



WEST RAND TAILINGS RETREATMENT PROJECT

Unlocking value and
creating sustainability

Grant Stuart
Vice President: Projects

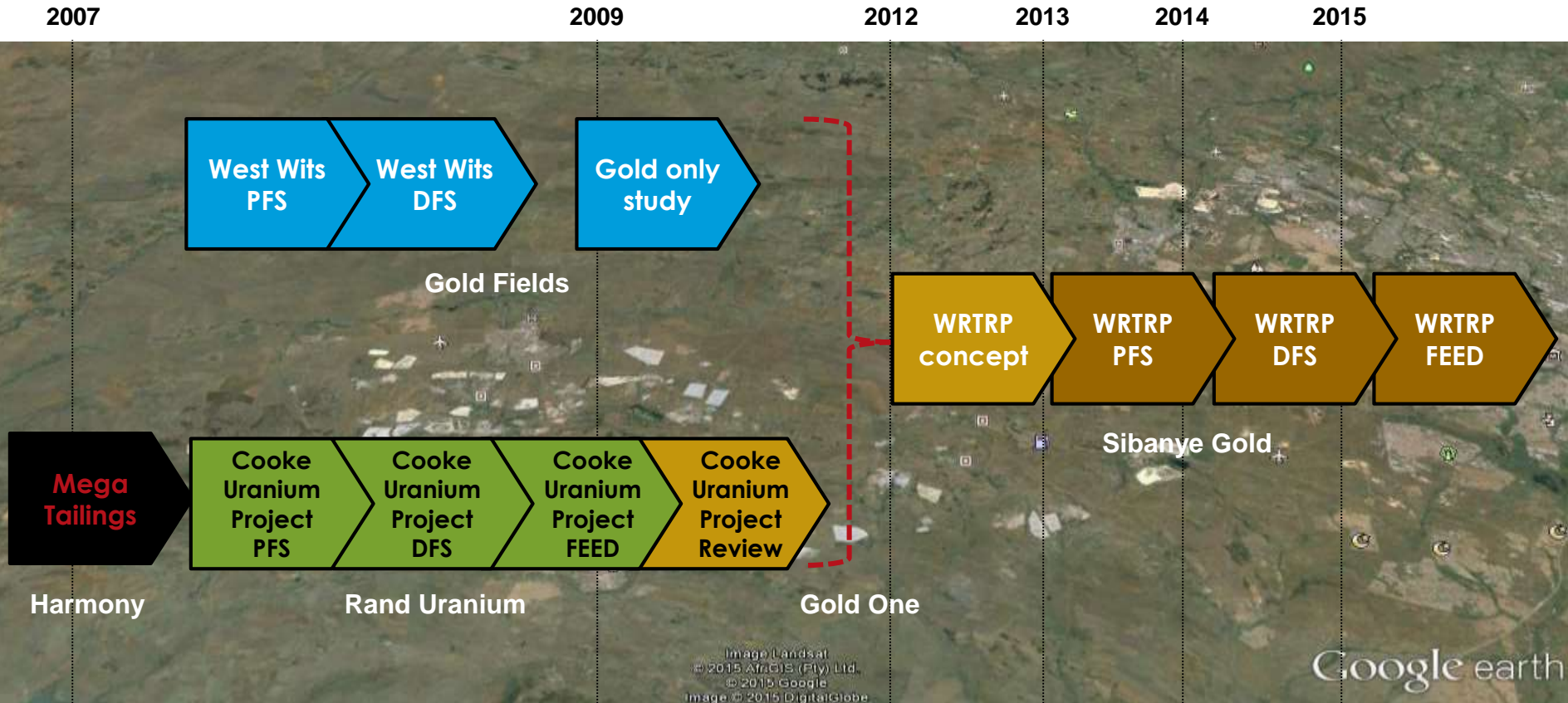
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- The West Rand Tailings Retreatment Project (WRTRP) is a **large-scale, long-life** surface tailings retreatment opportunity, the **economic viability** of which was **secured through the acquisition of the Cooke assets** by Sibanye in 2014
- The WRTRP will turn to account sizeable surface gold and uranium resources at Sibanye's Kloof, Driefontein and Cooke operations
 - realising **significant long-term value for shareholders**
 - **benefitting all stakeholders** by creating sustainable employment, facilitating community development, contributing to the revenue and delivering environmental benefits
- The project's inherent flexibility and the extensive, detailed technical studies undertaken, allow for **phased development and staging of capital**, substantially **reducing project risk**
- Process design has been historically proven at similar, existing operations
 - incorporating **modern technology** and **world-leading environmental standards**
- Possible use of existing surface processing infrastructure provides additional **flexibility**

Project history

Cooke surface resources were consolidated within Sibanye in 2014, creating the necessary critical mass and scale



Independently, the Sibanye (ex. Gold Fields) and Cooke surface projects were not economically or environmentally viable

Gold Fields (West Wits Project)*		Cooke Uranium Project	
Drivers	<ul style="list-style-type: none"> • Gold recovery • Environmental remediation 	Drivers	<ul style="list-style-type: none"> • Uranium recovery • Uranium consolidation/growth
Characteristics	<ul style="list-style-type: none"> • Sizable, high grade gold resources • Uranium and sulphuric acid by-products 	Characteristics	<ul style="list-style-type: none"> • High grade uranium resources • Gold and sulphuric acid by-products
Pros	<ul style="list-style-type: none"> • Scale and gold grade • Existing gold processing infrastructure 	Pros	<ul style="list-style-type: none"> • Scale and uranium grade • Uranium processing infrastructure at Cooke 4
Cons	<ul style="list-style-type: none"> • Removal of uranium and sulphur from final tailings • Not economic due to low uranium grades 	Cons	<ul style="list-style-type: none"> • Limited life due to lower resource volumes

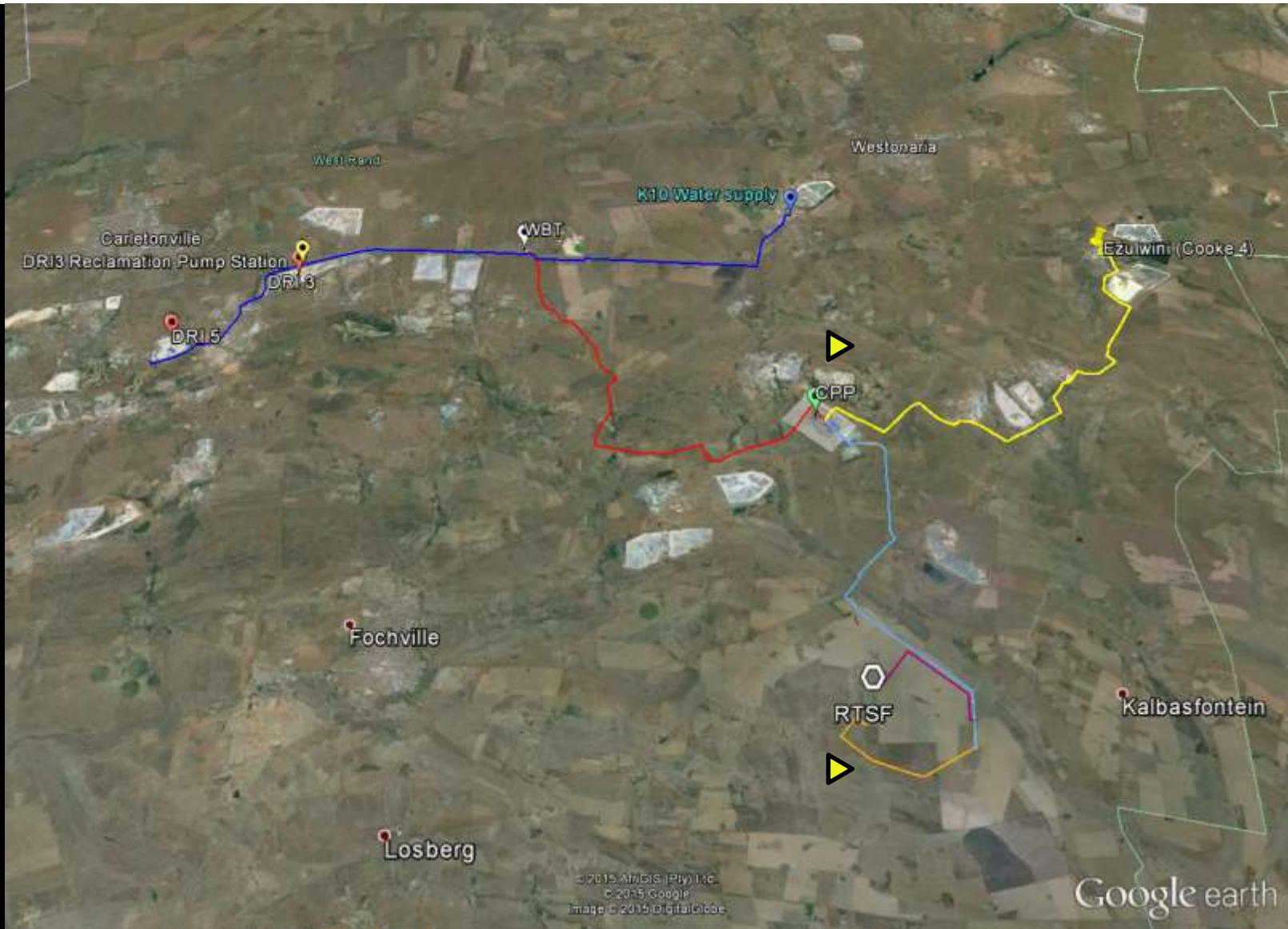
*Excluding South Deep

Integrating projects and leveraging synergies

- High-grade Driefontein surface facilities deliver early cash flows
- High uranium grade and size of Cooke resources underpin value and justify construction of uranium processing plant
- Scale of combined West Wits surface resources can support a long life-annuity operation
- Phased development of central, high-volume processing facilities and single deposition site reduce risk
- Existing gold and uranium processing infrastructure can be used when appropriate
- Central positioning of metallurgical processing facility and deposition site relative to resources is cost effective
- Possible consolidation of district resources in the future – improving project Return On Invested Capital (ROIC) and providing regional environmental solution

WRTRP – leveraged organic growth to deliver economic value with concurrent rehabilitation and provide sustainable social and environmental benefits

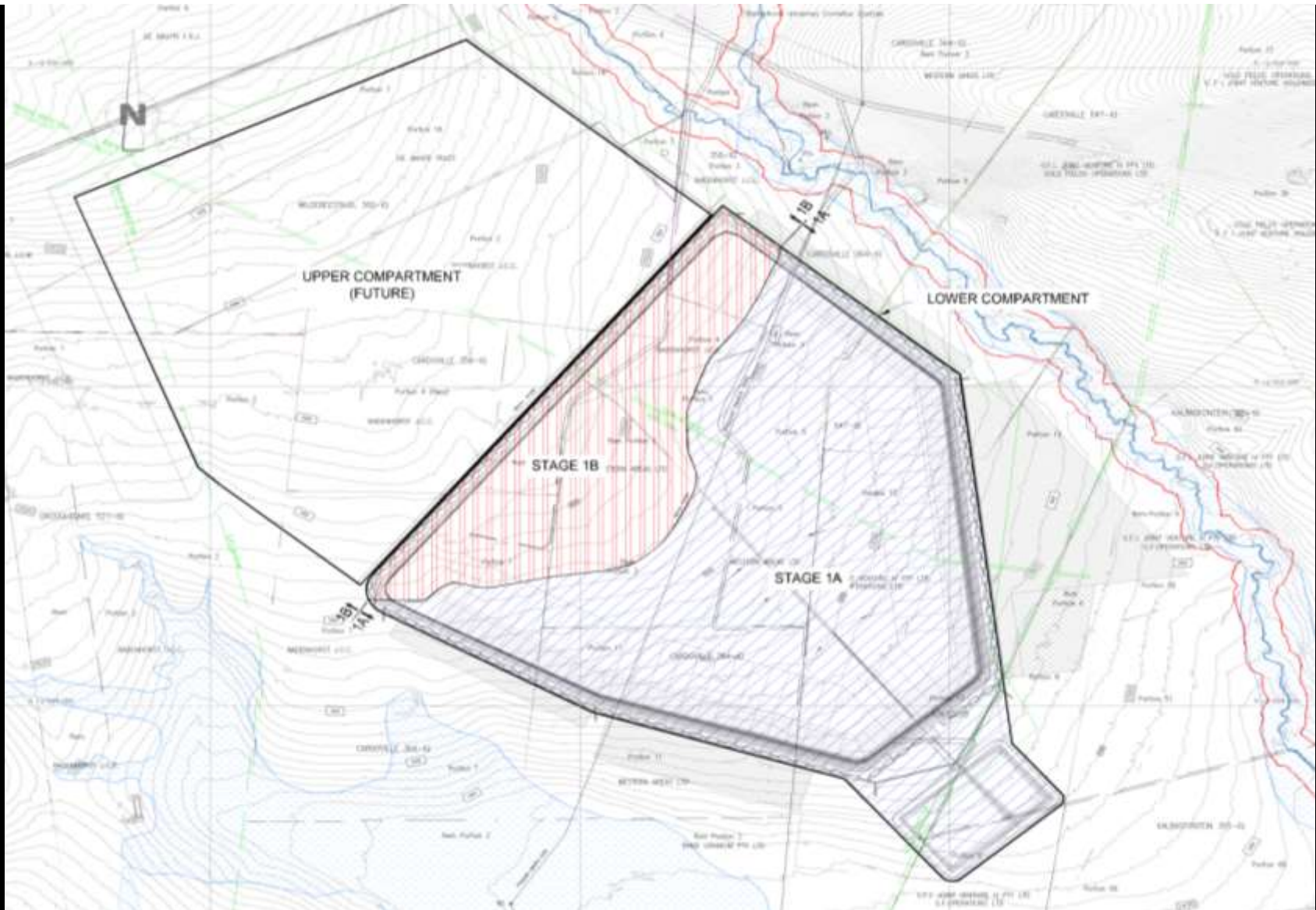
- Removal and remediation of existing tailings deposits currently located on sensitive dolomitic aquifers reduces future environmental liability and risk
 - single 1,350ha central tailings facility to be constructed away from sensitive dolomitic areas on less permeable substrate
 - removal of tailings facilities will reduce health risks for surrounding communities from possible exposure to dust
- Removal of sulphides by sulphuric acid plant to reduce acid mine drainage risk
- Currently impacted mine water to be re-used in the hydraulic mining process
- Excess water to be treated to potable drinking water standards



Central processing plant (CPP) location



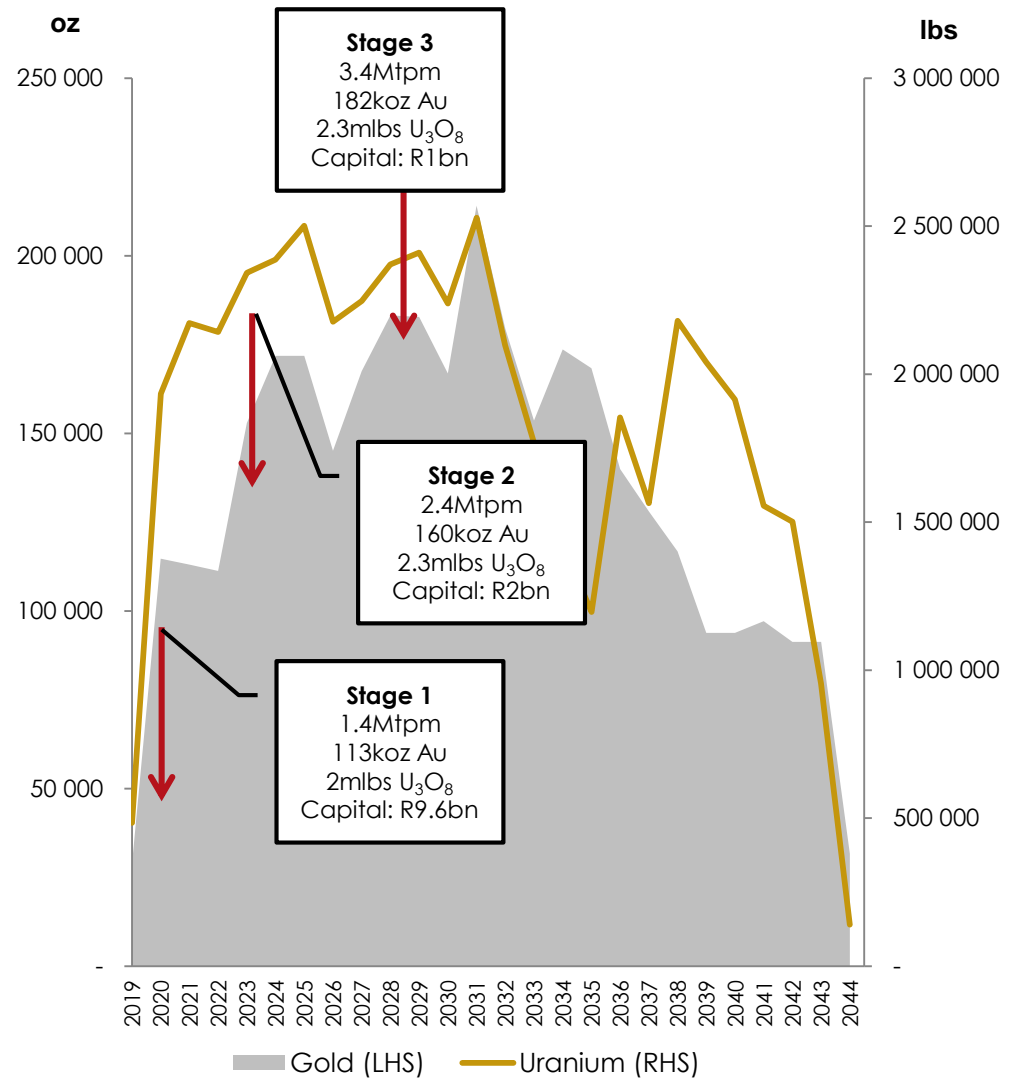
Regional tailings storage facility (RTSF) layout



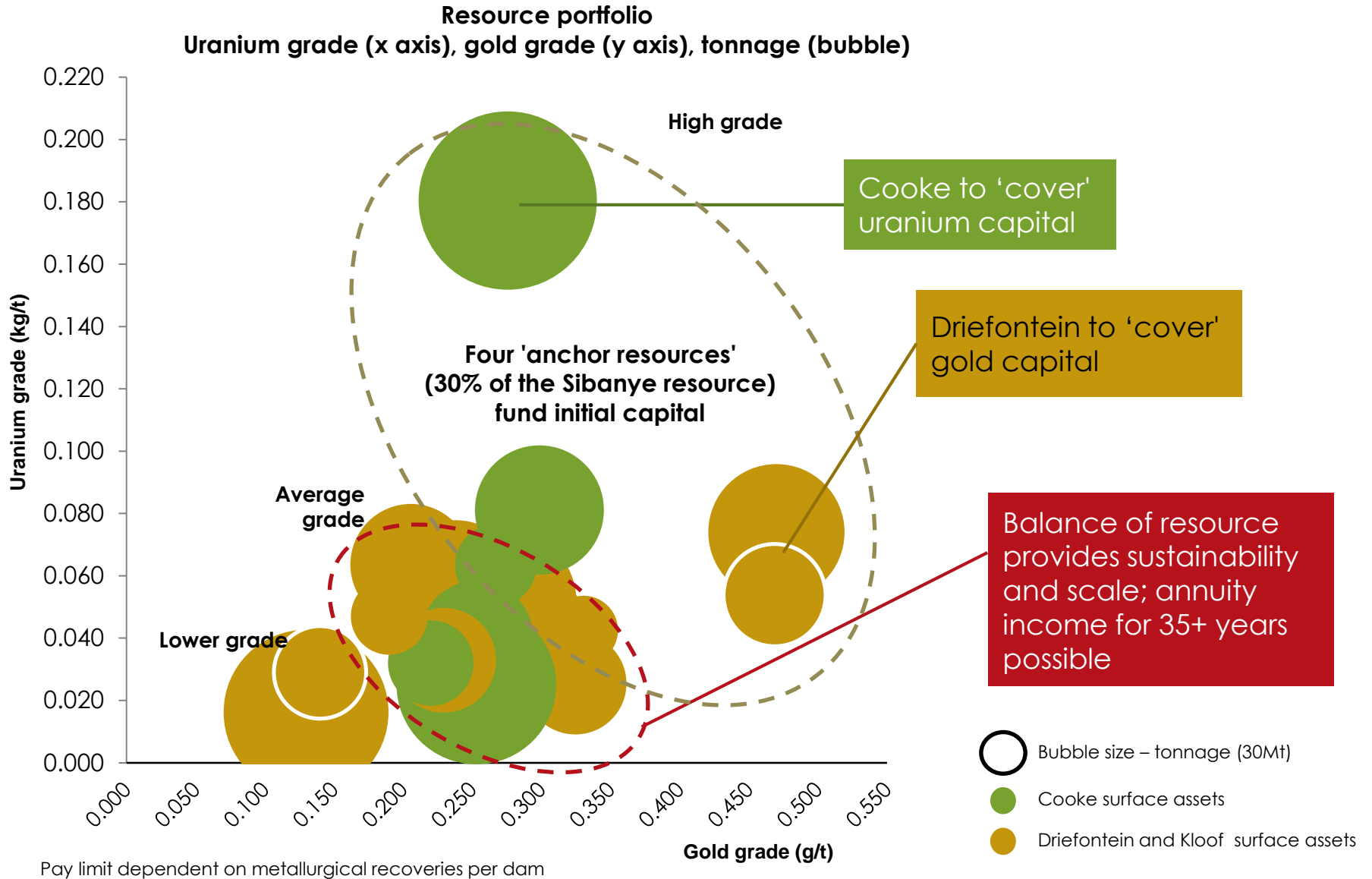
Full project implementation: conceptual profile

Plant modules developed in 1Mtpm stages to treat Driefontein, Kloof and Cooke clusters simultaneously

- Production of 3.5Moz of gold and 48Mlbs of uranium over LoM
- Peak production:
 - Gold: 210koz
 - Uranium: 2.5Mlbs
- Deposition site: capable of receiving peak throughput of up to 4Mtpm



Four “anchor” resources underpin project value



Pay limit dependent on metallurgical recoveries per dam

Capital recovered during phase one; potential 35-year annuity income thereafter



WRTRP

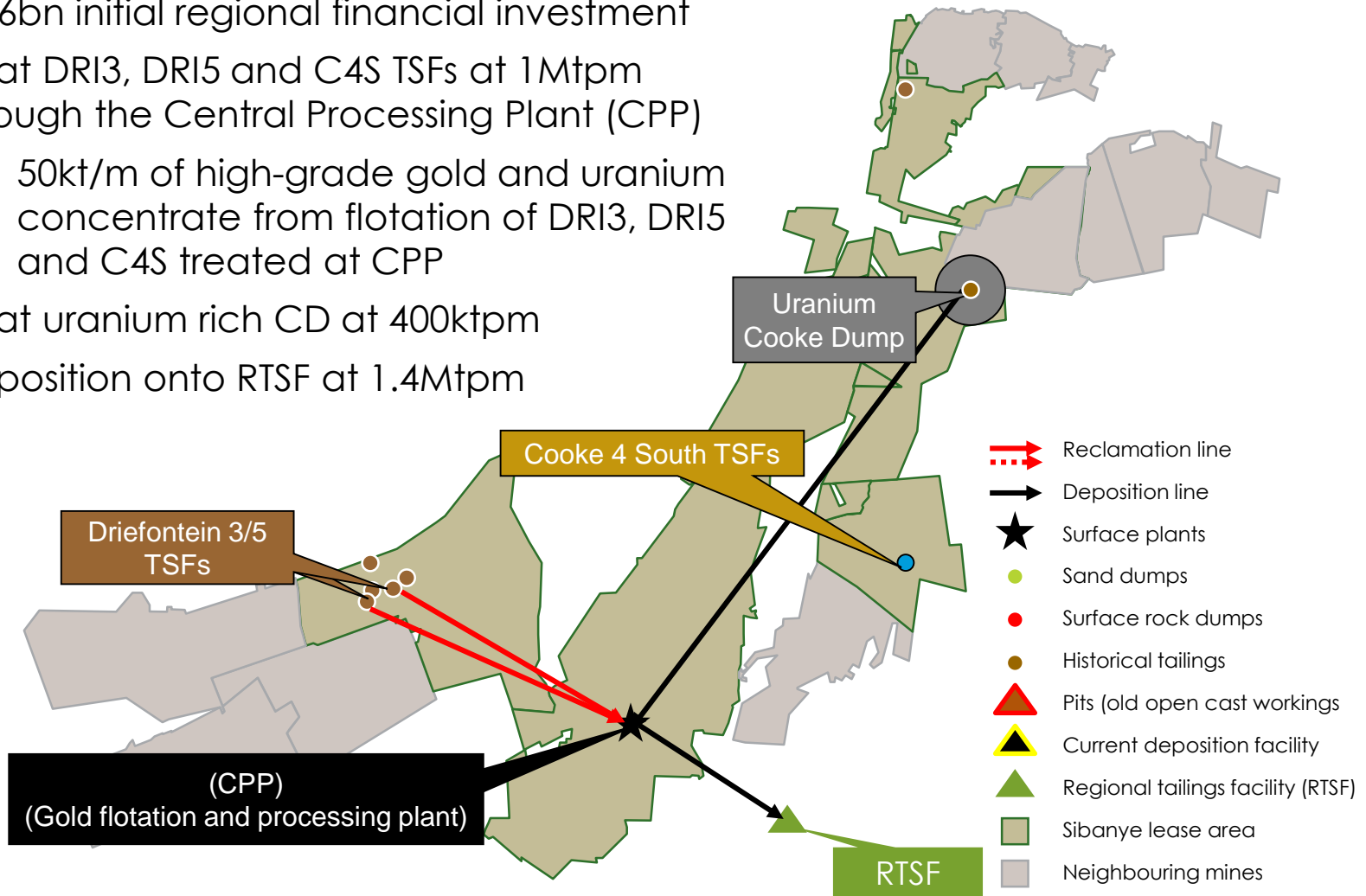
Preferred integrated gold
and uranium approach

Total Sibanye resource of 715Mt includes ~6.5Moz Au and ~99Mlb U₃O₈

- “Get into business” approach focusing on four anchor resources reduces capital and risk:
 - 210Mt resource containing 2.4Moz gold and 53Mlbs uranium
 - Cooke Dump (CD) reclaimed simultaneously with Driefontein 3 and 5 facilities (DRI3 and DRI5) and Cooke 4 facility (C4S) over 18 years
- Monthly throughput of 1Mt from DRI3, DRI 5 and C4S and 400,00t from CD
- Annual steady state gold production: 100,000oz potentially peaking at 115,000oz
- Annual steady state uranium production: 2.2Mlbs potentially peaking at 2.5Mlbs
- Total expected production of 1.3Moz of gold and 33.4Mlbs of uranium over 18 years
- Combined expected capital investment of ~R9.6bn over three years

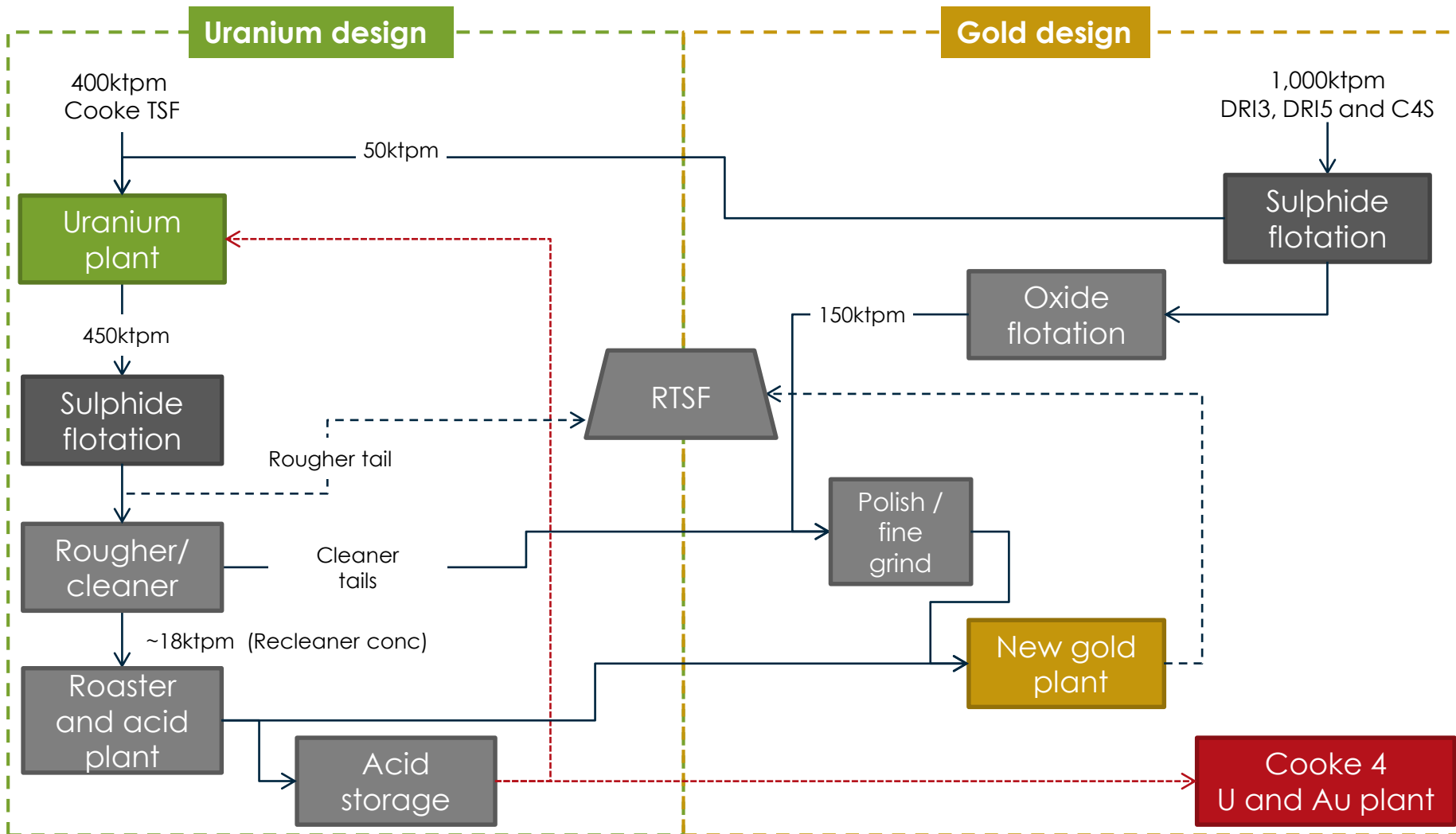
Note: DRI3, DRI5 - Driefontein 3/5 Dams, C4S – Cooke 4 South Dam and CD - Cooke Tailings Dams

- R9.6bn initial regional financial investment
- Treat DRI3, DRI5 and C4S TSFs at 1Mtpm through the Central Processing Plant (CPP)
 - 50kt/m of high-grade gold and uranium concentrate from flotation of DRI3, DRI5 and C4S treated at CPP
- Treat uranium rich CD at 400ktpm
- Deposition onto RTSF at 1.4Mtpm



Note: DRI3, DRI5 - Driefontein 3/5 Dams, C4S – Cooke 4 South Dam and CD - Cooke Tailings Dams

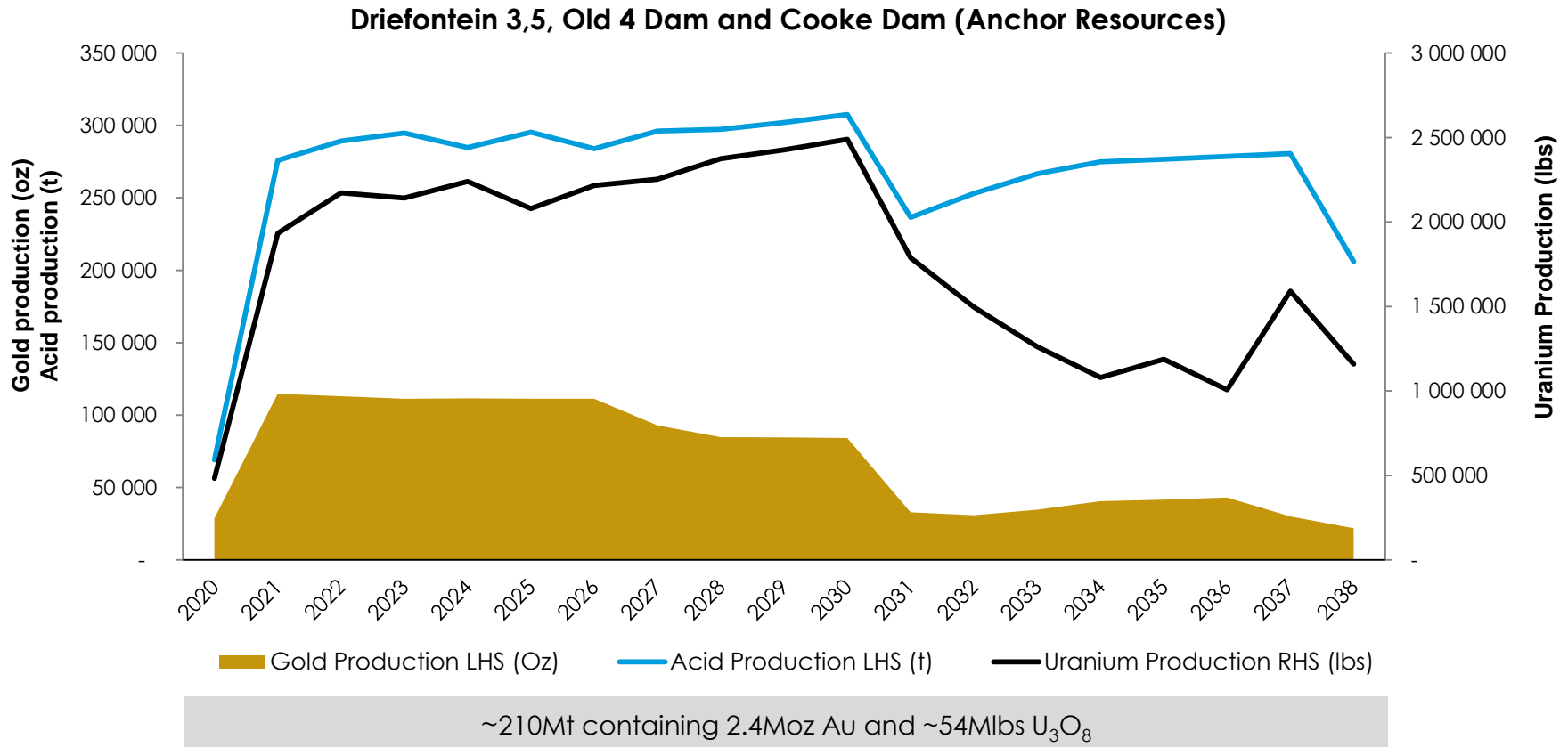
Integrated approach (cont'd)



Note: DRI3, DRI5 - Driefontein 3/5 Dams, C4S – Cooke 4 South Dam and CD - Cooke Tailings Dams

Production profile – integrated approach

- Additional Sibanye-owned resources offer further life and leverage annuity potential
- Initial investment of R9.6bn (2017-2019) with first production expected in 2020

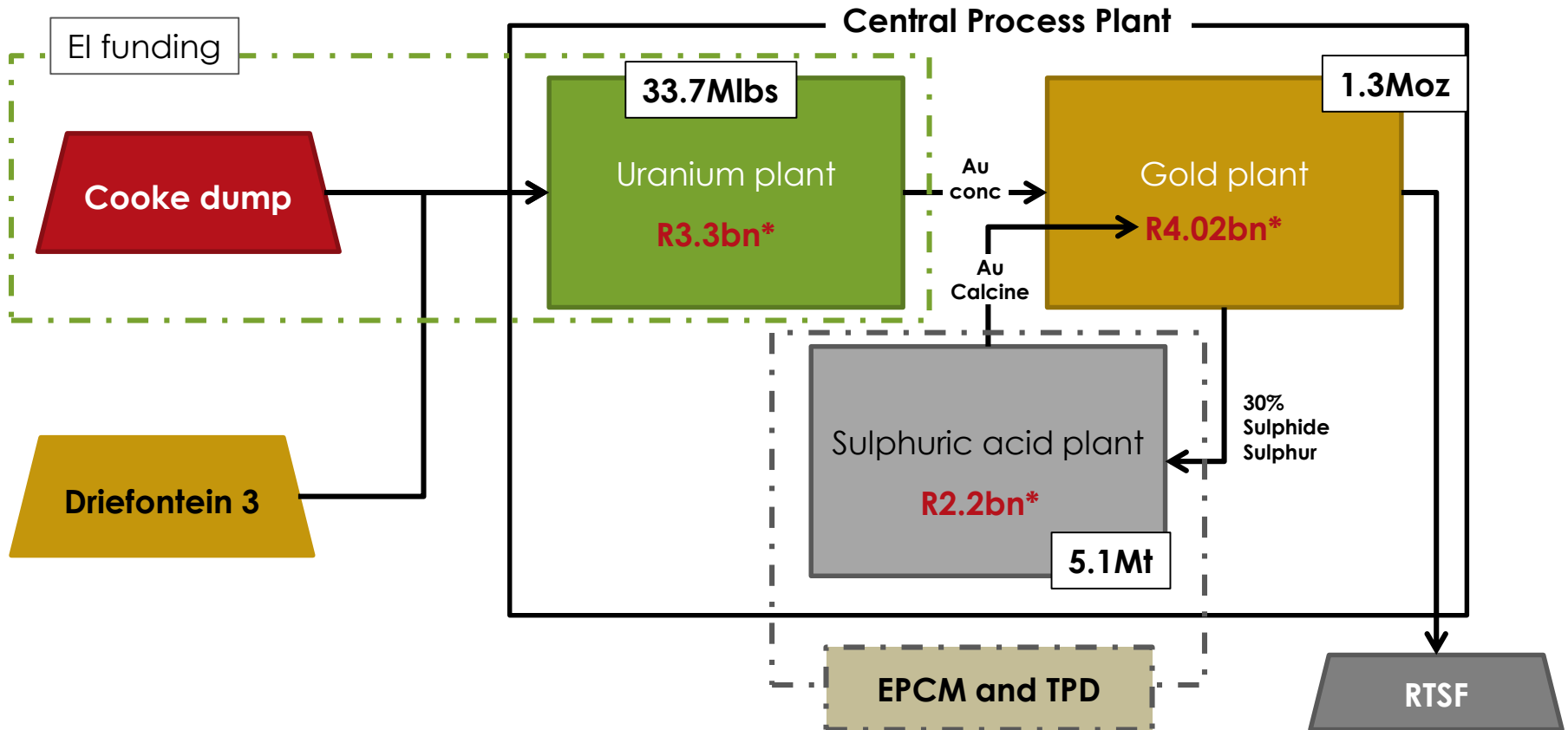


Anchor resources cover the capital

Opex	Gold		Uranium		Sulphuric acid	
Production over life	Moz	1.32*	Mlbs	33.37*	Mt	5.07*
	kg	41,057				
Capex	Rbn	4.02	Rbn	3.34	Rbn	2.20
	\$m	277	\$m	230	\$m	152
Opex	Rm	5.10	Rm	13.16	Rm	2.35
	\$m	351	\$m	907	\$m	162
Metrics						
Capex	R/kg	97,962	R/lb	100	R/t	435
	US\$/oz	210	US\$/lb	7	US\$/t	30
Opex	R/kg	124,121	R/lb	394	R/t	463
	US\$/oz	266	US\$/lb	27	US\$/t	32
Total	R/kg	222,084	R/lb	494	R/t	898
	US\$/oz	476	US\$/lb	34	US\$/t	62

* Shared capex (indirect costs) allocated to gold, uranium and acid modules
Exchange Rate: ZAR14.5: 1 US\$

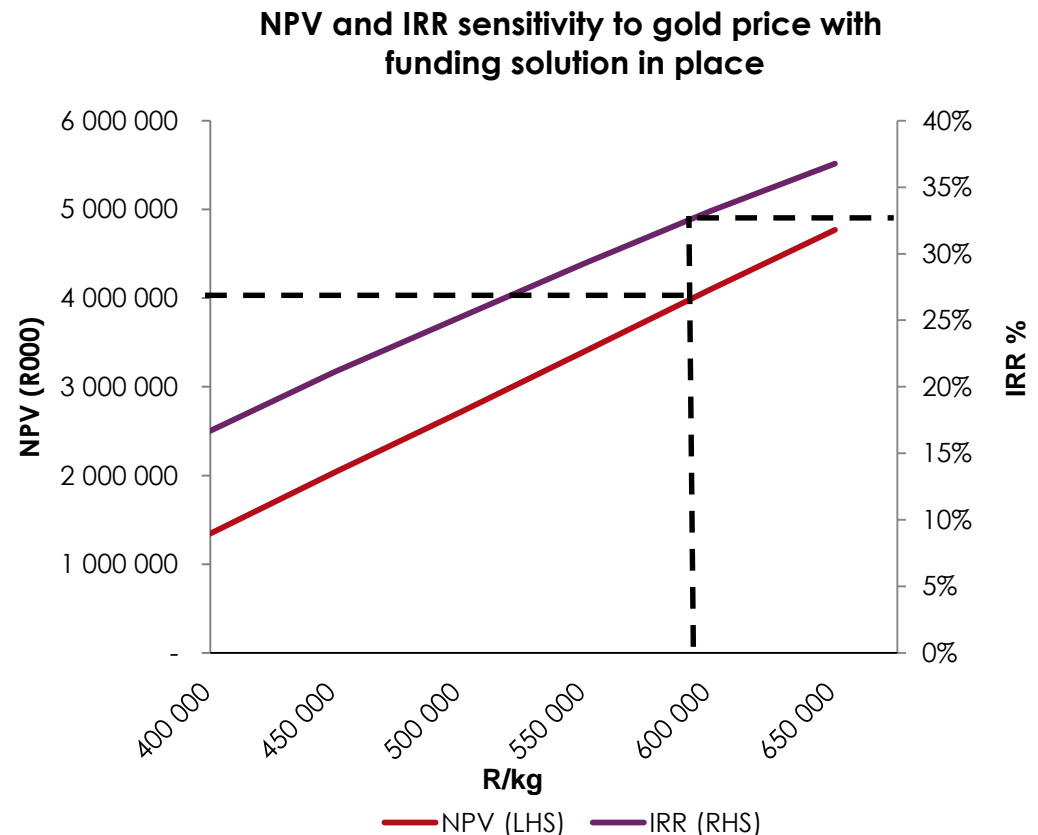
- Potential funding structure: 'Uranium off-take' solution with equity investor (EI) and 'build, own and operate' model for sulphuric acid with EPCM and third party distributor (TPD)



* Shared capex (indirect costs) allocated to gold, uranium and acid modules

“Get into business” design for 37% of the Sibanye-owned gold resource is significantly enhanced if uranium and sulphuric acid plants are funded by third parties

- Project valuation considers standalone project NPV; upside through annuity resource, tax shields and debt funding
- NPV of R4bn and IRR of 33% at a gold price of R600,000/kg with funding solution in place



Assuming Uranium price of US\$45/lb from 2021 exchange rate: ZAR14.5: 1 US\$



WRTRP

Delayed uranium
capital execution

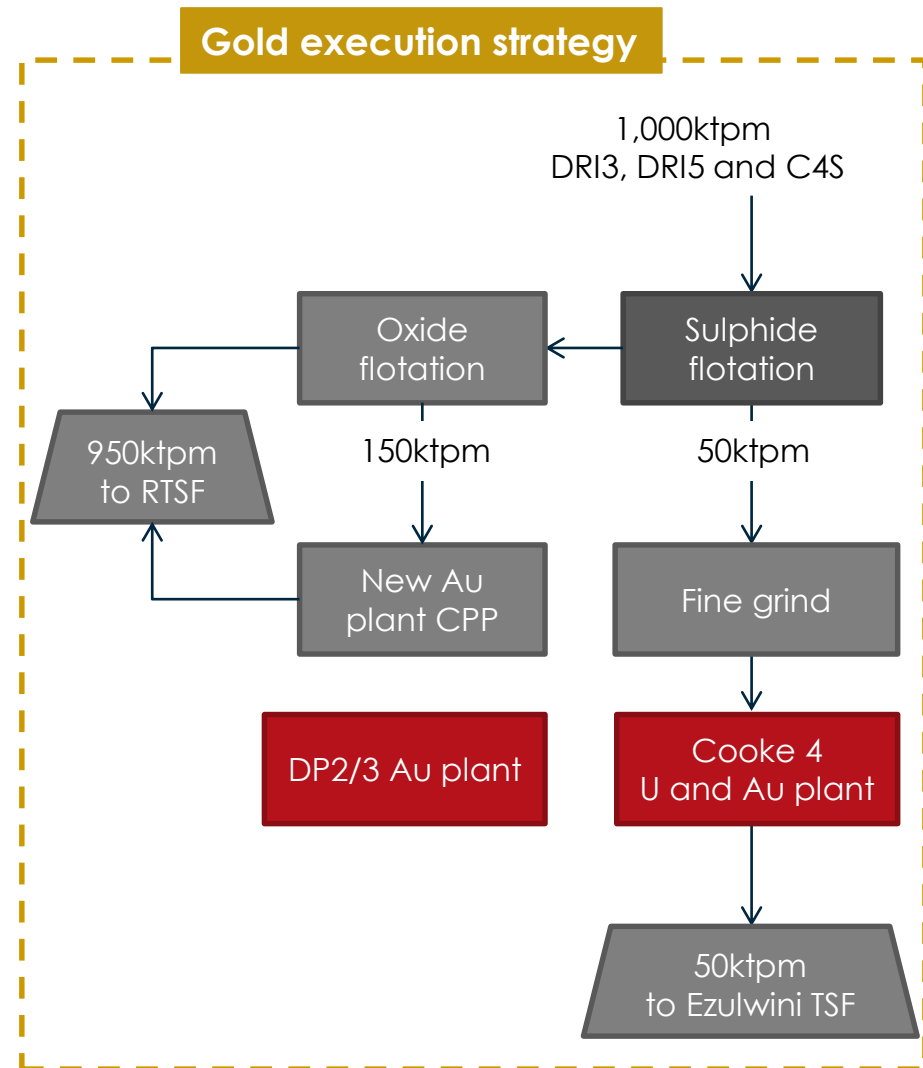
Total Sibanye resource of 715Mt includes ~6.5Moz Au and ~99Mlb U₃O₈

- “Get into business” approach focusing on three anchor resources reduces capital and risk:
 - 124Mt resource containing 1.6Moz gold and 18.7Mlbs uranium
 - DRI3 reclaimed first, followed by DRI5 and C4S over 11 years
- Throughput of 1Mtpm from DRI3, DRI 5 and C4S and delayed 400,00tpm from CD
- Annual steady state gold production: 90,000oz
- Annual steady state uranium production: 300,000lbs ramping up to 1Mlbs with C4S
- Total expected production of 860,000oz of gold and 6.1Mlbs of uranium over 11 years
- Combined capital investment of ~R4.6bn expected over two-year period
 - an expected delay to uranium and acid plant capital investment for 8 years until the life of the Cooke 4 North tailings dam reaches final height

Note: DRI3, DRI5 - Driefontein 3/5 Dams, C4S – Cooke 4 South Dam and CD - Cooke Tailings Dams

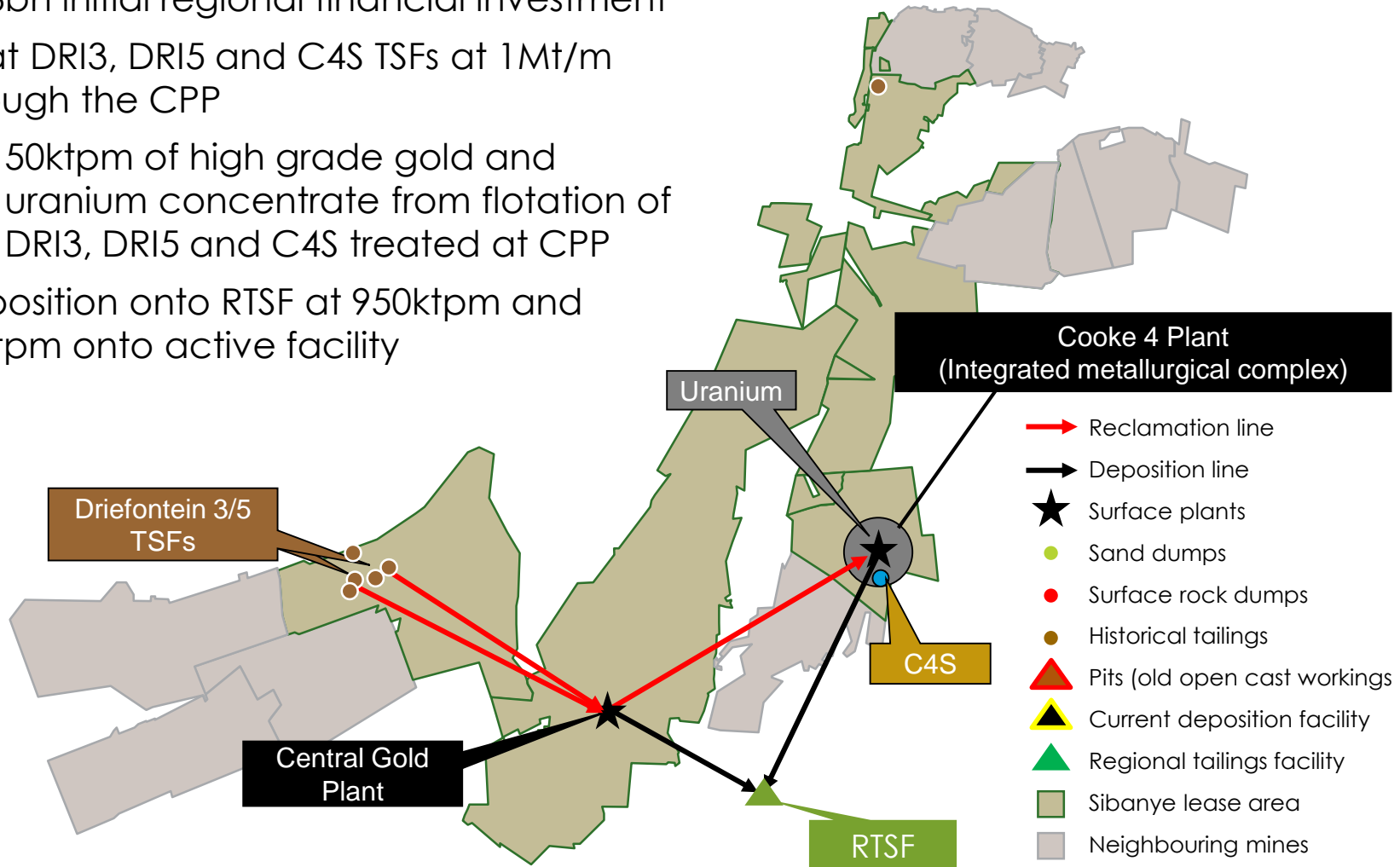
Prioritise the high-gold Driefontein complex

- Driefontein 3 and 5 TSFs and C4S reclaimed @ 1Mtpm
- 124Mt Sibanye resource contains 1.6Moz gold and 18.7Mlbs uranium
- Delay uranium and acid plant capital
- Opportunity to use existing surface infrastructure:
 - 180ktpm recently upgraded CIL plant currently treating surface rock material
 - Cooke 4 metallurgical plant



Delayed uranium capital execution (cont'd)

- R4.6bn initial regional financial investment
- Treat DRI3, DRI5 and C4S TSFs at 1Mt/m through the CPP
 - 50ktpm of high grade gold and uranium concentrate from flotation of DRI3, DRI5 and C4S treated at CPP
- Deposition onto RTSF at 950ktpm and 50ktpm onto active facility



Note: DRI3, DRI5 - Driefontein 3/5 Dams, C4S - Cooke 4 South Dam and CD - Cooke Tailings Dams

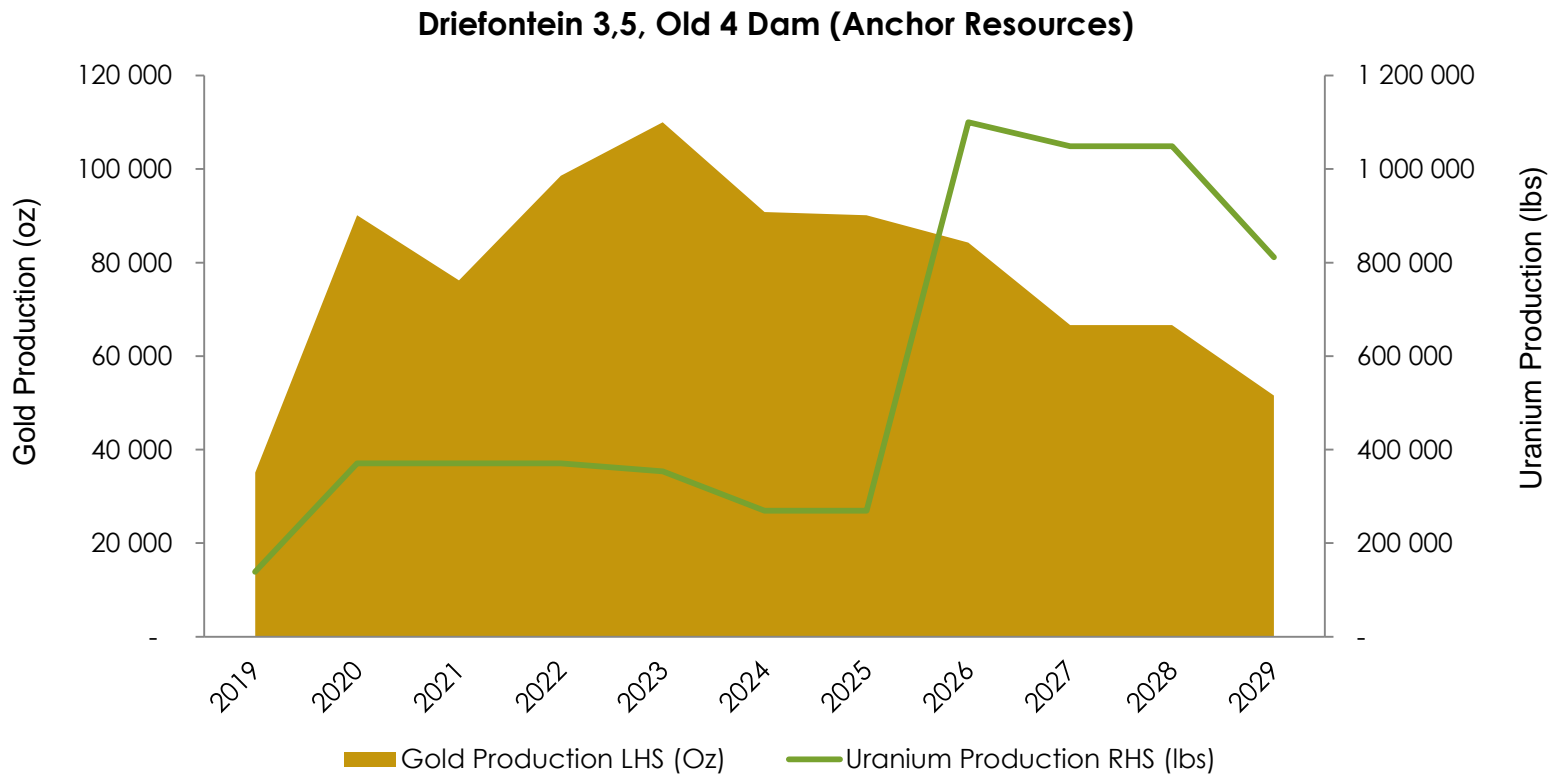
Delay of uranium execution is expected to reduce the execution timeframe to 24 months 24

Cost of sales – delayed uranium capital execution

Opex	Gold		Uranium	
	Production over life	koz	860	MIbs
	kg	26,749		
Capex	Rbn	4.43*	Rbn	116*
	\$m	306	\$m	8
Opex	Rm	5.07	Rm	1.64
	\$m	349	\$m	113
Metrics				
Capex	R/kg	165,610	R/lb	19
	US\$/oz	355	US\$/oz	1
Opex	R/kg	189,353	R/lb	269
	US\$/oz	406	US\$/oz	19
Total	R/kg	354,963	R/lb	288
	US\$/oz	761	US\$/lb	20

* Shared capex (indirect costs) allocated to gold, uranium and acid modules
Exchange Rate: ZAR14.5: 1 US\$

- Additional Sibanye-owned annuity offers additional life
- Initial investment of R4.6bn (2017-2018) with expected production in 2019



- Combined, the Cooke and Sibanye surface resources and infrastructure enhance the economic viability and development of long-life, environmentally-beneficial surface retreatment project
- Low technical risk project with flexible design and implementation routes that provide valuable optionality pending commodity prices and funding solution
 - potential to phase uranium and acid plant later
- First phase of integrated approach covers 75% of total project capital requirement (30% of the resource)
- Project valuation considers standalone project; upside through potential of annuity resources, tax shields and debt funding
- Expected name plate production of 100,000oz gold and 2Mlbs uranium annually by the end of Q1 2020
- Continuation of front-end engineering design (FEED) while permitting and funding strategy continue
 - permits including approval from the NNR, DMR and DWS expected by Q3 2016
 - investigating alternative funding options that have the potential to enhance equity valuations