

## PRE-FEASIBILITY STUDY UPDATE

Horizon Minerals Limited (ASX: HRZ) (“Horizon” or “the Company”) is pleased to provide an update on the progress of the Pre-Feasibility Study (“PFS”) work currently underway. This includes mining and infrastructure studies, and the processing plant study to refurbish and repurpose Black Swan to a gold plant being undertaken by GR Engineering Services Limited (“GRES”).

### HIGHLIGHTS

#### Processing PFS

- GRES is in the final stages of completing the Black Swan PFS that incorporates refurbishment of the existing comminution circuit and the introduction of a new gold Carbon in Leach (“CIL”) processing facility
- The plant has been designed for 1.5Mtpa throughput with equipment sized to achieve a product size of P80 106µm
- GRES has completed a trade-off study and identified a preferred comminution circuit involving single stage crushing plus SAG and ball mill
- This configuration utilises the existing Black Swan comminution circuit and provides the most flexibility and robustness for managing future ore types and any throughput rate increase
- The new CIL beneficiation component of the study is also well advanced, with process flow diagrams, mechanical equipment and electrical load lists, single line diagrams and various other components completed

#### Mining and Infrastructure Studies

- High level scoping studies have been finalised by Mining Plus and rankings completed on 24 open pit and underground mineral deposits
- More detailed PFS studies on prioritised deposits are underway to provide potential ore feed for the Black Swan processing facility
- Infrastructure and utilities components of the PFS are also ongoing, inclusive of power supply and network requirements, water supply requirements, accommodations studies and other civil works to accommodate greater ore storage under a hub and spoke processing model
- Environmental and permitting approvals are ongoing
- Delivery of the combined PFS is on track for completion in the December 2025 quarter

Commenting on the study progress, Managing Director and CEO Mr Grant Haywood said:<sup>1</sup>

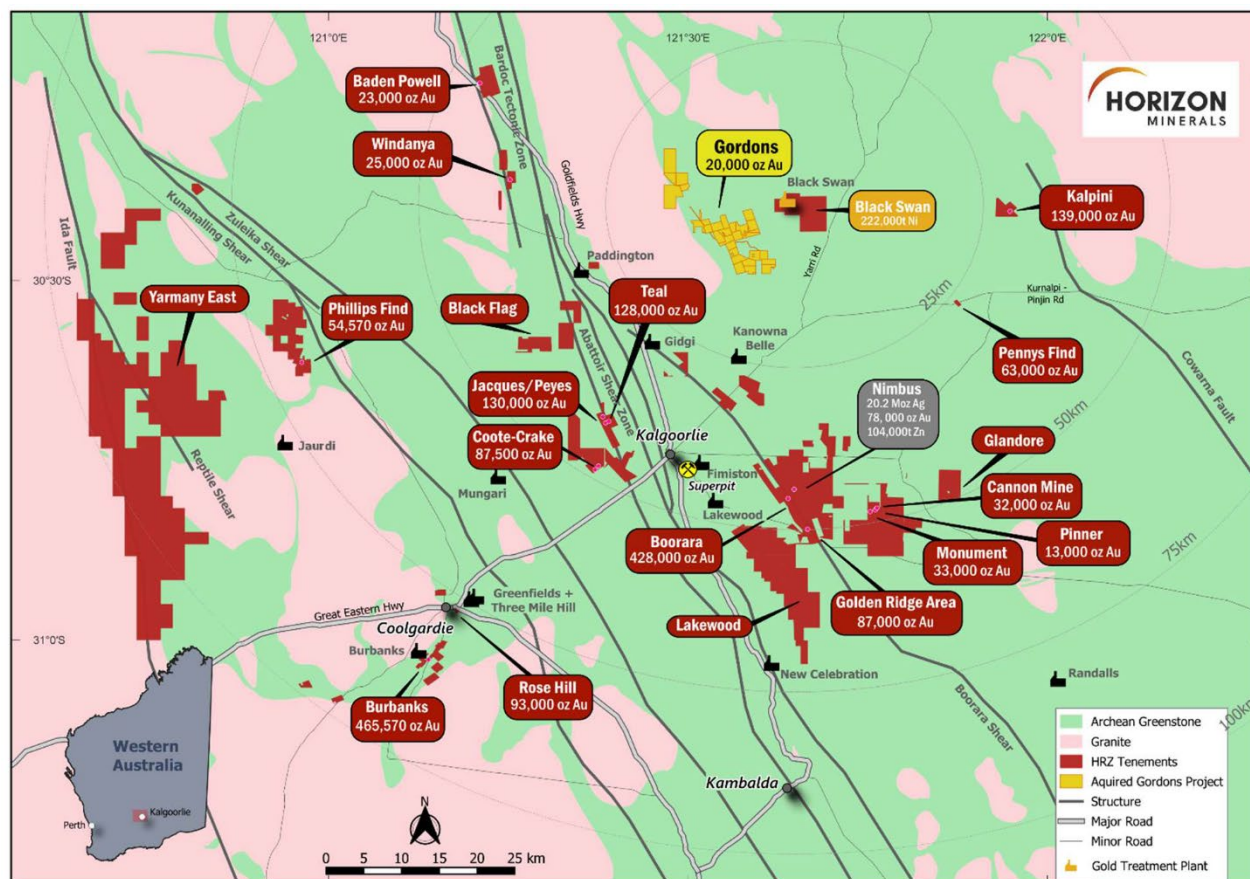
“Progressing the Black Swan Pre-Feasibility Study is an important step in our development and growth pathway towards being a new, independent mid-tier gold producer. The study work is founded on robust technical and economic analysis of our assets and is advancing well. With work completed on the option studies and associated preliminary engineering design, we look forward to sharing the final outcomes in the December quarter when completed and making a Financial Investment Decision shortly thereafter, and moving to the next steps of refurbishment and commissioning.”

<sup>1</sup> See Forward Looking and Cautionary Statements on Page 8.

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### Overview

Horizon is pleased to provide an update on the PFS work being undertaken at its 100% owned Black Swan Project, located approximately 40km to the northeast of Kalgoorlie-Boulder in the heart of the Western Australian goldfields (Figure 1).



**Figure 1: Horizon's project locations, regional geology and surrounding infrastructure**

### Black Swan Processing PFS

The Black Swan process plant PFS being conducted by GRES is progressing well, integrating the brownfield refurbishment and upgrade of the comminution circuit with the development of a new greenfield gravity and CIL gold recovery circuit. To date, process flow diagrams, mechanical equipment and electrical load lists, single line diagrams, and various other components have been completed.



The comminution circuit is the largest component of the Black Swan processing plant to be retained for the conversion project to gold processing. A critical first step was to assess the implications of processing lower-competency gold ore relative to the original high-competency nickel ore, as shown in Table 1, the gold ore is not particularly hard. This assessment ensured that the optimal circuit configuration for gold processing was identified, rather than simply relying on the existing arrangement.

1. Single stage crush plus SAG mill (SS SAG). This option includes using existing equipment, including the primary crusher, coarse ore bin, SAG mill, and cyclone cluster.
2. Single stage crushing plus SAG and ball mill (SABC) (Figure 2). This option includes using existing equipment, including primary crusher, coarse ore bin, SAG mill, pebble crusher, ball mill, and cyclone cluster.
3. Three-stage crushing plus ball mill (3SC + BM). This option includes using existing equipment including primary crusher, fine ore bin, ball mill, cyclone cluster and new equipment including a secondary crusher, tertiary crusher and product screen.

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In parallel, Orway Minerals Consultants (“OMC”) conducted simulation studies on the different feed sources through the comminution circuit, using the available ore characteristics to the Black Swan plant. Multiple potential ore feed sources have been identified within 100km of Black Swan, including Boorara, Cannon, Penny’s Find, Crake, Burbanks, Rosehill, Kalpini and Jacques.

There is reasonable availability of comminution data for Boorara, Cannon and Kalpini which was broken up into fresh, transitional and oxide parameters. There is limited comminution data for the other sources, particularly Burbanks. Additional comminution data for Burbanks is being sourced from the current drill program which will feed into the PFS, with other ore sources sourced from existing core. The design basis for the five year plan with ore characteristics developed annually is shown in the table below.

**Table 1: Average Yearly Ore Characteristics**

Parameter	Year 1	Year 2	Year 3	Year 4	Year 5
Abrasion Index (Ai)	0.0814	0.0960	0.1163	0.1280	0.1351
Crushing Work Index (CWi), kWh/t	7.3	8.1	10.0	11.3	11.8
Rod Mill Work Index (RWi), kWh/t	14.4	15.6	17.8	17.7	18.0
Bond Ball Mill Work Index (BWi), kWh/t	14.1	14.7	15.4	16.2	16.2

Both the OMC simulations and GRES trade-off studies independently favoured option 1 (SS SAG) for the 1.5Mtpa rate, but also indicated that with a marginal increase in capital, refurbishing both the SS SAG and option 2 (SABC) circuits at the start would offer a significant opportunity for future expansion and greater long-term flexibility.

The GRES PFS has proceeded on the basis of a comminution circuit under both options 1 and 2, with the SAG and ball mill structural arrangement remaining largely unchanged. The overall comminution circuit layout has been rationalised to simplify the conveying and pebble crushing circuits through the removal of redundant conveyors and screens.

### ***Gold Recovery Circuit (new)***

For all scenarios, the gravity gold and CIL recovery circuits downstream of comminution are all new installations and remain the same regardless of comminution circuit type. The gold circuit has been designed as a new conventional CIL plant, located adjacent to and separate from the existing nickel flotation circuit.

The design incorporates flexibility for future expansion in processing rate, with provision to increase the size of equipment such as the pre-leach thickener (a potential bottleneck at higher throughputs) and footprint allowances for future additional adsorption tanks.

### ***Flotation Circuit (existing)***

The nickel flotation circuit has been deliberately excluded and isolated from the gold conversion project design and will be kept on care and maintenance. This approach reduces complexity by allowing the new gold circuit to be constructed in an adjacent greenfield area, while retaining flexibility for future standalone redevelopment of the flotation circuit. By keeping the flotation circuit separate

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from the gold plant, future upgrades can be undertaken without interrupting gold operations, while still enabling a quick and simple tie-in to the comminution and leaching circuits if required.

### **Mining and Infrastructure Studies**

Mining Plus has been engaged to assist with delivering the mining studies that will provide the ore feed to Black Swan, aiming for a minimum life of mine plan of five years. A total of 24 projects have had scoping studies completed on them, generating high level metrics inclusive of physicals and financials. A gap analysis has also been conducted on environmental approvals and other technical work such as geotechnical, metallurgical and hydrogeological studies to rank the projects and to prioritise a number of key projects for the PFS phase. Both underground and open pit projects are undergoing PFS currently.

The cornerstone Burbanks project has shown great potential to be a long-life asset that can feed Black Swan, however areas of additional project work are required before it can be advanced to a PFS level of study. The key gaps are metallurgical, particularly comminution data, and geotechnical. In addition, a large portion of the high-grade underground Mineral Resource is classified as Inferred, and therefore cannot be converted to an Ore Reserve without further drilling. Horizon is currently undertaking a large 15,000m infill drilling program with the aim of improving the quality of the Mineral Resource and providing the core to undertake geotechnical and metallurgical programs.

Burbanks will therefore only be completed to a Scoping Study level for the upcoming PFS, with its combined Mineral Resource of 465.5koz @ 2.8g/t Au representing significant upside to the initial PFS mine plan.<sup>1</sup>

### **Next Steps<sup>2</sup>**

The PFS being completed on the plant refurbishment, infrastructure and mine feed sources is on track for completion in the December 2025 quarter.

It is anticipated that the PFS and Burbanks Scoping Study will be sufficient to make an informed Financial Investment Decision (FID) on the mill refurbishment and conversion of Black Swan to a gold plant. Subject to a positive FID, construction could commence during 2026.

### **Authorised for release by the Board of Directors**

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<sup>1</sup> See ASX announcements 19 May 2025 and 11 August 2025, and Confirmations on page 6. <sup>2</sup> See Forward Looking and Cautionary Statements on Page 8.



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**Horizon Minerals Limited – Summary of Gold Mineral Resources**

Project	Cutoff Au ppm	Measured			Indicated			Inferred			Total		
		Mt	Au ppm	Ounces	Mt	Au ppm	Ounces	Mt	Au ppm	Ounces	Mt	Au ppm	Ounces
Boorara OP	0.5	1.12	1.22	43,700	6.85	1.28	281,100	2.56	1.26	103,500	10.53	1.27	428,300
Burbanks OP	0.5				1.43	2.02	92,800	3.43	1.86	204,900	4.86	1.90	297,700
Burbanks UG	2.5/2.0				0.12	4.26	16,700	1.07	4.39	151,200	1.19	4.38	167,900
Phillips Find OP	0.5				0.54	2.40	41,700	0.19	2.09	12,700	0.73	2.32	54,400
Phillips Find UG	2							0.00	2.27	208	0.00	2.27	208
Golden Ridge	1				0.48	1.82	27,900	0.05	1.71	2,800	0.53	1.81	30,700
Golden Ridge North	0.8				0.65	1.15	24,300	0.77	1.30	32,300	1.43	1.23	56,600
Cannon UG	1				0.19	4.80	28,600	0.05	2.28	3,500	0.23	4.29	32,100
Monument	0.5							0.92	1.11	32,800	0.92	1.11	32,800
Pinner	0.5				0.06	1.02	2,100	0.27	1.25	10,800	0.33	1.21	12,800
Pennys Find	1.5				0.31	5.19	51,000	0.12	3.02	12,000	0.43	4.57	63,000
Kalpini	0.8				1.40	2.41	108,600	0.47	2.03	30,700	1.87	2.31	139,300
Rose Hill UG	2				0.33	4.49	47,100	0.18	4.78	27,800	0.51	4.60	74,900
Rose Hill OP	0.5	0.19	1.96	12,300	0.09	2.05	6,100				0.29	1.99	18,300
Jacques-Peyes	0.8				0.97	2.59	80,700	0.77	1.98	49,200	1.74	2.32	129,800
Teal	1				1.01	1.96	63,700	0.80	2.50	64,500	1.81	2.20	128,100
Crake	0.8				1.33	1.47	63,100	0.08	1.27	3,400	1.42	1.46	66,500
Coote	1							0.42	1.54	21,000	0.42	1.54	21,000
Capricorn	0.5							0.66	1.20	25,500	0.66	1.20	25,500
Baden Powell	0.5							0.60	1.20	23,000	0.60	1.20	23,000
Gordons Dam	1.0							0.36	1.70	20,000	0.36	1.70	20,000
<b>Total</b>		<b>1.31</b>	<b>1.33</b>	<b>55,900</b>	<b>15.75</b>	<b>1.85</b>	<b>935,300</b>	<b>13.77</b>	<b>1.88</b>	<b>831,600</b>	<b>30.86</b>	<b>1.84</b>	<b>1,822,900</b>

**Confirmation**

The information in this report that relates to Horizon's Mineral Resources estimates is extracted from and was originally reported in Horizon's ASX announcements:

- "Updated Boorara Mineral Resource Delivers a 34% Increase in Gold Grade" (Boorara) 27 April 2021,
- Group Mineral Resource Statement – Amended", . (Burbanks, Phillips Find) 1 August 2024,
- "High Grade Drill results and Resource Update for Rose Hill", (Rose Hill, Golden Ridge) 4 February 2020,
- "Maiden Resources for Monument and Golden Ridge North" (Golden Ridge North), 19 July 2023,
- "Investor Presentation June 2022", (Cannon) 31 May 2022,
- "Group Mineral Resource Statement – Amended", . (Monument, Pinner) 1 August 2024,
- "Pennys Find Resource Update", (Pennys Find) 29 December 2023,

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- “Kalpini Gold Project Mineral Resource Update” (Kalpini) 28 September 2021,
- “Jacques Find- Peyes Farm Mineral Resource update” (Jaques-Peyes) 15 September 2021,
- “Intermin’s Mineral Resources Grow 30% to over 560,000 Ounces”, (ASX:IRC) (Teal) dated 19 September 2018,
- “Updated Crake Resource improves in quality” (Crake) 7 September 2021,
- “Gold resources increase to 1.24moz” (Coote, Capricorn, Baden Powell) dated 28 September 2022,
- “Acquisition of Gordons Dam Project near Black Swan including Gordons Dam project”, (ASX:HRZ) (Gordons Dam) dated 5 August 2025

each of which is available at [www.asx.com.au](http://www.asx.com.au). The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters underpinning the estimates in those announcements continue to apply and have not materially changed. The Company confirms that the form and context of the Competent Person’s findings in relation to those Mineral Resources estimates or Ore Reserves estimates have not been materially modified from the original market announcements.

## Confirmation

The information in this report that relates to Horizon’s Exploration Results is extracted from and was originally reported in Horizon’s ASX announcement “Group Mineral Resource Statement – Amended” (Burbanks, Phillips Find) 1 August 2024 which is available at [www.asx.com.au](http://www.asx.com.au). The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters underpinning the exploration results in that announcement continue to apply and have not materially changed. The Company confirms that the form and context of the Competent Person’s findings in relation to those exploration results have not been materially modified from the original market announcements.

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### **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 announcement 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 any additional mine licenses, permits and other regulatory approvals required in connection with mining and third party processing operations, competition for among other things, capital, acquisition of reserves, undeveloped lands and skilled personnel, incorrect assessments of the value of acquisitions, changes in commodity prices and exchange rate, currency and interest 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 announcement 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 the announcement, including with respect to any production targets and financial estimates, based on the information contained in this and previous ASX announcements.