

Exceptional Updated Gold Pre-Feasibility Study Results

ASX Code: WRM

Issued Securities

Shares: 72.6 million

Options: 5.8 million

Cash on hand (24 July 2020)

\$15.7M

Market Cap (18 Aug 2020)

\$46.1M at \$0.635 per share

Directors & Management

Peter Lester

Non-Executive Chairman

Matthew Gill

Managing Director &

Chief Executive Officer

Jeremy Gray

Non-Executive Director

Stephen Gorenstein

Non-Executive Director

Shane Turner

Company Secretary

Rohan Worland

Exploration Manager

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HIGHLIGHTS

Exceptional Project Economics

- An initial Gold First stage ("Gold Stage One") **pre-tax free cash flow of A\$126M** at A\$2,300/oz gold price over its initial five years of operation.
 - This compares with the original 2017 Gold First PFS which delivered a pre-tax free cash flow of A\$37.6M at A\$1,700/oz gold price (refer Table 2-2 for further comparisons).
- **NPV (pre-tax 8%) of A\$93M and 82% IRR** based on A\$2,300 gold price.
- At A\$2,600/oz gold price, the Gold Stage One pre-tax cash flow increases 38% to A\$174M, the NPV (pre-tax 8%) increases to A\$132M and the IRR increases to 112%.
- Pre-production **capital cost of A\$39M with a payback of just 14 months** from production start.
- Gold Stage One All-In Sustaining Costs (AISC) of A\$1,327/oz.

Key Project Parameters

- Average gold sales of 35,500ozpa over the initial Gold Stage One 5 years of mill production.
- The first two gold deposits are already pre-stripped and on the approved Mining Leases there is also a tailings storage facility (TSF), a water dam and the plant site cleared, all from previous mining operations.
- Standalone mining and processing operation with a nominal 1Mtpa throughput, comprising a conventional crush/grind and CIL processing circuit, with room left to incorporate a flotation circuit as part of an anticipated silver Stage Two to produce a silver concentrate.

Ore Reserve Underpins Economics

- Open Pit Probable Ore Reserve of 4.1 Mt at 1.3 g/t gold for 174,000 oz.
- The Ore Reserve represents 88% of the Gold Stage One metal production forecast.

Substantial Project Upside - Silver

- The Gold Stage One PFS covers only two main deposits (Strauss and Kylo), with significant upside via the Company's two other gold Resources and through regional exploration.
- The Gold Stage One mine plan also assumes no contribution from any of the Company's four silver resources, hosting a combined 23M ozs of silver.
 - With the current strong silver price, studies are to commence to determine the optimum silver recovery flowsheet and product specifications, prior to bringing some of the silver resource into Reserve. This will then allow the inclusion of this material into the mine plan to occur and further extend the mine life and boost the already strong financial metrics of the project.

White Rock Minerals Ltd ("White Rock" or "the Company") is pleased to announce the results from a review and update to its 2017 Stage One Gold First Preliminary Feasibility Study¹ ("2017 PFS"). This review - The Stage One (Gold First) 2020 Pre-feasibility Study Update ("2020 PFS Update Report" or "the Report") - has seen an increase in the gold Resource and gold Ore Reserve and significantly improved financial metrics, re-confirming a technically and economically robust and viable mining and gold processing project for its 100% owned Mt Carrington gold and silver Project in northern New South Wales, Australia ("Project").

Management Comments

White Rock's MD&CEO, Matt Gill, said the outstanding results of the 2020 PFS Update for the Mt Carrington gold and silver project highlighted the opportunity to develop a substantial low cost Australian gold project with outstanding economics and strong financial returns, with genuine exposure to possible future silver production:

"White Rock's Mt Carrington project is wonderfully placed with exposure to two strong and sought-after commodities – gold and silver. We have the best of both worlds – a low entry cost to gold production with exposure to potential silver production at the right time.

This Pre-feasibility Study Update confirms Mt Carrington as a viable and robust project with significant potential upside in subsequent silver production and future gold and silver exploration.

The compelling 2020 PFS Update outcomes demonstrate the Board's view that the Mt Carrington gold and silver Project is one of the best undeveloped gold projects on the east coast of Australia, with the potential to deliver an average of 35,500oz of gold per annum at an "all-in sustaining cost" ("AISC") of A\$1,327/oz over an initial 5 year production period. At an assumed base case gold price of A\$2,300/oz, well below current spot prices, the Project is expected to deliver robust margins and generate strong free cashflows averaging A\$32M pa during its first five years of operation.

"Our project development strategy is underpinned by the construction of an onsite 1 million tonne per annum capacity CIL plant capable of producing gold dore bars and incorporating room for a flotation circuit and potentially producing a silver concentrate for sale in the future.

"The silver dominant Mineral Resource, containing some 8.3M ounces of Indicated Resource (refer ASX announcements 13 February 2012 & 20 November 2013) will be the subject of further mineralogy studies, metallurgical test work and concentrate sales discussions. Mining of these silver resources constitutes Stage Two of the Mt Carrington project.

"A low forecast pre-production capital investment of just A\$39 million and a 14 month capital payback makes this a financially attractive proposition, with a base case pre-tax NPV_{8%} of A\$93 million and 82% Internal Rate of Return at the assumed gold price of A\$2,300/oz. Using current spot prices of around A\$2,600/oz, we have a Project with a 100% margin on its costs, and the pre-tax NPV improves to A\$132 million and the IRR to 112%.

"There is substantial upside to our base case PFS numbers with strong potential to grow the current resource base of 352,000 ounces of gold and 23.2 Moz of silver through successful exploration on our large 183km³ land tenement package.

"The definition of an improved 174,000 oz Ore Reserve over that stated in 2017¹ indicates the financial viability of the project, with 88% of the mining plan underpinned by Ore Reserves.

"The focus now for this low cost high margin gold project, with a possible Silver Stage Two to follow, is to review options to fund and advance the project through the environmental approvals stage such that Development Consent can be achieved and a Final Investment Decision made.

"The robust economics of this Gold First PFS demonstrate the benefits of taking this project forward. As we mentioned in our June Quarterly Report, the updated financial and operating metrics will now allow the Company to complete a strategic review of Mt Carrington and select the best path to enhance Shareholder value from this project in light of the very strong gold price environment and significant interest in silver."

Cautionary Statement

The 2020 Pre-Feasibility Update Report referred to in this announcement ("2020 PFS Update Report" or "the Report") has been undertaken to review, update and re-confirm the technical and economic viability of the open pit and gold processing operation at Mt Carrington (the "Project"). The Report is based on Probable Ore Reserves derived from Indicated Mineral Resources. A proportion of Inferred Resource material has been included in mill feed which forms part of the production target ("Production Mill Feed").

Approximately 12% of the Production Mill Feed referred to in the Report is based on Inferred Resources, with half of this total scheduled at the end of Year 4. Investors are cautioned that there is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target itself will be realised.

The Report is based on the material assumptions outlined below. While White Rock considers all of the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the Report will be achieved.

Unless otherwise stated, all cashflows are in Australian dollars, are undiscounted and are not subject to inflation/escalation factors, and all years are calendar years. The 2020 PFS Update Report has been prepared to an overall level of accuracy of approximately -15% to +25%.

White Rock has concluded it has a reasonable basis for providing the forward-looking statements included in this announcement and believes that it has a "reasonable basis" to expect it will be able to complete the development of the Project.

Key components of the Report and the material assumptions used are contained within this announcement. Information includes mine design studies, metallurgical recoveries from existing test work and indicative costs based on discussions and information prepared by external consultants. Given the uncertainties involved, investors should not make any investment decisions based solely on the results of the Report.

This announcement has been prepared in accordance with the JORC Code (2012) and the ASX Listing Rules. Please refer to pages 18 - 22 of this announcement for further information regarding Forward-Looking Statements, Competent Persons Statement and Disclaimers.

1. Overview

White Rock Minerals released a Gold First Stage Pre-Feasibility Study ("2017 PFS") in December 2017¹.

In June 2020 White Rock engaged the lead consultancy for that 2017 PFS – Mining Plus P/L (a global mining services provider) to review that 2017 PFS and the associated gold Mineral Resource Estimates (MRE) and gold Ore Reserve, update the key operating and capital costs (OPEX and CAPEX respectively) and gold price assumptions, update the financial model accordingly and deliver an updated Report – the 2020 PFS Update Report – the subject of this Announcement.

Mincore P/L were engaged to work with Mining Plus and review and update the gold processing OPEX and CAPEX estimates. However there have been no additional metallurgical, geotechnical, hydrological or tailings management studies since the release of the 2017 PFS, therefore these parameters are unchanged in this 2020 Update Report. The reader is directed to the 2017 PFS for information on those areas of the 2020 PFS Update.

2. 2020 PFS Update Results

The following outlines the key outcomes of the 2020 PFS Update and are summarised in Table 2-1 to Table 2-7.

The outcome from the review into and the update of the 2017 PFS is an updated Ore Reserve as summarised below in Table 2.1. The 2020 Ore Reserve represents an increase in ore tonnage of 17% and an increase in contained ounces of 9%. With the review also into the Mt Carrington project costs and the increased gold price, this increased tonnage and project life results in a two and a half fold increase in free cash flow from A\$37 million to A\$126 million.

Table 2.1 – Ore Reserve

Description	Tonnes (Mt)	Grade (g/t Au)	Contained Gold (koz Au)
Mt Carrington Gold Project			
Proved	-	-	-
Probable	4.06	1.33	174
Total	4.06	1.33	174

Notes:

1. The Ore Reserve conforms with and uses JORC Code 2012 definitions.
2. All figures are rounded to reflect appropriate levels of confidence. Apparent differences may occur due to rounding.

Table 2-2 – Financial Outcome of the 2020 PFS Case compared to the 2017 PFS

Project Economics	Unit	2017 PFS	2020 PFS
IRR	%	34	82
NPV₈	A\$m	23.9	93.6
Pre-Tax Cash Flow	A\$m	37.6	126.3
Initial Capital Payback Period	months	22	14
Pre-Production CAPEX (inc. Contingency)	A\$m	35.6	39.0
Total Tonnage Milled	Mt	3.9	4.8
Gold Produced	oz	147,300	165,700
Throughput Rate	Mtpa	1.0	1.0
Initial Gold First Life of Mine	yrs	4.6	5.0
Average Annual Production Gold	oz/yr	36,000	35,500
C1 Cash Cost	A\$/oz	1,078	1,056
All-In Sustaining Cost (ASIC) (OPEX + Sustaining CAPEX)	A\$/oz	1,236	1,327
Australian Gold Price Assumed	A\$/oz	1,700	2,300

The results from the review and updating of the 2017 PFS demonstrate a significant uplift in project economics predominantly driven by the better gold price assumption:-

- ✓ Pre-tax Cash Flow increases 236% to A\$126.3M.
- ✓ The project NPV₈ increases 292% to A\$93.6M.
- ✓ The project IRR increases 141% to 82%.
- ✓ The initial Gold First Stage Mine Life increases 9% to 5 years.
- ✓ The Capital Payback Period reduces 45% to 14 months.

Table 2-3 – Key 2020 PFS Project Metrics at different Australian gold prices¹

Project Economics	Unit	PFS @A\$2,000/oz	PFS Base Case @A\$2,300/oz	PFS @A\$2,600/oz	PFS @A\$3,000/oz
Pre-Tax Free Cash Flow	A\$m	77.9	126.4	174.7	239.3
NPV ₈	A\$m	54.2	93.6	132.9	185.3
IRR	%	52	82	112	153
Payback Period	months	18	14	11	8

¹ All material assumptions other than the Australian gold price remain the same as the baseline case.

The results from the review and updating of the 2017 PFS demonstrate a robust and viable Gold First Stage for the Mt Carrington gold and silver project, with significant upside exposure to a strong Australian gold price.

Table 2.4 – Key 2020 PFS Project Production Metrics

Description	Unit	PFS
Tonnage Mined (O+W)	Mt	19.8
Ore Mined	Mt	4.7
Strip Ratio (Waste:Ore)		3.3 : 1
Ore Milled	Mt	4.8
Grade Mined	g/t Au	1.3
Ounces Milled	Oz Au	199,800
Mill Recovery	%	83
Gold Produced	oz	165,700
Annual Gold Production	Oz pa	35,500
Mine Life	Years	5

Table 2.5 – 2020 PFS Project Capital Costs

Description	Pre-Production	Life of Mine
Mining	\$1,824,000	\$1,824,000
Processing Plant – Gold Stage One	\$33,495,000	\$33,495,000
Tailings Storage Facility	\$3,700,000	\$8,400,000
Rehab Closure	-	\$3,500,000
Total	\$39.0M	\$47.2M

The relatively low Pre-Production capital cost is due to the fact that there already exists on site an initial Tailings Storage Facility, water supply dam, the two gold deposits are already pre-stripped and the processing plant site cleared. This existing infrastructure, in place from when mining occurred in 1998 – 1990, has been valued at ~A\$20M² and is a cost that the current Project does not have to bear.

Table 2.6 – Operating Cost Summary

Mining Cost Area	Unit	Rate
Load & Haul	A\$/t ore	8.95
Drill & Blast	A\$/t ore	3.03
Maintenance Labour	A\$/t ore	2.78
Supervision	A\$/t ore	1.07
Other	A\$/t ore	0.92
Mining Total	A\$/t ore	16.76
Processing Cost Area	Unit	Rate
Power	A\$/t ore	5.75
Reagents	A\$/t ore	13.08
Maintenance	A\$/t ore	0.76
Processing Total	A\$/t ore	19.67
Labour (Processing & Admin)	A\$/t ore	6.30
Grand Total	A\$/t ore	42.73

The 2017 PFS operating cost assumptions were reviewed and updated for current 2020 prices (e.g. explosives, diesel, major processing plant reagents, power and labour costs). A Project assumption is that the mining operation will be one done by a contractor, running second-hand articulated dump trucks; this assumption is believed reasonable given the small size of the pits to be mined and the Project's proximity to significant civil and road works activities in the Brisbane/Gold Coast area.

Table 2.7 – 2020 PFS Production Schedule

Description	Unit	Yr 0	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	TOTALS
Ore Mined	t	141,644	1,219,674	1,097,792	946,341	916,663	332,580	4,654,694
	g/t	0.98	1.21	1.46	1.20	1.33	1.56	1.31
Waste Mined	t	742,404	2,641,323	3,283,382	4,025,915	4,082,912	401,026	15,176,963
Total	t	884,049	3,860,997	4,381,175	4,972,256	4,999,575	733,606	19,831,657
Ore Milled	t	151,600	992,660	1,000,100	1,000,100	1,002,840	654,994	4,802,294
	g/t	0.89	1.32	1.46	1.25	1.31	1.16	1.29
	oz	4,324	42,000	46,873	40,136	42,104	24,333	199,771
Indicated	t	58,720	947,757	881,429	941,347	748,342	478,184	4,055,780
Inferred	t	7,280	43,019	118,671	58,753	254,498	116,694	598,914
Stockpile	t	85,600	1,884	-	-	-	60,116	147,600
Recovery	%	85%	84%	83%	83%	83%	82%	83%
Gold produced	oz	3,692	35,235	38,702	33,172	34,837	20,045	165,683

3. Project Description and Location

The Mt Carrington Project is located in the New England region of northern New South Wales, approximately 100 km west of the regional centre of Lismore, as shown in Figure 1. Access to the project area is via the Bruxner Highway, from Lismore to the small township of Drake. A site office is located 5 km due north of Drake within the central Mt Carrington group of mine leases, which can be accessed via a gravel road commencing at Drake.



Figure 1 – Mt Carrington Project Location

The Mt Carrington Project contains gold-silver epithermal mineralisation associated with a large 250km² collapsed volcanic caldera structure located in the southern New England Fold Belt.

Gold was first discovered in the district in 1853. In 1988 a mining operation at Mt Carrington focussed on extracting open pit oxide gold and silver ore from the Strauss, Kylo, Carrington, Guy Bell and Lady Hampden deposits, as shown in Figure 2. The oxide ore was largely depleted by 1990 and with metal prices at US\$370/oz gold and US\$5/oz silver, coupled with start-up operational issues, the small-scale mine was closed.



Figure 2 – Mt Carrington Project Site Layout

4. Mineral Resource Estimate

4.1. Strauss and Kylo MRE for the 2020 PFS Update

As part of the 2020 PFS update, a revised Mineral Resource Estimate (MRE) for the two main gold deposits Strauss and Kylo was required. The original Mineral Resource completed by Mining Plus in October 2017³ has been updated using revised gold price and operating cost assumptions that meet the requirements for reasonable prospects for eventual economic extraction.

The Mineral Resources are reported, in Table 4, at a cut-off of 0.3 g/t gold. All of the Resources have an effective date of 30 June, 2020. The updated MRE was prepared and reported in accordance with the JORC Code (2012) with the respective Table 1, Sections 1, 2 and 3 being included at the end of this Report.

Table 4 - Strauss-Kylo Gold Deposits Mineral Resource Estimate - June 2020

Classification	Cut-Off	Tonnes	Au (g/t)	Au (Oz)	Ag (g/t)	Ag (Oz)
Strauss Gold Deposit Mineral Resource Estimate						
Indicated	0.3	2,192,000	1.49	105,000	1.79	126,100
Inferred	0.3	470,000	1.66	25,100	2.33	35,200
Total	0.3	2,661,000	1.52	130,000	1.89	161,300
Kylo West Gold Deposit Mineral Resource Estimate						
Indicated	0.3	521,000	1.46	24,500	1.13	19,000
Inferred	0.3	36,000	1.04	1,200	0.86	1,000
Total	0.3	557,000	1.44	25,700	1.12	20,000
Kylo North Gold Deposit Mineral Resource Estimate						
Indicated	0.3	1,695,000	1.18	64,100	1.42	77,600
Inferred	0.3	46,000	0.81	1,200	1.49	2,200
Total	0.3	1,741,000	1.17	65,300	1.43	79,800
Total Strauss, Kylo West & Kylo North Gold Deposit Mineral Resource Estimate						
Indicated	0.3	4,410,000	1.36	193,400	1.57	223,000
Inferred	0.3	554,000	1.55	27,600	2.16	38,500
Total	0.3	4,964,000	1.38	221,000	1.64	261,500

The information in this report that relates to the Estimation and Reporting of Mineral Resources has been compiled by Mr. Richard Buerger BSc (Geology). Mr. Buerger is a full-time employee of Mining Plus Pty Ltd and has acted as an independent consultant on the Strauss-Kylo Deposit Mineral Resource estimation. Mr. Buerger is a Member of the Australasian Institute of Geologists (6031) and has sufficient experience with the style of mineralisation, the deposit type under consideration and to the activities undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (The JORC Code). Mr. Buerger consents to the inclusion in this report of the contained technical information relating the Mineral Resource Estimation in the form and context in which it appears.

4.2. Resources Excluded from the 2020 Mining Plan

In addition to the two gold resources used in the 2020 PFS Mining Plan, WRM also has stated additional reported resources, as shown in Figure 3 *Figure 3 – Mt Carrington Project Leases* and Table 5.

The Mt Carrington Project has previously prepared Mineral Resource Estimates for two additional gold deposits, Red Rock and Guy Bell. These MREs include 67,000 ounces of gold which are all classified as Inferred; these resources were not included in either the 2017 PFS or the 2020 PFS update.

The Mt Carrington Project also has announced Mineral Resource Estimates for four additional silver-rich deposits, Lady Hampden, White Rock, White Rock North and Silver King. The MREs for these deposits include 22.8 million ounces of silver, of which 8.3 million ounces are classified as Indicated; these resources were not included in either the 2017 PFS or the 2020 PFS update.

The additional gold and silver MREs not included in the 2017 PFS or 2020 PFS update offer the potential for an extended mine life and a possible Stage 2 silver production profile. These MREs are presented in Table 5.

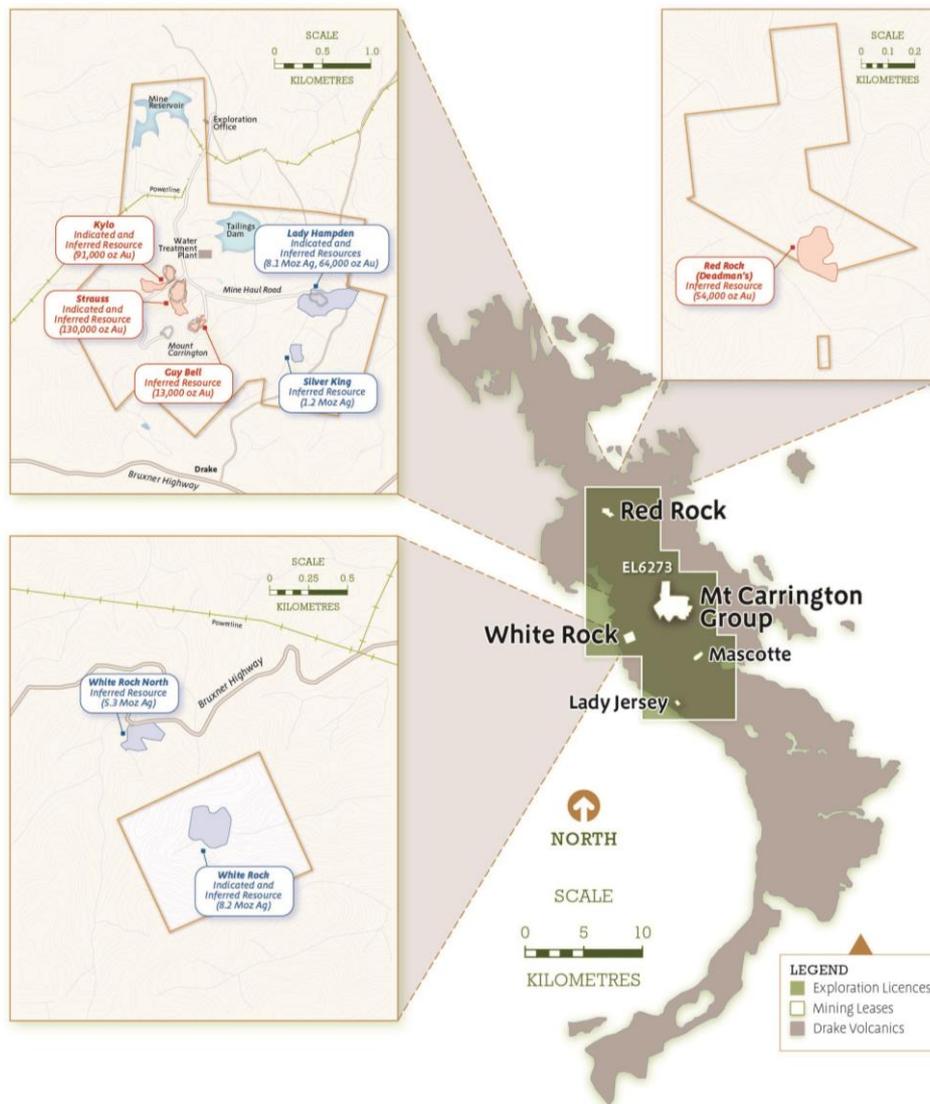


Figure 3 – Mt Carrington Project Leases

Table 5 - Mt Carrington Resources Excluded from Mining Plan

Classification	Deposit	Tonnes	Au (g/t)	Au (Oz)	Ag (g/t)	Ag (Oz)
Gold Dominant Deposits						
Inferred	Red Rock	1,630,000	1.0	54,000	3.5	182,000
	Guy Bell	160,000	2.5	13,000	4.9	24,000
Sub Total		1,790,000	1.2	67,000	3.6	206,000
Silver Dominant Deposits						
Indicated	Lady Hampton	1,840,000	0.6	37,000	69	4,056,000
	White Rock	1,710,000	-	-	77	4,214,000
Sub Total		3,540,000	0.3	37,000	73	8,270,000
Inferred	Lady Hampton	2,470,000	0.3	27,000	51	4,023,000
	White Rock	2,660,000	-	-	47	3,978,000
	White Rock North	3,180,000	-	-	52	5,314,000
	Silver King	640,000	-	-	59	1,218,000
SubTotal		8,950,000	0.1	27,000	51	14,533,000

Gold dominant Mineral Resources have been estimated using a cut-off of 0.5g/t Au except Red Rock, which uses a cut-off of 0.7g/t Au. All silver dominant Mineral Resources have been estimated using a cut-off of 25g/t Ag. The Red Rock, Guy Bell, Lady Hampton, White Rock, White Rock North and Silver King Mineral Resource was prepared and reported in accordance with the JORC Code (2004) as per ASX Announcements by White Rock Minerals Ltd on 13 February 2012, 11 July 2013 and 20 November 2013 and the ASX Announcement by Rex Minerals Ltd on 10 December 2008. The Resources figures have not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported. Refer to the ASX Announcement dated 9 October 2017 "Improved Gold Resources at Mt Carrington Gold-Silver Project".

within the final pit limits (approximately 12% of the total mill feed inventory). Value has been attributed to the recoverable gold from this Inferred material in the base-case financial modelling for the project. A comprehensive pre-mining RC grade control drilling program is planned, which will provide increased certainty around both tonnage and grade of this Inferred material. It is to be noted that 57% of this Inferred material is not processed until midway through Year 4 of the initial 5-year Gold First stage.

Sensitivity studies have demonstrated that the project is still viable if no value is attributed to the gold contained in the Inferred material.

No material classified as Inferred Mineral Resource is included in the Ore Reserves Estimate.

The Whittle optimisations have resulted in the merging of the three deposits into a single final pit. However, there is still a starter pit for each deposit. The final pit design is shown in Figure 5 which also includes the process plant location and run of mine stockpiles on the right-hand side.

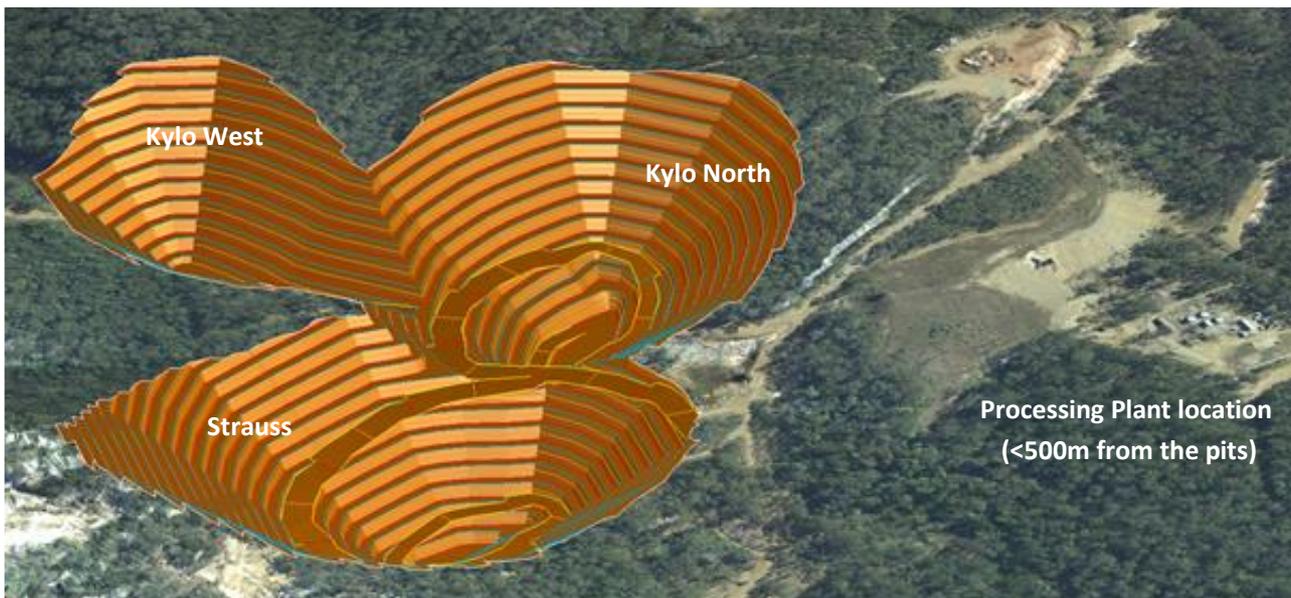


Figure 5 – Final Pit Design

The total mineral inventory to be mined is summarised in Table 7.

It is envisaged that a mining contractor will carry out the mining activities with technical and management direction from White Rock. The mine is planned to be operated over three discrete open pits each incorporating drill and blast, load and haul, and ore and waste management tasks.

Initial mine development and pre-stripping activities are scheduled to provide sufficient material required to construct the Tailings Storage Facility (TSF), site roads and the Run-of-Mine (ROM) pad. Waste dump capacity is sufficient to store all waste materials.

The initial six-month pre-strip is also required before a continuous ex-pit ore supply can be assured. There is an historic low-grade stockpile from the previous mining operations (1987-1990) which requires removal as soon as practicable in order to help improve acid rock drainage management at the site. This historic low-grade stockpile material will be reclaimed and processed during the commissioning phase of the process plant. It is envisaged that reclaiming of this stockpile will commence about 3-4 months after the start of the pre-strip mining. The annual planned ore production rate of 1.0 Mtpa can be sustained for the full mine life, however this includes the Inferred mineralisation (excluding the pre-existing low grade stockpile). The Inferred mineralisation totals 12% of the mined plant feed of which the majority is in the last 18 months of the mine life.

The mine production sequence follows a similar path to the 2017 PFS where ore is initially sourced from the Kylo West and Kylo North starter pits to ensure access can be maintained before Strauss mines through the pre-existing road. The merging of the three mining areas occurs in the third year of mining and careful planning is required to ensure Kylo West is completed before Kylo North advances too deep, as this pit mines through the ramp into Kylo West.

The Gold First Stage One production schedule is detailed in Table 2.7 and graphically in Figure 6.

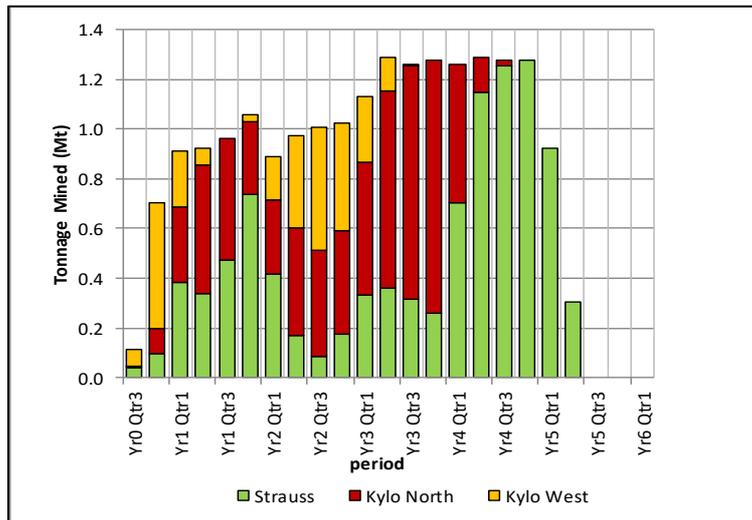


Figure 6 – Mining by Deposit

Table 71 – Mining Inventory

Description	Ore (t)	Ore (g/t)	Ore (oz)	Waste	W:O	Total
Kylo North						
Stage 1	680,494	1.05	22,923	886,082	1.3	1,566,576
Stage 2	881,457	1.24	35,113	4,833,395	5.5	5,714,852
Total	1,561,951	1.16	58,035	5,719,477	3.7	7,281,428
Kylo West						
Stage 1	309,075	1.39	13,765	547,927	1.8	857,003
Stage 2	257,693	1.21	10,010	1,644,817	6.4	1,902,510
Total	566,768	1.30	23,775	2,192,745	3.9	2,759,513
Strauss						
Stage 1	1,500,524	1.44	69,280	2,072,212	1.4	3,572,735
Stage 2	1,025,450	1.36	44,888	5,192,526	5.1	6,217,977
Total	2,525,974	1.41	114,168	7,264,738	2.9	9,790,712
Total	4,654,694	1.31	195,978	15,176,959	3.3	19,831,653
Description	Ore (t)	Ore (g/t)	Ore (oz)	Waste	W:O	Total
Kylo North						
Oxide	41,387	0.69	915	1,005,201	24.3	1,046,588
Transitional	164,180	0.94	4,965	1,216,649	7.4	1,380,829
Fresh	1,356,385	1.20	52,155	3,497,625	2.6	4,854,010
Total	1,561,951	1.16	58,035	5,719,477	3.7	7,281,428
Kylo West						
Oxide	198,070	1.10	7,030	908,653	4.6	1,106,723
Transitional	105,149	1.50	5,058	583,542	5.5	688,691
Fresh	263,549	1.38	11,687	700,550	2.7	964,099
Total	566,768	1.30	23,775	2,192,745	3.9	2,759,513
Strauss						
Oxide	34,478	1.08	1,193	1,530,119	44.4	1,564,597
Transitional	253,369	1.15	9,354	810,624	3.2	1,063,993
Fresh	2,238,127	1.44	103,621	4,923,995	2.2	7,162,122
Total	2,525,974	1.41	114,168	7,264,738	2.9	9,790,712
Total	4,654,694	1.31	195,978	15,176,959	3.3	19,831,653

8. Metallurgy and Gold Ore Processing

No further work has been done on the metallurgy or plant flowsheet or design since the release of the 2017 PFS. The 2020 PFS Update reviewed the flowsheet and equipment list and updated the capital costs accordingly.

In summary:-

8.1 Metallurgy Metallurgical Test Work [Extract from the 2017 PFS Report]

The Mt Carrington resources consist of several discrete gold and silver polymetallic deposits in which the gold and silver mineralisation is generally associated with sulphides, mainly pyrite and also some base metal sulphides, notably sphalerite and chalcopyrite.

The gold-only deposits considered in this 2020 PFS Update Report consist of a primary zone of quartz - jasperoid and quartz – based metal veins overlain by an oxide cap and a thin transition zone which has some extension to depth in fracture zones. The presence of cyanide consuming base metal species presents the main metallurgical challenge.

The metallurgical test work was carried out by ALS Metallurgy on four main composites intended to represent the main ore types likely to be mined and treated by the processing plant: Strauss, Kylo North, Kylo West Oxide and Kylo/Strauss supergene. Test work initially considered three processing routes:- flotation to a concentrate for sale, a flotation – concentrate cyanide leach route and a conventional cyanide leach by CIL flowsheet. Preliminary assessments concluded that the conventional CIL route offered the best overall economics based on up to 85% recovery at an acceptable cyanide consumption (below 2 kg/t).

The final metallurgical recoveries used in the Whittle pit optimisations and financial model are summarised below.

Table 82 – Mineral Processing Recoveries by Ore Source and weathering type

Ore Source	Oxide (%)	Transition (%)	Primary (%)
Kylo West	95.5	80.0	82.5
Kylo North	95.5	80.0	83.0
Strauss	95.5	80.0	82.5

Cyanide consumption under closely controlled conditions was found to range from 1.35 kg/t for oxide ore to 1.8 kg/t for primary and supergene ores. Recovery – cyanide consumption optimisation work will continue through the next phase of feasibility study work.

8.2 Ore Processing and Production

The processing plant will be designed at a nominal throughput of 1 Mtpa of fresh ore. The plant will be designed to operate seven days per week at a nominal treatment rate of 124 dry tonnes per hour of fresh ore.

Over the initial Gold First 5 year mine life, approximately 4.8 Mt of ore will be processed at an average grade of 1.3 g/t Au and 83% recovery to produce approximately 165,700oz recovered gold as dore.

8.3 Process Plant Description

Mincore was engaged by White Rock Minerals to carry out a Prefeasibility Engineering Study (PES) for the Mt Carrington Gold Project. The purpose of the PES study was to provide a ±25% Capital Cost Estimate guided by the Class 4 AusIMM Estimation handbook and high level risk assessment, for the construction of a 1.0Mtpa Process Plant to process the Mt Carrington Gold Deposits.

The processing plant design is based on conventional, well-proven processing technology following a processing route of:

- Primary crushing by a jaw crusher to a product size P80 of 100mm direct feeding a sizing screen.
- Sizing screen oversize and middlings feeding Secondary and Tertiary cone crushers respectively to a product size of P80 of 10mm.
- Crushed fine ore storage bin.
- Grinding using a single stage Ball mill and classification circuit to a product size of P80 of 75µm.
- Leaching with cyanide and adsorption onto activated carbon by a six stage carbon in leach (CIL) circuit, acid wash and Pressure Zadra elution in separate columns.
- Cold cyanide washing for copper removal which can be run in the elution column and does not require an additional column. The cold-cyanide step would be added after carbon transfer to the elution column and before the heating cycle commences. This can be achieved with minor alterations to the PLC control system and the cyanide dosing system and does not require significant additional equipment.
- Thermal regeneration of the barren carbon prior to its return to the CIL circuit.
- Electrowinning the gold onto steel wool cathodes.
- Smelting of the calcined steel wool cathodes to produce a final product of gold dore’.
- CIL tailings are treated using a cyanide detoxification circuit, prior to discharge into the tailings storage facility (TSF).
- Reagents preparation and storage.
- Water and air services.

A plant site layout is shown in Figure 7 and a flowsheet schematic outline of the process is shown in Figure 8.

Mincore updated the 2017 PFS capital cost estimates for the gold processing plant and associated infrastructure. The capital cost for the project is mainly the cost of the gold processing plant and associated plant infrastructure, being \$33.5 million. This estimate includes a contingency of \$4.3M (13%).

Mincore estimated the capital cost for the process plant and infrastructure in 2017 at A\$30.8M and after the majority of the plant equipment was repriced for this 2020 PFS review, the capital cost estimate is now A\$33.49M which represents a 8.6% increase. The accuracy of the estimate is -15% to +25% and is in line with a Class 4 estimate under the AACE International Cost Estimate Classification guidelines. This is summarised in Table 8.

The Project Schedule indicates a 13-month construction and commissioning timeframe.

Table 83 – Summary of Total Processing Plant Capital Costs by Major Area as at Q3, 2017 Vs May 2020 (excl. escalation and interest)

Area	Year 2017 A\$M	Year 2020 A\$M	Variance
Direct			
Process Plant	20.2	22.19	1.99
Site Preparation and Infrastructure	3.02	3.00	-0.02
Engineering and Contractors (Indirect)	3.58	3.90	0.32
Contingency (Process Plant)	4.00	4.37	0.37
Total (Real) Capital Costs (Excludes Mining and TSF)	30.8	33.49	2.66

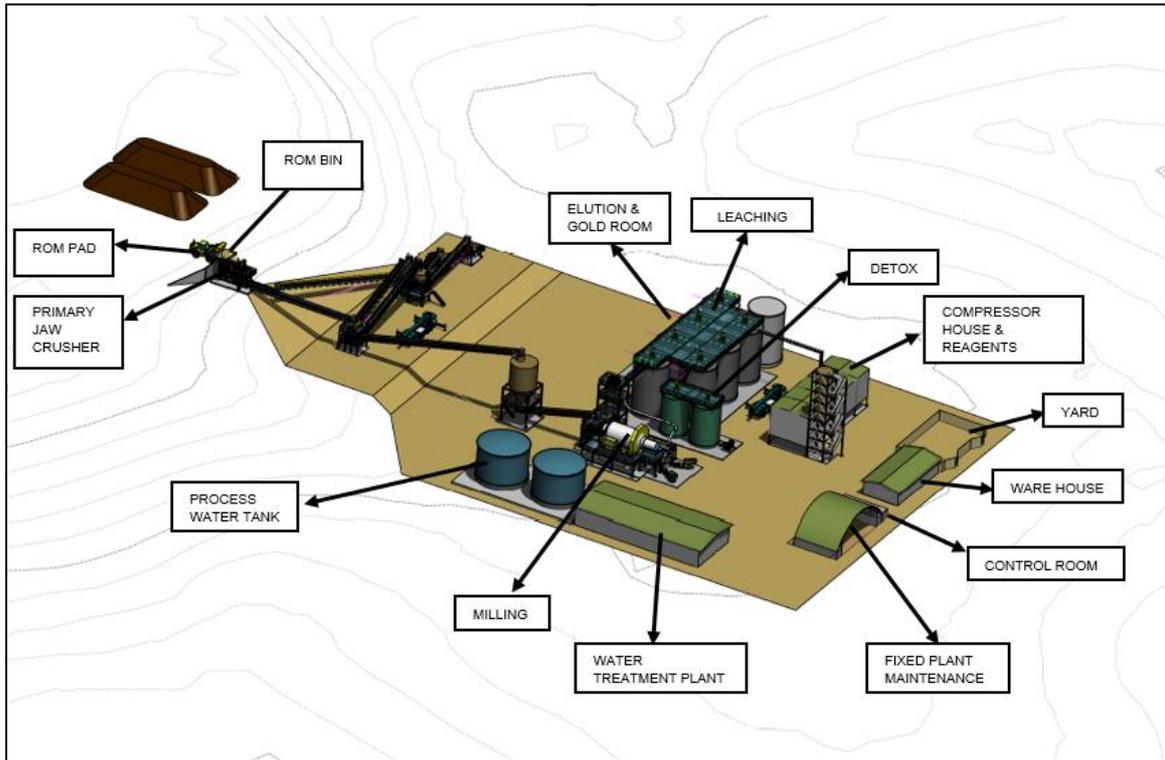


Figure 7 – Processing Plant Site Layout

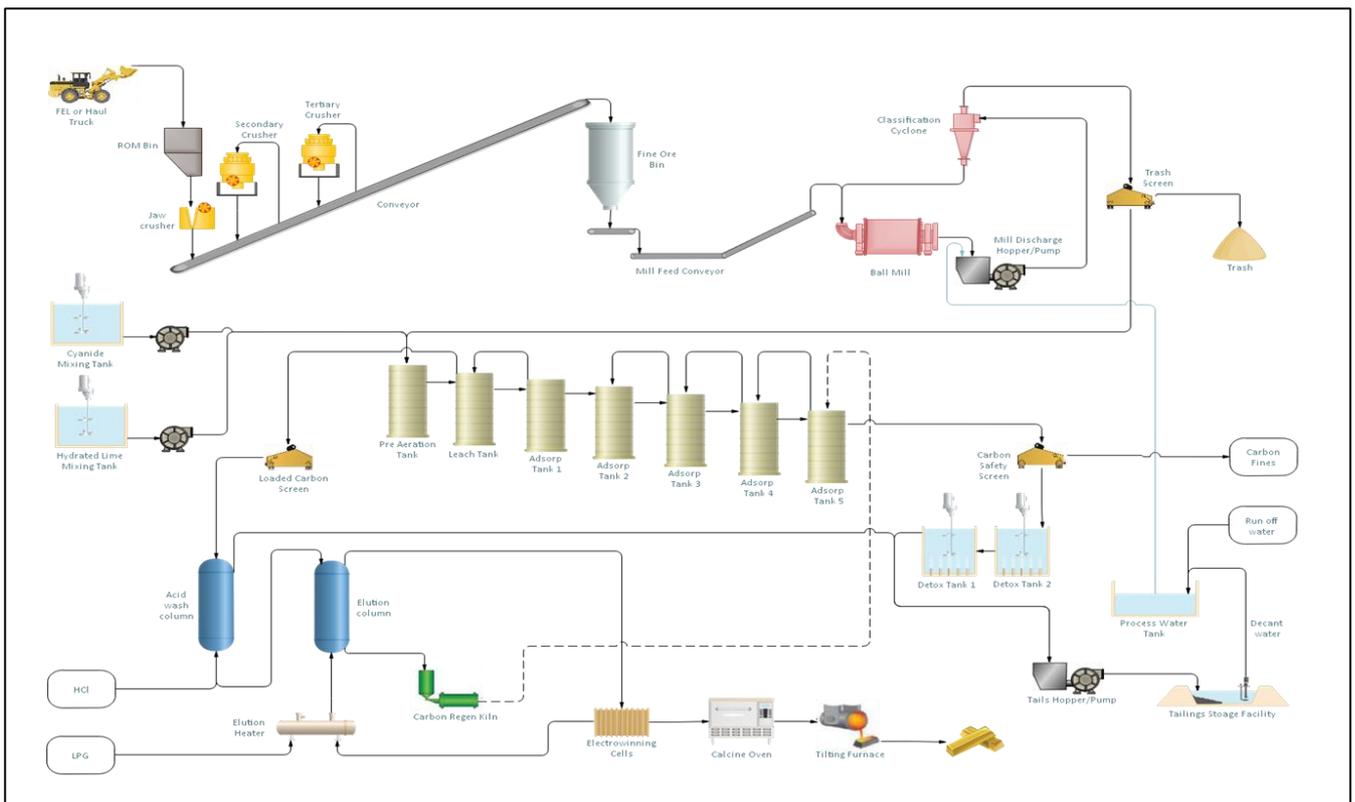


Figure 8 – Gold Process Flow Diagram

9. Tails Storage Facility

No further work has been done on the Tailings Storage Facility design since the release of the 2017 PFS.

The capital costs for the TSF embankments were estimated and reported by ATC Williams for the 2017 PFS, as shown in Figure 9. The 2017 PFS estimated the cost for each embankment stage as:-

- Stage 1 - \$3.8 million
- Stage 2 - \$2.4 million
- Rehabilitation - \$2.5 million.

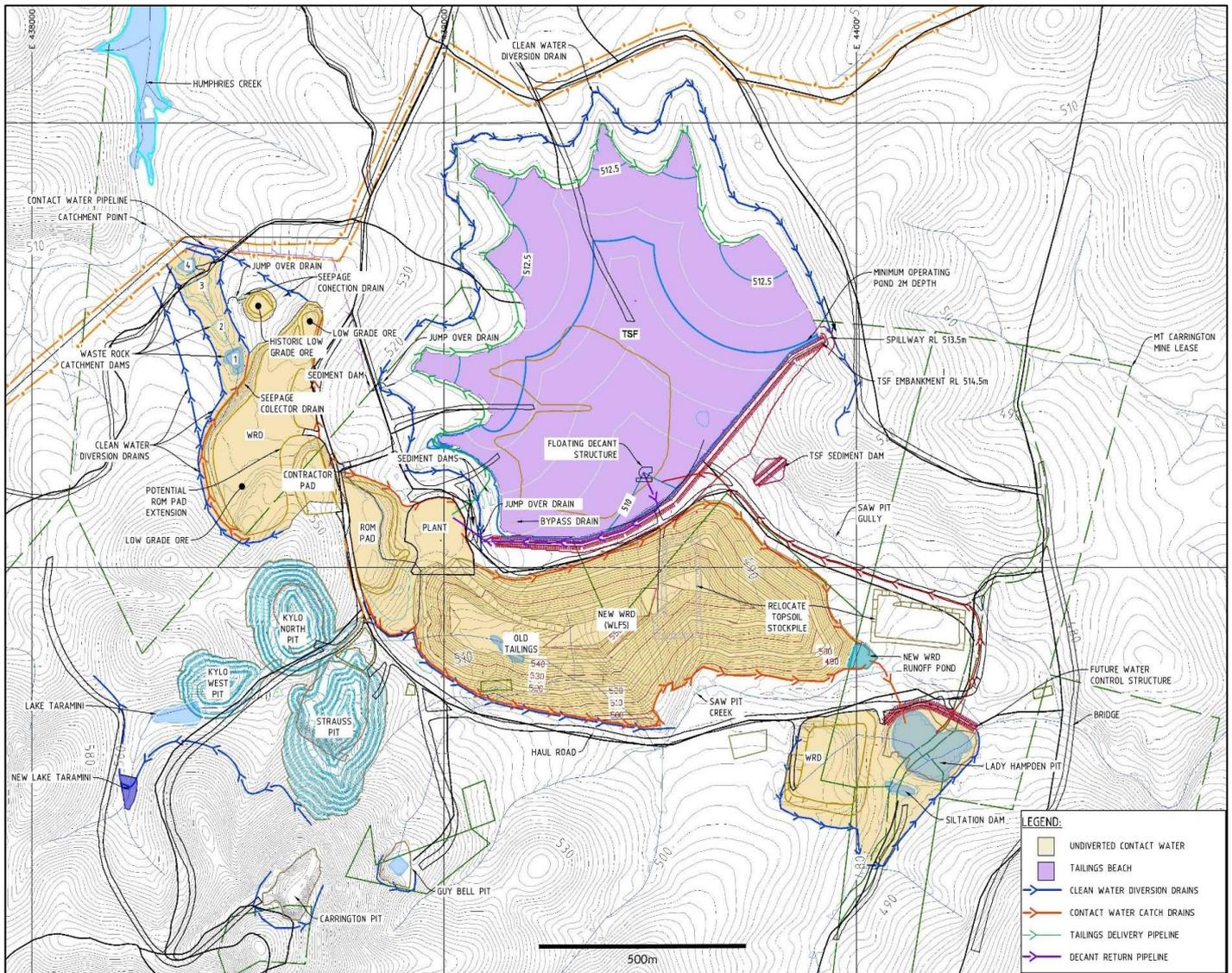


Figure 9 – Mt Carrington Site Layout, TSF and drainage design (from the 2017 PFS)

The capacity of the TSF in the 2017 PFS was estimated at 4.0 Mt of tailings, which was adequate for the production plan in 2017, but is not sufficient for the increased tonnages to be mined and processed and the extended mine life in the 2020 PFS update.

To estimate the capital cost of an enlarged Stage 2 embankment for the 2020 PFS update, the areas and volumes from an ATC Options Study were applied to the Stage 2 unit costs from the 2017 PFS, which resulted in an increase in the Stage 2 capital cost to \$4.08 million. A 15% contingency was also added to this to account for price escalation and the decreased level of accuracy associated with the 2017 options study. This increased capital cost was used for the 2020 PFS case.

The capital cost used for the 2020 PFS update Stage 2 embankment in the financial analysis is estimated to be \$4.70 million and the total CAPEX for the TSF over the initial Gold First Stage One is summarised:-

- Stage 1 - \$3.7 million
- Stage 2 - \$4.7 million
- Rehabilitation - \$2.5 million.

10. Infrastructure, Transport and Services

There has been no change to this section of the original 2017 PFS.

11. Community Relations

There has been no change to this section of the original 2017 PFS.

12. Environment and Permitting

There has been no change to this section of the original 2017 PFS.

The Mt Carrington Project is wholly contained within the historic Mining Leases and a surrounding Exploration Licence that are 100% owned by White Rock. The main areas of disturbance (the pits, processing plant and TSF) sit within the Mining Lease where past mining and forestry practices have already created a disturbed landscape. The Mining Lease will require an extension to include some additional areas such as the expanded tailings storage facility. In addition, a new Mine Operation Plan will require approval on granting of Development Approval from the NSW Government before mining operations can commence.

Since 2010 White Rock and a range of specialist environmental consultants have been collecting a variety of environmental baseline data that will assist in following the NSW Government's State Significant Development (SSD) process. This process includes initial consultation with the Department of Planning, Industry and Environment (DPIE), receive approval for the Mt Carrington Project to be declared a State Significant Development (SSD) project, receive the Project's environmental assessment requirements (SEARs), and conduct those things as required to receive approval to commence mining, including a comprehensive and committed community consultation process. This process includes the submission of a Preliminary Environmental Assessment (now referred to as a Scoping Report) and ultimately the approval of the Project's Environmental Impact Statement ("EIS"), required for Development Approval. The majority of long lead time baseline studies are near complete and include air quality, surface water, groundwater, terrestrial & aquatic ecology, meteorology and rock materials characterisation. White Rock is looking to progress studies and the approval processes to manage or mitigate the risks that have been identified for the Project to date and expects to commence the formal approvals process in the near future, subject to funding.

13. Economic Evaluation

Mannerim Partners were commissioned to update and audit the project financial modelling for the 2020 PFS. All Owner's Team expenditures relating to the studies prior to construction of the Gold First Stage One project are treated as sunk costs and that includes the costs of all prior Scoping, PFS and environmental studies. Table 10 below highlights the key financial inputs and assumptions applied in the project economic analysis. All assumptions will be reviewed in the course of subsequent stages of study.

Table 10 – Key Financial Assumptions

Parameter	Units	Assumption
Gold Price	A\$/oz	2,300
Accumulated Tax losses	A\$M	27.6*
Royalties	%	4.0**
Corporate Income Tax Rate	%	30
Diesel Price (after rebate)	A\$/litre	0.80
Power	Cents per kWhr	15

Notes:

* Estimated tax losses at the end of December 2019.

** Royalty percentage as per NSW taxation rules on Ad Valorem basis less allowable deductions.

The financial analysis was undertaken using a A\$2,300/oz Gold Price, reflecting the improved sentiment for gold, but also being some 15% below the spot price as at end July 2020. This Gold price is assumed to be constant over the initial 5-year LoM plan. Project financial sensitivity to lower and higher gold prices are described in Table 2.3.



Figure 10 – Five year Gold Price (A\$/oz) as at 27th July 2020

Table 11 – Summary of Key 2020 PFS Update Financial Outcomes

Project Economics	Unit	2020 PFS
IRR	%	82
NPV₈	A\$m	93.6
Pre-Tax Cash Flow	A\$m	126.3
Initial Capital Payback Period	months	14
Pre-Production CAPEX (inc. Contingency)	A\$m	39.0
Development Capital Cost per Ounce	A\$/oz	235
Total Tonnage Milled	Mt	4.8
Gold Produced	oz	165,700
Throughput Rate	Mtpa	1.0
Initial Gold First Life of Mine	yrs	5.0
Average Annual Production Gold	oz/yr	35,500
C1 Cash Cost	A\$/oz	1,056
All-In Sustaining Cost (ASIC) (OPEX + Sustaining CAPEX)	A\$/oz	1,327
Australian Gold Price Assumed	A\$/oz	2,300

Notes:

1. All figures are rounded to reflect appropriate levels of confidence. Apparent differences may occur due to rounding.
2. C1 Cash Cost = mining and processing operating expenditure + transport and refining costs.
3. AISC = C1 + G&A + Royalties + sustaining capital.
4. Pre-production CAPEX costs are expressed in 2020 real terms.
5. The capital cost estimate is within an accuracy of -15% / +25%.
6. Gold price assumption A\$2,300.

14. Conclusions

- ✓ The Board has approved the Gold First Stage One 2020 PFS Update outcomes, which indicate a technically sound and financially viable Project for progression to a Definitive Feasibility Study (DFS) followed by a Final Investment Decision (FID) and the continuation of Environment Studies.
- ✓ The Stage One 2020 PFS case for the project consists of the development of the gold mine open pits (Kylo North, Kylo West and Strauss), with a conventional CIL process plant and associated infrastructure using a grid power supply, for a 1 Mtpa throughput rate, over an initial 5 year “Gold First” project life.
- ✓ Potential to further optimise and enhance the financial outcomes of the Project will be assessed during the Definitive Feasibility Study stage.

- ✓ The silver dominant resources, containing some 8.3M ounces in the Indicated category (refer ASX announcements 13 February 2012 & 20 November 2013) is the subject of further mineralogy, metallurgical test work and concentrate sales discussions. Mining of this silver resource constitutes Stage Two of the Mt Carrington project.
- ✓ Expenditure to further unlock the considerable exploration potential of the Mt Carrington tenements is not included in the PFS.

Appendix 1. Forward-Looking and Cautionary Statements.

Appendix 2. Competent Persons.

Appendix 3. JORC Code 2012 Table 1.

This release is authorised by the Board of White Rock Minerals Ltd.

¹ Refer ASX Announcement 27th December 2017 "Mt Carrington Gold-Silver Project Pre-Feasibility Study Stage 1".

² Refer ASX Announcement 16 September 2014 "Mt Carrington Gold Project Positive Scoping Study".

³ Refer ASX Announcement 9 October 2017 "Improved Gold Resources at Mt Carrington Gold-Silver Project".

Appendix 1. Forward-Looking and Cautionary Statements.

Some statements in this report regarding estimates or future events are Forward-Looking statements. They include indications of, and guidance on, future earnings, cash flow, costs and financial performance. Forward-Looking statements include, but are not limited to, statements preceded by words such as "planned", "expected", "projected", "estimated", "may", "scheduled", "intends", "anticipates", "believes", "potential", "could", "nominal", "conceptual" and similar expressions.

Forward-Looking statements, opinions and estimates included in this report are based on assumptions and contingencies which are subject to change without notice, as are statements about market and industry trends, which are based on interpretations of current market conditions. Forward-Looking statements are provided as a general guide only and should not be relied on as a guarantee of future performance. Forward-Looking statements may be affected by a range of variables that could cause actual results to differ from estimated results, and may cause the Company's actual performance and financial results in future periods to materially differ from any projections of future performance or results expressed or implied by such Forward-Looking statements.

These risks and uncertainties include but are not limited to liabilities inherent in mine development and production, geological, mining and processing technical problems, the inability to obtain mine licenses, permits and other regulatory approvals required in connection with mining and processing operations, competition for among other things, capital, acquisitions of reserves, undeveloped lands and skilled personnel, incorrect assessments of the value of acquisitions, changes in commodity prices and exchange rate, currency and interest rate fluctuations, various events which could disrupt operations and/or the transportation of mineral products, including labour stoppages and severe weather conditions, the demand for and availability of transportation services, the ability to secure adequate financing and management's ability to anticipate and manage the foregoing factors and risks.

There can be no assurance that Forward-Looking statements will prove to be correct. Statements regarding plans with respect to the Company's mineral properties may contain forward-looking statements in relation to future matters that can only be made where the Company has a reasonable basis for making those statements. This report has been prepared in compliance with the JORC Code (2012) and the current ASX Listing Rules.

The Company believes that it has a reasonable basis for making the Forward-Looking statements in this report, including with respect to any production targets and financial estimates, based on the information contained in this report.

CAUTIONARY STATEMENT

This 2020 PFS Update report (“Report”) has been prepared by White Rock Minerals Limited and is provided on the basis that none of the Company nor its respective officers, shareholders, related bodies corporate, partners, affiliates, employees, representatives and advisers make any representation or warranty (express or implied) as to the accuracy, reliability, relevance or completeness of the material contained in this report and nothing contained in this report is, or may be relied upon as a promise, representation or warranty, whether as to the past or the future. The Company hereby exclude all warranties that can be excluded by law.

The Report contains prospective financial material, which is predictive in nature and may be affected by inaccurate assumptions or by known or unknown risks and uncertainties and may differ materially from results ultimately achieved.

The Report contains “Forward-Looking statements”. All statements other than those of historical facts included in the report are Forward-Looking statements. Where the Company expresses or implies an expectation or belief as to future events or results, such expectation or belief is expressed in good faith and believed to have a reasonable basis. However, forward-looking statements are subject to risks, uncertainties and other factors, which could cause actual results to differ materially from future results expressed, projected or implied by such Forward-Looking statements. Such risks include, but are not limited to, gold and other metals price volatility, currency fluctuations, increased production costs and variances in ore grade or recovery rates from those assumed in mining plans, as well as political and operational risks and governmental regulation and judicial outcomes. The Company does not undertake any obligation to release publicly any revisions to any “Forward-Looking statement” other than as required by law relating to any material changes in assumptions.

The information in this report is in summary form only and does not contain all the information necessary to fully evaluate any transaction or investment. It should be read in conjunction with the Company’s other periodic and continuous disclosure announcements lodged with the ASX, which are available at www.asx.com.au and other publicly available information on the Company’s website at www.whiterockminerals.com.au.

No New Information or Data

This announcement contains references to exploration results and Mineral Resource and Ore Reserve estimates, all of which have been cross-referenced to this or previous market announcements by the Company. The Company confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcements and in the case of estimates of Mineral Resources and Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.

Appendix 2. Competent Persons.

The information in this report that relates to the Estimation and Reporting of Mineral Resources has been compiled by Mr. Richard Buerger BSc (Geology). Mr. Buerger is a full-time employee of Mining Plus Pty Ltd and has acted as an independent consultant on the Strauss-Kylo Deposit Mineral Resource estimation. Mr. Buerger is a Member of the Australasian Institute of Geologists (6031) and has sufficient experience with the style of mineralisation, the deposit type under consideration and to the activities undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code)'. Mr. Buerger consents to the inclusion in this report of the contained technical information relating the Mineral Resource Estimation in the form and context in which it appears.

The information in this report that relates to exploration results is based on information compiled by Mr Rohan Worland who is a Member of the Australian Institute of Geoscientists and is a consultant to White Rock Minerals Ltd. Mr Worland has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the ‘Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves’. Mr Worland consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

Competent Person's Consent Form

Pursuant to the requirements of ASX Listing Rules 5.6, 5.22 and 5.24 and
Clause 9 of the JORC Code 2012 Edition (Written Consent Statement)

Report name

WHITE ROCK MINERALS MT CARRINGTON PFS UPDATE

(Insert name or heading of Report to be publicly released) ('Report')

WHITE ROCK MINERALS LIMITED

(Insert name of company releasing the Report)

MT CARRINGTON GOLD PROJECT, DRAKE, NEW SOUTH WALES

(Insert name of the deposit to which the Report refers)

If there is insufficient space, complete the following sheet and sign it in the same manner as this original sheet.

10 AUGUST 2020

(Date of Report)

Statement

I,

ANDREW HUTSON

(Insert full name(s))

confirm that I am the Competent Person for the Report and:

- I have read and understood the requirements of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012 Edition).
- I am a Competent Person as defined by the JORC Code, 2012 Edition, having five years' experience that is relevant to the style of mineralisation and type of deposit described in the Report, and to the activity for which I am accepting responsibility.
- I am a Member or Fellow of *The Australasian Institute of Mining and Metallurgy* or the *Australian Institute of Geoscientists* or a 'Recognised Professional Organisation' (RPO) included in a list promulgated by ASX from time to time.
- I have reviewed the Report to which this Consent Statement applies, a copy of which is attached as Annexure A (**Approved Information**).
- I consent to the inclusion of the Competent Person Statement in the Report in the form in which it is contained.

I am a full time employee of

MINING PLUS PTY LTD

(Insert company name)

and have been engaged by

WHITE ROCK MINERALS LIMITED

(Insert company name)

to prepare the documentation for

MT CARRINGTON GOLD PROJECT, DRAKE, NEW SOUTH WALES

(Insert deposit name)

on which the Report is based, for the period ended

10 AUGUST 2020

(Insert date of Resource/Reserve statement)

I have disclosed to the reporting company the full nature of the relationship between myself and the company, including any issue that could be perceived by investors as a conflict of interest.

I verify that the Report is based on and fairly and accurately reflects in the form and context in which it appears, the information in my supporting documentation relating to Mineral Resources and Ore Reserves.

Consent

I consent to the release of the Report containing the Approved Information and the Competent Person's Statement set out in Annexure A by the directors of:

WHITE ROCK MINERALS LIMITED

(Insert reporting company name)



Signature of Competent Person:

10 AUGUST 2020

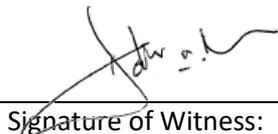
Date:

FAusIMM

Professional Membership:
(insert organisation name)

920705

Membership Number:



Signature of Witness:

JOHN NOLAN, WOODVALE

Print Witness Name and Residence:
(eg town/suburb)

APPENDIX 3 JORC (2012) TABLE 1 SECTION 1

Criteria	JORC Code (2102) Explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> • <i>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i> • <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> • <i>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</i> 	<ul style="list-style-type: none"> • Sampling of the deposits has consisted of diamond drilling (HQ and NQ mainly with minor PQ), Reverse Circulation drilling (face sampling hammers ranging in size from 5 ¼" to 10 ½") and open hole percussion drilling (used predominantly for grade control drilling) • The majority of diamond core sampling is at 0.3 to 1.5m intervals with the boundaries selected based on alteration, mineralisation or lithological attributes. Some historic core was sampled out to 4m. A consistent side of the core has been sampled throughout the various drilling programs. • Reverse Circulation samples have been collected at 1.0m & 1.5m interval spacing. • Percussion holes have been routinely sampled at either 2.0m or 3.0m intervals.
Drilling techniques	<ul style="list-style-type: none"> • <i>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i> 	<ul style="list-style-type: none"> • Recent drilling includes diamond core completed by White Rock Minerals Ltd ("WRM") and Rex Minerals Ltd ("Rex") from 2008. Historic drilling includes diamond core, reverse circulation (RC) and percussion completed by Aberfoyle Ltd, Mt Carrington Mines Ltd ("MCM"), CRA Exploration Pty Ltd ("CRAE") and Drake Resources Ltd ("Drake") between 1980 and 2005. • All diamond drilling is mainly NQ & HQ, with rare PQ sized core drilled. • Most diamond drill core is oriented. Recent diamond drill core was oriented via a Reflex ACE/ACT tool. • The majority of reverse circulation (RC) and percussion drilling used a 5 ¼" to 10 ½" face sampling hammer, 3m rod length. The majority of RC and percussion drilling is vertical at Strauss apart from detailed RC grade control drilling in the upper portion of the deposit, which is all angled drilling. At Kylo RC and percussion drilling is both vertical and angled.
Drill sample recovery	<ul style="list-style-type: none"> • <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i> • <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i> • <i>Whether a relationship exists</i> 	<ul style="list-style-type: none"> • Core recovery has been recorded on paper drill logs and in digital form. • A link between core recovery and grade is not apparent. No significant loss of fines or core has been noted. Mineralisation is hosted in competent siliceous ground. Where oxide is encountered at Kylo West recovery is similar to fresh rock.

Criteria	JORC Code (2102) Explanation	Commentary
	<p><i>between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i></p>	<ul style="list-style-type: none"> Recovery for RC and percussion drilling was not logged. Historic explorers conducted sample return tests between RC and percussion drilling. Sample weights for RC were not within 10% of theoretical yield. It was thought that RC was introducing an unknown bias as the loss was not consistent with variable ground conditions.
Logging	<ul style="list-style-type: none"> <i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i> <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i> <i>The total length and percentage of the relevant intersections logged.</i> 	<ul style="list-style-type: none"> Diamond drill core has been geotechnically and geologically logged using both quantitative and qualitative standards applicable to the level appropriate for the Resource category. This includes stratigraphy, lithology, colour, weathering, grain size, volcanic type, clast type, clast size, roundness, textural features, brecciation type, alteration class or intensity and mineralogy, mineralisation, vein type / texture / components, sulphide and quartz percent per metre, structure, recovery, breaks per metre, rock quality designation, magnetic susceptibility and specific gravity. All core was photographed. All historical RC and percussion drill chips were qualitatively logged at 1.0m & 1.5m intervals for lithology, alteration, weathering and mineralisation. Recent angled diamond drilling has been used to validate historic RC and percussion drilling and aid reinterpretation such that sufficient confidence in RC and percussion logging supports appropriate Mineral Resource estimation. An extensive selection of historic chip samples has been retained for reference. Each drillhole has been logged in its entirety apart from grade control drill holes.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> <i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i> <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<ul style="list-style-type: none"> Recent diamond drill core was split in half (or ¼ core PQ) by automated core saw to obtain a 3-4.5kg sample for external laboratory preparation by ALS Brisbane where it is dried, crushed to 70% passing <6mm, riffle split to ~3kg then pulverised to 85% passing <75micron. The oriented half core portion was retained for future reference and further test work. Field duplicates were regularly inserted and while some minor variation is evident in the results (in most cases less than 20%) this has been determined to be more a function of inherent heterogeneity of the mineralisation rather than systemic sampling method or preparation issues. Historic RC and percussion sample preparation records are incomplete. Records that exist show that dry samples were split using a riffle or face splitter to obtain two 1-2kg samples. Wet samples were mixed and sampled by hand or split by rotary disc cutter, collected in a bucket, flocculated, filtered and dried to a 3-5kg subsample, which was then riffle split to obtain two 1-2kg samples. Initial samples submitted to the laboratory were typically composited over 3m with 1m splits submitted in areas of interest. Samples were submitted to ALS Brisbane, Comlabs South Australia, and AAL in Ballina, Orange, Townsville, Balcatta and Drake. Limited detailed laboratory sample preparation information is available. For MCM samples submitted to Comlabs samples were crushed to 30# to 50# mesh (600 to 300 micron) and split with 100g split taken and pulverised to 120# mesh (125 micron). For CRAE samples submitted to ALS samples were pulverised to 200 micron.

Criteria	JORC Code (2102) Explanation	Commentary
		<ul style="list-style-type: none"> Limited historic QAQC information is available. Duplicate samples and repeat assays were taken routinely as were control samples. Control samples were submitted between 1 in 10 and 1 in 50. No documentation has been discovered as to the effectiveness of these checks. A review of repeat sample results for gold shows good consistency. Sampling techniques and laboratory preparation methods are considered industry standard and/or best practise at the time of works and relevant to the material being sampled. Based on mineralisation style, the sub-sampling techniques are considered adequate for representative sampling.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> <i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i> <i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i> 	<ul style="list-style-type: none"> All recent diamond core samples were assayed by ALS Brisbane for Au and multi-elements with the ~3kg pulverised sample analysed for Au by AAS of a 30g charge fire assay fusion bead (Au-AA25 technique, 0.01ppm detection limit) and a suite of 33 elements including Ag analysed by ICP-AES of a 0.25g charge of four acid digest solute (ME-ICP61 technique, 0.5ppm Ag detection limit), with over detection grades re-assayed by ICP-AES of a 0.4g charge of four acid digest solute. Fire assay analysis for Au via Au-AA25 technique is considered total. Multi-element analysis via ME-ICP61 technique is considered near-total for all but most resistive elements (not of relevance). The nature and quality of the analytical technique is deemed appropriate and of industry standard for the mineralisation style. Blanks, relevant certified reference material as standards and crushed core duplicate samples are inserted at regular intervals to company procedures (minimum 6 in 100 sample spacing) including blanks at the start of the batch and before duplicate samples. Additional blanks, standards and pulp duplicates are analysed as part of laboratory QAQC and calibration protocols. Review of sample assay, internal QAQC and laboratory QAQC results was undertaken when received, with notable sample results checked for relevance to geology and mineralisation. Internal and external reviews of QAQC have been undertaken. No external laboratory checks have been completed. Historic drilling includes sampling by Aberfoyle analysed by ALS and Comlabs, sampling by MCM analysed by ALS, Comlabs and AAL and sampling by CRAE analysed by ALS and AAL. The majority of Au assays were by fire assay (either 30g or 50g charges). The majority of Ag and base metal assays used an AAS finish for all sampling up to 1990 and an ICP finish for sampling by CRAE analysed by ALS in 1991-92. Records of the laboratory analysis are insufficient to determine the digestion used for base metals. Detection limits were 0.01 ppm for Au, 1 ppm for Ag and 2-5ppm for Cu, Pb & Zn. Acceptable levels of accuracy and precision have been established for both recent and historic drilling assay data.

Criteria	JORC Code (2102) Explanation	Commentary
Verification of sampling and assaying	<ul style="list-style-type: none"> <i>The verification of significant intersections by either independent or alternative company personnel.</i> <i>The use of twinned holes.</i> <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> <i>Discuss any adjustment to assay data.</i> 	<ul style="list-style-type: none"> Recent drilling assay results were checked and verified by alternative company personnel and notable assay results reviewed. No external laboratory checks have been completed. No twinned holes have been completed. All data was collected via paper or digital logging forms, entered into controlled Excel spreadsheets, validated by the supervising geologist then sent to a third party database manager for further validation and integration into a secure external SQL database. All hard copy data was filed and stored at the site office. All digital data was filed and stored on site with backup to the corporate office server and an additional third party remote server. The historic drilling database was recompiled by CRAE and subsequently updated by Drake and has then undergone validation by Rex and WRM. All pre-1980 drilling has been excluded from the database since the location and assay accuracy has been deemed insufficient for use in this Mineral Resource estimation. No adjustment to assay data has been undertaken.
Location of data points	<ul style="list-style-type: none"> <i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i> <i>Specification of the grid system used.</i> <i>Quality and adequacy of topographic control.</i> 	<ul style="list-style-type: none"> All recent diamond drill holes have been surveyed via RTK-DGPS for surface position (accuracy <0.1m). All recent diamond drill holes have been down hole surveyed by Reflex camera tool at approximately 30m spacing for subsurface positioning The surface position of historic drill holes were for the most part determined by tape and compass from a local grid established by a surveyor. Conversion of local grid to AMG control has undergone graphical and spatial analysis using collar locations, geology and mineralisation. The majority of historic drill holes were not surveyed down hole since most holes were vertical and shallow (<100m). Approximately half angled drill holes completed by MCM were surveyed down hole. No Aberfoyle drill holes were surveyed down hole. All CRAE drill holes were surveyed at approximately 25m intervals down hole. Topographic control has been provided by a high resolution airborne LiDAR survey acquired in 2013, accurate to <0.25m. All coordinates are in AMG (AGD66 Zone 56). Location quality is deemed of very high quality and adequate for requirements of this Mineral Resource estimation.
Data spacing and distribution	<ul style="list-style-type: none"> <i>Data spacing for reporting of Exploration Results.</i> <i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i> <i>Whether sample compositing has been applied.</i> 	<ul style="list-style-type: none"> Data spacing (drill holes) is variable and appropriate to the geology. Both the Strauss and Kylo deposits have been defined by drilling on predominantly 15 – 25m spaced section lines with between 10 – 25m spacing across strike to test the dip continuity and extents of the mineralisation. Grade control drilling in the upper portions of both deposits has been completed on 10m section lines (perpendicular to the strike of the mineralisation) with 5m spacing between holes. The spacing is considered sufficient to establish geological and grade continuity appropriate for Mineral Resource estimation. For the RC and percussion drilling, the initial samples submitted to the laboratory were typically composited

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<p>Orientation of data in relation to geological structure</p>	<ul style="list-style-type: none"> • <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> • <i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i> 	<p>over 2 - 3m with 1m splits submitted in areas of interest. No additional compositing has occurred for the original samples.</p> <ul style="list-style-type: none"> • Invariably some bias in individual drill hole results has been introduced due to the multi-directional narrow anastomosing vein to 'stockwork' style epithermal mineralisation. • Historical drilling at Strauss was dominantly vertical and prone to bias due to the upper stockwork having a dominant vertical vein component. With depth the dominant vein orientation shifts to shallow (~20°) towards the east-south-east. Historic drilling at Kylo North is dominantly angled since it was recognised early that mineralisation was controlled by dominantly vertical veining in a stockwork system focused along the near vertical contact between the competent andesite and volcanoclastics. At Kylo West historic drilling was also dominantly angled as well with the veining steep towards the south. Recent angled diamond drilling provided the basis for understanding the distribution and orientation of veining and allowed a detailed interpretation with which to incorporate all historic drilling with confidence. • Recent diamond drilling was designed to intersect mineralisation as close to orthogonal as possible. The drill holes may not necessarily be perpendicular to the orientation of the intersected mineralisation. Oriented diamond core has allowed the variable vein orientations to be identified and appropriate geological sampling including apexing of high grade veins and the integration of structural measurements with the overall interpretation and modelling of mineralisation.
<p>Sample security</p>	<ul style="list-style-type: none"> • <i>The measures taken to ensure sample security.</i> 	<ul style="list-style-type: none"> • Recent drill samples were transported directly from the manned drill site by company vehicle to the company base of operations for processing. • Samples were bagged in numbered calico sample bags, grouped into numbered and labelled large polyweave bags placed on a pallet and securely wrapped and labelled. • Samples were transported by company vehicle or external freight contractor to the laboratory. • No unauthorised people were permitted at the drill site, sample preparation area or laboratory. • Sample pulps were returned to the company after 90 days for storage in a lockable shipping container. • Historical drilling sample security was not documented.
<p>Audits or reviews</p>	<ul style="list-style-type: none"> • <i>The results of any audits or reviews of sampling techniques and data.</i> 	<ul style="list-style-type: none"> • No audits of sampling techniques and data have been completed. • External reviews of QAQC data have not identified any significant issues requiring a review of procedures relating to sampling techniques.

JORC (2012) TABLE 1 SECTION 2

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	<ul style="list-style-type: none"> The Kylo and Strauss deposits are wholly situated on ML 1147 located approximately 2km north of Drake in northern NSW. ML 1147 is part of the greater Mt Carrington Project (22 mining tenements and 1 exploration licence) and is 100% owned and operated by WRM, with an expiry date of 8th December 2030. The MLs are located in Girard State Forest SF303 with access and compensation agreements in place with Forests NSW. One Native Title claim is registered over the area (NNTT #NC11/5). Security in the form of an environmental bond of \$968,000 is held over the entire Mt Carrington Project mining tenements. All of the tenements are current and in good standing.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> Mining of the deposits was undertaken by MCM from 1987 to 1990. Significant exploration has previously been conducted by Aberfoyle, MCM, CRAE, Drake and Rex. The Exploration Results presented here are a compilation of the historical drilling completed by these explorers together with WRM. All historical work has been reviewed, appraised and integrated into a database and is of sufficient quality, relevance and applicability to be used for the Mineral Resource being reported here.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> The Mt Carrington deposits are hosted by the Drake Volcanics; a NW-trending 60km x 10km Permian bimodal volcano-sedimentary sequence within the Wandsworth Volcanic Group near the north-eastern margins of the southern New England Fold Belt. The Drake Volcanics overlie or is structurally bounded by the Carboniferous to Early Permian sedimentary Emu Creek Formation to the east and bounded by the Demon Fault and Early Triassic Stanthorpe Monzogranite pluton to the west. The sequence is largely dominated by andesite and equivalent volcanoclastics, however basaltic through to rhyolitic facies stratigraphic sequences are present, with numerous contemporaneous andesite to rhyolite sub-volcanic units intruding the sequence. The Razorback Creek Mudstone underlies the Drake Volcanics to the east, and Gilgurry Mudstone conformably overlies the Drake Volcanic sequence. In addition, Permian and Triassic granitoid plutons and associated igneous bodies intrude the area, several associated with small scale intrusion-related mineralisation. The Drake Volcanic sequence and associated intrusive rocks are host and interpreted source to the volcanogenic epithermal Au-Ag-Cu-Pb-Zn mineralisation developed at Mt Carrington. The majority of the Drake Volcanics and associated mineralisation are centred within a large scale circular caldera with a low magnetic signature and 20km diameter. The Strauss and Kylo deposits are low sulphidation epithermal vein type mineralisation that manifests as a zone of stockwork fissure veins and vein breccia associated with extensive phyllic to silicic alteration. Veining is localised along the margins of an andesite dome/plug and lava flow within a sequence of andesitic volcanoclastics (tuffaceous sandstone and lapilli tuff). Economically

Criteria	JORC Code explanation	Commentary
Drill hole Information	<ul style="list-style-type: none"> • A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> ○ easting and northing of the drill hole collar ○ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar ○ dip and azimuth of the hole ○ down hole length and interception depth ○ hole length. • If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	<p>mineralisation is Au-dominant with minor Ag and significant levels of Zn, Cu & Pb.</p> <ul style="list-style-type: none"> • Exploration results are not being reported.
Data aggregation methods	<ul style="list-style-type: none"> • In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. • Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. • The assumptions used for any reporting of metal equivalent values should be clearly stated. 	<ul style="list-style-type: none"> • Exploration results are not being reported. • Not applicable as a Mineral Resource is being reported.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> • These relationships are particularly important in the reporting of Exploration Results. • If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. • If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known'). 	<ul style="list-style-type: none"> • Exploration results are not being reported. • Mineralisation at Strauss occurs as a broad zone of stockwork veining that narrows with depth. Within the stockwork zone there are two dominant vein orientations: near vertical north trending veins and bedding parallel veins striking north-east and dipping approximately 20° towards the southeast. Recent drilling intersected the vertical veining at 20° to 40° and the bedding parallel veining at 70° to 90°. • Mineralisation at Kylo North occurs as a broad zone of stockwork veining that is dominated by near vertical north trending veins focused on the near vertical north trending andesite-volcaniclastic contact. Most drilling typically intersected mineralisation at approximately 20° to 40°. • Mineralisation at Kylo West occurs as two parallel zones of stockwork veining that strike east-west and dip 70° towards the south. Most drilling typically intersected mineralisation at approximately 30° to 70°.

Criteria	JORC Code explanation	Commentary
Diagrams	<ul style="list-style-type: none"> • <i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i> 	<ul style="list-style-type: none"> • Relevant diagrams have been included within the Mineral Resource report main body of text.
Balanced reporting	<ul style="list-style-type: none"> • <i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i> 	<ul style="list-style-type: none"> • The report is believed to include all representative and relevant information and is believed to be comprehensive. • Exploration results are not being reported.
Other substantive exploration data	<ul style="list-style-type: none"> • <i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i> 	<ul style="list-style-type: none"> • No other information is available at this time.
Further work	<ul style="list-style-type: none"> • <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> • <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i> 	<ul style="list-style-type: none"> • Further work will include grade control drilling prior to the commencement of and during mining.

JORC (2012) TABLE 1 SECTION 3

Criteria	JORC Code (2012) Explanation	Commentary
Database integrity	<ul style="list-style-type: none"> Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. Data validation procedures used. 	<ul style="list-style-type: none"> During active exploration drilling and sampling data was stored in an external SQL database managed by a third party data specialist. Exports of the database have been provided to Mining Plus. White Rock project geologists routinely validate assays returned back to drill core intercepts. Mining Plus has undertaken a high level review of all files for syntax, duplicate values, from and to depth errors and EOH collar depths. Once loaded into 3D software, Mining Plus has completed a review of all survey data by visually validating all hole traces for consistency.
Site visits	<ul style="list-style-type: none"> Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case. 	<ul style="list-style-type: none"> The Mining Plus Competent Person, Richard Buerger has completed a site visit to the property in January 2017. While on site the CP reviewed the mineralisation controls and elements of economic interest to be included in the estimation.
Geological interpretation	<ul style="list-style-type: none"> Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology. 	<ul style="list-style-type: none"> The geological information for Strauss is built on 1,162 drill holes for the deposit comprising 32,951.5 m of drilling. For Kylo, the geological information is built on 318 holes comprising 21,985.9 m of drilling. The base of weathering (including partial oxidation) has been modelled using the drill logs with these points used to create an oxidation bounding surface for the deposits with a portion of the mineralisation for each deposit existing within the oxidized rocks. The data used in the geological model for Strauss is a combination of diamond core (40 holes for 5,805.6 m), RC (995 holes for 21,993.6 m) and percussion holes (126 holes for 5,152.3 m), along with mapped surface and pit exposures of the host lithologies and structures. The data used in the geological model for Kylo is a combination of diamond core (27 holes for 3,881.3 m), RC (192 holes for 12,971.5 m) and percussion holes (99 holes for 5,133.1 m), along with mapped surface and pit exposures of the host lithologies and structures. Gold is the primary element of economic interest at both Strauss and Kylo, with sulphur domains also modelled due to this elements influence on the processing and waste rock classification. The gold mineralisation at Strauss is interpreted to be controlled by a combination of stratigraphy and structure and forms as steeply dipping fissure veins within a flat lying andesite unit and as steeply dipping stockwork veins within the gently dipping underlying volcanoclastic lithologies. The original Strauss mineralisation interpretation completed by White Rock Geologists for the 2012 Ravensgate Resource Estimate, which was based on a nominal gold cut-off of 0.25 g/t gold has been used to guide the mineralisation modelling for this Resource Estimate. The previous interpretation of most of the

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		<p>mineralisation contained different orientations of mineralisation within the one shape, which have been separated and sub-domained into four moderately east-dipping lodes in the underlying volcanics, a moderately to steeply west-dipping lode in the southern part of the deposit and a large, flat-lying zone within the overlying andesite unit. Two smaller mineralised domains used in the 2012 Ravensgate Resource have remained un-modified for this Resource.</p> <ul style="list-style-type: none"> • At Kylo, the primary control on gold mineralisation is the contact zone of a large quartz andesite porphyry intrusion with the gold hosted within quartz stockwork zones in close proximity to this contact. • The Kylo mineralisation domains used during the 2012 Ravensgate Mineral Resource Estimate have been used unchanged in this Resource update, apart from the segregation of the main Kylo domain into two sub-domains based on different orientations as the mineralisation wraps around the andesite intrusion. • In order to provide information for waste rock management and processing purposes, Mining Plus has undertaken the modelling of the sulphur distribution within the Strauss-Kylo, with this modelled independently of the gold mineralisation. Mining Plus has used the geological models provided (including weathering surfaces) as the basis for the sulphur modelling, with an indicator modelling approach used in Leapfrog Geo v3.4. Analysis of the length weighted grade populations for sulphur have identified inflection points in the grade population, with these inflection points used as indicator cut-off grades to create nested sulphur grade models. Samples above these cut-off grades have been flagged within Leapfrog and then modelled using a search ellipse based on the geological controls and/or mineralisation orientation. • No alternative interpretations have been considered as the model developed is thought to best represent the current geological understanding of the deposit.
Dimensions	<ul style="list-style-type: none"> • <i>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</i> 	<ul style="list-style-type: none"> • The mineralisation at Strauss strikes NNE to SSW and extends approximately 360 m in this direction, with a vertical extent in excess of 130 m. The across strike extents of the mineralisation is approximately 200 m. • The individual mineralisation lenses generally range in thickness from 2 m to up to 15 – 20 m true thickness. • The mineralisation at Kylo can be divided into two zones, Kylo West and Kylo North. • At Kylo West, the mineralisation is comprised of two subparallel zones striking E-W with a steep southerly dip, related to a porphyry intrusive contact. The main mineralised zone has a strike length in excess of 300m, with a dip extent of up to 150m. The mineralised zone varies from 2m to in excess of 40m true width, with much of the mineralisation being between 10 – 20m wide. • At Kylo North, the mineralisation wraps around the eastern edge of the porphyry with a change in strike to NNE-SSE and a steep dip to the west. The mineralisation extends up to 140m along strike with a similar dip extent (140m). Widths range from 2 – 5 m true thickness at the down dip extensions of the mineralisation to in excess of 90 m in the upper parts of the deposit.

Criteria	JORC Code (2012) Explanation	Commentary
<p>Estimation and modelling techniques</p>	<ul style="list-style-type: none"> • <i>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</i> • <i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i> • <i>The assumptions made regarding recovery of by-products.</i> • <i>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</i> • <i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i> • <i>Any assumptions behind modelling of selective mining units.</i> • <i>Any assumptions about correlation between variables.</i> • <i>Description of how the geological interpretation was used to control the resource estimates.</i> • <i>Discussion of basis for using or not using grade cutting or capping.</i> • <i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i> 	<ul style="list-style-type: none"> • Mineral Resource estimation for both deposits has been completed within Maptek Vulcan V10.0.4 Resource Modelling software. A single block model encompassing both deposits has been created with the two deposits separated in the block model using the “deposit” variable. • Ordinary Kriging has been used as the interpolation technique to estimate the Mineral Resource with this method considered appropriate given the nature of the mineralisation at both Strauss and Kylo. • The three dimensional mineralisation wireframes have been imported into Vulcan with these solids used to flag the mid-point of individual samples located in these solids with unique gold and sulphur domain codes. These domain codes have then been used to extract a raw assay file from Vulcan for grade population analysis, as well as analysis of the most appropriate composite length to be used for the estimation. • Analysis of the raw samples within the gold mineralisation domains at Strauss indicates that the majority of sample lengths are at either 1.0 or 3.0 m in length. Mining Plus has selected a 2.0m composite length after ensuring that no relationship exists between sample length and grade that could bias the grade population analysis. For the Kylo Deposit, the majority of samples are 1.0 m in length, with a 2.0 m composite selected. The compositing has been undertaken using the merge function with a 0.1 m residual in Vulcan. The majority of the samples within the Strauss and Kylo gold mineralised domains are at the selected composite length. • Within the Sulphur domains, the majority of samples within the Strauss deposit are at 1 m in length, with this length chosen for the compositing process. For the Kylo Sulphur domains, a significant number of samples are at 3 m in length. Analysis in Snowden Supervisor indicated a relationship between Sulphur grade and length, hence it has been decided to use a 3 m composite length to remove any potential bias caused by splitting raw sample lengths. The compositing has been undertaken using the merge function with a 0.1 m residual in Vulcan. • Geostatistical and continuity analysis have been undertaken utilising Snowden’s Supervisor™ V8.7 software. • Composites within the individual mineralised domains have been analysed to ensure that the grade distribution is indicative of a single population (for all elements) with no requirement for additional sub-domaining and to identify any extreme values which could have an undue influence on the estimation of grade within the domain. For domains that have a co-efficient of variation (CV) greater than 1.8 for gold, silver and arsenic and 1.0 for sulphur, iron, lead, copper and zinc, log histograms, log-probability and mean-variance plots have been used to identify if the high CV is due to the influence of extreme values and if so, determine the impact of applying a grade cap (top-cut) to that population. The application of the top-cut to the various elements inside the gold and sulphur domains has resulted in the desired decrease in CV without decreasing the average mean grade by an

Criteria	JORC Code (2012) Explanation	Commentary
		<p>excessive amount. A top-cut has been applied to the un-mineralised samples to negate the influence of un-modelled higher grade samples for most elements.</p> <ul style="list-style-type: none"> • Grade continuity analysis (variography) for gold, silver, copper, lead and zinc have been undertaken in Snowden Supervisor v8.7 software inside the gold mineralised domains. Variography for sulphur, iron and arsenic has been completed using the combined composites from all of the sulphur domains greater than 0.2% S. Variograms have been checked to ensure that they are geologically robust with respect to the strike and dip of each domain. • Kriging Neighbourhood Analysis (KNA) has been undertaken on the gold mineralisation domains within both deposits to determine the most appropriate interpolation parameters to apply during the block modelling process. • The KNA indicated a parent block size of 10 m (X) by 10 m (Y) by 5 m (Z) be applied to the deposit. The drill hole spacing in the deposit ranges from 15 m by 15 m in the better drilled parts of the deposit to 80 m by 80 m in the along strike and down dip extensions of the deposit – therefore the block size selected is considered appropriate for the drill spacing. In order for effective boundary definition, a sub-block size of 2 m (X) by 2 m (Y) by 1 m (Z) has been used with these sub-cells estimated at the parent block scale. • No assumption has been made regarding selective mining units. • The interpolations have been constrained within the mineralisation wireframes and undertaken in three passes with the mineralisation wireframes utilised as hard-boundaries during the estimation. The gold mineralisation domains have been used to constrain the estimation of gold, silver, copper, lead and zinc. Sulphur, iron and arsenic have been estimated inside the sulphur domains. • Estimation within the mineralisation domains utilized three interpolation passes with each pass using an increased search ellipse size with a decrease in the minimum number of samples required for a block to populate with grade used on subsequent passes: <ul style="list-style-type: none"> ○ The 1st pass utilized a search ellipse set at half the range of the variogram for each element with the orientation defined by the variography. A minimum of 6 and a maximum of 24 composites have been used during the interpolation with a maximum of two composites for each drill hole. ○ The 2nd pass used a search ellipse set at the range of the variogram with the orientation defined by the variography. A minimum of 4 and a maximum of 24 composites have been used during the interpolation with a maximum of two composites for each drill-hole. ○ The 3rd and final pass used a search ellipse twice the size of the variogram ranges with the orientation consistent with the first two passes. A minimum of 2 and a maximum of 24 composites have been used during the interpolation. • Grade has been estimated into the un-mineralised blocks using two interpolation passes and tight search

Criteria	JORC Code (2012) Explanation	Commentary
		<p>ellipses.</p> <ul style="list-style-type: none"> Length weighting has been applied during the estimation of all elements in all domains. The resource has been validated visually in section and level plan along with a statistical comparison of the block model grades against the de-clustered composite grades to ensure that the block model is a realistic representation of the input grades. The de-clustering has been deemed necessary in order for comparison with an OK estimation (which de-clusters during the estimation). No issues material to the reported Mineral Resource have been identified in the validation process. Open pit mining has taken place at both Strauss and Kylo, although no production records have been located in order to reconcile the Mineral Resource Estimate. The resource block model has been depleted to account for the material already mined. The “mined” variable has been used to deplete the models, with the mined areas of each model coded as <i>mined</i> = 1, and the remaining in-situ Mineral Resource coded as <i>mined</i> = 0.
Moisture	<ul style="list-style-type: none"> Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content. 	<ul style="list-style-type: none"> Tonnages are estimated on a dry basis.
Cut-off parameters	<ul style="list-style-type: none"> The basis of the adopted cut-off grade(s) or quality parameters applied. 	<ul style="list-style-type: none"> The current Mineral Resource for the Strauss and Kylo Deposits has been reported at a nominal cut-off of 0.5 g/t gold inside a Whittle optimised pit shell. <p>In order to report a Mineral Resource that has reasonable prospects for economic extraction, Mining Plus has undertaken an open-pit optimisation using Whittle mining software with the following price and cost assumptions:</p> <ul style="list-style-type: none"> Gold price of AUD\$3000/oz, Total costs (including mining, processing, transport and G&A) of AUD\$25.74/t, Mining dilution of 5% due to the wide zones of mineralisation, Mining ore loss of 5%, Silver recovery of 85%, Gold recovery of 90%. The Strauss-Kylo Mineral Resource has been reported by cut-off grade and Mineral Resource Category.
Mining factors or assumptions	<ul style="list-style-type: none"> Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be 	<ul style="list-style-type: none"> It has been assumed that the Strauss and Kylo deposits will be mined by open pit mining methods, with the Mineral Resources reported inside an optimized pitshell using the mining factors listed above. No other mining assumptions have been used in the estimation of the Mineral Resource.

Criteria	JORC Code (2012) Explanation	Commentary
	<p><i>reported with an explanation of the basis of the mining assumptions made.</i></p>	
<p>Metallurgical factors or assumptions</p>	<ul style="list-style-type: none"> <i>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</i> 	<ul style="list-style-type: none"> Gold and silver recoveries and processing costs have been assumed in the Whittle optimisation undertaken to determine a pitshell for reporting the Mineral Resource inside. These recovery factors are listed above.
<p>Environmental factors or assumptions</p>	<ul style="list-style-type: none"> <i>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</i> 	<ul style="list-style-type: none"> No environmental factors or assumptions have been incorporated into the reporting of the Mineral Resource Estimate for Strauss or Kylo.
<p>Bulk density</p>	<ul style="list-style-type: none"> <i>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</i> <i>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between</i> 	<ul style="list-style-type: none"> For Strauss, 340 bulk density measurements have been collected with this dataset supplied by White Rock Minerals along with the bulk density values to be assigned based on oxidation state. For Kylo, 482 bulk density measurements have been collected. White Rock Minerals have stated that the bulk density measurements have been collected using the water immersion technique. Mining Plus have reviewed the bulk density data supplied and have accepted the assigned values based on oxidation state as applicable for the two deposits. A factor has not been applied to account for void spaces or moisture differences. Bulk Densities have been assigned based on oxidation

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	<p><i>rock and alteration zones within the deposit.</i></p> <ul style="list-style-type: none"> • <i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i> 	<p>state with a bulk density of 2.54 g/cm³ applied to oxide and transitional material in both deposits and 2.73 g/cm³ and 2.63 g/cm³ applied to fresh material at Strauss and Kylo respectively.</p> <ul style="list-style-type: none"> • Bulk density data are considered appropriate for use in Mineral Resource and Ore Reserve estimation.
Classification	<ul style="list-style-type: none"> • <i>The basis for the classification of the Mineral Resources into varying confidence categories.</i> • <i>Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</i> • <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i> 	<ul style="list-style-type: none"> • Classification of the Strauss and Kylo Deposit Mineral Resource estimates is in keeping with the "Australasian Code for Reporting of Mineral Resources and Ore Reserves" (the JORC Code as prepared by the Joint Ore Reserve Committee of the AusIMM, AIG and MCA and updated in December 2012). All classifications and terminologies have been adhered to. All directions and recommendations have been followed, in keeping with the spirit of the code. • The resource classification has been applied to the MRE based on the drilling data spacing, grade and geological continuity, and data integrity. The resource has been classified on the following basis; <ul style="list-style-type: none"> ○ No areas of the in-situ Mineral Resource satisfied the requirement to be classified as Measured Mineral Resources, ○ Portions of the model defined by drilling spaced on a 25 m x 25 m pattern and where the confidence in the estimation is considered high have been classified as Indicated Mineral Resources. ○ Areas that have drill spacing further apart than 25 m (X) and 25 m (Y), where variographic parameters have been borrowed from other domains and with lower levels of confidence in the estimation have been classified as Inferred Mineral Resources. • Mining Plus has used these parameters as a guide to develop classification wireframes digitised on section and checked on level plans. The Resource classification has been assigned inside these solids for the mineralised blocks in order to remove any potential spotted dog classifications for the deposit. • Results reflect the Competent Persons' view of the deposit
Audits or reviews	<ul style="list-style-type: none"> • <i>The results of any audits or reviews of Mineral Resource estimates.</i> 	<ul style="list-style-type: none"> • No other independent audits or reviews have been undertaken on the Mineral Resource estimate.
Discussion of relative accuracy/confidence	<ul style="list-style-type: none"> • <i>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and</i> 	<ul style="list-style-type: none"> • The Mineral Resources as reported are considered global estimates, with additional infill drilling, re-logging and re-interpretation of the geology, alteration and mineralisation required to increase the local scale confidence in the Mineral Resource Estimate.

Criteria	JORC Code (2012) Explanation	Commentary
	<p><i>confidence of the estimate.</i></p> <ul style="list-style-type: none"> • <i>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</i> • <i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i> 	

JORC (2012) TABLE 1 SECTION 4

Criteria	JORC Code (2012) Explanation	Commentary
Mineral Resource Estimate for conversion to Ore Reserves	Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.	The Ore Reserve Estimate is based on the results of a revised Mineral Resource Estimate for Strauss and Kylo deposits completed by Mining Plus Pty Ltd (“Mining Plus”) as per the ASX announcement from White Rock Minerals on 9th October 2017, with the competent person being Mining Plus’s Richard Buerger. The Mineral Resource block model used for this project is the file <i>Strauss-Kylo_1709_eng</i> for the Strauss and Kylo deposits, also referred to as the updated Mineral Resource model of September 2017. This model has been deemed to be the most up to date representation of the geology at the Mt Carrington project by WRM, and data transfer of the resource block model to Mining Plus, was validated between the WRM and Mining Plus geology and mining teams during the commencement of this study. All geological information including the resource model completed by Mining Plus is available and was used as the basis of this mining study.
	Clear statements as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	The Minerals Resources are reported inclusive of the Ore Reserves.
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	<p>No significant activities have been undertaken on the site since the completion of the 2017 PFS and maiden Ore Reserve.</p> <p>Overall there have been a significant number of site visits over a significant period of time by both project personnel and also a WRM site maintenance team, so the site conditions are well understood. WRM have some personnel based on site as part on on-going care and maintenance activities for the project site, also supported by the WRM Corporate team and a team of specialised consultants.</p> <p>Site visits under taken by the current project team as outlined below:</p> <p>Colin McVie & Mining Plus;</p> <ul style="list-style-type: none"> • Mining Plus Manager Project Development conducted a site visit on the 21st & 22nd March 2017 as the Ore Reserve Competent Person in order to ensure the data used for the mining study matches the field observations. • Site visit involved detailed site tour of all areas, including proposed waste dump locations, and site layout considerations, and inspections of previous mining areas, waste dumps and other site activities including plant location, water management, and TSF. • While on-site also discussions with geotechnical team and environmental lead to understand site specific items for consideration. • Other members of Mining Plus team including a Project Administrator - Andrew Bales and Principal Resource Geologist - Richard Buerger (CP for Resources on this project) have also attended site visits <p>Alan Riles - Riles Integrated Resource Management Pty Ltd Study Manager, metallurgy, processing operations, coordination of technical inputs visited site on March 20th – 22nd 2017 to conduct the following:-</p> <ul style="list-style-type: none"> • General project setting and access considerations, • Detailed site tour of all facilities including existing pits and plant site, TSF and surface water management, general site topography and potential plant and infrastructure locations,

Criteria	JORC Code (2012) Explanation	Commentary
		<ul style="list-style-type: none"> • Discussions with the geology team on deposit geology, mineralisation, geometallurgy and potential future ore-types, • Inspection of core and discussions on observed mineralogy for selection of metallurgical test work composites. <p>Mark Eggers & PSM Geotechnical Team; A number of site visits were completed by Geotechnical team members as outlined below: 20 to 22 March 2017, site visit by Mark Eggers (Chief Engineering Geologist) and Greg Kennedy (Senior Engineering Geologist), completed the following:</p> <ul style="list-style-type: none"> • Pit exposure inspection for Kylo North, Strauss, Guy Bell, Mt Carrington, and Mt Carrington waste dumps. • Detailed diamond core inspection, logging of rock mass units from various deposits. • Inspection of proposed waste dump areas south of White Rock deposit. • Inspect possible haul road corridors from White Rock deposit to Mt Carrington. • Geotechnical observations made during this site visit were used to: <ul style="list-style-type: none"> - Formulate conceptual level slope design parameters for Strauss, Kylo North, Kylo West, Lady Hampden, and Silver King deposits, and - Inform recommendations for the forward work program to elevate slope designs to PFS level. <p>1 to 5 May 2017, site visit by Greg Kennedy (Senior Engineering Geologist) and Harrison Crooks (Engineering Geologist), completed the following:</p> <ul style="list-style-type: none"> • Geotechnical mapping of exposures at Kylo North, Strauss and White Rock “Glory Hole”. • Geotechnical re-logging of selected core from Kylo North, Kylo West, Strauss, Lady Hampden, and White Rock. • Point load testing of existing core and lump samples from exposures. • Geotechnical data collected during this site visit was used to develop Open Pit Geotechnical PFS design parameters. <p>Heather Wardlaw of ATC Williams visited the Mt Carrington TSF on 20 March 2017. The purpose of the visit was a walk-over inspection to gain an understanding of the topography and existing features around the existing tailings storages and to identify possible sources of material for future embankment construction.</p> <ul style="list-style-type: none"> • The site visit highlighted the complex issues of near surface seepage, runoff from old workings, waste rock dumps (WRD) and the existing TSFs. Acid mine drainage made the seepage issue worse and was evident from the WRD to the east of the plant site in the adjacent Humphries Creek Catchment as well as to the west in the TSF catchment. Acid Mine drainage was also observed flowing from an old adit near Strauss Pit into Saw Pit Creek. • Much of the contaminated water potentially flowing into Saw Pit Gully from the WRD had been diverted into the TSF and as a consequence, it is understood that wildlife has returned to the gully. • Seepage from the TSF embankment and water flowing from the standpipe piezometer downstream of the TSF and the Toe Dam was observed.
	If no site visits have been undertaken indicate why this is the case.	Site visits have been completed by key project team members so the site conditions are well understood.
Study status	The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.	Mining Plus conducted an Updated Pre-Feasibility mining study on the Mt Carrington project's Strauss and Kylo Gold deposits based on the September 2017 Indicated Mineral Resource.

Criteria	JORC Code (2012) Explanation	Commentary
	<p>The code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resource to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material modifying factors have been considered.</p>	<p>As part of the Updated Mt Carrington Gold Only Pre-Feasibility study, a mine plan was developed that is technically achievable and economically viable. This mine plan considered material Modifying Factors such as mining, processing, metallurgy, infrastructure, economic, marketing, legal, environmental, social and regulatory, involving a multi discipline team with team members from various groups, with the leads being WRM and Mining Plus.</p>
<p>Cut-off parameters</p>	<p>The basis of the cut-off grade(s) or quality parameters applied.</p>	<p>The Mineral Resource has not been updated since the previously announced maiden Ore Reserve.</p> <p>The Mineral Resource provided was a geologically domained resource; this geological model was evaluated to determine which blocks produced cash surplus when treated as ore. The economic analysis for the cut-off was completed initially to determine pit extents and pit development sequence through the use of Geovia's Whittle software.</p> <p>Cut-off grade is based on a Net Block Value basis in Whittle, taking into account the net revenue from recovered gold and the cost of ore mining, processing and G&A for each block. These parameters are used to determine an Au cut-off grade and blocks above this grade are considered as ore.</p> <p>The Au cut-off grade varies slightly according to rock type; overall weighted average cut-off for the purposes of Ore Reserves is 0.57g/t Au.</p>
<p>Mining factors or assumptions</p>	<p>The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).</p> <p>The choice, nature and appropriateness of the selected mining method (s) and other mining parameters including associated design issues such as pre-strip, access, etc.</p>	<p>The general methodology used to convert Mineral Resources to Ore Reserves was as follows:</p> <ol style="list-style-type: none"> 1. Prepare mining block model, incorporating appropriate dilution and ore loss factors, from the block model that underpins the Mineral Resource estimate. 2. Prepare mining and processing cost inputs, geotechnical slope information, expected processing recoveries and other inputs (gold price, royalties) for input to Whittle optimisation software. 3. Run Whittle pit optimisations at a range of revenue factors to produce a series of nested pit shells. All Inferred material was treated as waste for the purposes of this pit optimisation, such that the pit design is not driven by inclusion of Inferred material. 4. Select pit shell to use as a basis for pit design and design final pit and pit stages. 5. Run mine scheduling to produce a set of mining physicals over life of mine. Inferred material that occurs within the pit designs (less than 12% of total mining inventory and mostly forecast to be mined late in the mine life) was attributed value during this process. 6. Develop a mining cost model (capex and opex) for input to overall project financial modelling. <p>The mining method planned to be utilised is conventional open pit mining using truck and excavator operating on 4m benches. Drilling and blasting has been considered to be required for all the material to be mined.</p>

Criteria	JORC Code (2012) Explanation	Commentary
	<p>The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc.), grade control and pre-production drilling. The major assumptions made and the Mineral Resource model used for pit and stope optimisation (if appropriate).</p>	<p>Pells Sullivan Meynink (PSM) undertook a number of reviews of the project area including a final review for the pit shells, which resulted in the slope design parameters remaining applicable to the Ore Reserve, that PSM have stated are to a minimum of a Pre-feasibility geotechnical Study level. Batter angle for the pits range from 60° to 75° depending on localised geological boundaries and weathering zones. Final pit benches are planned to be between 8m and 16m high with 7.5m catch berms.</p>
	<p>The mining dilution factors used. The mining recovery factors used. Any mining widths used.</p>	<p>The sub-blocked geological block model that forms the basis of the Mineral Resource Estimate (MRE) was modified to incorporate appropriate dilution by regularising the model to a Selective Mining Unit (SMU) size of 4m x 4m x 2m (X x Y x Z). Comparison of the Grade-tonnage curves from the regularised mining model (or "SMU model") and the original MRE model shows that the SMU model incorporates a global dilution factor of approximately 6%, which is considered appropriate for the proposed mining method and the type of mining equipment envisaged for the project. Dilution is therefore considered to be inherently incorporated into the Ore Reserves via the SMU regularisation process.</p> <p>However, the regularised SMU model was not considered to incorporate sufficient Ore Loss (or mining recovery); and as such an additional 4% Ore Loss (or 96% Mining Recovery) factor was applied for Ore Reserves estimation purposes.</p> <p>A Minimum Mining Width of 15m was used during the pit and pushback design process.</p>
	<p>The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.</p>	<p>No value was attributed to Inferred Mineral Resources during the pit shell generation process.</p> <p>There is some Inferred material above the nominated cut-off grade (0.57g/t Au) that is included in the mining inventory within the final pit designs, and economic value is attributed to this Inferred material in the project schedule and economic analysis.</p> <p>The Inferred material represents approximately 12% of the total mining inventory for the project.</p> <p>Financial modelling demonstrates a positive project NPV if the revenue from Inferred material is removed (i.e. Inferred treated as waste), so the project's economic viability does not depend on the inclusion of the Inferred material.</p> <p>The processing plant is planned to be commissioned on a pre-existing low grade stockpile.</p> <p>The proportion of Inferred material in the early part of the mine plan is not significant; most of the mined Inferred material is in the Strauss pit Stage 2 cutback which is the last cutback scheduled in the LoM plan.</p> <p>A comprehensive RC grade control program will be implemented, specifically designed to improve confidence in the geological modelling that underpins the Mineral Resources and Ore Reserves.</p>
	<p>The infrastructure requirements of the selected mining methods.</p>	<p>The Ore Reserve estimation process has taken into account the pre-existing infrastructure such as historical waste dumps and haul roads and utilised these where practicable. The ROM Pad, workshop and processing plant area, while being placed on pre-existing infrastructure areas, do not impact on the Ore Reserve.</p>
<p>Metallurgical factors or assumptions</p>	<p>The metallurgical process proposed and the appropriateness of that process to the style of the mineralisation.</p>	<p>A single stage primary crush, Semi Autogenous Grinding and Ball Milling with Pebble Crushing (SABC) comminution circuit followed by a conventional carbon in leach (CIL) process is proposed. This process is considered appropriate for the Mt Carrington ore, which is classified as free-milling.</p> <p>Alternatives evaluated included concentrate sales and concentrate leach in light of the presence of cyanide-consuming base metal</p>

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		sulphides however CIL was selected on the basis of maximising recovery at acceptable CN usage.
	Whether the metallurgical process is well-tested technology or novel in nature.	The proposed metallurgical process and flowsheet is commonly used in the Australian and international gold mining industry and is considered to be well-tested technology.
	The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.	Composites tested by ore source for the Kylo North, Kylo West and Strauss pits and by oxidation state i.e. oxide, transition, primary Diagnostic leach, CN leach tests and size by size recovery tests performed to determine amenability to CN leaching, and optimal grind size Bond Work Index tests carried out to determine ore hardness and power consumption. The metallurgical recoveries utilised for the study were; Oxide 95.5% Transitional 80.0% Fresh 82.5% (Strauss and Kylo West), 83.0% Kylo North.
	Any assumptions or allowances made for deleterious elements.	Allowance has been made for pre-aeration to improve recovery and reduce CN usage due to impact of sulphides.
	The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.	There has been no bulk sampling or pilot-plant testing to date.
	For minerals that are defined by the specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?	Gold is not a mineral defined by a specification.
Environmental	The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	The majority of long lead time baseline environmental studies are near complete and include air quality, surface water, groundwater, terrestrial & aquatic ecology, meteorology and rock materials characterisation. Various project approval pathways are being discussed with regulators. Waste rock characterisation work has been completed to a PFS level. Waste rock and tailings storage locations have been selected based on suitable geographical characteristics and proximity to the pit and plant. Approvals for the TSF and waste rock dumps will be obtained during the Development Consent process and subsequent licensing by the relevant government regulators.
Infrastructure	The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.	The proposed mine plan includes waste rock dumps, ROM pad, surface water management facilities, workshops and mine administration facilities. Existing infrastructure from the previous mining operations (1987-1990) will be used where practicable and upgraded as appropriate. Sufficient water will be available for site requirements from the existing storages on site. Preliminary site water balance studies indicate a net positive water balance is achievable under normal operating circumstances. Power to site will be available via existing feed lines from the main grid power system. Power supply facilities will be upgraded as required during project construction.

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		<p>A Tailings Storage Facility (TSF) Options Study was completed by ATC Williams in July 2017, and a PFS Study in October 2017. The TSF layout for the selected option has now been further developed into a pre-feasibility study level based on the revised LOM of 4.8Mt at the rate of 1Mtpa. The TSF will provide storage for the site's contaminated water and supply the required water for processing. A high-level water balance indicated that for a median rainfall year there will be sufficient return water for processing. The new TSF will be constructed encompassing the existing TSF.</p> <p>Tailings deposition will be from the northern and western sides of the TSF and the decant pond will form at the eastern end adjacent to the embankment, where a decant water return system will be located.</p> <p>The TSF will also store any contaminated water and supply the required water for processing. It is expected that a median rainfall year will provide sufficient return water for processing but during a dry year additional water may be required;</p> <p>The TSF embankment is zoned with a bituminous geomembrane sealing system on the upstream face, a crest width of 10 m and slopes of 2:1 (Horizontal: Vertical) on the upstream and downstream side. Existing waste rock stockpiles or waste rock produced during ongoing mining operations are expected to provide the embankment fill, and the bituminous geomembrane will be sourced from off-site.</p>
Costs	<p>The derivation of, or assumptions made, regarding projected capital costs in the study.</p> <p>The methodology used to estimate operating costs.</p> <p>Allowances made for the content of deleterious elements.</p> <p>The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co-products.</p> <p>The source of exchange rates used in the study.</p> <p>Derivation of transport charges.</p> <p>The basis for forecasting or source of treatment and refining charges, penalties for</p>	<p>The mining capital cost for the Ore Reserve is limited to minor initial capital purchases, and pre-production mining.</p> <p>The Processing Plant capital cost and the TSF capital cost were determined by specialist consultancies in their fields (Mincore and ATC Williams respectively).</p> <p>Mining operating costs were built up from first-principles where the operating hours of all equipment were established and then costs applied for maintenance, tyres, labour and consumables. The costs further take into account the fixed dry hire costs and associated insurances, plus the cost of labour including operators, maintainers and management and also an expected contractor's profit margin.</p> <p>Processing operating costs were built up from first-principles calculations where the main costs drivers are the required power (Bond WI and grind size), CN (test work results) and labour.</p> <p>All operating costs are considered to be at PFS level of accuracy i.e. -15%/+25%.</p> <p>Past mining operations and metallurgical test work leading up to and as part of the 2017 PFS did show the presence of cyanide-soluble copper to be present as a deleterious element that could affect the processing costs. As such, a slightly higher than normal consumption rate was assumed in the process and processing cost.</p> <p>A gold price of A\$2,300/oz was utilised in the PFS, reflecting the improved sentiment for gold, but also being some 15% below the spot price as at end July 2020. This Gold price is assumed to be constant over the initial 5-year LoM plan.</p> <p>The Updated PFS has been undertaken in Australian Dollars.</p> <p>Provision for transport of gold dore to the Perth Mint has been made using generally known commercial rates.</p> <p>Provision for refining charges of gold dore at the Perth Mint has been made using generally known commercial rates.</p>

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	failure to meet specification, etc.	
	The allowances made for royalties payable, both Government and private.	The royalty rate applicable for the Mt Carrington project is 4% ex-mine value. Ex-mine value refers to the value of the mineral once it is mined and brought to surface allowing for deductions related to processing, treatment, depreciation and some administration costs. This rate has been applied to all revenues of the project over its life of mine.
Revenue Factors	The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns etc.	The pit optimisations were based on a Revenue Factor 1 gold price of A\$2300 per ounce, less applicable royalties. It is envisaged that gold will be produced as dore bars so product treatment and transportation charges will be minimal and there is no requirement for net smelter return calculations.
	The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.	A life-of-mine (LOM) forecast Gold price of A\$2300 (real 2020) is applied in the financial model for the project evaluation. This price was selected by White Rock on the basis of historical A\$ Gold prices over the last 2 years. The price is near the median of the historical range and consistent with long term broker consensus forecasts.
Market Assessment	The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.	There is a transparent market for the sale and purchase of gold.
	A customer and competitor analysis along with the identification of likely market windows for the product.	There is a transparent market for the sale and purchase of gold.
	Price and volume forecasts and the basis for these forecasts.	There is a transparent market for the sale and purchase of gold.
	For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.	There are no industrial minerals included in the PFS.
Economic	The inputs to the economic analysis to produce the net present value (NPV), the source and confidence of these economic inputs estimated inflation, discount rate, etc.	Discounted cashflow modelling and sensitivity analysis has been completed to evaluate the economic performance of the project. Key value driver inputs into the financial model include; Gold price of A\$2300/oz based on historical performance and long-term forecasts, Discount rate of 8% as determined by the Board of Directors of White Rock, and excluding project financing. The project returns a positive NPV under the assumptions used.
	NPV ranges and sensitivity to variations in the significant assumptions and inputs.	White Rock has not disclosed the Project NPV to support the Ore Reserve estimates as this is considered to be commercially sensitive. The Project NPV is most sensitive to variations in realised gold price and operating costs <ul style="list-style-type: none"> • a 10% reduction in gold price or total gold produced reduces NPV by approx. 30%; • a 10% increase in operating costs reduces NPV by approx. 18%, and; • a 10% increase in development capital reduces NPV by 4%.

Criteria	JORC Code (2012) Explanation	Commentary
Social	The status of agreements with key stakeholders and matters leading to social licence to operate.	Throughout the ownership of the Mt Carrington Project White Rock has established a strong platform for engagement with the community. The level of community engagement has been dictated by level of activity and has included community sponsorship and support of community initiatives. At the beginning of the PFS White Rock engaged leading community consultants Umwelt to assist in developing a Social Impact Assessment (“SIA”) and Community Engagement Strategy that is an integral part of the Development Consent process. Ultimately the strategy aims to work with stakeholders and the community to identify ways to enhance the positive and minimise the negative impacts of the Project. One Native Title claim is registered over the area (NNTT #NC11/5). Introductory meetings and a site visit has been completed with Native Title claimants. No Native Title negotiations have commenced. The majority of the central Mining Leases and the area of the Exploration Licence subject of this PFS are located in Girard State Forest SF303. Access and compensation agreements for this land are in place with Forests NSW. The periphery of the central Mining Leases to the east includes private freehold and Crown Land. Current compensation agreements are not in place for this land.
Other	To the extent relevant, the impacts of the following on the project and/or on the estimation and classification of the Ore reserves:	
	Any identified material naturally occurring risks.	Terrestrial ecology studies that commenced in 2013 and are still ongoing have shown that no impacts are expected on threatened vegetation communities as no Endangered Ecological Communities currently listed under either the BC Act or the EPBC Act have been identified within the Project Site. Similarly, to date no flora species currently listed as Threatened under either Act has been recorded within areas likely to be impacted and therefore no adverse impacts are anticipated at this stage. One Threatened fauna species has been detected in the area which may be impacted by the project. This species, the Giant Barred Frog, has been found in 4 locations in the general area of the Project and one of these location may be impacted by the development. Further work is required to develop strategies to ensure that the impact of the Project is minimised.
	The status of material legal agreements and marketing arrangements.	No material contracts or marketing arrangements are in place.
	The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary government regulations will be received within the timeframes anticipated in the Pre-feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.	The project is contained within 22 mining leases and one exploration licence, which are all in good standing. An approved Mining Operation Plan for Care & Maintenance activities on the mining tenements is current. Approvals for mining will be sought through the Development Consent process.

Criteria	JORC Code (2012) Explanation	Commentary
Classification	<p>The basis for the classification of the Ore Reserves into varying confidence categories. Whether the result appropriately reflects the Competent Person's view of the deposit.</p> <p>The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</p>	<p>It is the opinion of the Competent Persons for Ore Reserves that the results are an appropriate reflection of the deposit.</p> <p>There are no Measured Mineral Resources for the deposits under consideration, so there are no Proven Ore Reserves.</p> <p>Indicated Mineral Resources within the final pit design (which has been derived by applying appropriate Modifying Factors as described above) have been classified as Probable Ore Reserves.</p>
Audits or reviews	<p>The results of any audits or reviews of Ore Reserve estimates.</p>	<p>No audits or reviews of the Ore Reserves estimate have been conducted to date.</p>
Discussion of relative accuracy/confidence	<p>Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using and approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.</p> <p>The statement should specify whether it relates to global or local estimates, and if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. Accuracy and confidence discussions should extend to specific discussions of any applied Modifying factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.</p> <p>It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</p>	<p>The Ore Reserve is based on the following key elements:</p> <ul style="list-style-type: none"> • A current Mineral Resource estimate with the large proportion of Mineral Resource classification being Indicated; this is considered sufficient to support a PFS. • There are no unforeseen modifying factors at the time of this statement that will have any material impact on the Ore Reserve estimate. • Geotechnical assessment is considered sufficient for a PFS, and allows progression to feasibility level study, with more detailed geotechnical assessment to be completed in the next stage of study. • The mine planning and scheduling assumptions are based on current industry practice, which are seen as globally correct at this level of study; with further work in the next level of study to understand any periodic cost fluctuations. • As part of ongoing works planned as part of the FS, it is recommended that further work is completed on ore and waste rock characterisation, including further testwork and geological interpretation. Following this work, the waste rock dump design and mine schedule will be reviewed and updated as appropriate. This work would also include further analysis of the historic low-grade ore stockpile. • The cost estimates and financial evaluation have been estimated by the project team with specialist consultants and team members, which are considered sufficient to support this level of study. The accuracy of the cost estimate is -15% to +25% and is in line with a Class 4 estimate under the AACE International Cost Estimate Classification guidelines. • As part of the FS works, the project team will also engage with potential contractors in the local area and region to further confirm construction and mining costs, and to assist with the project execution planning. • Mine economics are based on long term commodity forecasts which carry inherent risks.