

# Town of Port Hedland

## Evaluation of the Subdivision Proposal for Airport Land

COMMERCIAL VIABILITY

November 2011

**STRICTLY PRIVATE AND CONFIDENTIAL**

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## EXECUTIVE SUMMARY

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# Executive Summary

- Paxon was engaged by the Town of Port Hedland (“TOPH”) to evaluate the commercial viability of BHP Billiton Iron Ore Pty Ltd (“BHPB”)’s Subdivision Proposal for Airport Land.
- In order to assess the viability of the BHPB’s option to the TOPH, the following options have been assessed:
  1. BHPB Proposal – BHPB’s Subdivision Proposal for Airport Land (for the initial term plus each contract extension thereafter) including scenario modelling of the Proposal with and without a capital prepayment;
  2. TOPH Self Development – Self-Development by TOPH of the Airport Land followed by either:
    - Sale of the lots;
    - Leasing of the developed lots; or
    - Sale of lots with area less than 1ha, and lease of the remaining lots.
  3. Joint Venture Option – Joint Venture between a third party and TOPH to subdivide the land and followed by either:
    - Sale of the lots;
    - Leasing of the developed lots; or
    - Sale of lots with area less than 1ha, and lease of the remaining lots.
  4. Undeveloped Lot Sale Option – Sale of the entire englobo land parcel in its current form.
- The financial aspects of each Proposal and scenario has been assessed in accordance with section 3.59 of the *Local Government Act*, and includes an overall financial assessment of the major land transaction including details specifically of:
  - Its expected financial effect on the local government;
  - Costs to the Town to generate the capital required;
  - Impacts on borrowing capacity; and
  - Impacts on financial ratios.

# Executive Summary

- The following table defines the key financial metrics evaluated.

Term	Definition
Discount Rate	The discount rate represents the interest rate used in discounting the cash flows to determine the net present value of future cash flows. The discount rate takes into account the time value of money (the idea that money available now is worth more than the same amount of money available in the future because it of its opportunity cost – it could be earning interest) as well as the risk (uncertainty) of the anticipated future cash flows (which might be less than expected). Accordingly, the discount rate utilised is used to weight the future cash flows, with a greater weighting being placed on the earlier cash flows as they are the most certain. The discount rate used to evaluate the free cash flows of a Project is based on the risk associated with that Project. Projects with a greater level of risk attract higher discount rates, as a greater weighting is placed on the earlier cash flows.
Net Present Value (NPV)	The NPV weights the future cash flows inversely proportional to the discount rate selected, and thereby compares the value of a dollar today to the value of that same dollar in the future, after taking into account inflation returns required to shareholders. Projects that are NPV positive should be accepted as they are more than able to compensate shareholders for the risks undertaken.
Internal Rate of Return (IRR)	The IRR represents the discount rate at which the NPV would be \$0.

# Executive Summary

- The following scenarios have been assessed.

Proposal	Scenario	Scenario Name
BHPB Proposal – BHPB’s Subdivision Proposal for Airport Land (with Prepayment)	Initial 10 year contract term.	BHPB 10
	Initial 10 year contract term plus 1 x 5 year extension.	BHPB 15
	Initial 10 year contract term plus 2 x 5 year extensions.	BHPB 20
	Initial 10 year contract term plus 3 x 5 year extensions.	BHPB 25
BHPB Proposal – BHPB’s Subdivision Proposal for Airport Land (without Prepayment)	Initial 10 year contract term.	BHPB 10 (without Prepayment)
	Initial 10 year contract term plus 1 x 5 year extension.	BHPB 15 (without Prepayment)
	Initial 10 year contract term plus 2 x 5 year extensions.	BHPB 20 (without Prepayment)
	Initial 10 year contract term plus 3 x 5 year extensions.	BHPB 25 (without Prepayment)
TOPH Self Development	Self-Development by TOPH of the Airport Land and then sale of the resultant lots.	TOPH: Sale
TOPH: Lease	Self-Development by TOPH of the Airport Land and then lease of the resultant lots.	TOPH: Lease
TOPH: Hybrid	Self-Development by TOPH of the Airport Land followed by sale of lots with area less than 1ha and lease of the remaining lots.	TOPH: Hybrid
Joint Venture	Joint Venture between a third party and TOPH to subdivide the land and then sell the resultant lots.	JV: Sale
JV: Lease	Joint Venture between a third party and TOPH to subdivide the land and then lease of the resultant lots.	JV: Lease
JV: Hybrid	Joint Venture between a third party and TOPH to subdivide the land and then sell the resultant lots.	JV: Hybrid
Undeveloped Lot Sale Option	Sale of the entire englobo land parcel in its current form.	Undeveloped Lot Sale Option

# Executive Summary

- The table below provides a comparison of the NPV achieved under each of the defined options at a range of discount rates.

Description	Total Contract Term (Years)	Capital (\$m)	Total (\$m)	NPV (\$m)	Rank	NPV (\$m)	Rank	NPV (\$m)	Rank
Discount Rate				7.0%		15.0%		25.0%	
BHPB 10 (without Prepayment)	10	\$0.00	\$179.18	\$123.61	11	\$87.07	8	\$60.94	5
BHPB 10	10	\$0.00	\$168.21	\$123.14	12	\$94.07	4	\$73.66	4
BHPB 15 (without Prepayment)	15	\$0.00	\$245.61	\$141.94	9	\$89.46	7	\$59.30	6
BHPB 15	15	\$0.00	\$227.53	\$140.97	10	\$98.34	3	\$74.46	3
BHPB 20 (without Prepayment)	20	\$0.00	\$324.72	\$156.81	7	\$90.44	6	\$58.48	7
BHPB 20	20	\$0.00	\$298.23	\$155.39	8	\$100.75	2	\$75.17	2
BHPB 25 (without Prepayment)	25	\$0.00	\$419.12	\$168.87	5	\$90.75	5	\$58.09	8
BHPB 25	25	\$0.00	\$382.69	\$167.02	6	\$102.15	1	\$75.78	1
TOPH: Sale	25	-\$42.37	\$38.84	\$32.17	14	\$25.55	14	\$18.47	11
TOPH: Lease	25	-\$42.37	\$1,172.55	\$289.01	1	\$58.09	11	-\$16.62	14
TOPH: Hybrid	25	-\$42.37	\$1,013.52	\$261.78	3	\$61.90	9	-\$4.63	13
JV: Sale	25	\$0.00	\$35.42	\$29.88	15	\$24.36	15	\$18.47	10
JV: Lease	25	-\$45.78	\$1,169.13	\$286.71	2	\$56.90	12	-\$16.62	14
JV: Hybrid	25	-\$20.32	\$1,010.10	\$259.48	4	\$60.71	10	-\$4.63	12
Undeveloped Lot Sale Option	25	\$0.00	\$49.35	\$49.35	13	\$49.35	13	\$49.35	9

# Executive Summary

- BHPB's Proposal for all contract terms is the preferred option at the selected discount rate of between 15.0% and 25.0% and is shown below.

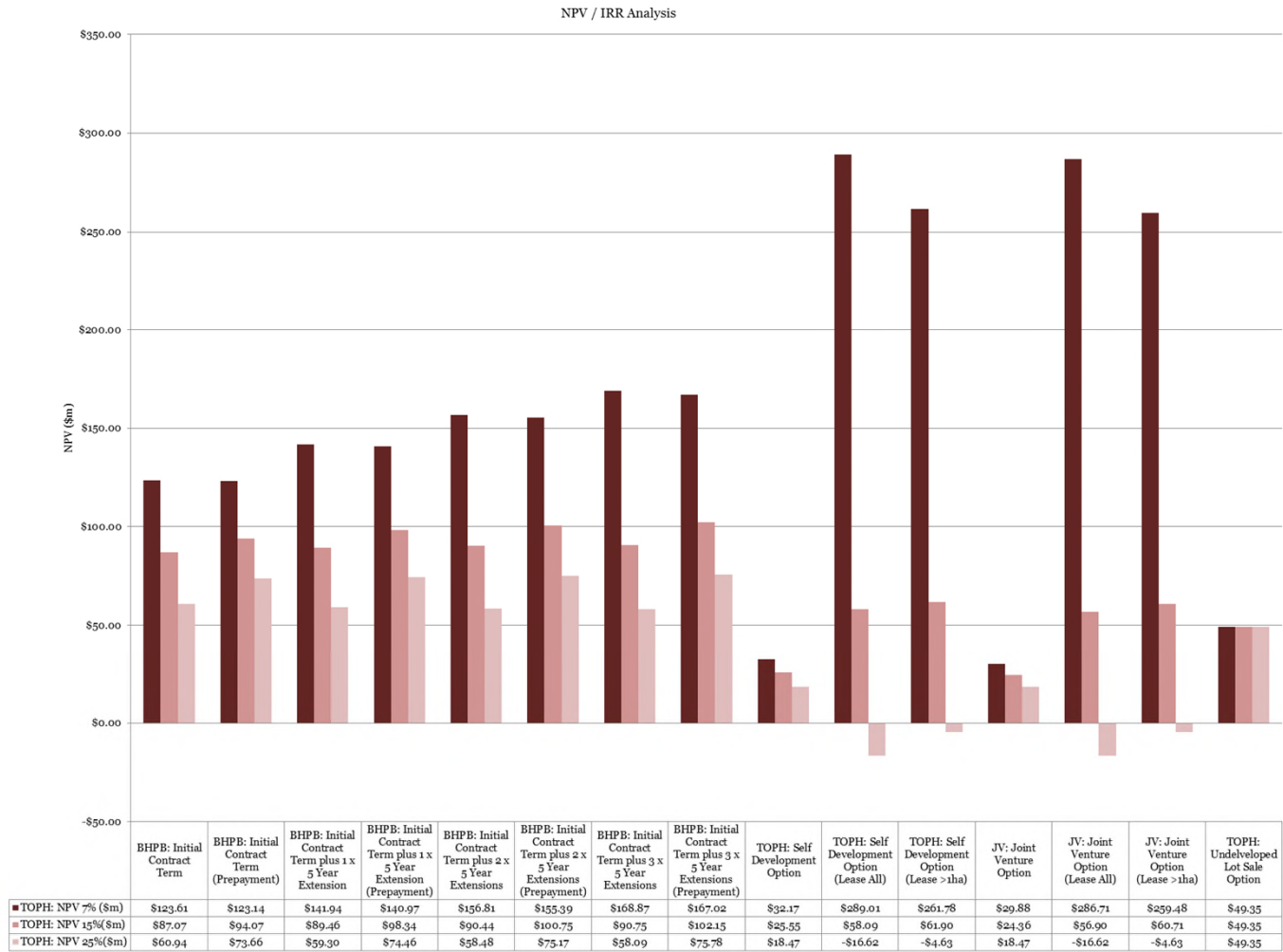
Description	Total Contract Term (Years)	Capital (\$m)	Total (\$m)	NPV (\$m)	Rank	NPV (\$m)	Rank	NPV (\$m)	Rank
<b>Discount Rate</b>				<b>7.0%</b>		<b>15.0%</b>		<b>25.0%</b>	
BHPB 10	10	\$0.00	\$168.21	\$123.14	12	\$94.07	4	\$73.66	4
BHPB 15	15	\$0.00	\$227.53	\$140.97	10	\$98.34	3	\$74.46	3
BHPB 20	20	\$0.00	\$298.23	\$155.39	8	\$100.75	2	\$75.17	2
BHPB 25	25	\$0.00	\$382.69	\$167.02	6	\$102.15	1	\$75.78	1

- The NPV measures the value created to the local government, based on its opportunity cost of capital. TOPH ordinarily utilise a discount rate of 7%, however given the nature of risk associated with a land development it is recommended that a discount rate of 15%-25% be adopted and the Project has been assessed on this basis.
- BHPB's Proposal is able to achieve the highest NPV as it requires no capital contribution from TOPH, but delivers serviced lots of land to TOPH at a greater market value.
- The prepayment of the ground lease on lot 35 and the market value of lot 34 further enhances value to TOPH as it is able to receive the capital upfront from BHPB. Due to the time value of money, this creates further value to TOPH which increases in line with the discount rate utilised to calculate the NPV.
- BHPB's Proposal has the greatest financial effect on local government as it creates the highest NPV to TOPH at discount rates of between 15%-25%.
- The TOPH's potential capacity for further debt is approximately \$40 - \$45 million, based on the 2011/12 budget provided. Although, this could be utilised to fund the project under the self development option (with an estimated requirement of \$41 million), this would utilise all existing capacity and thus leave no debt capacity for other projects or initiatives. BHPB's Proposal places no burden on the debt capacity of TOPH as BHPB are solely responsible for the funding of the development, and accordingly TOPH is not subject to any debt servicing costs.
- BHPB's Proposal favourably increases the Current Ratio and Untied Cash to Unpaid Trade Creditors Ratio due to the prepayment for lot 34 and the prepayment of the ground lease on lot 35.



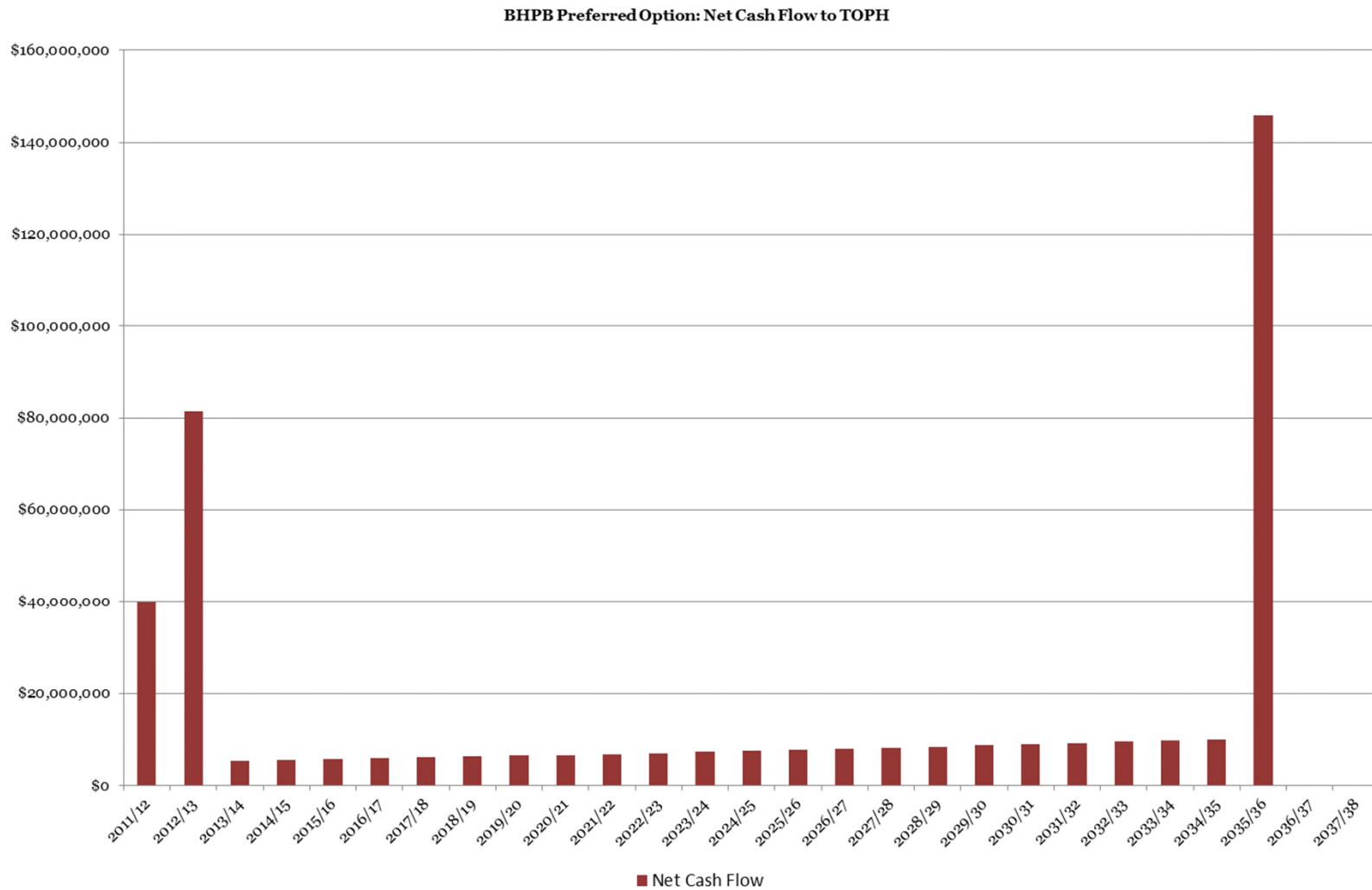
# Executive Summary

- The chart illustrates the evaluated NPV for the TOPH internal development options compared against BHPB's Proposal for different contract terms.



# Executive Summary

- The resultant net cash flow to TOPH is shown below for the preferred option (BHPB's Proposal over 25 years).



## SCOPE AND METHODOLOGY

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# Scope

- Paxon was engaged by the Town of Port Hedland (“TOPH”) to evaluate the commercial viability of BHP Billiton Iron Ore Pty Ltd (“BHPB”)’s Subdivision Proposal for Airport Land.
- As part of this engagement, Paxon has undertaken an evaluation of the financial aspects of various Proposals and scenarios in accordance with section 3.59 of the *Local Government Act*, and includes an overall financial assessment of the major land transaction including details specifically of:
  - Its expected financial effect on the local government;
  - Costs to the Town to generate the capital required;
  - Impacts on borrowing capacity; and
  - Impacts on financial ratios
- This report details the process and outcomes of this evaluation.

# Methodology

- Paxon's methodology for undertaking this engagement is detailed as follows:
  1. A review of BHPB's Subdivision Proposal for Airport Land including financial modelling of the costs and benefits associated with this option; and
  2. The determination and financial modelling of the costs and benefits associated with the self-development options relating to the Subdivision of Airport Land by TOPH.
- In order to assess the viability of the BHPB's option to the TOPH, the following options have been assessed:
  1. BHPB Proposal – BHPB's Subdivision Proposal for Airport Land (for the initial term plus each contract extension thereafter) including scenario modelling of the Proposal with and without a capital prepayment;
  2. TOPH Self Development – Self-Development by TOPH of the Airport Land followed by either:
    - Sale of the lots;
    - Leasing of the developed lots; or
    - Sale of lots with area less than 1ha, and lease of the remaining lots.
  3. Joint Venture Option – Joint Venture between a third party and TOPH to subdivide the land and followed by either:
    - Sale of the lots;
    - Leasing of the developed lots; or
    - Sale of lots with area less than 1ha, and lease of the remaining lots.
  4. Undeveloped Lot Sale Option – Sale of the entire englobo land parcel in its current form.

## ASSUMPTIONS UTILISED

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# Assumptions

In undertaking the commercial evaluation, a number of key assumptions have been utilised. These are detailed below.

## GST

- All cash flows have been modelled excluding GST.

## Contract Term

- A total contract term of 25 years including an initial contract term of 10 years plus 3 by 5 year extension options has been assumed.

## Indexation Rates

- The following indexation assumptions have been utilised.

Description	Rate
Consumer Price Index <sup>1</sup>	3.00%
Land Appreciation <sup>1</sup>	5.00%
Capital Cost Escalation <sup>1</sup>	5.00%
Third Party (of Joint Venture) - IRR Required	25.00%

1 - Source: Based on market evidence and ABS data.

## Other Costs

- As advised by engineering consultants, the costs of undertaking all necessary approvals required for subdivision approval and land subdivision has been assumed to be \$41.0 million.
- The cost of replacing the boundary fencing between the operating airport and the proposed first stage subdivision has not been provided and is therefore excluded from the analysis.

# Assumptions

## Discount Rate Utilised

- Paxon has been advised, that, ordinarily, the TOPH assesses projects at a discount rate of 7% per annum. It appears that such a discount rate is utilised to be synonymous with the risk free rate. Such an approach is acceptable when social infrastructure and non-commercial projects are being undertaken. However, the Precinct 3 project represents a commercial project, that being an industrial land development.
- The discount rate ascribed to a project assessment is required to incorporate the risk profile of the investment being undertaken. The design, construction and market risks associated with the project are material and therefore the project is required to be assessed with an acknowledgment of such risks. It is therefore appropriate for the TOPH to assess the options available to it at the appropriate (and higher) discount rate. The discount rate applied for the project has been estimated at a discount rate range of 15% - 25%. This has been estimated after considering the appropriate systematic risk (Beta) for land development projects. Whilst, for information purposes, the project is also assessed at a discount rate of 7%, the project / option selection recommendation is being considered across the 15% - 25% discount rate range.
- The principles for determining discount rates for discount cash flow (DCF) analysis are based on the theory used to calculate the cost of capital represented by the capital asset pricing model (CAPM). The CAPM is the most widely accepted and extensively developed theoretical approach.
- In the CAPM, the cost of capital reflects the return required by an investor to undertake or invest in a particular project. The required return is equal to the risk-free rate, plus a risk premium for the systematic or market risks retained by the investor. Systematic risks are risks that affect all assets within a diversified portfolio of assets and therefore cannot be eliminated by holding such a portfolio. Examples of such risks for this project include:
  - demand risk relating to the level of general economic activity;
  - unexpected inflation;
  - the effect of unexpected changes in interest rates or foreign exchange rates on asset values; and
  - broad market risks.



# Assumptions

## Discount Rate Utilised

- CAPM is used to calculate the cost of capital and is expressed as:

- $R_a = R_f + \beta_a (R_m - R_f)$  where:

Symbol	Name	Description	Value
$R_a$	Cost of capital on Asset	The cost of capital of (or required return on) assets whose risk class is designated by the Asset Beta or systematic risk.	To be calculated
$R_f$	Risk-free rate	The risk-free rate is determined to be equal to the recent average of the ten-year Commonwealth Bond rate.	4.3%
$\beta_a$	Asset Beta	The Asset Beta represents the systematic risk by reflecting the degree that asset returns (i.e. returns of a particular project) are expected to vary with returns of the market as a whole (i.e. a well-diversified portfolio of assets or projects), based on market evidence for the Property Development sector.	1.2
$(R_m - R_f)$	Market Risk Premium	The market risk premium is the return an investor would expect to receive after investing in an asset exactly correlated with the market.	6.0%

- For long term projects of this nature, it is often commonplace to observe a liquidity premium in addition to the CAPM calculation due to the asset being illiquid and not comparable to the required rate of return for liquid investments. Consultation with financial institutions and infrastructure funds suggest that this illiquidity premium ranges from 0.5% to 3% return per annum. In the current economic environment, it is seen prudent to observe the upper bound of this range. Therefore a premium of 3% has been utilised as the illiquidity premium and added to the base CAPM calculation.
- Based on the above assumptions, the following table demonstrates the discount rate range to be utilised for the project assessment.

Range	Value
Beta Asset Range	1.2
<b>CAPM</b>	<b>11.5%</b>
Plus: Liquidity Premium	3%
<b>Required Rate of Return</b>	<b>14.5%</b>

# Assumptions

## Land Value – Freehold and Leasehold<sup>1</sup>

- The following values (2011/12) for serviced and unserviced lots were assumed.

Description	Area (sqm)	Unserviced Value	Serviced Value	Ground Rent (Serviced Land) per annum
Lots 1-33	228,837		\$47,244,225	
Lot 34	100,000		\$10,000,000	
Lot 36	100,000		\$10,000,000	
Lots 37-39	100,621		\$15,093,150	
Lot 35	600,000		\$42,000,000	\$3,000,000
<b>Total</b>	<b>1,129,458</b>	<b>\$49,350,000</b>	<b>\$124,337,375</b>	

1 - Source: David Liggins, *Port Hedland International Airport Precinct 3 39 Lot Subdivision*, 29 September 2011. It is noted that the valuer has advised that some of the above amounts are still subject to review.

## BHPB PROPOSAL

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# BHPB Proposal

- A cost and benefit analysis (to TOPH) of BHPB's Subdivision Proposal for Airport Land is shown below.

Description	Costs to TOPH	Benefit to TOPH
Development of Lots	Market land value of unserviced Lots (2011/12).	Market land value of serviced Lots upon completion of development.
Ground Lease on Lot 35	Market land value of serviced Lot 35.	Ground Lease based on a rate of \$12.00 per square metre. Lease is subject to an annual 3.0% indexation adjustment beginning in the fourth year of the Project.
		Market land value of serviced Lot 35 upon expiration of the final lease term.
		Prepayment of ground lease up to a cap of \$31.0 million. The prepayment consists of an upfront payment of \$31.0 million in the first year of the Project. The discount rate used to calculate the present value of the prepayment has been assumed to be 8.0% as advised by BHPB.
Purchase Lot 34 freehold fully serviced post creation of Lot 34's title.		Purchase Lot 34 for the proposed BHP Billiton Central Warehouse for \$9.0 million.
		Prepayment of purchase of Lot 34.

# BHPB Proposal

- The NPV analysis performed on the cash flows of the initial term plus each contract extension are shown below at different discount rates.

Description	Total Contract Term (Years)	Capital (\$m)	Total (\$m)	NPV (\$m)	NPV (\$m)	NPV (\$m)
<b>Discount Rate</b>				<b>7.0%</b>	<b>15.0%</b>	<b>25.0%</b>
BHPB 10	10	\$0.00	\$168.21	\$123.14	\$94.07	\$73.66
BHPB 15	15	\$0.00	\$227.53	\$140.97	\$98.34	\$74.46
BHPB 20	20	\$0.00	\$298.23	\$155.39	\$100.75	\$75.17
BHPB 25	25	\$0.00	\$382.69	\$167.02	\$102.15	\$75.78

- BHPB's Proposal requires nil capital contribution from TOPH.
- BHPB's Proposal achieves a positive NPV to the TOPH at all discount rates.
- BHPB's Proposal is the preferred option for discount rates of 15.0% - 25.0%.

# BHPB Proposal (without Prepayment)

- A cost and benefit analysis (to TOPH) of BHPB's Subdivision Proposal for Airport Land without the prepayment of the ground lease of Lot 35 and prepayment of the \$9.0 million purchase of Lot 34 is shown below. This scenario has been developed to assess the value of the prepayment component of the commercial package to TOPH.

Description	Costs to TOPH	Benefit to TOPH
Development of Lots	Market land value of unserviced Lots (2011/12).	Market land value of serviced Lots upon completion of development.
Ground Lease on Lot 35	Market land value of serviced Lot 35.	Ground Lease based on a rate of \$12.00 per square metre. Lease is subject to an annual 3.0% indexation adjustment beginning in the fourth year of the Project.
		Market land value of serviced Lot 35 upon expiration of the final lease term.
Purchase Lot 34 freehold fully serviced post creation of Lot 34's title.		Purchase Lot 34 for the proposed BHP Billiton Central Warehouse for \$9.0 million.

# BHPB Proposal (without Prepayment)

- The NPV analysis performed on the cash flows of the initial term plus each contract extension are shown below at different discount rates.

Description	Total Contract Term (Years)	Capital (\$m)	Total (\$m)	NPV (\$m)	NPV (\$m)	NPV (\$m)
<b>Discount Rate</b>				<b>7.0%</b>	<b>15.0%</b>	<b>25.0%</b>
BHPB 10 (without Prepayment)	10	\$0.00	\$179.18	\$123.61	\$87.07	\$60.94
BHPB 15 (without Prepayment)	15	\$0.00	\$245.61	\$141.94	\$89.46	\$59.30
BHPB 20 (without Prepayment)	20	\$0.00	\$324.72	\$156.81	\$90.44	\$58.48
BHPB 25 (without Prepayment)	25	\$0.00	\$419.12	\$168.87	\$90.75	\$58.09

- BHPB's Proposal requires nil capital contribution from TOPH.
- BHPB's Proposal achieves a positive NPV to the TOPH at all discount rates.
- BHPB's Proposal is no longer the preferred option to TOPH. Each BHPB option has a lower NPV and is ranked lower than its comparable option with the prepayment of the ground lease of Lot 35 and purchase of Lot 34 . Accordingly, the prepayment offer has a net benefit to TOPH.

# Value of Prepayment to TOPH

- In order to determine the impact of the prepayment offer proposed by BHPB, the prepayment has been assessed as:

***The value of BHPB's Proposal***

***Less: Value of BHPB's Proposal (with no prepayment)***

- The discount rate used to calculate the present value of the prepayment has been assumed to be 8.0% as advised by BHPB.
- The financial impact of the prepayment on the total cash flow and the discounted cash flows is outlined below.

Description	Total Contract Term (Years)	Total (\$m)	NPV (\$m)	NPV (\$m)	NPV (\$m)
<b>Discount Rate</b>			<b>7.0%</b>	<b>15.0%</b>	<b>25.0%</b>
BHPB 10 : Prepayment Value	10	-\$10.97	-\$0.47	\$7.00	\$12.72
BHPB 15 : Prepayment Value	15	-\$18.08	-\$0.97	\$8.88	\$15.16
BHPB 20: Prepayment Value	20	-\$26.49	-\$1.42	\$10.31	\$16.69
BHPB 25:Prepayment Value	25	-\$36.43	-\$1.85	\$11.40	\$17.69

- Although BHPB's Proposal results in a lower total cash flow, it increases the NPV of the Proposal to TOPH at discount rates greater than 8.0%. The increase in NPV is due to the time value of money and therefore increases in line with the discount rate used to calculate the NPV.
- BHPB's Proposal with the prepayment increases the value to TOPH by up to \$17.69 million at a 15.0% discount rate (which is indicative of the risk profile of a land development Project) and should therefore be accepted as part of the commercial package offered.
- Although the inclusion of the prepayment reduces the total cash flow received to TOPH, the NPV of the prepayment options achieve greater value to TOPH because of the time value of money.



## TOPH SELF DEVELOPMENT OPTION

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# TOPH Self Development Option: Sale

- A cost and benefit analysis (to TOPH) of self developing the Airport Land is shown below.

Description	Costs to TOPH	Benefit to TOPH
Development of Lots	Market land value of unserviced Lots (2011/12).	Market land value of serviced Lots upon completion of development.
	Cost of subdividing the lots.	
Boundary Fencing	Cost of replacing the boundary fence between the operating airport and the proposed first stage subdivision with CASA approved security fencing to a standard required by the airport classification.	
Approvals	Costs of undertaking all necessary approvals required for subdivision approval and land subdivision.	

# TOPH Self Development Option: Sale

- The NPV analysis performed on the cash flows of the Self Development Option are shown below at different discount rates.

Description	Total Contract Term (Years)	Capital (\$m)	Total (\$m)	NPV (\$m)	NPV (\$m)	NPV (\$m)
<b>Discount Rate</b>				<b>7.0%</b>	<b>15.0%</b>	<b>25.0%</b>
TOPH: Sale		-\$42.37	\$38.84	\$32.17	\$25.55	\$18.47

- TOPH are required to make a capital contribution of \$42.37 million to self develop the land.
- The Self Development Option achieves a positive NPV contribution to TOPH at all discount rates.

# TOPH Self Development Option: Lease

- A cost and benefit analysis (to TOPH) of self developing the Airport Land and then leasing it is shown below.

Description	Costs to TOPH	Benefit to TOPH
Development of Lots	Market land value of unserviced Lots (2011/12).	Ground lease from serviced lots.
	Cost of subdividing the lots.	Market land value of serviced Lots upon completion of lease term.
Boundary Fencing	Cost of replacing the boundary fence between the operating airport and the proposed first stage subdivision with CASA approved security fencing to a standard required by the airport classification.	
Approvals	Costs of undertaking all necessary approvals required for subdivision approval and land subdivision.	

# TOPH Self Development Option: Lease

- The NPV analysis performed on the cash flows of the Self Development Option and lease is shown below at different discount rates.

Description	Total Contract Term (Years)	Capital (\$m)	Total (\$m)	NPV (\$m)	NPV (\$m)	NPV (\$m)
<b>Discount Rate</b>				<b>7.0%</b>	<b>15.0%</b>	<b>25.0%</b>
TOPH: Lease		-\$42.37	\$1,172.55	\$289.01	\$58.09	-\$16.62

- TOPH are required to make a capital contribution of \$42.37 million to self develop the land.
- The Self Development Option achieves a positive NPV contribution to TOPH at all discount rates.
- This is the preferred option when assessing the NPVs at a discount rate of 7.0%.

# TOPH Self Development Option: Sale / Lease

- A cost and benefit analysis (to TOPH) of self developing the Airport Land and selling lots with area less than 1 ha, and leasing lots of area greater than 1ha is shown below.

Description	Costs to TOPH	Benefit to TOPH
Development of Lots	Market land value of unserviced Lots (2011/12).	Market land value of serviced Lots (of area under 1ha) upon completion of development.
	Cost of subdividing the lots.	Ground lease on serviced lots (of area greater than 1ha).
		Market value on serviced lots (of area greater than 1ha) being received upon completion of the lease term.
Boundary Fencing	Cost of replacing the boundary fence between the operating airport and the proposed first stage subdivision with CASA approved security fencing to a standard required by the airport classification.	
Approvals	Costs of undertaking all necessary approvals required for subdivision approval and land subdivision.	

# TOPH Self Development Option: Sale / Lease

- The NPV analysis performed on the cash flows of the Self Development Option are shown below at different discount rates.

Description	Total Contract Term (Years)	Capital (\$m)	Total (\$m)	NPV (\$m)	NPV (\$m)	NPV (\$m)
<b>Discount Rate</b>				<b>7.0%</b>	<b>15.0%</b>	<b>25.0%</b>
TOPH: Hybrid		-\$42.37	\$1,013.52	\$261.78	\$61.90	-\$4.63

- TOPH are required to make a capital contribution of \$42.37 million to self develop the land.
- The Self Development Option achieves a positive NPV contribution to TOPH at all discount rates.

## JOINT VENTURE OPTION

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# Joint Venture Option: Sale

- A cost and benefit analysis (to TOPH) has been performed assuming the Airport Land is subdivided through entering into a Joint Venture with a third party, a summary of which is provided below.
- The format of the Joint Venture proposed would involve the TOPH contributing the englobo parcel to the Joint Venture with the Joint Venture partner funding all development costs and then selling the resultant lots. The Joint Venture partner would be entitled to retain proceeds to provide itself with a 25.0% IRR, with the TOPH being entitled to the residual.

Description	Costs to TOPH	Benefit to TOPH
Development of Lots	Market land value of unserviced englobo land parcel (2011/12).	The receipt of the net lot realisations after all development costs have been paid and an IRR of 25.0% has been earned by the Joint Venture partner for funding 100% of the development costs. A 25.0% IRR to the Joint Venture partner is utilised as an estimate to the market rate for land subdivision project returns.
Boundary Fencing	Cost of replacing the boundary fence between the operating airport and the proposed first stage subdivision with CASA approved security fencing to a standard required by the airport classification.	
Approvals	Costs of undertaking all necessary approvals required for subdivision approval and land subdivision.	

# Joint Venture Option: Sale

- The NPV analysis performed on the cash flows to TOPH are shown below at all discount rates.

Description	Total Contract Term (Years)	Capital (\$m)	Total (\$m)	NPV (\$m)	NPV (\$m)	NPV (\$m)
<b>Discount Rate</b>				<b>7.0%</b>	<b>15.0%</b>	<b>25.0%</b>
JV: Sale		\$0.00	\$35.42	\$29.88	\$24.36	\$18.47

- The Joint Venture Option requires nil capital contribution from TOPH.
- The Third Party is required to contribute \$42.37 million towards the development of the land.
- Based on a required IRR of 25.0% to the Third Party, TOPH is able to achieve a positive NPV contribution from this option.
- The Joint Venture Option always achieves a lower NPV than the comparable self development option.

# Joint Venture Option: Lease

- A cost and benefit analysis (to TOPH) has been performed assuming the Airport Land is subdivided through entering into a Joint Venture with a third party, a summary of which is provided below.
- The format of the Joint Venture proposed would involve the TOPH contributing the englobo parcel to the Joint Venture with the Joint Venture partner funding all development costs and then requesting payment from TOPH such that it provides itself with a 25.0% IRR.

Description	Costs to TOPH	Benefit to TOPH
Development of Lots	Market land value of unserviced englobo land parcel (2011/12).	Ground lease from serviced lots.
	Payment to Joint Venture partner such that the Joint Venture partner is able to earn a 25.0% IRR on its development costs.	Market land value of serviced Lots upon completion of lease term.
Boundary Fencing	Cost of replacing the boundary fence between the operating airport and the proposed first stage subdivision with CASA approved security fencing to a standard required by the airport classification.	
Approvals	Costs of undertaking all necessary approvals required for subdivision approval and land subdivision.	

# Joint Venture Option: Lease

- The NPV analysis performed on the cash flows to TOPH are shown below at all discount rates.

Description	Total Contract Term (Years)	Capital (\$m)	Total (\$m)	NPV (\$m)	NPV (\$m)	NPV (\$m)
<b>Discount Rate</b>				<b>7.0%</b>	<b>15.0%</b>	<b>25.0%</b>
JV: Lease		-\$45.78	\$1,169.13	\$286.71	\$56.90	-\$16.62

- The Joint Venture Option requires \$45.78 capital contribution from TOPH as payment to the Joint Venture partner such that it is able to earn a 25.0% IRR on the development costs.
- The Third Party is required to contribute \$42.37 million towards the development of the land.
- Based on a required IRR of 25.0% to the Third Party, TOPH is able to achieve a positive NPV contribution from this option.
- The Joint Venture Option always achieves a lower NPV than the comparable self development option, and additionally requires a capital contribution in the form of a payment to the Joint Venture partner.

# Joint Venture Option: Sale / Lease

- A cost and benefit analysis (to TOPH) has been performed assuming the Airport Land is subdivided through entering into a Joint Venture with a third party, a summary of which is provided below.
- The format of the Joint Venture proposed would involve the TOPH contributing the englobo parcel to the Joint Venture with the Joint Venture partner funding all development costs and then selling the lots of area under 1 ha. The Joint Venture partner would be entitled to retain proceeds to provide itself with a 25.0% IRR, with the TOPH being entitled to the residual.

Description	Costs to TOPH	Benefit to TOPH
Development of Lots	Market land value of unserviced englobo land parcel (2011/12).	<p>The receipt of the net lot realisations (of lots of area under 1ha) after all development costs have been paid and an IRR of 25.0% has been earned by the Joint Venture partner for funding 100% of the development costs. A 25.0% IRR to the Joint Venture partner is utilised as an estimate to the market rate for land subdivision project returns. TOPH receives a ground lease on serviced lots (of area greater than 1ha) with market value being received upon completion of the lease term.</p> <p>Ground lease on serviced lots (of area greater than 1ha).</p> <p>Market value on serviced lots (of area greater than 1ha) being received upon completion of the lease term.</p>
Boundary Fencing	Cost of replacing the boundary fence between the operating airport and the proposed first stage subdivision with CASA approved security fencing to a standard required by the airport classification.	
Approvals	Costs of undertaking all necessary approvals required for subdivision approval and land subdivision.	

# Joint Venture Option: Sale / Lease

- The NPV analysis performed on the cash flows to TOPH are shown below at all discount rates.

Description	Total Contract Term (Years)	Capital (\$m)	Total (\$m)	NPV (\$m)	NPV (\$m)	NPV (\$m)
<b>Discount Rate</b>				<b>7.0%</b>	<b>15.0%</b>	<b>25.0%</b>
JV: Hybrid		-\$20.32	\$1,010.10	\$259.48	\$60.71	-\$4.63

- The Joint Venture Option requires \$20.32 capital contribution from TOPH as payment to the Joint Venture partner such that it is able to earn a 25.0% IRR on the development costs.
- The Third Party is required to contribute \$42.37 million towards the development of the land.
- Based on a required IRR of 25.0% to the Third Party, TOPH is able to achieve a positive NPV contribution from this option.
- The Joint Venture Option always achieves a lower NPV than the comparable self development option, and additionally requires a capital contribution in the form of a payment to the Joint Venture partner.

## UNDEVELOPED LOT SALE OPTION

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# Undeveloped Lot Sale Option

- This option involves the TOPH selling the englobo land parcel in its current form.

Description	Costs to TOPH	Benefit to TOPH
Sale of Lots		Market land value of unserved Lots.

- The NPV of this option to TOPH is the market land value of the unserved lots of \$49.35 million for all discount rates as shown in the table below.

Description	Total Contract Term (Years)	Capital (\$m)	Total (\$m)	NPV (\$m)	NPV (\$m)	NPV (\$m)
<b>Discount Rate</b>				<b>7.0%</b>	<b>15.0%</b>	<b>25.0%</b>
Undeveloped Lot Sale Option		\$0.00	\$49.35	\$49.35	\$49.35	\$49.35



## COMMERCIAL EVALUATION OF OPTIONS

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# Commercial Evaluation

- The table below provides a comparison of the NPV achieved under each of the defined options at a range of discount rates.

Description	Total Contract Term (Years)	Capital (\$m)	Total (\$m)	NPV (\$m)	Rank	NPV (\$m)	Rank	NPV (\$m)	Rank
Discount Rate				7.0%		15.0%		25.0%	
BHPB 10 (without Prepayment)	10	\$0.00	\$179.18	\$123.61	11	\$87.07	8	\$60.94	5
BHPB 10	10	\$0.00	\$168.21	\$123.14	12	\$94.07	4	\$73.66	4
BHPB 15 (without Prepayment)	15	\$0.00	\$245.61	\$141.94	9	\$89.46	7	\$59.30	6
BHPB 15	15	\$0.00	\$227.53	\$140.97	10	\$98.34	3	\$74.46	3
BHPB 20 (without Prepayment)	20	\$0.00	\$324.72	\$156.81	7	\$90.44	6	\$58.48	7
BHPB 20	20	\$0.00	\$298.23	\$155.39	8	\$100.75	2	\$75.17	2
BHPB 25 (without Prepayment)	25	\$0.00	\$419.12	\$168.87	5	\$90.75	5	\$58.09	8
BHPB 25	25	\$0.00	\$382.69	\$167.02	6	\$102.15	1	\$75.78	1
TOPH: Sale	25	-\$42.37	\$38.84	\$32.17	14	\$25.55	14	\$18.47	11
TOPH: Lease	25	-\$42.37	\$1,172.55	\$289.01	1	\$58.09	11	-\$16.62	14
TOPH: Hybrid	25	-\$42.37	\$1,013.52	\$261.78	3	\$61.90	9	-\$4.63	13
JV: Sale	25	\$0.00	\$35.42	\$29.88	15	\$24.36	15	\$18.47	10
JV: Lease	25	-\$45.78	\$1,169.13	\$286.71	2	\$56.90	12	-\$16.62	14
JV: Hybrid	25	-\$20.32	\$1,010.10	\$259.48	4	\$60.71	10	-\$4.63	12
Undeveloped Lot Sale Option	25	\$0.00	\$49.35	\$49.35	13	\$49.35	13	\$49.35	9

# Commercial Evaluation

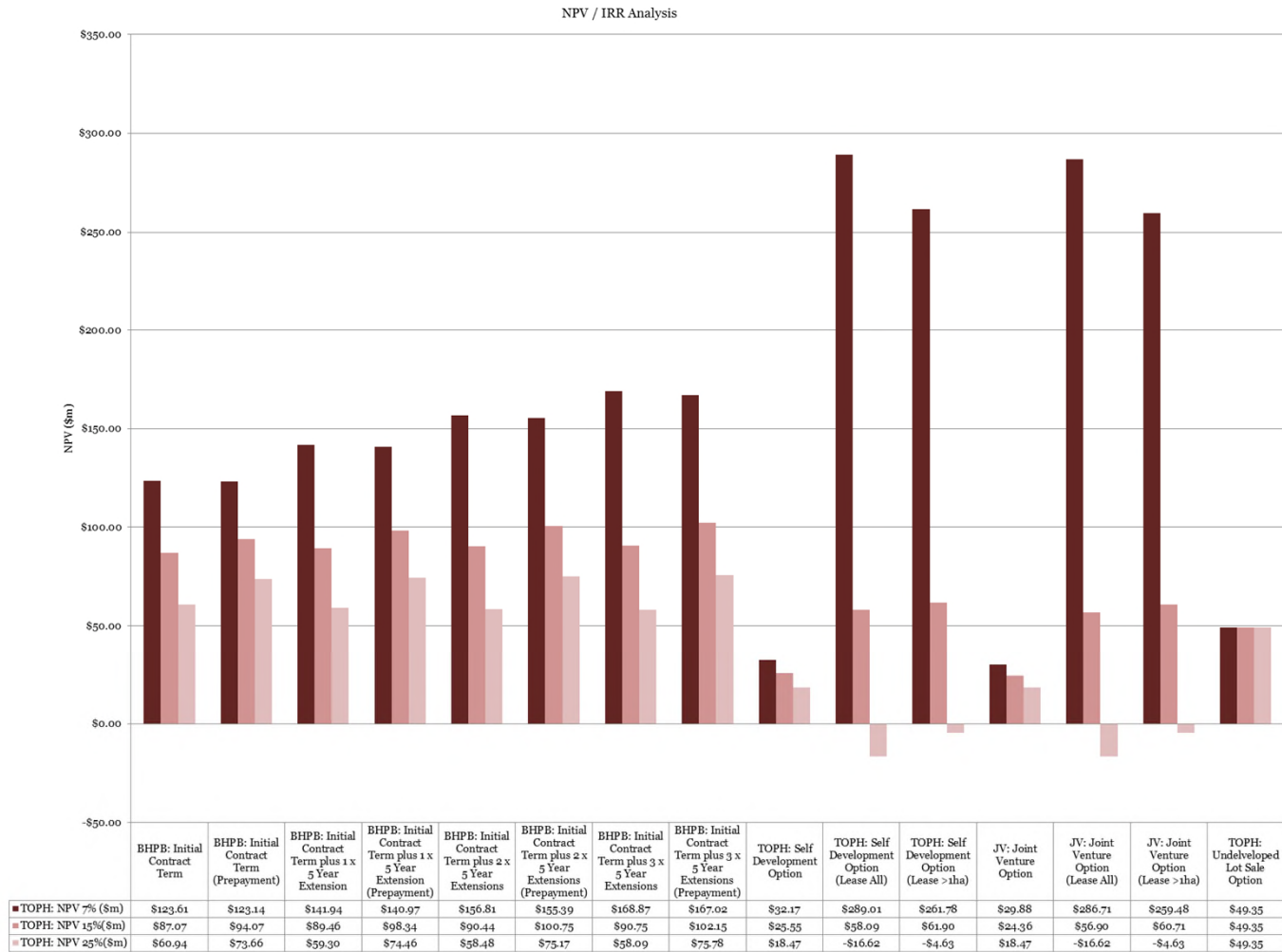
- BHPB's Proposal for all contract terms is the preferred option at the selected discount rate of between 15.0% and 25.0% and is shown below.

Description	Total Contract Term (Years)	Capital (\$m)	Total (\$m)	NPV (\$m)	Rank	NPV (\$m)	Rank	NPV (\$m)	Rank
Discount Rate				7.0%		15.0%		25.0%	
BHPB 10	10	\$0.00	\$168.21	\$123.14	12	\$94.07	4	\$73.66	4
BHPB 15	15	\$0.00	\$227.53	\$140.97	10	\$98.34	3	\$74.46	3
BHPB 20	20	\$0.00	\$298.23	\$155.39	8	\$100.75	2	\$75.17	2
BHPB 25	25	\$0.00	\$382.69	\$167.02	6	\$102.15	1	\$75.78	1

- The NPV measures the value created to the local government, based on its opportunity cost of capital. TOPH ordinarily utilise a discount rate of 7%, however given the nature of risk associated with a land development it is recommended that a discount rate of 15%-25% be adopted and the Project has been assessed on this basis.
- BHPB's Proposal is able to achieve the highest NPV as it requires no capital contribution from TOPH, but delivers serviced lots of land to TOPH at a greater market value.
- The prepayment of the ground lease on lot 35 and the market value of lot 34 further enhances value to TOPH as it is able to receive the capital upfront from BHPB. Due to the time value of money, this creates further value to TOPH which increases in line with the discount rate utilised to calculate the NPV.

# Commercial Evaluation

- The chart illustrates the evaluated NPV for the TOPH internal development options compared against BHPB's Proposal for different contract terms.



## OTHER *LOCAL GOVERNMENT ACT* REQUIREMENTS

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# Expected Financial Effect On The Local Government

- The following financial effects on the local government of each option are shown in the table below:
  1. The capital contribution required by TOPH;
  2. The total cash flow received over the Project term;
  3. The NPV over the Project term (based on a 15.0% and 25.0% discount rate); and
  4. The IRR over the Project term.

Description	Capital Cost (\$m)	Total Cash Flow (\$m)	NPV (\$m) @ 15.0%	NPV (\$m) @ 25.0%	IRR
BHPB 10 (without Prepayment)	-	\$179.18	\$87.07	\$60.94	132.0%
BHPB 10	-	\$168.21	\$94.07	\$73.66	757.0%
BHPB 15 (without Prepayment)	-	\$245.61	\$89.46	\$59.30	131.9%
BHPB 15	-	\$227.53	\$98.34	\$74.46	768.9%
BHPB 20 (without Prepayment)	-	\$324.72	\$90.44	\$58.48	131.9%
BHPB 20	-	\$298.23	\$100.75	\$75.17	774.4%
BHPB 25 (without Prepayment)	-	\$419.12	\$90.75	\$58.09	131.9%
BHPB 25	-	\$382.69	\$102.15	\$75.78	777.6%
TOPH: Sale	-\$42.37	\$38.84	\$25.55	\$18.47	61.6%
TOPH: Lease	-\$42.37	\$1,172.55	\$58.09	-\$16.62	21.5%
TOPH: Hybrid	-\$42.37	\$1,013.52	\$61.90	-\$4.63	23.8%
JV: Sale	-	\$35.42	\$24.36	\$18.47	71.8%
JV: Lease	-\$45.78	\$1,169.13	\$56.90	-\$16.62	21.4%
JV: Hybrid	-\$20.32	\$1,010.10	\$60.71	-\$4.63	23.7%
Undeveloped Lot Sale Option	-	\$49.35	\$49.35	\$49.35	N/A

- BHPB's Proposal requires no capital contribution from TOPH and achieves the highest NPV when a discount rate of 15.0% - 25.0% (based on the risk associated with a land development option) is selected. BHPB's Proposal also achieves the highest IRR for all contract terms.

# Costs To The Town To Generate The Capital Required

- The cost to TOPH of each option is measured by the amount of capital required as well as the resulting annual debt servicing costs (as it has been assumed that any capital contribution would be funded through debt). The cost of each option to TOPH, as well as its relative ranking against the alternative options is assessed and compared in the table below.
- The debt servicing costs have been assumed to be the annual repayment (comprising of principal and interest) of a Credit Foncier type loan over a 10 year term, with a 6.50% cost of debt.

Description	Capital (\$m)	Debt Servicing Cost to TOPH	Rank
BHPB 10 (without Prepayment)	-	-	1
BHPB 10	-	-	1
BHPB 15 (without Prepayment)	-	-	1
BHPB 15	-	-	1
BHPB 20 (without Prepayment)	-	-	1
BHPB 20	-	-	1
BHPB 25 (without Prepayment)	-	-	1
BHPB 25	-	-	1
TOPH: Sale	-\$42.37	-\$5.89	3
TOPH: Lease	-\$42.37	-\$5.89	3
TOPH: Hybrid	-\$42.37	-\$5.89	3
JV: Sale	-	-	1
JV: Lease	-\$45.78	-\$6.37	4
JV: Hybrid	-\$20.32	-\$2.83	2
Undeveloped Lot Sale Option	-	-	1

- BHPB's Proposal, the Joint Venture: Sale option and the Undeveloped lot sale option all require nil capital and ongoing debt servicing costs to TOPH and represent the options with the lowest cost to TOPH.

# Borrowing Capacity

- Local Governments are generally constrained to a financial ratio approach to their determination of borrowing capacity. This approach is based on income as opposed to a recurring operating cash flow approach. This approach is adopted primarily due to the not for profit nature of the councils which means that typically they do not generate surplus operating cash.
- The relevant financial ratios often considered by lending institutions (WATC or otherwise) are:
  1. **Debt Commitment Ratio:** *Debt Service Costs / Total Operating Revenue*

This is a measure used to measure the local government's ability to repay the interest and principal debt outstanding. Financial institutions consider a ratio above 20% to be undesirable and as an upper limit in determining borrowing capacity.
  2. **Interest Coverage Ratio:** *Net Interest Expense / Total Operating Revenue*

This measure is utilised to determine the ability to meet interest repayments from revenue. An upper limit of 10% is ordinarily utilised as a threshold for determining borrowing capacity.



# Borrowing Capacity

- The theoretical borrowing capacity has been calculated on the basis of the above ratios and is depicted below. This has been conducted utilising the TOPH's 2011/12 Budget.

Debt Service Capacity	Amount
Total Operating Revenue	\$48,598,408
20% Upper Threshold = Debt Service Capacity	\$9,719,682
Equivalent Borrowing Capacity	\$69,062,920
Less: Current Borrowings	-\$27,334,711
<b>Capacity Available</b>	<b>\$41,728,209</b>

Interest Coverage Capacity	Amount
Total Operating Revenue	\$48,598,408
10% Upper Threshold = Borrowing Capacity	\$4,859,841
Equivalent Borrowing Capacity	\$71,997,641
Less: Current Borrowings	-\$27,334,711
<b>Capacity Available</b>	<b>\$44,662,930</b>

- In calculating the above, the following is noted:
  - 'Equivalent Borrowing Capacity' within the Debt Commitment Ratio assumes a loan with a:
    - 10 year term;
    - 6.75% fixed interest rate; and
    - Credit Foncier repayment profile
- Based on the above ratios, the TOPH's potential capacity for further debt is approximately \$40 - \$45 million, based on the 2011/12 budget provided. This could be utilised to fund the project under the self development option (with an estimated requirement of \$41 million). However, this would utilise all existing capacity and thus leave no debt capacity for other projects or initiatives.

# Impacts on Financial Ratios

- BHPBs Proposal has the following balance sheet impacts to TOPH:
  1. Following the development on the Airport Land by BHPB, the revaluation of the serviced lots results in an increase in the land value of TOPH.
  2. The purchase of lot 34 by BHPB results in an increase in cash by \$10.5 million and a corresponding decrease in land value of \$10.5 million.
  3. The remaining lots (excluding lot 35) results in an increase in cash by \$76.0 million and a corresponding decrease in land value of \$10.5 million.
  4. The upfront payment of the ground lease on lot 35 results in an increase in cash of \$31.0 million and an increase in prepayments of \$31.0 million.
- Accordingly the Pro Forma impacts of these transactions on the financial ratios are compared to the 2009/10 financial ratios in the following table.

Ratio	2009/10	BHPB Pro Forma	Analysis
Current Ratio	1.245	7.290	The ratio is expected to increase favourably due to the prepayments by BHPB.
Untied Cash to Unpaid Trade Creditors Ratio	0.385	10.887	The ratio is expected to increase favourably due to the prepayments by BHPB.
Debt Ratio	0.071	0.166	The increase in debt ratio is due to the increase in liabilities of the prepayments.
Debt Service Ratio	0.033	0.029	The reduction in debt service ratio is due to the increase in revenue from the ground lease of lot 35.
Gross Debt to Revenue Ratio	0.192	0.171	The reduction in gross debt to revenue ratio is due to the increase in revenue from the ground lease of lot 35.
Gross Debt to Economically Realisable Assets Ratio	0.075	0.075	No impact.
Rate Coverage Ratio	0.255	0.232	The reduction in rate coverage ratio is due to the lower increase in revenue from the ground lease of lot 35 relative to rate revenue.
Outstanding Rates Ratio <sup>2</sup>	0.013	0.013	No impact.

## SUMMARY

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# Summary

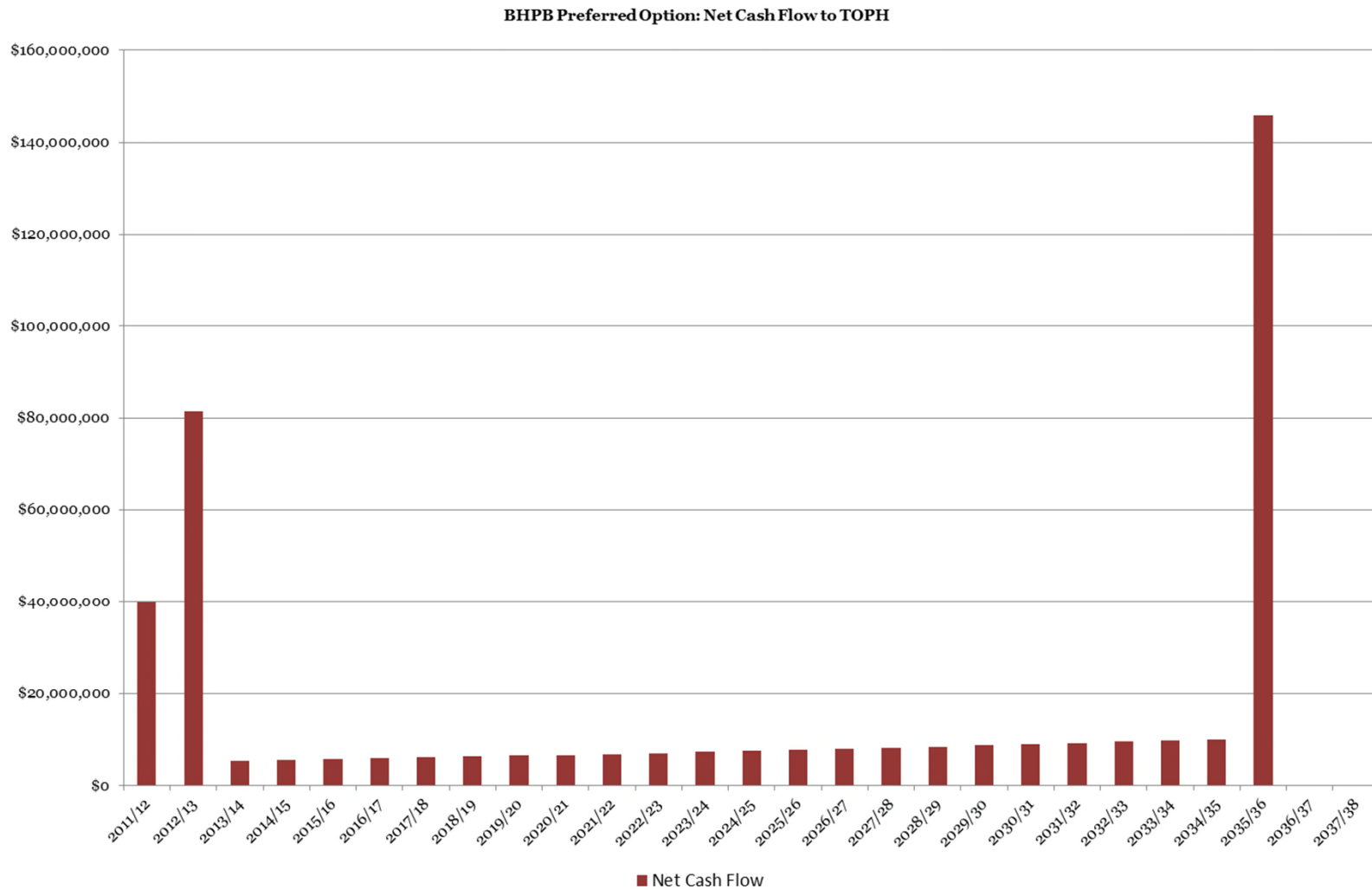
- BHPB's Proposal for all contract terms is the preferred option at the selected discount rate of between 15.0% and 25.0% and is shown below.

Description	Total Contract Term (Years)	Capital (\$m)	Total (\$m)	NPV (\$m)	Rank	NPV (\$m)	Rank	NPV (\$m)	Rank
<b>Discount Rate</b>				<b>7.0%</b>		<b>15.0%</b>		<b>25.0%</b>	
BHPB 10	10	\$0.00	\$168.21	\$123.14	12	\$94.07	4	\$73.66	4
BHPB 15	15	\$0.00	\$227.53	\$140.97	10	\$98.34	3	\$74.46	3
BHPB 20	20	\$0.00	\$298.23	\$155.39	8	\$100.75	2	\$75.17	2
BHPB 25	25	\$0.00	\$382.69	\$167.02	6	\$102.15	1	\$75.78	1

- The NPV measures the value created to the local government, based on its opportunity cost of capital. TOPH ordinarily utilise a discount rate of 7%, however given the nature of risk associated with a land development it is recommended that a discount rate of 15%-25% be adopted and the Project has been assessed on this basis.
- BHPB's Proposal is able to achieve the highest NPV as it requires no capital contribution from TOPH, but delivers serviced lots of land to TOPH at a greater market value.
- The prepayment of the ground lease on lot 35 and the market value of lot 34 further enhances value to TOPH as it is able to receive the capital upfront from BHPB. Due to the time value of money, this creates further value to TOPH which increases in line with the discount rate utilised to calculate the NPV.
- BHPB's Proposal has the greatest financial effect on local government as it creates the highest NPV to TOPH at discount rates of between 15%-25%.
- The TOPH's potential capacity for further debt is approximately \$40 - \$45 million, based on the 2011/12 budget provided. Although, this could be utilised to fund the project under the self development option (with an estimated requirement of \$41 million), this would utilise all existing capacity and thus leave no debt capacity for other projects or initiatives. BHPB's Proposal places no burden on the debt capacity of TOPH as BHPB are solely responsible for the funding of the development, and accordingly TOPH is not subject to any debt servicing costs.
- BHPB's Proposal favourably increases the Current Ratio and Untied Cash to Unpaid Trade Creditors Ratio due to the prepayment for lot 34 and the prepayment of the ground lease on lot 35.

# Summary

- The resultant net cash flow to TOPH is shown below for the preferred option (BHPB's Proposal over 25 years).



## Financial Model Extract – BHPB 10 Year Assessment

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## Financial Model Extract – BHPB 15 Year Assessment

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## Financial Model Extract – BHPB 20 Year Assessment

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## Financial Model Extract – BHPB 25 Year Assessment

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## Financial Model Extract – Self Develop

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## Financial Model Extract – Joint Venture Option

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## Financial Model Extract – Undeveloped Lot Sale

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