compared to a recent major project that GHD was closely involved with in 2004. This pipeline incorporated a compression and dehydration facility, of significant cost, and the pipeline was also many more kilometres in length. In total, this pipeline and compressor station had a CAPEX cost of $34k/in-km, however the costs for the pipeline and metering component of this project were estimated in the order of $25k/in-km. This pipeline project was designed and constructed prior to the recent sharp increase in steel price (in 2005). It would be expected that if this pipeline had incorporated the steel increase alone, costs would be in the order of $28-$29k/in-km.

Although the cost estimate for the DVP is approximately than the estimated current equivalent cost of this recent project, the DVP is of significantly less length in kilometres. It is common for

smaller length pipelines (ie < 100 km) to have a larger capital cost/in-km, due to the significant upfront/set-up costs that are associated with a pipeline project. Therefore this estimate of is considered to be reasonable, when compared to recent projects.

Appendix A

Cost Estimate

Cost Breakdown Spreadsheet

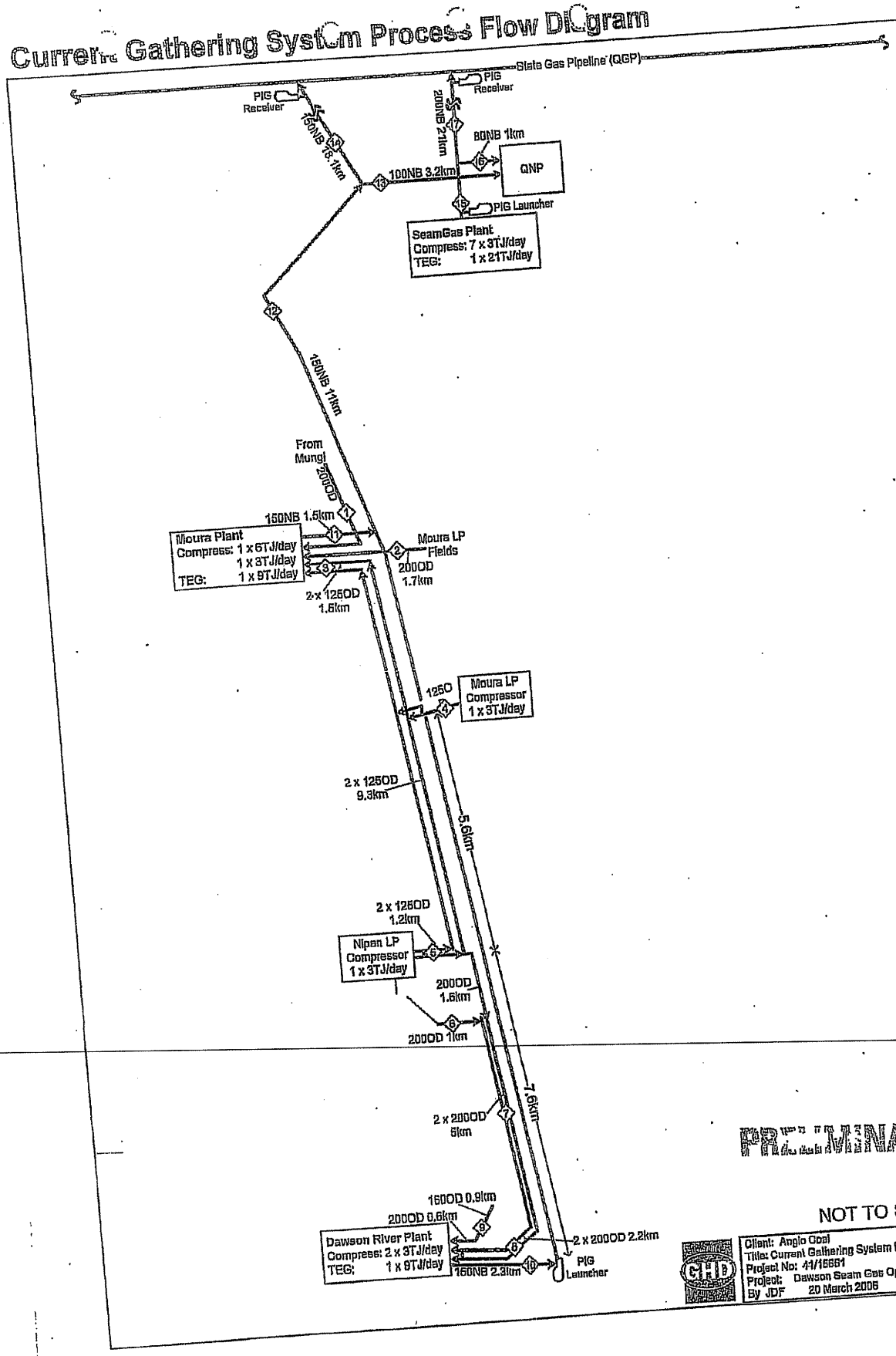
Appendix B

Current Gathering System

Process Flow Diagram – Obtained from Dawson Seamgas Optimisation Study

P&ID – Obtained from Dawson Seamgas Optimisation Study

Current Gathering System Process Flow Diagram



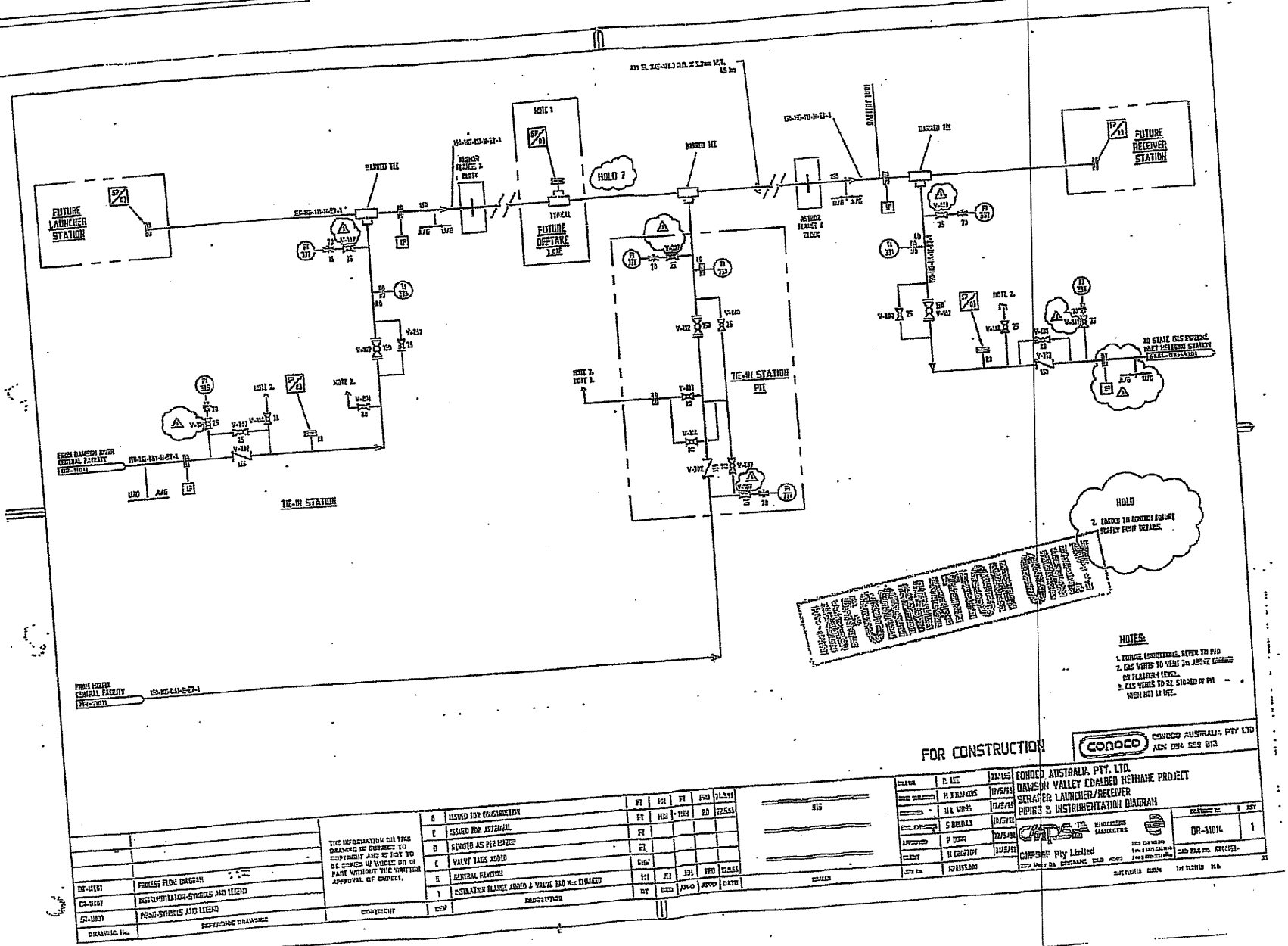
Current Gathering System Process Flow Diagram

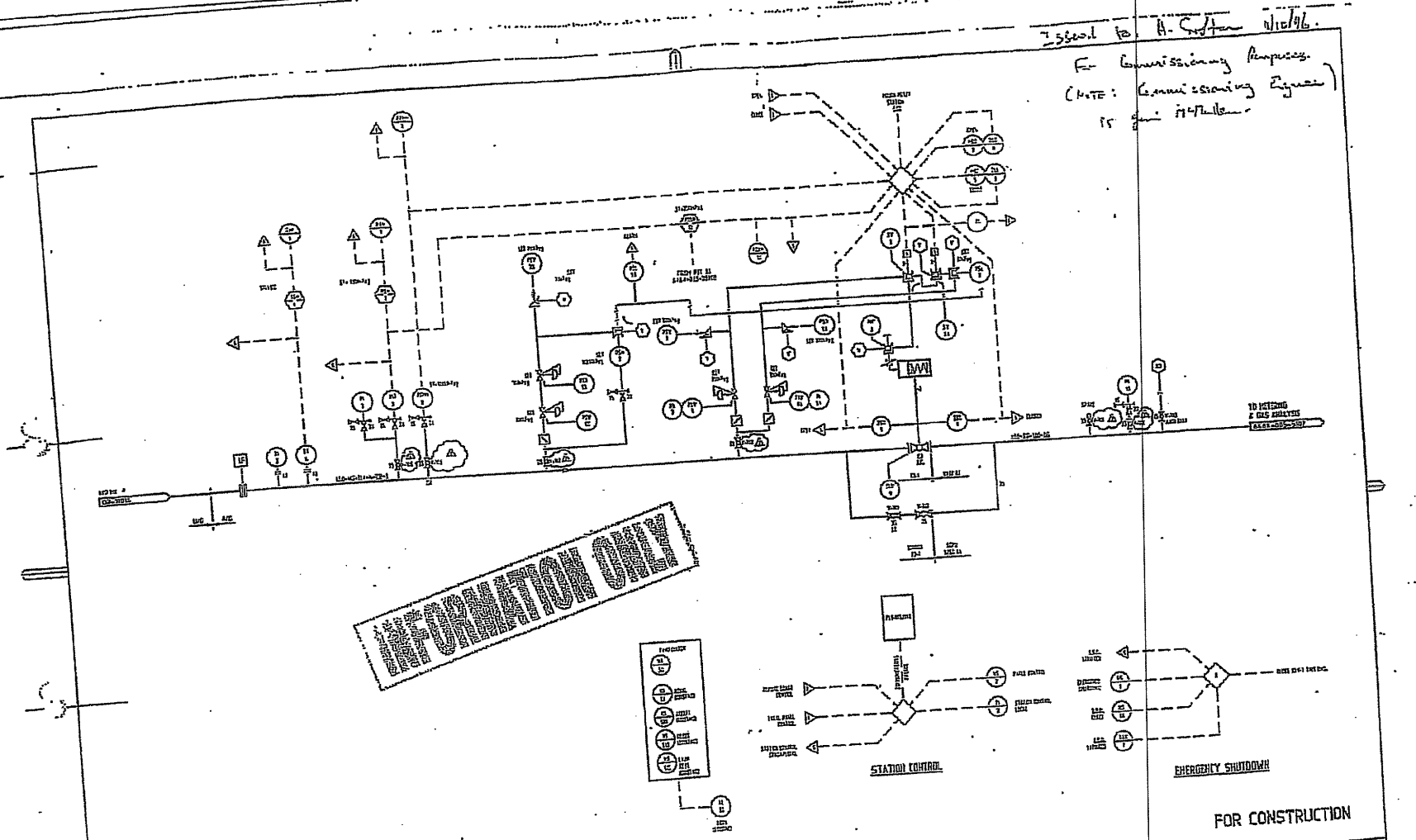
Line		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Pressure	kPag	242	242	241	398	396	282	244	240	243	9591	9565	9500	8776	9500	9630	9608	9500
Temperature	degC	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Flowrate	kg/h	769	769	1538	769	769	1538	1538	1538	1538	3076	3076	6152	6152	0	13842	1538	12304
	MMSCFD	0.96	0.96	1.91	0.96	0.96	1.91	1.91	1.91	1.91	3.82	3.82	7.64	7.64	0.00	17.20	1.91	15.28
	TJ/day	1	1	2	1	1	2	2	2	2	4	4	8	8	0	18	2	16
Density	kg/m3	2.15	2.15	2.14	3.13	3.11	2.27	2.16	2.13	2.15	67.02	66.82	66.35	61.01	66.35	67.30	67.14	66.35
Water Content	mg/std.m3	16395	16395	16382	11286	11339	15447	16242	16430	16288	65	65	65	65	66	65	65	65
Composition (dry basis)																		
CH4	mol%	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%
N2	mol%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%
CO2	mol%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%

PRELIMINARY

PRELIMINARY

Client:	Anglo Coal
Title:	Current Gathering System Process Flow Diagram
Project No.:	41/15661
Project:	Dawson Seam Gas Optimisation
By: JDF	20 March 2006 Rev. B


FUTURE LAUNCHER STATION
FUTURE RECEIVER STATION
HOLD 7
TYPICAL FUTURE OFFTAKE
TIE-IN STATION
TIE-IN STATION PIT
HOLD
NOTES:
FOR CONSTRUCTION
CONOCO AUSTRALIA PTY. LTD.
DAWSON VALLEY COALBED METHANE PROJECT
SCRAPER LAUNCHER/RECEIVER
PIPING & INSTRUMENTATION DIAGRAM
CIPSEF Pty Limited
DR-11010
1


STATION CONTROL
EMERGENCY SHUTDOWN
FOR CONSTRUCTION

Appendix C

Vendor Correspondence

- Orrcon
- Bredero Shaw

"Ben Glasson" <b.glasson@orrcon.com.au>
10/10/2006 10:07 AM

To <Jennifer.Connor@ghd.com.au>
cc
bcc
Subject RE: FW: line pipe pricing enquiry

Jennifer,

The rate would increase to ~$48.75/m for
168.3 x 4.8 API 5L X65 ERW.

Please do not hesitate to contact either Rob or myself if we can provide any additional assistance.

Regards,
Ben Glasson

-----Original Message-----
From: Jennifer.Connor@ghd.com.au [mailto:Jennifer.Connor@ghd.com.au]
Sent: Monday, 9 October 2006 12:19 PM
To: Robert Campbell
Cc: Ben Glasson
Subject: Re: FW: line pipe pricing enquiry

Hi Rob,
I refer to your indicative pricing provided below.

Would this pricing vary much for a grade of X60 (or even X65)? I have since been advised that this pipeline is CL900 (it was previously taken as CL600), and hence to keep the similar approx 5 mm wall thickness, a higher grade is required.
Are you able to advise an equivalent price for this pipeline, using X60 instead of X42, and again using the nearest common wall thickness to 5 mm?

Regards,

Jennifer Connor

Pipeline Engineer
Oil, Gas & Energy

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T 61 7 3316 3553 | M 0418 153 677 | F 61 7 3316 3333 |
jennifer_connor@ghd.com.au
201 Charlotte Street Brisbane QLD 4000 Australia | http://www.ghd.com.au

"Robert Campbell"
<r.campbell@orrco

"Robert Campbell" <r.campbell@orrcon.com.au>
25/09/2006 03:06 PM

To <jennifer.connor@ghd.com.au>
cc "Ben Glasson" <b.glasson@orrcon.com.au>, "Joe Scoffi" <j.scoffi@orrcon.com.au>
bcc
Subject FW: line pipe pricing enquiry

History: This message has been replied to.

Jennifer,

Further to your enquiry for linepipe pricing we advise the following budget pricing for your reference:

~ 47,000 metres 168.3mm OD x 4.8mm WT API 5L Gr X42 in triple random max 18 metre lengths c/w 1.0mm high density polyethylene coating in accordance with AS1518-2002.

PRICE: $45.50 per metre

Price includes for delivery to Central Queensland.

We trust that this is to your satisfaction, however should you require any further clarification please do not hesitate to call.

Best regards
Rob Campbell
Manager - Pipelines

Orrcon Operations Pty Ltd ABN 92 094 103 090
947 Nudgee Rd Banyo QLD 4014 AUSTRALIA PO Box 295
Salisbury QLD 4107 AUSTRALIA
T 07 36218404 F 07 36218444 M 0438 784123 E
r.campbell@orrcon.com.au
W www.orrcon.com.au Check out our Orrcon Racing Website www.orrconracing.com.au

-----Original Message-----
From: Ben Glasson
Sent: Monday, 25 September 2006 1:05 PM
To: Robert Campbell
Subject: FW: line pipe pricing enquiry

-----Original Message-----
From: Jennifer.Connor@ghd.com.au [mailto:Jennifer.Connor@ghd.com.au]
Sent: Monday, September 25, 2006 11:59 AM

To: Ben Glasson
Subject: Fw: line pipe pricing enquiry

Hi Ben,
Just in reference to my query below, are you able to include approximate freight cost of the line pipe to central queensland?

Thanks.

Jennifer Connor

Pipeline Engineer
Oil, Gas & Energy

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T 61 7 3316 3553 | M 0418 153 677 | F 61 7 3316 3333 |
jennifer_connor@ghd.com.au
201 Charlotte Street Brisbane QLD 4000 Australia | http://www.ghd.com.au

----- Forwarded by Jennifer Connor/Brisbane/GHD/AU on 25/09/2006 11:58 AM -----

From: Jennifer Connor/Brisbane/GHD/AU on 25/09/2006 10:36:16 AM

Repository: 4116334 Dawson Valley Pipeline Cost Estimate

To: b.glasson@orrcon.com.au
cc:
Subject: line pipe pricing enquiry

Hi Ben,
I left a message on your phone this morning, just enquiring about a cost estimate for line pipe.

I'm hoping to obtain a rough cost estimate (ie in the order of 20% accuracy) for 47 km of ERW line pipe, grade X42 and DN150. I am unsure exactly of the wall thickness, but would be assuming in the order of 5 mm (or nearest standard wall thickness to this value).

Our client has asked us to obtain a cost estimate for re-constructing one of their existing pipelines in central queensland, hence the approximate nature of this query.

If you would be able to get back to me within the next few days, that would be great. Let me know if you require further information.

regards,

Jennifer Connor

Pipeline Engineer
Oil, Gas & Energy

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T 61 7 3316 3553 | M 0418 153 677 | F 61 7 3316 3333 |
jennifer_connor@ghd.com.au
201 Charlotte Street Brisbane QLD 4000.Australia | http://www.ghd.com.au

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Defence | Property & Buildings | Environment

This e-mail has been scanned for viruses by MessageLabs.

PMayes@BrederoShaw.ShawCor.com
29/09/2006 03:45 PM

To Jennifer.Connor@ghd.com.au
cc DBennett@BrederoShaw.ShawCor.com, DElliss@BrederoShaw.ShawCor.com
bcc
Subject Fw: Yellow Jacket Pricing

Jennifer,

Please find attached our Budget Quotation for Yellow Jacket coating, as requested in your email dated 22 Sept.

(See attached file: 06A09-747.pdf)(See attached file: TC01 Terms & Conditions of Sale.pdf)

Please keep in touch regarding project progression to enable firming up of prices.

Best regards
Peter

Peter Mayes
Technical Services Manager

BREDERO SHAW AUSTRALIA Pty Ltd
www.brederoshaw.com

Tel: +61 2 4261 3455
Fax: +61 2 4261 4571
Direct +61 2 4255 4236
E-mail: pmayes@brederoshaw.shawcor.com
---
* Lot 22 West Dapto Rd, Kembla Grange NSW 2530
* PO Box 180 Unanderra NSW 2526

----- Forwarded by Dean Bennett/BrederoShaw/ShawCor on 29/09/2006 03:02 AM -----

Jennifer.Connor@ghd.com.au
22/09/2006 03:05 PM

To NPerrott@BrederoShaw.ShawCor.com
cc
Subject Yellow Jacket Pricing

Hi Nick,

Are you able to help me with some very rough pricing (ie 20% accuracy) for coating line pipe with Yellow Jacket?

This is to enable us to estimate the cost of reconstructing an existing pipeline in central queensland. The pipeline is DN150 and is 47 km. Do you need any more information to be able to provide this at all? I am unsure what the existing coating thickness is, but would be presuming around 1 mm.

Thanks for your help,
regards,
Jennifer

Jennifer Connor

Pipeline Engineer
Oil, Gas & Energy

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T 61 7 3316 3553 | M 0418 153 677 | F 61 7 3316 3333 |
jennifer_connor@ghd.com.au
201 Charlotte Street Brisbane QLD 4000 Australia | http://www.ghd.com.au

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06A09-747.pdf

TC01 Terms & Conditions of Sale.pdf

BREDERO SHAW

Date: Friday, 29 September 2006

Customer Name: GHD
Customer: Jennifer Connor
Project No: 06A09
Reference No: 747

Budget Pricing

Item Number	Pipe Diameter (mm)	Wall Thickness (mm)	Pipe Length (m)	Quantity (m)	Coating Type	Coating Thickness (um)	Unit Price	Total Price
	168.3	6.4	18	47,000	Yellow Jacket	1,000	$8.93	$419,710.00

Note:

Prices are exclusive of GST.
Terms & Conditions in accordance with those attached.
Order to be carried out in one continuous coating run.
Bare pipe to be supplied free of mill varnish.
Coating shall be in accordance with Bredero Shaws standard practices unless stated otherwise.
Prices quoted are in Australian Dollars.
Payment terms are Net 30 Days.
Where applicable, sleeve repairs may be applied to coating ends unless otherwise specified.

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Document Status

Rev No.	Author	Reviewer		Approved for Issue		
		Name	Signature	Name	Signature	Date
A	J Connor	(Draft for Client Review)				4/10/06
0	J Connor	P Dahm		M. SARAH		11/10/06