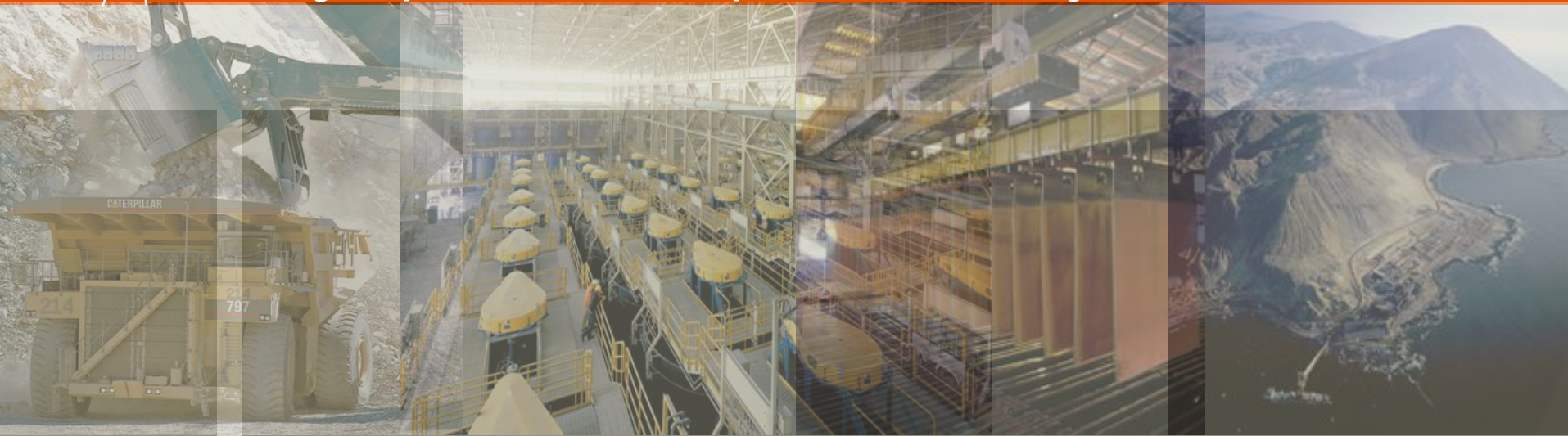


Olympic Dam Expansion Project



Grant McLaren

Project Coordinator &

Project Manager Safety, Infrastructure & Execution
Planning



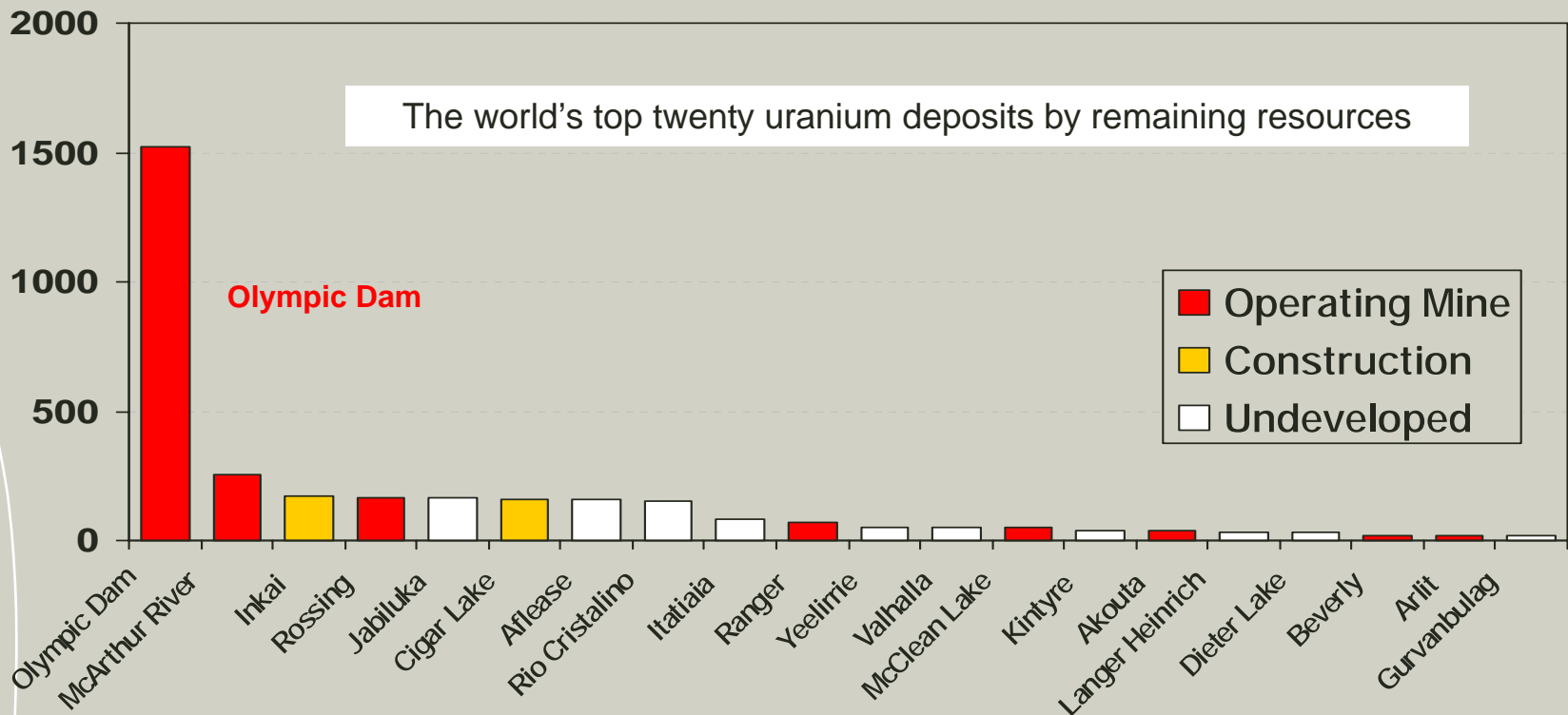
Base Metals Australia – Olympic Dam



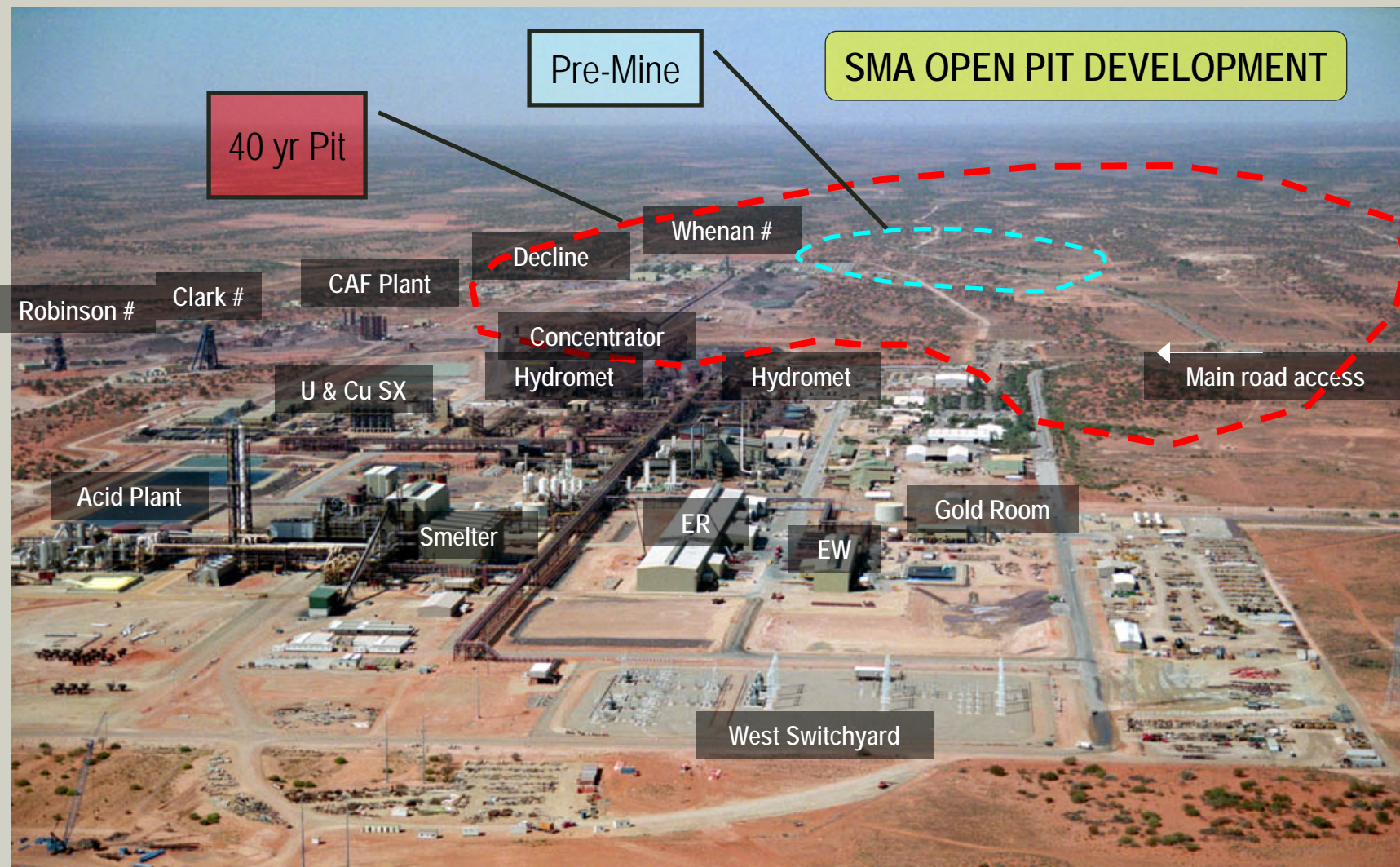
Olympic Dam Expansion Project

- Olympic Dam is a world-class copper-uranium-gold-silver mineral resource.

'000 tonnes of U_3O_8



Site Layout

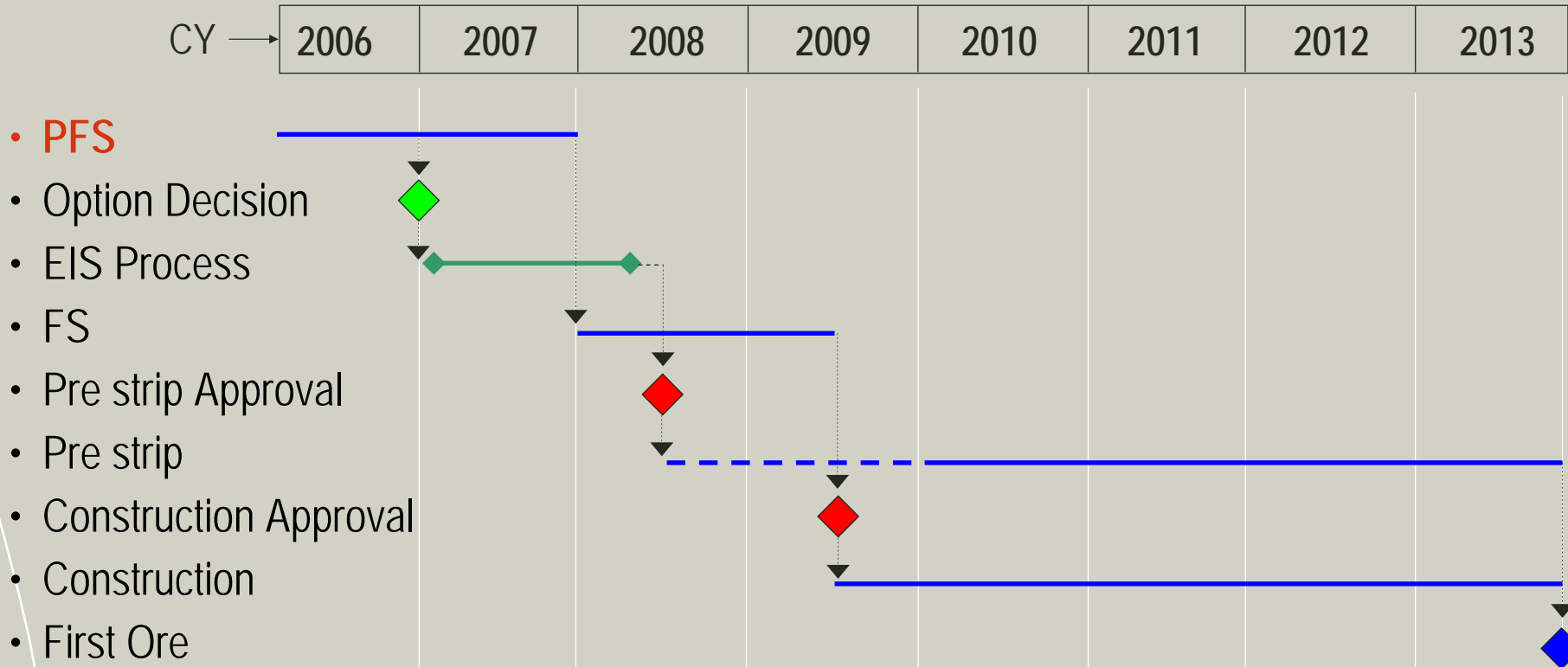


Project Scope

- **Base Case (Acquisition Case)**
 - 40 Mtpa Open Pit Ore Supply
 - 350 Mtpa Open Pit Mine
 - 2-Stage Smelter
 - Metal Production
 - 500 ktpa Cu
 - 15 ktpa U
 - 0.5 Mozpa Au
 - First Open Pit Ore: 2013



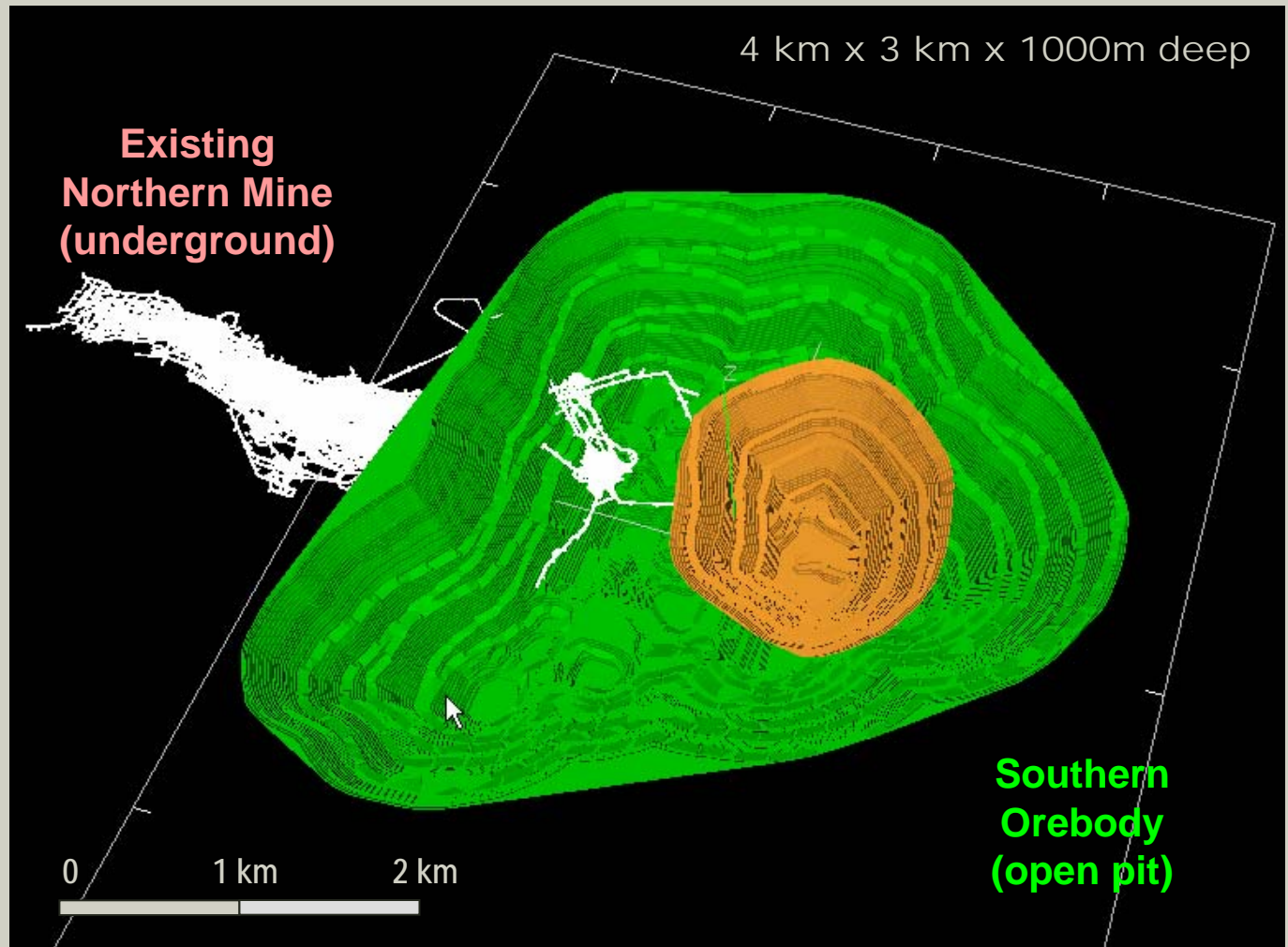
Base Case Project Timeline



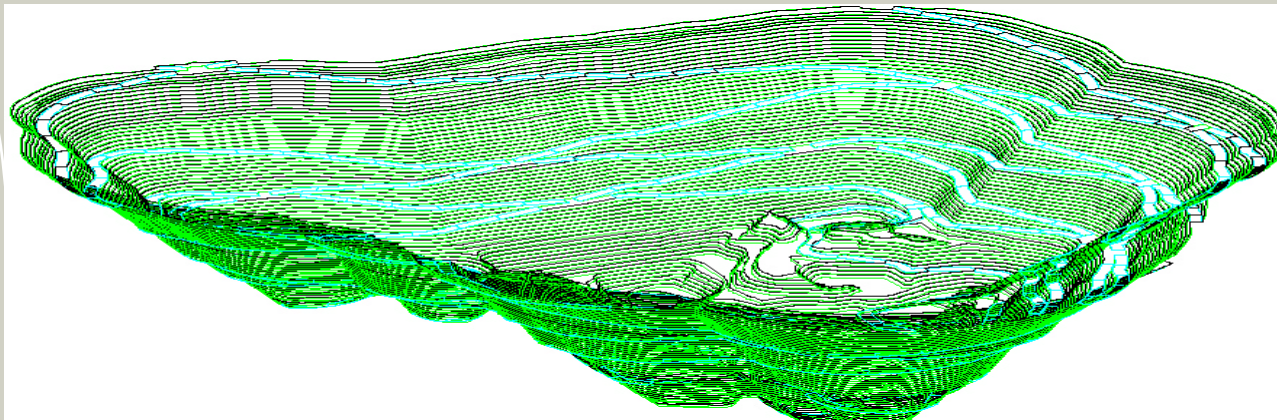
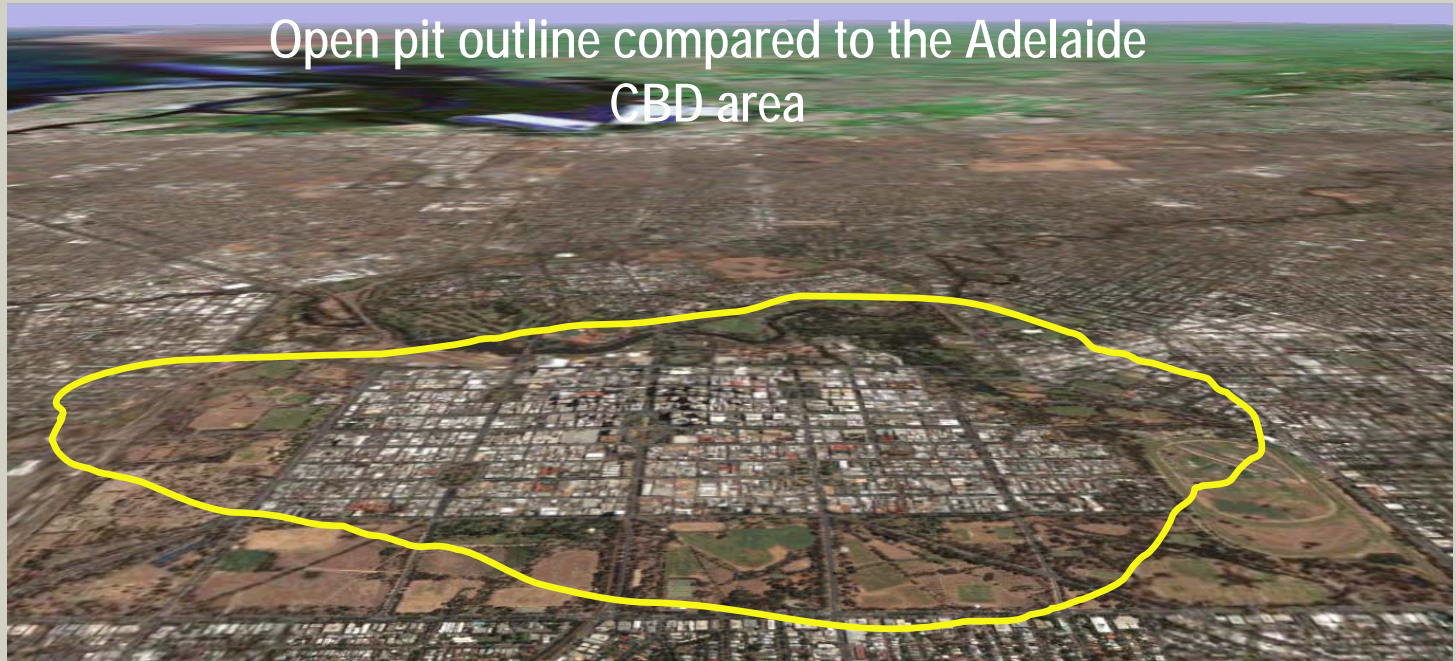
Preferred option - open pit



Forbidden City (Beijing)



Olympic Dam – Pit Outline



Olympic Dam Development Summary

	Current	Proposed (draft estimates)
Mine production (per year)	Ore 10m tonnes Copper 220,000 tonnes Uranium 4,000 tonnes Gold 80,000 ounces Silver 800,000 ounces	Ore 40m tonnes Copper 500,000 tonnes Uranium 15,000 tonnes Gold 500,000 ounces Silver 2,900,000 ounces
Energy		
Water (per year)		
Transport In/Out (per year)		
Exports		

Olympic Dam Development Summary

	Current	Proposed (draft estimates)
Mine production (per year)	Ore 10m tonnes Copper 220,000 tonnes Uranium 4,000 tonnes Gold 80,000 ounces Silver 800,000 ounces	Ore 40m tonnes Copper 500,000 tonnes Uranium 15,000 tonnes Gold 500,000 ounces Silver 2,900,000 ounces
Energy	120 MW Source: State grid	420 MW Source: State grid, on-site gas or combination
Water (per year)		
Transport In/Out (per year)		
Exports		

Olympic Dam Development Summary

	Current	Proposed (draft estimates)
Mine production (per year)	Ore 10m tonnes Copper 220,000 tonnes Uranium 4,000 tonnes Gold 80,000 ounces Silver 800,000 ounces	Ore 40m tonnes Copper 500,000 tonnes Uranium 15,000 tonnes Gold 500,000 ounces Silver 2,900,000 ounces
Energy	120 MW Source: State grid	420 MW Source: State grid, on-site gas or combination
Water (per year)	12 GL pa (32ML/day – 374 Litres/second) Source: Great Artesian Basin	48 GL pa (132ML/day – 1534 Litres/second) Source: GAB or coastal desalination
Transport In/Out (per year)		
Exports		

Olympic Dam Development Summary

	Current	Proposed (draft estimates)
Mine production (per year)	<p>Ore 10m tonnes</p> <p>Copper 220,000 tonnes</p> <p>Uranium 4,000 tonnes</p> <p>Gold 80,000 ounces</p> <p>Silver 800,000 ounces</p>	<p>Ore 40m tonnes</p> <p>Copper 500,000 tonnes</p> <p>Uranium 15,000 tonnes</p> <p>Gold 500,000 ounces</p> <p>Silver 2,900,000 ounces</p>
Energy	<p>120 MW</p> <p>Source: State grid</p>	<p>420 MW</p> <p>Source: State grid, on-site gas or combination</p>
Water (per year)	<p>12 GL pa</p> <p>(32ML/day – 374 Litres/second) Source: Great Artesian Basin</p>	<p>48 GL pa</p> <p>(132ML/day – 1534 Litres/second)</p> <p>Source: GAB or coastal desalination</p>
Transport In/Out (per year)	<p>1m tonnes</p> <p>Transport mode: road</p> <p>12,000 trucks (30 per day)</p>	<p>2.2m tonnes</p> <p>Transport mode: road/rail intermodal or direct rail -</p> <p>26,500 trucks (70 per day)</p>
Exports		

Olympic Dam Development Summary

	Current	Proposed (draft estimates)
Mine production (per year)	<p>Ore 10m tonnes</p> <p>Copper 220,000 tonnes</p> <p>Uranium 4,000 tonnes</p> <p>Gold 80,000 ounces</p> <p>Silver 800,000 ounces</p>	<p>Ore 40m tonnes</p> <p>Copper 500,000 tonnes</p> <p>Uranium 15,000 tonnes</p> <p>Gold 500,000 ounces</p> <p>Silver 2,900,000 ounces</p>
Energy	<p>120 MW</p> <p>Source: State grid</p>	<p>420 MW</p> <p>Source: State grid, on-site gas or combination</p>
Water (per year)	<p>12 GL pa</p> <p>(32ML/day – 374 Litres/second) Source: Great Artesian Basin</p>	<p>48 GL pa</p> <p>(132ML/day – 1534 Litres/second)</p> <p>Source: GAB or coastal desalination</p>
Transport In/Out (per year)	<p>1m tonnes</p> <p>Transport mode: road</p> <p>12,000 trucks (30 per day)</p>	<p>2.2m tonnes</p> <p>Transport mode: road/rail intermodal or direct rail -</p> <p>26,500 trucks (70 per day)</p>
Exports	Via Port Adelaide	Via Port Adelaide and/or Darwin

GAB Artesian Springs

What do they look like?



Economic Benefits for SA

	Current	Proposed (draft estimates)
Permanent Jobs	BHP Billiton 1750 State-wide 6200	BHP Billiton ~4000 State-wide ~15000
Location of workforce		
Construction Jobs		
Gross State Product (pa)		
Investment		

Life of Olympic Dam is 70+ years

Economic Benefits for SA

	Current	Proposed (draft estimates)
Permanent Jobs	BHP Billiton 1750 State-wide 6200	BHP Billiton ~4000 State-wide ~15000
Location of workforce	Roxby Downs 80% FIFO/DIDO 20%	Roxby Downs 85% FIFO/DIDO 15-30%
Construction Jobs		
Gross State Product (pa)		
Investment		

Life of Olympic Dam is 70+ years

Economic Benefits for SA

	Current	Proposed (draft estimates)
Permanent Jobs	BHP Billiton 1750 State-wide 6200	BHP Billiton ~4000 State-wide ~15000
Location of workforce	Roxby Downs 80% FIFO/DIDO 20%	Roxby Downs 85% FIFO/DIDO 15-30%
Construction Jobs	Minor works	On site peak 8000 On site average 5000 State-wide ~7300
Gross State Product (pa)		
Investment		

Life of Olympic Dam is 70+ years

Economic Benefits for SA

	Current	Proposed (draft estimates)
Permanent Jobs	BHP Billiton 1750 State-wide 6200	BHP Billiton ~4000 State-wide ~15000
Location of workforce	Roxby Downs 80% FIFO/DIDO 20%	Roxby Downs 85% FIFO/DIDO 15-30%
Construction Jobs	Minor works	On site peak 8000 On site average 5000 State-wide ~7300
Gross State Product (pa)	\$1 billion	~\$2.5 billion
Investment		

Life of Olympic Dam is 70+ years

Economic Benefits for SA

	Current	Proposed (draft estimates)
Permanent Jobs	BHP Billiton 1750 State-wide 6200	BHP Billiton ~4000 State-wide ~15000
Location of workforce	Roxby Downs 80% FIFO/DIDO 20%	Roxby Downs 85% FIFO/DIDO 15-30%
Construction Jobs	Minor works	On site peak 8000 On site average 5000 State-wide ~7300
Gross State Product (pa)	\$1 billion	~\$2.5 billion
Investment	1988 – 2004 \$4 billion	2005 – 2013 Additional \$5 billion+

Life of Olympic Dam is 70+ years

Conclusion

- Olympic Dam is world class:
 - the largest uranium deposit in the world
 - the lowest cost uranium producer in the world
 - established producer of copper, gold and uranium with a 17 year successful history
 - 70+ more years with further expansion capacity
- Work is well advanced on the Expansion Study, with construction likely to start in 2008/9
- Likely development case is a 40 Mtpa open pit mine, using latest processing technology and which conforms to all of BHP Billiton's Sustainable Development Principles
- Successful project assured with BHP Billiton using world class people, systems and equipment

