AusNet Transmission Group Pty Ltd

Transmission Revenue Review 2017-2022

XA09 – RTS Redevelopment Project: Business Case (Public)

Submitted: 30 October 2015

Business Case Application for Approval - REVISION 1

XA09 Richmond Terminal Station (RTS) redevelopment project

CAP #:	T0435
Project Initiator:	[C-I-C]
Contact No:	[C-I-C]
Initiating Dept / Div:	NSD
Prepared By ;	[C-I-C]
Date of Submission:	March 2012
Target Project Start Date:	March 2010
Target Project Completion Date:	December 2016

SP AusNet
A member of Singapore Power Group

1. RECOMMENDATION

In its meeting No. 02/10 on 26 March 2010 the Board passed a resolution to proceed with redevelopment of Richmond Terminal Station **(RTS)** with an estimated capital expenditure of $137.3 million.

Acknowledging the planning and design criteria established for the Brunswick Terminal Station (BTS) augmentation project a detailed re-assessment of the RTS redevelopment project was undertaken. Focussing in particular on the urban design and environmental matters under the provisions of City of Yarra's planning scheme a design **(Concept Design)** for RTS re-development project was developed. This Concept Design has been confirmed through community consultation, assessment against planning scheme requirements and extensive engineering studies.

The Concept Design is significantly different to the initial design for this project. This project has been re-estimated and benchmarked to reflect current market conditions.

Approval is sought to:

- continue with redevelopment of Richmond Terminal Station (RTS), and
- increase the approved capital outlay from $137.3 million to $219.6 million.

2. FINANCIAL SUMMARY

2.1. *PREVIOUSLY APPROVED*

Program / Project Expenditure Forecasts	2010 / 11	2011 / 12	2012 / 13	2013 / 14	2014 / 15	2015 / 16	2016 / 17	Total
Program / Project Direct Expenditure	10 533	28 427	34 385	17 462	25 906	7,229		123,943
Program / Project Total Expenditure	11,408	30,891	37,995	20,678	28,812	7,562		137,347
Revenue	1,510	3,529	6,907	9,766	12,354	14,519	14 047	681,428
NPV								5,481
Payback Period (Discounted)								
Corporate WACC (Post Tax Nominal)								[C-I-C]

2.2. *REVISED SUMMARY*

Program / Project Expenditure Forecasts	2010 / 11	2011 / 12	2012 / 13	2013 / 14	2014 / 15	2015 / 16	2016 / 17	Total
Program / Project Direct Expenditure	2 277	2,747	36,844	55,520	43,999	35,392	1,451	178,229
Program / Project Total Expenditure	2,544	3,925	42,581	65,855	56,284	46,234	2 264	219,686
Revenue	1,119	1,411	3,516	8,451	12,959	16,998	19,081	890,813
NPV								7,147
Payback Period (Discounted)								36.8
Corporate WACC (Post Tax Nominal)								[C-I-C]

2.3. *VARIANCE TO PREVIOUS APPROVAL*

Program / Project Expenditure Forecasts	2010 / 11	2011 / 12	2012 / 13	2013 / 14	2014 / 15	2015 / 16	2016 / 17	Total
Program / Project Direct Expenditure	(8,255)	(25,680)	2,459	38 058	18,092	28,162	1,451	54,287
Program / Project Total Expenditure	(8,865)	(26,966)	4,585	45,177	27,471	38,672	2,264	82,339
Revenue	(391)	(2,117)	(3,391)	(1,316)	605	2,478	5,034	209,385
NPV								1 666

3. ENDORSEMENTS

Manager PMO	Network Owner	Finance Manager
Kerry Karafotias	Andrew Maticka	Mark Campbell
Date:	Date:	Date:

4. APPROVALS

[C-I-C]

[C-I-C]

Group General Manager, Networks Strategy and Development	Chief Financial Officer	Managing Director
Charles Popple	Geoff Nicholson	Nino Ficca
Date: 29 May 2012	Date:	Date:

Project Initiator	Director, Regulation and Network Strategy
Herman De Beer	Alistair Parker
Date:	Date:

5. REASON FOR REVISION

Revision Raised by:	[C-I-C]
Current Status of this Project:	Delivery
Trigger for Change:	Scope
Effects of Change on:	
Strategic Alignment	No Change
Benefit	Community benefits are greatly increased as the proposed design would better integrate with the surrounding.
Scope	The proposed design of the project is significantly different from the initial design. The proposed design has also been influenced by extensive engineering studies undertaken to address site subsidence and soil contamination. The project scope is further defined in document "Richmond Terminal Station Rebuild – Scope of Works, Rev 2.1 dated 15 February 2012.
Work to be undertaken	The proposed design will require installation of gas insulated switchgear housed inside architecturally treated buildings, increased buffer zones and landscaping.
Cost	Estimated cost increase from initial approval is $82.25 million. Major contributing factors and associated cost increase are: - $16.07 million to meet more stringent planning and environmental requirements which have led to design changes, - $28.67 million to accommodate outcome of extensive engineering studies to inform the Concept Design and re estimation of project cost, - $20.28 million to account for price escalation, - $1.72 million to account for introduction of carbon tax on usage of SF_6 insulating gas, and - $15.51 million to account for increase in overhead and financing cost.
Risks	- Significantly reduced OH&S risks for civil works. - Reduced constructability risk as extensive engineering studies have been undertaken to inform the proposed design.
Impact Assessment File Name:	Not applicable.
Initial Approved Business Case File Name:	

6. WORK TO BE UNDERTAKEN/DESCRIPTION OF WORK REQUIRED TO COMPLETE THE CHANGE

Initial:

The initial project scope broadly includes following:

- replacement of 150 MVA 220/66 kV transformers with standard 225 MVA transformers,
- replacement of 22 kV switchyard with GIS equipment,
- replacement of 220 kV switchyard with GIS equipment,
- replacement of 66 kV switchyard with AIS/GIS equipment,
- replacement of 66 kV protection and control, and
- replacement of 22 kV protection and control.

Change:

Below are the changes to the initial scope of the project:

- replacement of the 150 MVA 220/66 kV transformers with high impedance transformers,
- replacement of 66 kV switchyard with GIS equipment, and
- larger 220 kV and 66 kV buildings to accommodate the GIS equipment.

Strategic Procurement	Initial: The 220/66 kV transformers and GIS equipment are long lead items that require consideration when planning for delivery of this project.		
	Change: No change.		
Program Timing	Initial: Project completion in financial year 2015/16.		
	Change: Project completion in financial year 2016/17.		
Composition of projects within the program	Initial: Not applicable		
	Change: No change.		
Other Associated Projects	**Project Number/Title**	**Approved (Yes/No)**	**Cost**
	ZB12	Yes	$17.26 million

7. OPTIONS CONSIDERED

Following options have been considered:

- Option 1: Redevelopment with GIS and 225 MVA 220/66 kV Transformers
- Option 2: Redevelopment with 66 kV AIS/GIS and 225 MVA transformers
- Option 3: Redevelopment with GIS and 150 MVA 220/66 kV Transformers
- Option 4: Staged Asset Renewal
- Option 5: Do Nothing

7.1. REDEVELOPMENT WITH GIS AND 225 MVA 220/66 KV TRANSFORMERS - PREFERRED OPTION

This redevelopment option offers all of the construction efficiency and reliability advantages inherent with a compact indoor GIS redevelopment with circuit outages only required for cutover purposes. It minimises the supply risks during the redevelopment project and takes into account the importance of the CBD load supplied from RTS, and the concurrence of redevelopment projects at BTS and WMTS.

Community consultation and specialist studies undertaken to inform the Concept Design of RTS redevelopment highlighted the need to provide a design which is characterised by the land use and spatial forms of the local area. In February 2012 City of Yarra made a decision to grant a planning permit to the Concept Design presented in Attachment 1. Further extensive engineering studies have been undertaken to address site subsidence, constructability and management of contaminants present in RTS. Outcome of these studies has been included in the Concept Design of the project.

The Concept Design is significantly different to the initial design for this project. This project has been re-estimated and benchmarked to reflect current market conditions. Estimated cost increase of $82.25 million is presented in section 5 of this paper.

This option provides for efficient future augmentation, allows for the ultimate plan for RTS and is economically justified by 2016 based on the community benefits delivered with more reliable transformers and 220 kV, 66 kV and 22 kV switchgear.

Sensitivity studies for discount rate and load growth scenarios confirmed that this is a robust, and the most economic credible option.

This option also models establishment of an additional transformer at RTS in 2027/28 to meet transformation capacity needs.

7.2. OPTION 2: REDEVELOPMENT WITH 66 KV AIS/GIS AND 225 MVA TRANSFORMERS

In March 2010 this design option was approved by the Board.

In June 2010 a similar hybrid air-insulated-switchgear / gas-insulated-switchgear design for the BTS augmentation project was not supported by Moreland City Council and local community as:

- the proposal for the BTS project did not conform with local or state government planning requirements; and
- the design compromised environmental values; and was visually intrusive.

Further under the Planning and Environmental Act 1987 Moreland City Council had referred the planning permit application for BTS augmentation project to City of Yarra as a referral authority. City of Yarra had formally objected to the proposed design as it considered the design had detrimental impact on the visual amenity of the Merri Creek environment.

The site context and spatial form around RTS is similar to BTS.

Acknowledging the planning decision of this design option for BTS and considering the similarity of site context of both RTS and BTS, hybrid design option for RTS will not satisfy the provision of state and City of Yarra's planning scheme, nor would it be supported by the community and thus could not be implemented.

This hybrid AIS/GIS design option is no longer the preferred option.

7.3. OPTION 3: REDEVELOPMENT WITH GIS AND 150 MVA 220/66 KV TRANSFORMERS

This option is similar to the preferred option except it employs 150 MVA 220/66 kV transformers instead of 225 MVA transformers. This option is not recommended for following reasons:

- the PV cost is higher than Option 1 due to the need to augment the 220/66 kV transformers more often to provide the same transformation capacity,
- the restricted RTS site limits the ultimate transformation capacity possible with this option resulting in the establishment of a new site in 2027/28 for subsequent capacity increases.
- GIS transformer switching cost at 220 kV and 66 kV are higher than AIS transformer switching cost, and
- it provides a less secure switching arrangement in the ultimate stage when five or six 150 MVA transformers are required compared with four units in Option 1.

The increase in project costs for the preferred option will also impact this option and thus the relative ranking has not changed – this option remains the second lowest PV cost.

7.4. OPTION 4: STAGED ASSET RENEWAL

This option proposes replacement of assets as a series of discrete projects undertaken over a number of years, targeting the replacement of the highest risk assets. This option is no longer a credible option for following reasons:

- the age and condition of the assets at RTS suggest that little deferment of capital expenditure would be possible,
- it will not meet the state and local planning scheme requirements for the site and will not be approved by the Council, and
- the uncertainty regarding the timing of the completion of the BTS augmentation project to allow load to be transferred from RTS to BTS.

Apart from the technical and planning approval aspects, this option also has a higher PV cost as shown in the economic analysis undertaken for the RTS Redevelopment Business Case. New information on the load demand forecast for RTS and the revised schedule for the BTS completion shows that the community cost of this option has increased and the ranking of third position, in the original submission, remains unchanged.

This option also models establishment of a new site in 2027/28 to meet transformation capacity needs.

*7.5. DO NOTHING *MANDATORY*

The PV cost of this option has increased commensurate with the increase in the latest load demand forecast for RTS over the load demand forecast used in the 2009/10 assessments. A high level assessment of the incremental benefits provided by more reliable transformers shows that capital expenditure of up to $240 M (real 2012) is economic in 2016 to avoid the probability weighted risk of supply interruptions to customers supplied from RTS 66 kV circuits.

Further this option is not consistent with SP AusNet's obligations to meet network performance and reliability standards under the National Electricity Rules **(NER)** and the accepted Electricity Safety Management Scheme and is used for economic comparison only.

NPV analysis of the options in the initial paper is presented below:

Options	$'000	PV Capital Cost	PV Opex Costs	PV Community Benefits / Costs	PV Proceeds from sales	Total PV Cost	NPV including Regulatory Return
Do Nothing		($59,853)	($9,127)	($85,267)	-	($154,247)	$1,736
225 MVA Transformers		($112,611)	-	-	-	($112,611)	$5,481
150 MVA Transformers		($115,365)	-	-	-	($115,365)	$5,611
Staged Asset Renewal		($117,087)	($727)	($2,416)	-	($120,230)	$5,856
-		-	-	-	-	-	$3,593

All figures are in $000's unless otherwise stated.
(nominal and discounted)

Changed NPV analyses of the options are:

Economic Analysis of Options ($'000s)	PV Capital Cost	PV Opex Costs	PV Community Benefits	PV Proceeds From Sales	Total PV Cost	NPV including Reg Return
Do Nothing	(86,267)	(9,359)	(88,347)	-	(183,974)	5,659
225 MVA Transformers	(142,276)	(3,072)	-	-	(145,348)	7,147
150 MVA Transformers	(143,677)	(3,072)	-	-	(146,749)	7,908
Staged Asset Renewal	(145,901)	(10,118)	(2,515)	-	(158,534)	7,608
	-	-	-	-	-	-

All figures are in $000's unless otherwise stated.
(nominal and discounted)

8. BENEFITS

8.1. *INITIAL BENEFITS*

Business Driver	Strengthen	Regulated Network Reliability and Resilience	Strong
Benefit & Measure	o By replacing these high risk assets, that are in poor condition, network reliability and availability will be enhanced		

Business Driver	Strengthen	Compliance	Strong
Benefit & Measure	o The proposed redevelopment project will ensure continued compliance with the network performance and reliability requirements defined in the NER		

Business Driver	Transform	Customer and Community	Strong
Benefit & Measure	o Customer service is improved by reducing the risk of their supply being adversely impacted.		

Business Driver	Transform	Sustainability	Strong
Benefit & Measure	• The new transformer will have lower losses than the existing transformers, allowing power to be transmitted more efficiently. o Removal of health and safety risk associated with older plant, particularly the 22 kV switch board.		

Business Driver	Modernise	New Technologies	Low
Benefit & Measure	o The new 220 kV and 66 kV GIS will reduce the terminal station's footprint.		

8.2. NEW BENEFITS

Business Driver	Transform	Community	Strong
Benefit & Measure	o Complete migration of the 66 kV switchyard inside a building will greatly increase ccommunity benefits as the proposed design would better integrate with the surrounding.		

9. RISK OF REVISION NOT BEING APPROVED

9.1. INITIAL

Business Driver	Strengthen	Regulated Network Reliability and Resilience	Strong
Identified Risk of NOT being approved	o The community cost due to the increased frequency and duration of service disruptions will exceed the cost of funding improvements in the reliability of electricity supplies from RTS.		

Business Driver	Strengthen	Compliance	Strong
Benefit & Measure	o Non-compliance with the network performance and reliability requirements stated in the National Electricity Rules.		

Business Driver	Strengthen	Safety and Environment	Strong
Benefit & Measure	o Non compliance with the accepted Electricity Safety Management Scheme. o Increased risk of transformer failure		

9.2. NEW

There is no change since initial approval.

10. DELIVERY OF PROJECT RISKS (KNOWN)

Risk	What could occur
Health Environment and safety	SP AusNet's standard health and safety procedures will be followed for the project including development and implementation of site specific construction, environment and safety plan. Assessment of noise emissions and EMF associated with the Concept Design has been undertaken and both are well below the prescribed levels.
Construction	The redevelopment of RTS is considered a complex project and allowances have been made to manage the design and construction risk of the recommended lowest project risk option. The complexity of the project will be taken into account at all stages of the project and accredited external service providers will be used to carry out design and construction activities. In-house engineering services staff will review these services using

	established processes to monitor work quality, compliance, performance and risk. A detailed Construction and Environment Management Plan (CEMP) will be developed to plan and manage construction activates. The CEMP will also outline the process of information sharing with the community and City of Yarra.
Network outage	The construction sequence and work scope for each element of the project has been developed to minimise the requirement for sustained line outages and hence the risk exposure which they present to the overall program.

11. FINANCIAL IMPACTS

11.1. EXPEND CAT /WORK CODE:

CG1R.

11.2. ECONOMIC EVALUATION OPTIONS

For the full Financial Evaluation of the options considered and supporting financial details refer to the attached RTS NPV Model.

TABLE: Financial Analysis of Preferred Option

Financial Forecasts ($'000s)	2010 / 11	2011 / 12	2012 / 13	2013 / 14	2014 / 15	2015 / 16	2016 / 17	Total
Revenue	[C-I-C]							
Expenses								
Capital								
Savings								
Working Capital								
Residual Revenue								
Tax								
Net Cash Flow (excludes financing)								
NOPAT (EVA, excludes interest)								
Capital Charge								
EBITDA								
EBIT								
NPAT								
Earnings / (Loss) per Share cents								[C-I-C]
NPV								
WACC (Post Tax Nominal)								

All figures are in $000's unless otherwise stated. (nominal)

TABLE: Economic Analysis of Options

Economic Analysis of Options ($'000s)	PV Capital Cost	PV Opex Costs	PV Community Benefits	PV Proceeds From Sales	Total PV Cost	NPV including Req Return
Do Nothing	(86,267)	(9,359)	(88,347)	-	(183,974)	**5,659**
225 MVA Transformers	(142,276)	(3,072)	-	-	(145,348)	**7,147**
150 MVA Transformers	(143,677)	(3,072)	-	-	(146,749)	**7,908**
Staged Asset Renewal	(145,901)	(10,118)	(2,515)	-	(158,534)	**7,608**
	-	-	-	-	-	-

All figures are in $000's unless otherwise stated.
(nominal and discounted)

TABLE: Project Expenditure Forecasts

Project Expenditure Forecasts ($'000s)	2010 / 11	2011 / 12	2012 / 13	2013 / 14	2014 / 15	2015 / 16	2016 / 17	Total
Design	[C-I-C]							
Internal Labour								
Materials								
Plant & Equipment								
Contracts								
Meter Costs								
Other								
Project Direct Expenditure (P50)	2,277	2,747	36,844	55,520	43,999	35,392	1,451	178,229
Delivery Risk Adjustment =(P90-P50)	[C-I-C]							
Project Direct Expenditure plus risk (P90)								
Overheads								
Finance Charges								
Operating Costs / (Savings)								
WDV (Written Down Value) of Assets to be retired								
Total Estimated Expenditure for Approval	2,544	3,925	42,581	65,855	56,284	46,234	2,264	219,686
NPV								[C-I-C]
Corporate WACC (Post Tax Nominal)								

TABLE: Contribution of Projects to Key Business Metrics

Contribution of Projects to Key Business Metrics	2010 / 11	2011 / 12	2012 / 13	2013 / 14	2014 / 15	Post 2014 / 15
Opex (Costs) / Savings	-	$103	$211	$540	$887	$12,796
OH&S	-	-	-	-	-	-
System Capacity	-	-	-	-	$18,524	$185,081
Environmental Risk	-	-	-	-	-	-
Regulatory Compliance	-	-	-	-	-	-
Bushfire Mitigation	-	-	-	-	-	-
Corporate Image	-	-	-	-	-	-
Reliability	-	-	-	-	-	-
Incentive Revenue	-	-	-	-	-	-
Asset Failure Risk						
Gas Mains Renewal						

All figures are in $000's unless otherwise stated.
(nominal)

TABLE: Capitalised Finance Charges (Interest During Construction)

Financial Year ($'000s)		Month	Project Direct Expenditure				Net Monthly Expenditure	Cummulative WIP Balance	Transferred into RAB (Sarcoded)	Customer Contribution Receipted into Trust	Finance Charges	Total Finance Charges	Cumulative Finance Charges
			Project Direct Expenditure $Real	Project Direct Expenditure $Nominal	Overheads	Totals							
2010 / 2011		Apr-10	-	-	-		-	-	-		-		-
		May-10	1	1	0		1	1	-		-		-
For A to P:		Jun-10	745	745	52		797	804	-		5		5
Direct	2,277	Jul-10	114	114	8		122	932	-		6		12
Overheads	159	Aug-10	156	156	11		167	1,106	-		6		18
Finance Charges	107	Sep-10	154	154	11		165	1,280	-		9		28
	2,544	Oct-10	49	49	3		52	1,341	-		9		37
Error checks		Nov-10	298	298	21		319	1,671	-		11		49
($Real)		Dec-10	82	82	6		87	1,771	-		12		61
Direct	-	Jan-11	98	98	7		105	1,889	-		13		74
Overheads	-	Feb-11	419	419	29		448	2,354	-		16		90
		Mar-11	162	162	11	2,437	173	2,544	-		17	107	107
2011 / 2012		Apr-11	228	234	16		250	2,811	-		19		126
		May-11	307	315	22		337	3,172	-		22		148
For A to P:		Jun-11	218	224	15		240	3,435	-		23		171
Direct	2,747	Jul-11	165	169	12		181	3,641	-		25		196
Overheads	192	Aug-11	131	134	9		144	3,811	-		26		222
Finance Charges	354	Sep-11	243	249	17		267	4,105	-		28		250
	3,293	Oct-11	366	376	26		402	4,539	-		31		281
Error checks		Nov-11	212	218	15		233	4,805	-		33		314
($Real)		Dec-11	78	80	6		85	4,924	-		34		348
Direct	-	Jan-12	201	207	14		221	5,180	-		35		383
Overheads	-	Feb-12	374	384	27		411	5,629	-		38		422
		Mar-12	153	157	11	2,939	168	5,837	-		40	354	462
2012 / 2013		Apr-12	1,241	1,307	91		1,398	7,265	-		50		511
		May-12	1,113	1,172	82		1,254	8,598	-		59		570
For A to P:		Jun-12	1,133	1,193	84		1,277	9,942	-		68		638
Direct	30,844	Jul-12	3,540	3,727	261		3,988	14,026	-		96		733
Overheads	2,579	Aug-12	5,504	5,869	412		6,301	20,466	-		140		873
Finance Charges	2,211	Sep-12	6,624	6,973	488		7,461	28,119	-		192		1,065
	41,634	Oct-12	2,477	2,607	182		2,790	31,121	-		213		1,277
Error checks		Nov-12	2,523	2,656	186		2,842	34,197	-		234		1,511
($Real)		Dec-12	2,499	2,631	184		2,815	37,266	-		255		1,765
Direct	-	Jan-13	3,163	3,330	233		3,563	41,110	-		281		2,046
Overheads	-	Feb-13	2,492	2,624	184		2,807	44,219	-		302		2,348
		Mar-13	2,599	2,736	192	39,423	2,928	47,471	-		324	2,211	2,672
2013 / 2014		Apr-13	3,381	3,651	256		3,907	51,731	-		353		3,026
		May-13	12,309	13,294	931		14,225	66,409	-		453		3,479
For A to P:		Jun-13	3,398	3,670	257		3,927	70,820	-		484		3,962
Direct	55,520	Jul-13	3,398	3,670	257		3,927	75,261	-		514		4,477
Overheads	3,686	Aug-13	5,339	5,766	404		6,170	51,786	30,000		355		4,832
Finance Charges	5,501	Sep-13	4,198	4,534	317		4,851	57,026			389		5,221
	64,908	Oct-13	3,752	4,053	284		4,336	61,784			422		5,643
Error checks		Nov-13	2,988	3,205	224		3,430	65,663			449		6,091
($Real)		Dec-13	3,235	3,494	245		3,738	69,875			477		6,569
Direct	-	Jan-14	3,235	3,494	245		3,738	74,123			506		7,075
Overheads	-	Feb-14	3,264	3,525	247		3,772	75,431			536		7,611
		Mar-14	2,920	3,164	221	59,407	3,385	82,379			563	5,501	8,174
2014 / 2015		Apr-14	3,346	3,706	260		3,968	53,715	30,000		368		8,542
		May-14	6,546	7,254	508		7,762	61,899			423		8,965
For A to P:		Jun-14	3,396	3,764	263		4,027	66,360			453		9,418
Direct	43,999	Jul-14	3,396	3,764	263		4,027	70,891			484		9,902
Overheads	3,080	Aug-14	2,896	3,209	225		3,434	74,830			511		10,413
Finance Charges	5,539	Sep-14	2,896	3,209	225		3,434	78,609			536		10,952
	52,617	Oct-14	5,396	5,980	419		6,398	85,793			586		11,536
Error checks		Nov-14	2,396	2,655	186		2,841	59,244			610		12,147
($Real)		Dec-14	2,396	2,655	186		2,841	52,445	40,000		360		12,507
Direct	-	Jan-15	2,346	2,600	182		2,782	55,607			380		12,887
Overheads	-	Feb-15	2,346	2,600	182		2,782	58,791			402		13,289
		Mar-15	2,346	2,600	182	47,079	2,782	61,996			423	5,539	13,712
2015 / 2016		Apr-15	2,886	3,281	230		3,511	65,957			451		14,163
		May-15	2,386	2,713	190		2,902	69,333			474		14,638
For A to P:		Jun-15	2,386	2,713	190		2,902	72,733			497		15,133
Direct	35,391	Jul-15	4,736	5,384	377		5,761	79,034			540		15,673
Overheads	2,477	Aug-15	2,336	2,656	186		2,842	82,438			563		16,236
Finance Charges	4,628	Sep-15	2,336	2,656	186		2,842	85,866			587		16,823
	42,496	Oct-15	2,336	2,656	186		2,842	26,908	60,000		200		17,023
Error checks		Nov-15	2,336	2,656	186		2,842	31,968			218		17,241
($Real)		Dec-15	2,302	2,617	183		2,800	35,007			239		17,480
Direct	-	Jan-16	3,327	3,783	265		4,047	39,323			269		17,749
Overheads	-	Feb-16	1,986	2,258	158		2,416	42,028			287		18,036
		Mar-16	1,778	2,021	141	37,869	2,163	44,492			304	4,628	18,340
2016 / 2017		Apr-16	1,244	1,451	102		1,552	(0)	46,047		2		18,342
		May-16	-	-	-		-	(0)	-		-		-
For A to P:		Jun-16	-	-	-		-	(0)	-		-		-
Direct	1,451	Jul-16	-	-	-		-	(0)	-		-		-
Overheads	102	Aug-16	-	-	-		-	(0)	-		-		-
Finance Charges	2	Sep-16	-	-	-		-	(0)	-		-		-
	1,554	Oct-16	-	-	-		-	(0)	-		-		-
Error checks		Nov-16	-	-	-		-	(0)	-		-		-
($Real)		Dec-16	-	-	-		-	(0)	-		-		-
Direct	-	Jan-17	-	-	-		-	(0)	-		-		-
Overheads	-	Feb-17	-	-	-		-	(0)	-		-		-
		Mar-17	-	-	-	1,552	-	(0)	-		-	2	-
Total						190,705					18,342	18,342	
Cash flow amount should equal the total directs as shown on page 1 of the A to P							Total Including Finance Charges				209,047		

11.3. BUDGET PROVISION

There is an allowance within the company initiated transmission budget to fund this project in the financial years from 2010/11 to 2016/17.

11.4. REVENUE

NER Schedule 6A.2.1 "Establishment of opening regulatory asset base for a regulatory control period" Clause (f) (1) requires that:

*"The previous value of the regulatory asset base **must be increased by the amount of all capital expenditure incurred** during the previous control period, including any capital expenditure determined for that period under clause 6A.8.2(e)(1)(i) in relation to contingent projects where the revenue determination has been amended by the AER in accordance with clause 6A.8.2(h) (**regardless of whether such capital expenditure is above or below the forecast capital expenditure for the period** that is adopted for the purposes of the transmission determination (if any) for that period)." **(Emphasis added)***

Furthermore, the AER recognises that it does not approve individual projects. For example, in the January 2008 SP AusNet Revenue Determination:

"... the AER reiterates that the total forecast capex approved is an allowance only, and is not tied to a fixed, project specific, work program. Within the approved allowance, SP AusNet retains the discretion regarding the allocation and expenditure of capex, and is expected to be responsive to changing conditions in order to meet the prescribed capex objectives."

On this basis it is reasonable to assume that all costs incurred in this project will be included in the Regulated Asset Base **(RAB)** and generate revenue accordingly.

11.5. FINANCIAL RISKS

This project will be completed in the next regulatory control period and will be subject to approval of the capital expenditure allowance set at the next Transmission Revenue Reset (TRR) by the AER. Noting that the AER does not approve individual capital projects and SP AusNet has the ability to prioritise works within the period, it is unlikely SP AusNet would be required to fund a capital shortfall due to redevelopment of RTS. Any shortfall in funding would at worst be limited to the financing cost incurred until the end of the period, as the National Electricity Rules (NER) require that "the value of the regulatory asset base must be increased by the amount of all capital expenditure incurred regardless of whether such capital expenditure is above or below the forecast capital expenditure for the period".

The AER will be most likely to approve the associated capital expenditure allowance if an approved business case is available at the next regulatory review, funding is committed and construction is underway.

The new assets will roll into the RAB at the end of the next regulatory period at their depreciated constructed value.

The financial risks are being treated as follows:

- AEMO (the Australian Energy Market Operator) and the two Distribution Businesses (CitiPower and United Energy Distribution) supplied from RTS have confirmed the ongoing need of the RTS facilities in accordance with the proposed redevelopment,
- a detailed Project Execution Plan will minimise the number and duration of outages, limiting the associated rebate cost;
- the project has been carefully estimated to cover the additional cost that may arise because this is a brown field development, and
- capital efficiency will be targeted by a combination of foreign exchange hedging, period order purchasing, fixed-price subcontracts and in-house project execution processes.

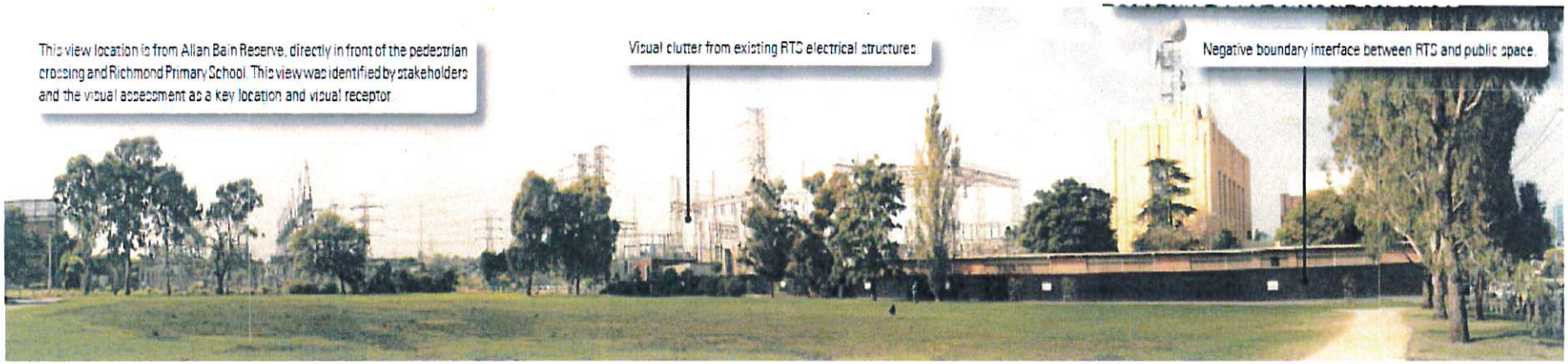
11.6. ASSET RETIREMENTS, CONTRIBUTED (GIFTED) ASSETS, CUSTOMER CONTRIBUTION REVENUE

The fixed assets accounting team were consulted regarding the Write Down Value **(WDV)** of the assets to be retired. The total WDV is $5.1 million.

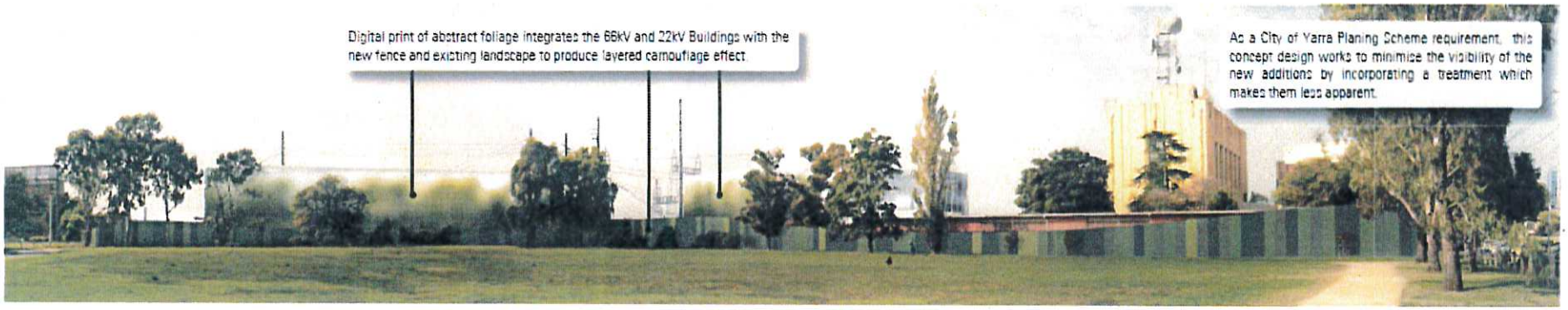
11.7. CORPORATE ACCOUNTING AND TAX ADVICE

The project is a usual business transaction and does not require any special corporate accounting, tax advice, or sign off.

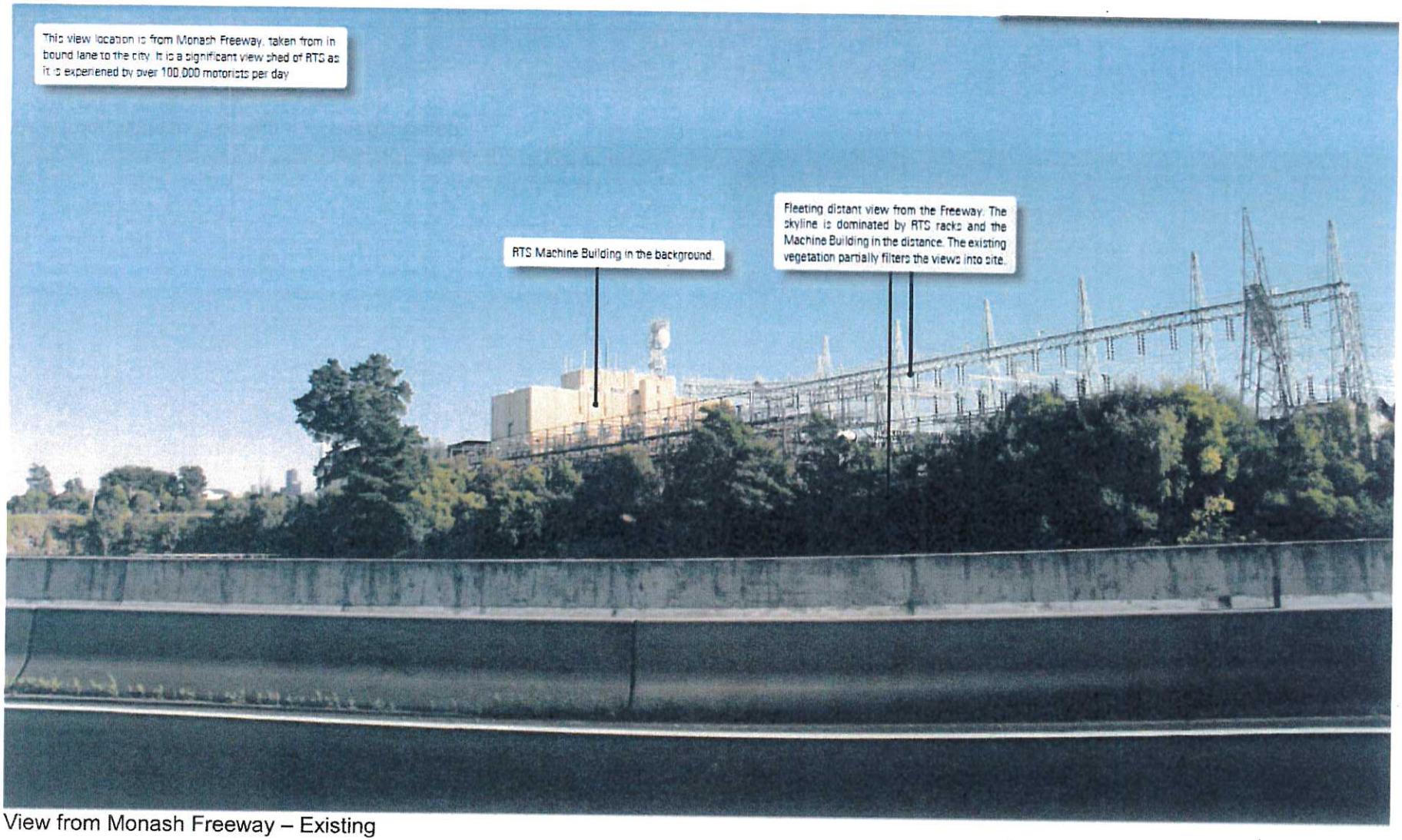
ATTACHMENT 1 CONCEPT DESIGN



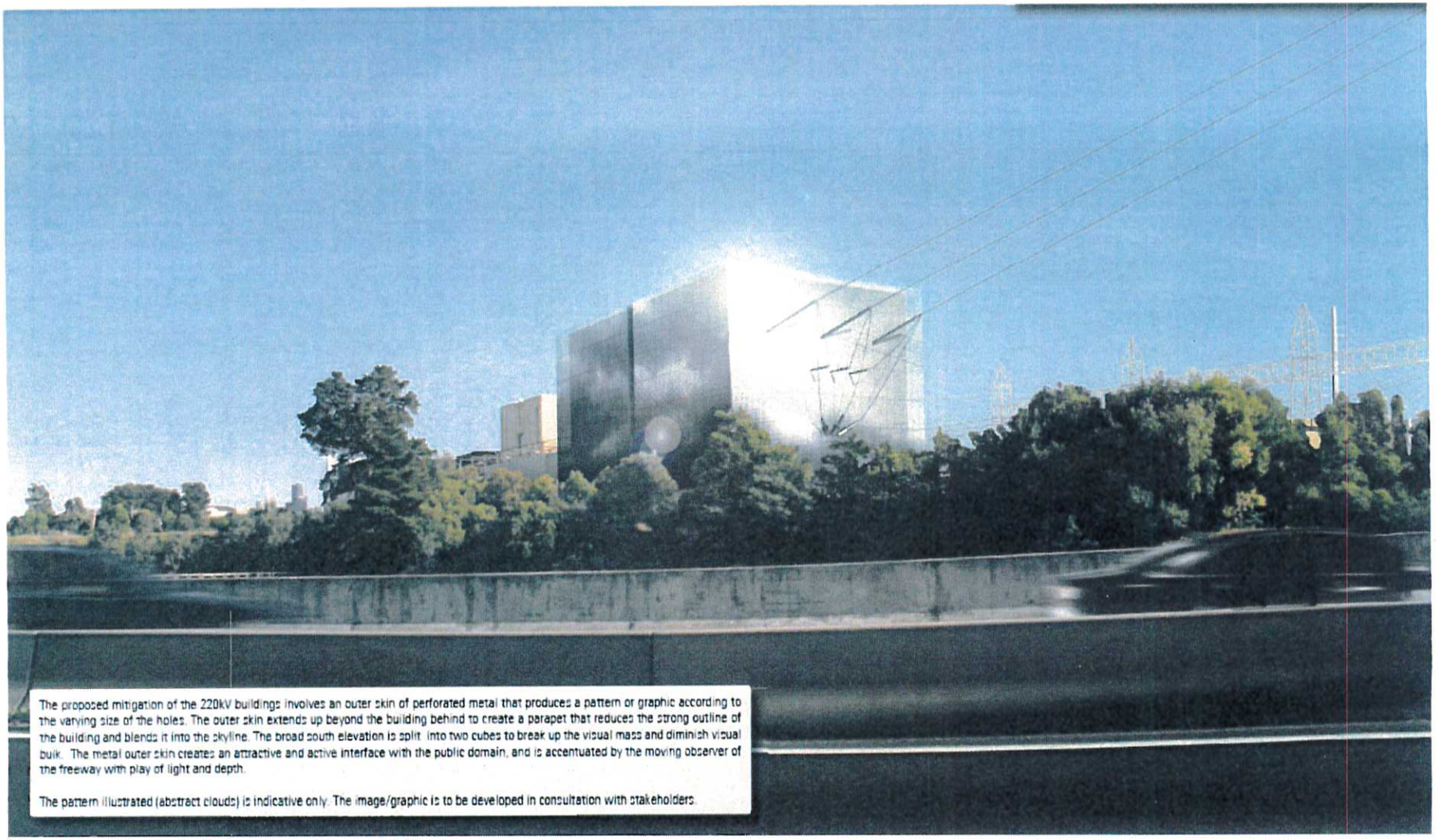
View from Allan Bain Reserve – Existing



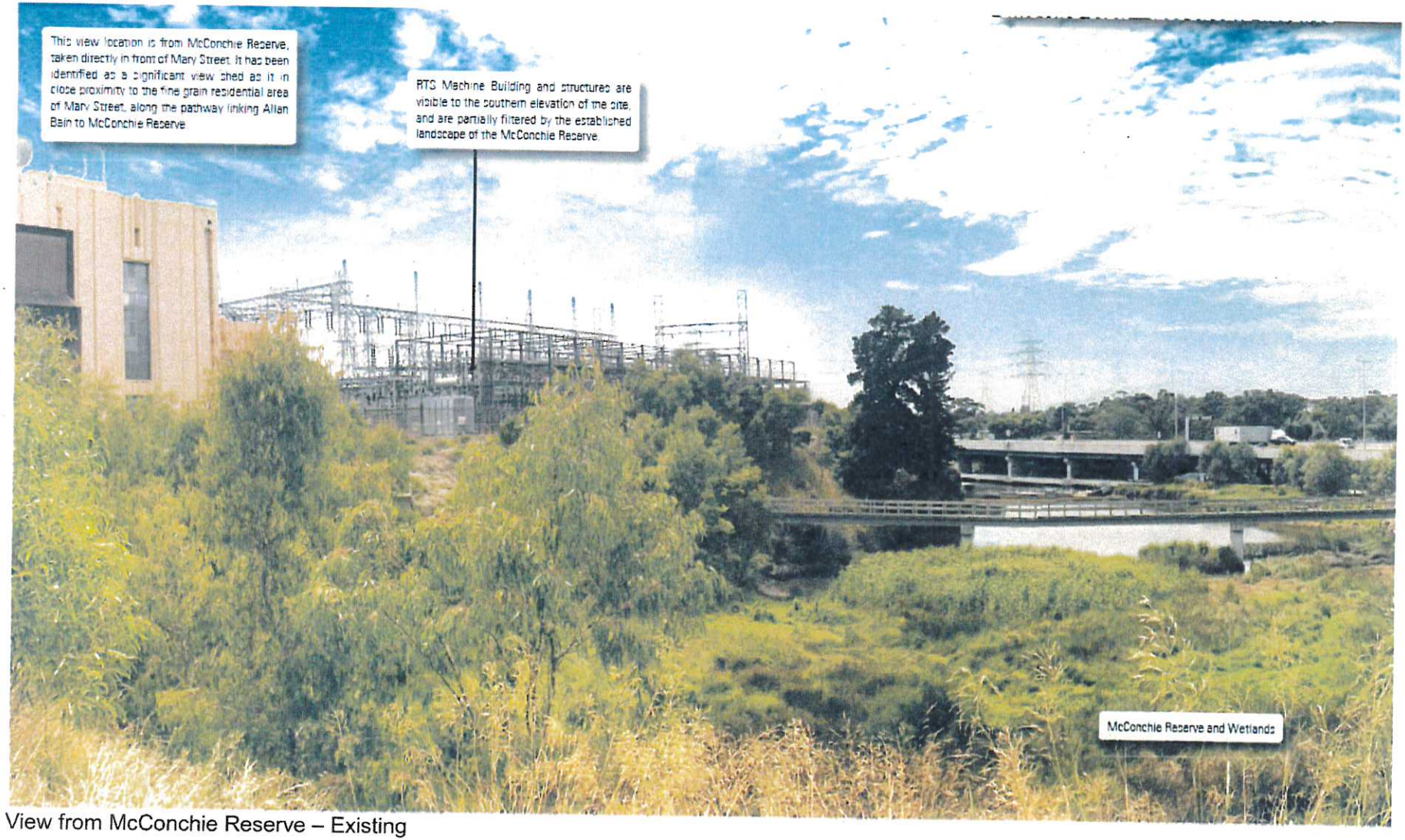
View from Allan Bain Reserve – Concept Design



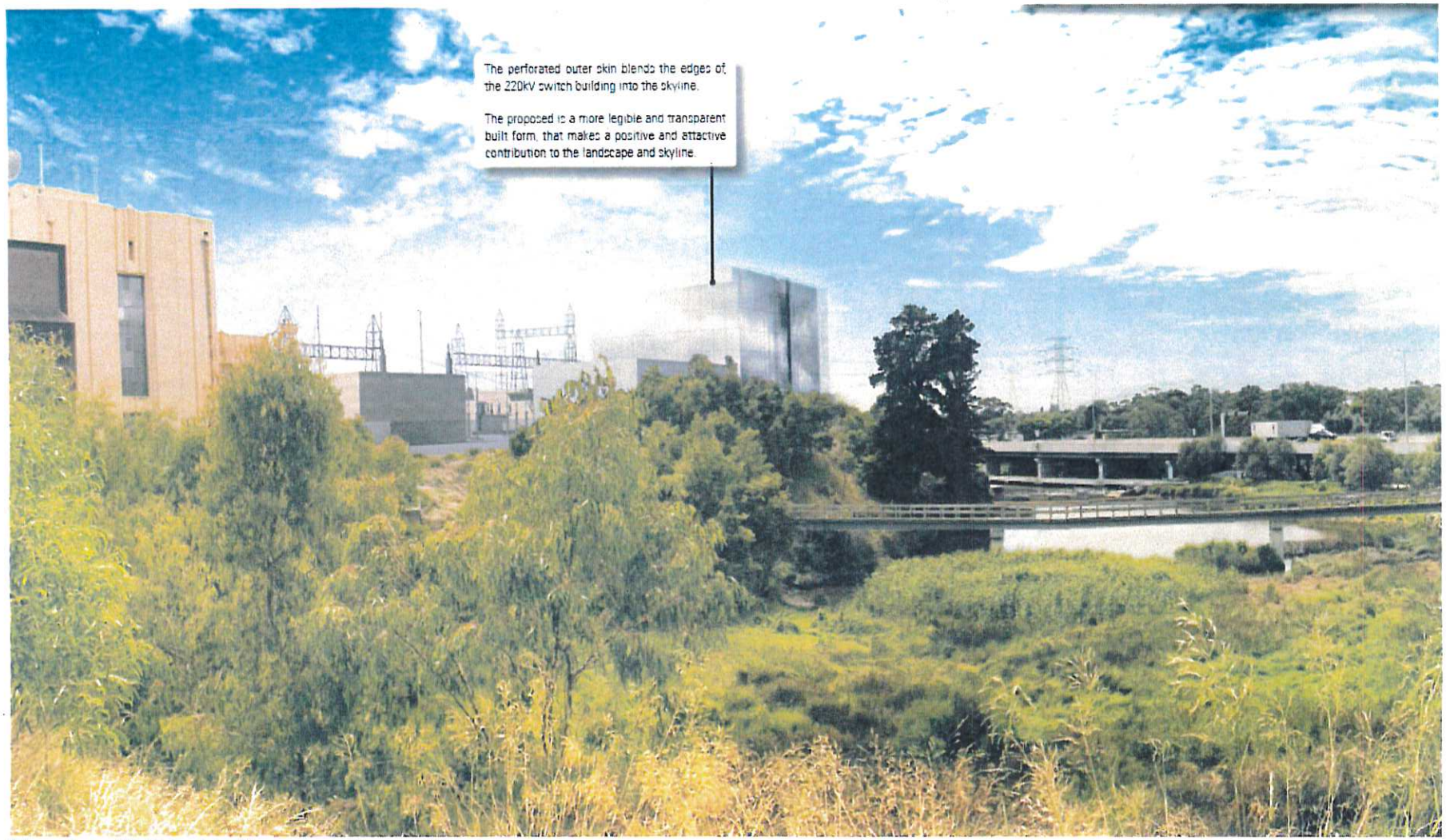
View from Monash Freeway – Existing



View from Monash Freeway – Concept Design



View from McConchie Reserve – Existing



View from McConchie Reserve – Concept Design