Macro and WA Limestone secure strategically located Derby Construction Sand Project

Highlights

- **Macro and strategic partner WA Limestone successfully complete acquisition of the Derby East Construction Sands Project from Thunderbird Operations Pty Ltd with Macro appointed as manager and operator of Project**
- **Project comprises two granted exploration licences located just 24kms east of Port of Derby on sealed, all weather Derby-Gibb River Road**
- **NORDEN Shipping (Singapore) Pte Ltd, a subsidiary entity of Macro's strategic partner, Dampskibsselskabet NORDEN A/S (NORDEN), holds a licence to import sand and fine aggregates issued by Singapore's Building & Construction Authority**
- **Singapore imported approximately 150 million tonnes of sand between calendar years 2020 and 2023. The Specification of sand located at the Project meets Singapore requirements and Main Roads West Australia Specification 302 for earthworks**
- **Macro and NORDEN have commenced studying the logistics supply chain involving transhipping and ocean freight operations from the Port of Derby as well as strategic marketing to Singapore and other southeast Asian markets**

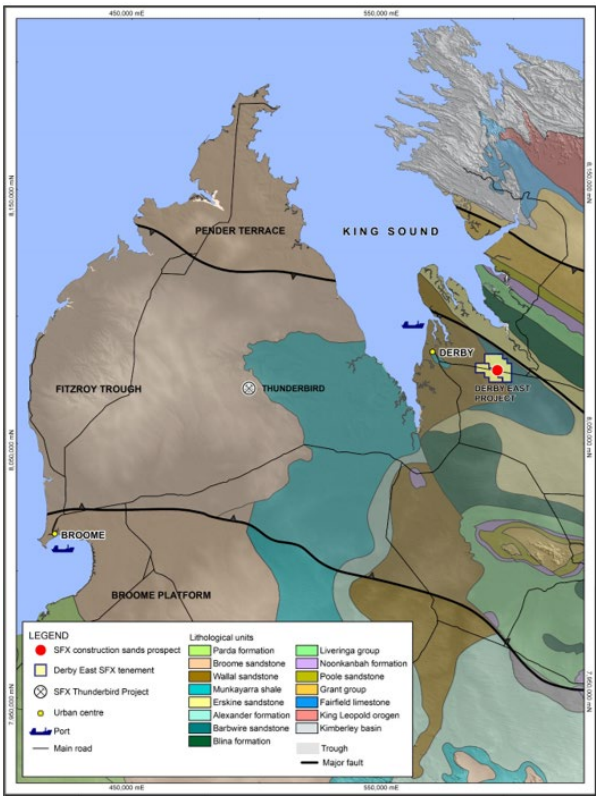

Figure 1: Derby East Project Location

Macro Metals Limited (ASX:M4M) (**Macro** or the **Company**) is pleased to announce that its wholly owned subsidiary, FE Metals Limited (**FE**) and Macro's strategic partner, WA Limestone Pty Ltd (**WAL**) have successfully completed the joint acquisition of the Derby East Construction Sands Project (**Derby East Project**) from Thunderbird Operations Pty Ltd, a wholly owned subsidiary of Kimberley Mineral Sands Pty Ltd. The total consideration paid for 100% of legal and beneficial interest in the Project was A$125,000.

FE and WAL have each acquired a 50% interest in the Derby East Project for the sum of A$62,000. As part of the transaction, FE and WAL have agreed to appoint Macro's wholly owned subsidiary, Macro Mining Services Pty Ltd, as the manager and operator of the Project.

Macro Managing Director, Simon Rushton said, "*I am excited to be strengthening our partnership with WA Limestone. Their team and I have a proven history of successfully creating a supply chain and exporting sand to overseas markets. In conjunction with Macro's strategic partner NORDEN, and in particular, NORDEN's growing logistics division, we are exceptionally well placed to extend that supply chain to international shipping and local logistics within the end user markets on an extremely cost competitive basis.*

Subject to the establishment of a Mineral Resource and securing the approvals necessary for us to commence operations, we anticipate a relatively simple, low risk and low cost operation, with mining to be conducted above the water table and undertaken by a conventional mining fleet in easy-moderate ground conditions. The nearby Derby port and its associated infrastructure is a significant benefit in developing a lowest quartile cost operation."

Overview of Derby East Project

The Derby East Project comprises two granted exploration licences, E04/2390 and E04/2478 and is situated approximately 24 km east of Derby on a sealed portion of the Gibb River Road, which connects Derby with the town of Wyndham.

The project is intersected by the Gibb River Road which provides excellent access to the site and has a series of unsealed minor tracks that lead into the project area (Figure 1).

The town of Derby has significant infrastructure including a sealed, all-weather airstrip capable of landing Fokker 100's with a new passenger terminal, commercial accommodation, equipment servicing facilities, fuel supply and an established port complete with jetty and laydown area, allowing for the loading and unloading of vessels.

Quality of Sand

Derby East is a large fluviatile sand occurrence located within the two tenements. Drilling conducted by the previous tenement holders in 2012, 2016 and 2018 for a total of 1,604.7 metres established that construction sand is hosted by sub-angular to sub-rounded medium to coarse fluviatile sands from 7m to approximately 60m depth, with an average thickness of 39m within the Jurassic Wallal Sandstone.

Based on both historic Areva aircore drilling and that more recently completed by Thunderbird in 2016 and 2018, an outline of the prospective construction sand occurrence has been interpreted covering an area approximately 12km length by 5km width; or an area approximately 60 km^2 (Figure 2).

Large bulk samples, collected in 3 metre intervals from the 2016 drilling program were dispatched to geotechnical consultant, Golders, for geotechnical test work. The locations of the 2016 geotechnical samples are shown in Figure 3.

Seven composites were homogenised with six from the Wallal sands and one (EDSC0023) Pindan (cover) clay. Particle size classification, Atterberg Limits (shrinkage, plasticity, liquid limit), linear shrinkage and California Bearing Ratio were tested.

Golders geotechnical analysis found that the sands grouped together as having similar geotechnical properties. Bulk samples had a D50 grainsize approximate to a particle size distribution of 0.425mm. All samples are non-plastic and have a soaked CBR value ranging from 20% to 30%.

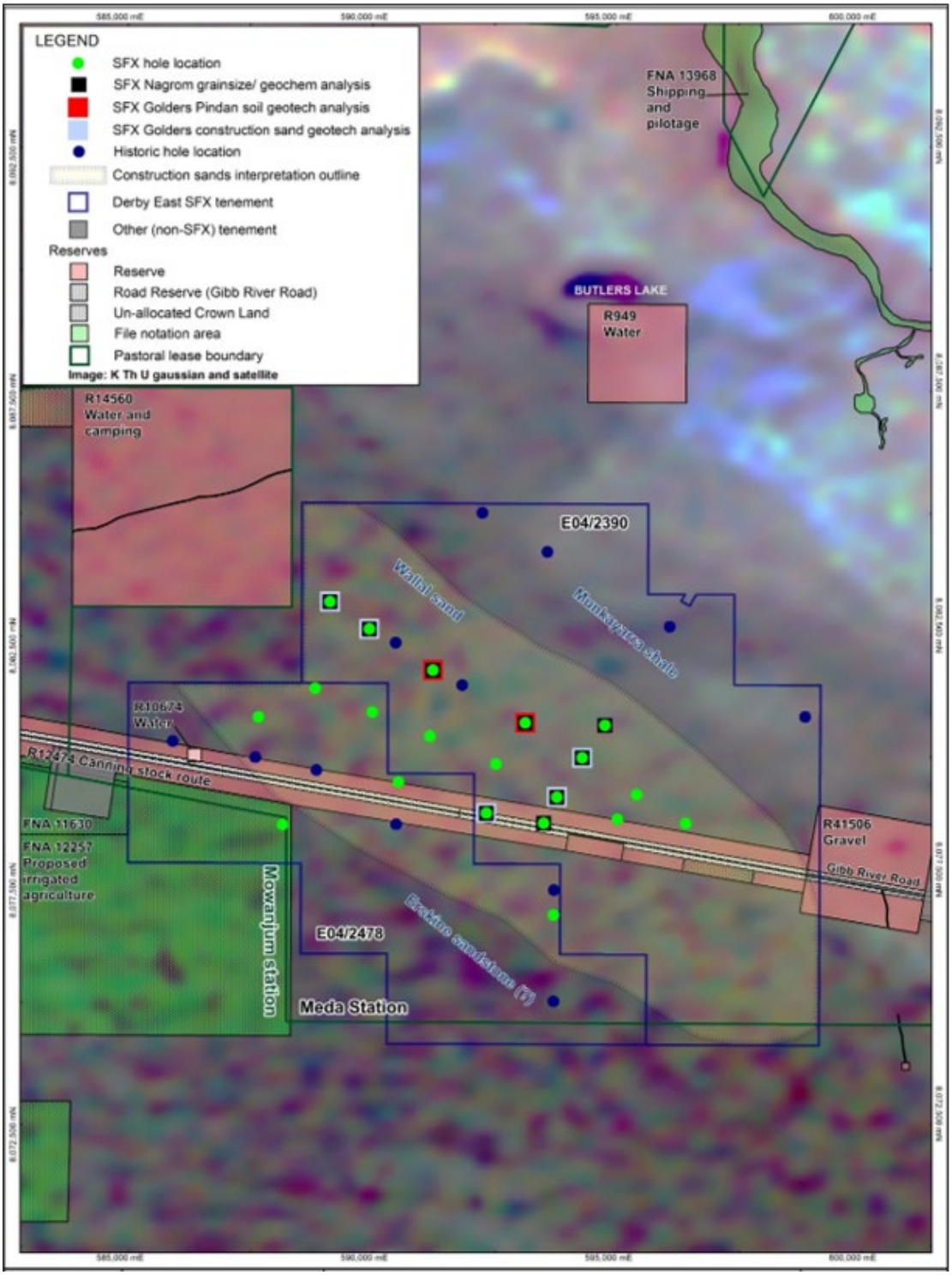

Figure 2: Sand Interpretation Outline and Drilling

From an engineering perspective, Golders concluded that the sands from the Derby East Project exhibited good strength characteristics.

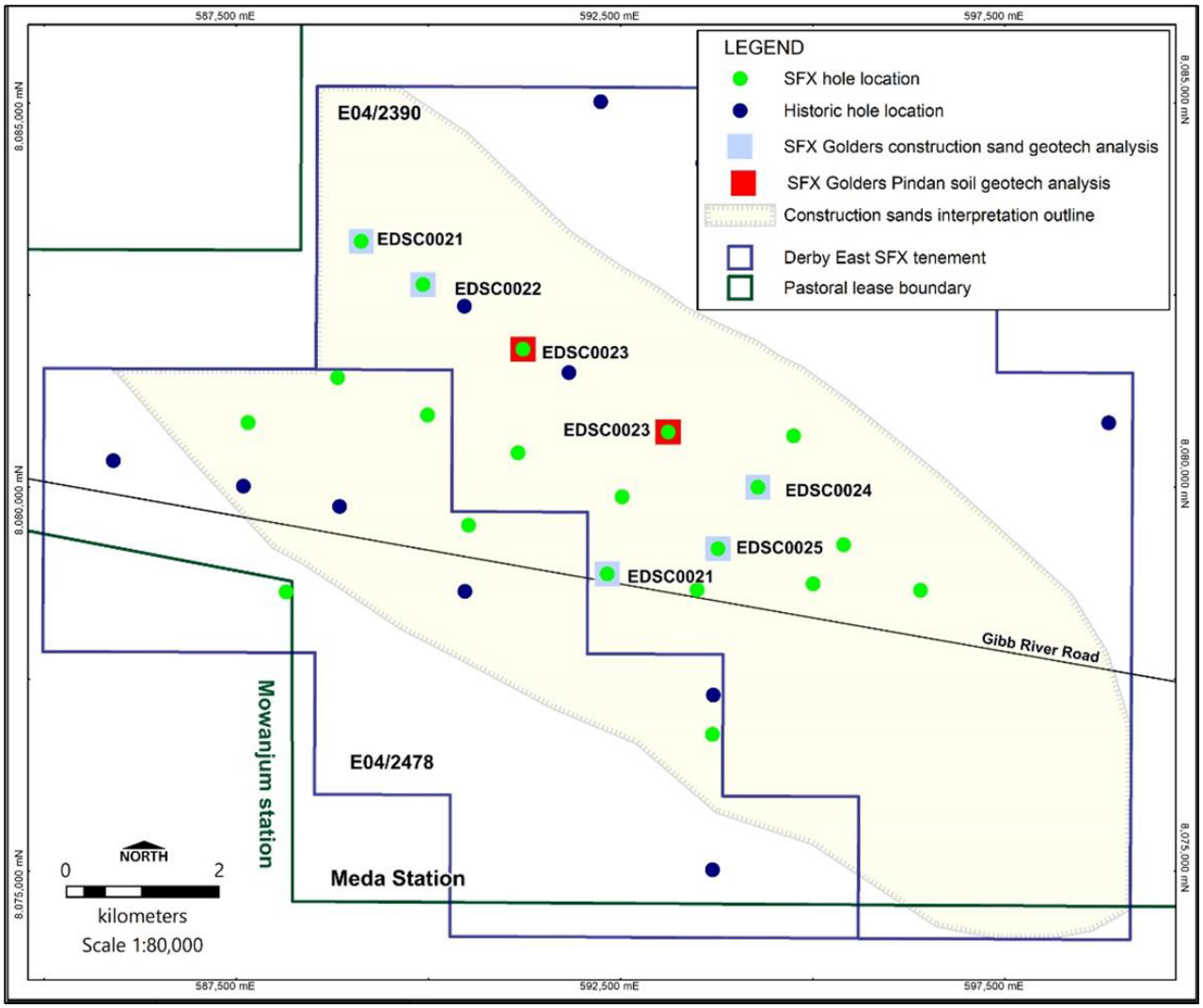

Figure 3: Golders Geotechnical Sample Locations (2016)

The host Wallal sand unit has been tilted and eroded since deposition, overlain by 'soft' free dig/ pushable Cainozoic gravelly channels, silts and Pindan soils. This recent cover ranges from approximately 3m thickness in the southeast to 14m thickness in the northwest, averaging approximately 10m in thickness (Figure 4).

Construction sands material within the Wallal unit consists of arenaceous medium to coarse, sub-angular, moderately to well sorted, clean sands with low fines. Material generally gets coarser at the base of the deposit, to include horizons of gravel. The host sand unit ranges from 7m thickness in the far east to 60m thickness in the deepest part of the palaeo-channel (drill intersections); with an averaged drilled thickness of 39m (Figure 4).

Water table is fresh and was encountered at an average drill depth of approximately 37.5m (maximum 46m), shallowing to the east up to 10m in the east. This enables favourable dry mining techniques to be applied above that depth.

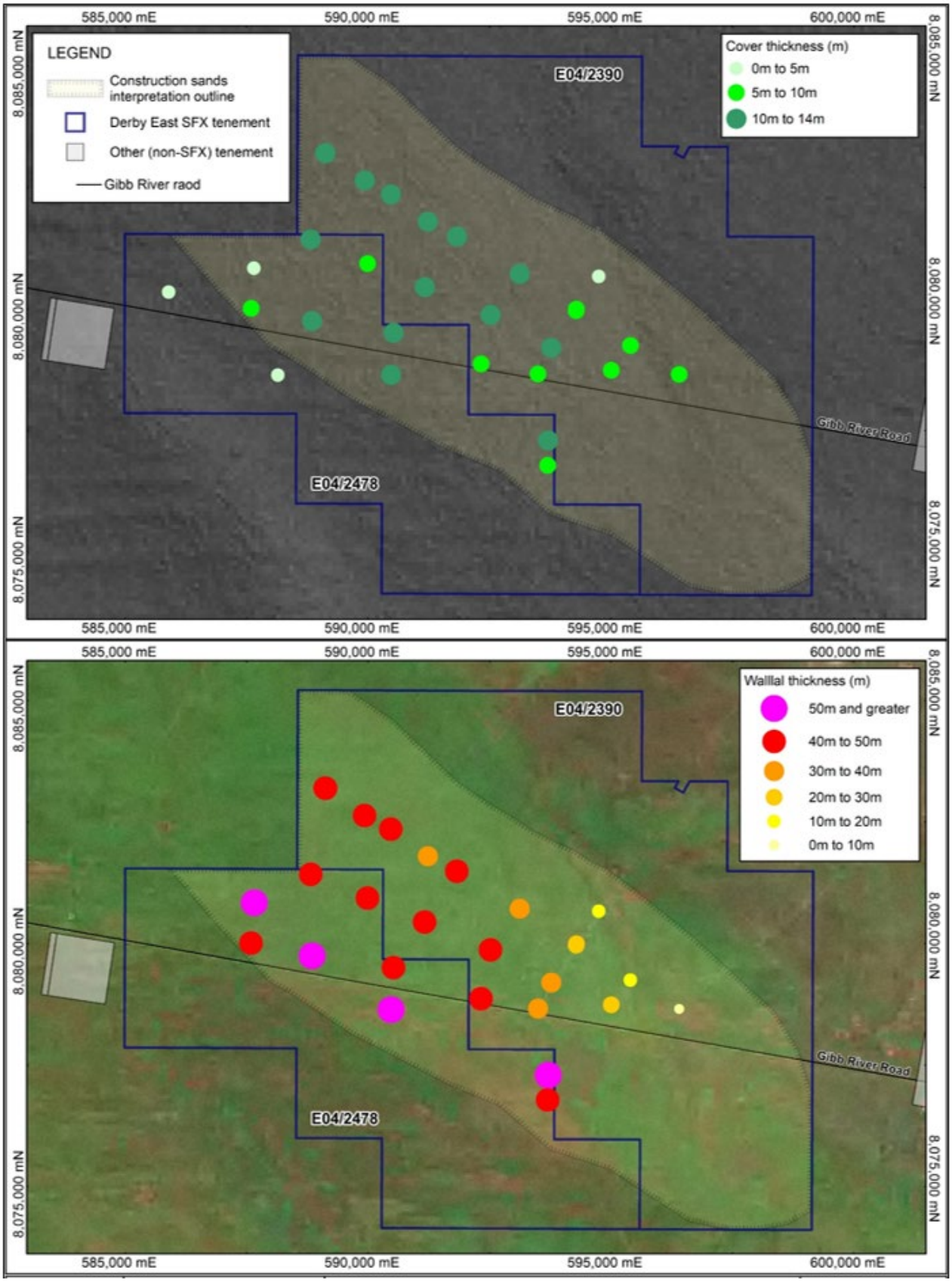

Figure 4: Derby East Project cover thickness (m) [top] and host Wallal sands thickness [bottom]

Land Access

As noted above, the Derby East Project is situated approximately 24 km east of Derby and is intersected by the sealed portion of the Gibb River Road, which provides excellent access to the site.

The Mowanjum pastoral lease and community are to the west of the Derby East Project and do not overlap the construction sands occurrence.

Native Title

The Derby East Project is situated on the lands of the Warrwa Mawadjala Gadjidgar and Warrwa People Native Title Claim Warrwa - Combined Part A Tribunal File No. WCD2020/010.

Previous exploration activities by Thunderbird were approved by representatives of the Warrwa Traditional Owners. Prior to earth disturbing works occurring at the project, the Warrwa traditional owners completed heritage surveys and the survey groups did not identify any heritage concerns or artefacts. As such, there are no known heritage sites on the project.

Environmental

In November 2022, Mattiske Consulting Pty Ltd (**Mattiske**) completed a desktop flora and vegetation assessment to identify both local and regional flora and vegetation values of the Derby East Project area. Subsequently, in July 2023, Mattiske completed a field survey of the Derby East Project area.

The total area surveyed was approximately 700 ha. A Level 2 detailed flora and vegetation assessment was undertaken of the Starter Mine Pit area and associated 400 m buffer was completed. A Level 1 reconnaissance level survey was completed in the area between the 400 m mine pit buffer and the boundary of the Derby East Project area (Figure 5).

A total of 48 vegetation survey quadrats were established to sample the vegetation within the Derby East Project area. A total of 130 vascular plant taxa which are representative of 98 genera and 49 families were recorded across the Derby East Project area and no threatened, priority or introduced flora taxa were recorded during the field survey. Further, none of the woodland or grassland communities defined within the Derby East Project area represented a vegetation type which is either unique or not widely represented within the Dampier Botanical District.

Based on the results of the desktop survey and field activities, Mattiske concluded that there did not appear to be concerns with respect to the flora or vegetation present within the Derby East Project area and additional survey work was not warranted.

Figure 5: Flora and Vegetation Survey Areas

Next steps

The Company has commenced planning the most time and cost-effective approvals pathway in parallel with planning the additional exploration activities required over the Project with the aim of delineating a mineral resource and completing development studies.

The Company, in conjunction with NORDEN, has commenced local stakeholder consultation, including with the Shire of Derby in relation to both the Project itself as well as the future access to the Port of Derby.

This announcement has been authorised for release by the Board of Directors.

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About Macro Metals Limited

Macro is a mineral exploration, development and mining services company focussed on delivery of shareholder value through the economic development of natural resource assets. The Company directly owns a portfolio of iron ore and manganese assets which are undergoing active exploration programs, with the aim of providing future production opportunities.

Separately, through its wholly owned subsidiary, Macro Mining Services, the Company offers bespoke, safe and highly value accretive mining services across a range of commodity groups and through the entire pit to customer supply chain, including mining, crushing and screening, processing, haulage, ship loading and shipping services.

Macro is a diversified mining and mining services business.

Forward Looking Statements

This announcement may include forward-looking statements. Forward-looking statements are only predictions and are subject to risks, uncertainties and assumptions which are outside the control of the Company. Actual values, results or events may be materially different to those expressed or implied in this announcement. Given these uncertainties, recipients are cautioned not to place reliance on forward looking statements. Any forward-looking statements in this announcement speak only at the date of issue of this announcement. Subject to any continuing obligations under applicable law, the Company does not undertake any obligation to update or revise any information or any of the forward-looking statements in this announcement or any changes in events, conditions, or circumstances on which any such forward looking statement is based.

Competent Person's Statement

The information in this announcement that relates to exploration results for the Derby Sands Project is based on information compiled and fairly represented by Mr Robert Jewson, who is a Member of the Australian Institute of Geoscientists and Non-Executive Director of Macro Metals Limited. Mr Jewson has sufficient experience relevant to the style of mineralisation and type of deposit under consideration, and to the activity which he has undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Jewson consents to the inclusion in this report of the matters based on this information in the form and context in which it appears. Mr Jewson is a director and shareholder of Macro Metals Ltd.

Appendix 1 - Drill Collar Table

Hole	Easting	Northing	Dip	Azimuth	Total Hole Depth	Drill type
EDAC022	618495	8068378	-90	0	69	AC
EDAC023	617849	8071274	-90	0	57	AC
EDAC025	633105	8069344	-90	0	36	AC
EDAC026	630366	8069661	-90	0	54	AC
EDAC035	592327	8078870	-90	0	57	AC
EDAC036	594752	8080667	-90	0	27	AC
EDAC037	589127	8083198	-90	0	63	AC
EDAC038	589930	8082637	-90	0	60	AC
EDAC039	591233	8081795	-90	0	54	AC
EDAC040	593121	8080718	-90	0	48	AC
EDAC041	594289	8079999	-90	0	36	AC
EDAC042	593770	8079197	-90	0	51	AC
EDAC043	593499	8078662	-90	0	51	AC
NC_0004_1	593709	8077293	-90	0	319.6	DD
NC_0015_1	591831	8081490	-90	0	234	MR
NC_0016_1	590477	8078641	-90	0	228	MR
NC_0020_1	585903	8080344	-90	0	234	MR
NC_0021_1	587595	8080013	-90	0	238	MR
NC_0022_1	588847	8079749	-90	0	224	MR
NC_0023_1	594286	8079968	-90	0	202	MR
NC_0024_1	598852	8080837	-90	0	216	MR
NC_0025_1	596080	8082683	-90	0	222	MR
NC_0026_1	589120	8083203	-90	0	276	MR
NC_0027_1	590471	8082356	-90	0	246	MR
NC_0031_1	592243	8085016	-90	0	209.5	MR
NC_0032_1	593574	8084216	-90	0	300	MR

Appendix 2 - Main Roads WA Spec 302- Earthworks

Composite[1] ID	Hole ID	Depth from (m)	Depth to (m)	Interval (m)	Main Roads W.A Spec 302 - Earthworks									
					Particle Size Distribution									Linear Shrinkage < 0.425mm
					37.5	19	9.5	4.75	2.36	1.18	0.425	0.15	0.075	%
					Passing (%)									
					100	100	100	100	100	100	100	30	10	1
					100	80	60	45	30	20	5	3	1	0
EDSC0021	EDAC035	30	45	15	100	100	99	99	99	97	75	17	8	0
EDSC0022	EDAC038	18	27	9	100	100	100	100	98	93	56	15	10	0
EDSC0023	EDAC039/ EDAC040	.03/06	.06/09	6	100	100	100	100	100	98	82	54	34	6.4
EDSC0024	EDAC041	15	27	12	100	100	100	100	98	95	74	8	5	0
EDSC0025	EDAC042	18	39	21	100	100	100	100	99	96	64	10	7	0
EDSC0026	EDAC043	33	42	9	100	100	100	100	100	98	54	9	5	0

Denotes above specification criteria

[1] *Construction sand material (EDSC0021, EDSC0022, EDSC0024, EDSC0025, EDSC0026), Pindan clay (EDSC0023)*

Appendix 3 - Comparison for acceptance criteria strength and chemistry for sand used for Reclamation Fill, Caisson key sand and Sand Backfill (Jurong Town Council, Singapore)

Composite ID[1]	Hole ID	Depth from (m)	Depth to (m)	Interval (m)	Reclamation Fill, Cassion Key Sand and Sand Backfill																		
					Angularity	Angle of shear resistance[2]		Silt clay content		Carbonate content (shell)		Organics	Metal impurities content											
													Cr	Co	Ni	Cu	Zn	As	Mo	Cd	Se	Ba	Hg	Pb
					Visual log	Degrees˚		%		%		Visible	(ppm)											
						Cut-off		Cut-off		Cut-off			Cut-off											
						30		15		15			100	20	35	35	200	30	10	2	20	200	0.5	100
EDSC0021	EDAC035	30	45	15	Sub-angular	✓		8	✓	0.01	✓	✓	30	-5	15	-10	-5	-5	1	-0.5	-5	85	0.03	20
EDSC0022	EDAC038	18	27	9	Sub-rounded to sub-angular	✓		9	✓	0.01	✓	✓	20	-5	-5	-10	-5	-5	1	-0.5	-5	75	0.04	20
EDSC0024	EDAC041	15	27	12	Sub-rounded to sub-angular	✓		5	✓	0	✓	✓	20	-5	-5	-10	-5	10	1	-0.5	-5	70	0.02	10
EDSC0025	EDAC042	18	39	21	Sub-angular	✓		6	✓	0.01	✓	✓	25	-5	10	-10	-5	-5	1	-0.5	-5	55	0.04	-10
EDSC0026	EDAC043	33	42	9	Sub-angular	✓		4.5	✓	0.01	✓	✓	20	-5	5	-10	-5	10	-1	-0.5	-5	60	0.03	20
EDSC0023	EDAC039/ EDAC040	03 & 06	06 & 09	6	Pindan Clay	?		32.5	×		×	?	-	-	-	-	-	-	-	-	-	-	-	-

Denotes above specification criteria

[1] Geochemistry EDSC0021 sand subset of EDSC001 (SA075392 - SASA75404), EDSC0022 sand subset EDSC0008 assays (SA075491 - SA075496), EDSC0024 sand subset of EDSC017 (SA075606 - SASA75613), EDSC0025 sand subset of EDSC018 (SA075633 - SASA75648), EDSC0026 subset of EDSC020 (SA075679 - SASA75687), EDSC0023 not assayed as Pindan clay.
[2] Angle of shear resistance expected to exhibit a friction angle in excess of 30˚ when compacted to a dry density ration of 95% MMD

Appendix 4 - Comparison for acceptance particle distribution criteria for sand used for Caisson key sand and Sand Backfill (Jurong Town Council, Singapore)

Composite [1] ID	Hole ID	Depth from (m)	Depth to (m)	Interval (m)	Cassion and Sand Backfill Particle distribution[2]							Comment
						3	2	1.18	0.9	0.6	0.2	0.063	
						Passing (%)							
					Max	100	100	100	95	85	40	10	
					Min	60	40	25	15	10	0	0	
EDSC0021	EDAC035	30	45	15		99	97.5	97	94	87	31.5	8	Light white-grey, fine to coarse grained sand
EDSC0022	EDAC038	18	27	9		99	97	93	84	73	24.5	9	Medium brown-khaki, medium to coarse grained sand
EDSC0024	EDAC041	15	27	12		98	97	95	92	87	21	5	Light khaki fine to coarse grained sand
EDSC0025	EDAC042	18	39	21		99	98	96	93	82	21	6	Light khaki medium to coarse grained sand
EDSC0026	EDAC043	33	42	9		100	99	98	90	78	17.5	4.5	Light cream-khaki coarse-grained sand
EDSC0023	EDAC039/ EDAC040	03/06	06/09	6		100	99.5	98	95	90	61	32.5	Dark brown-red fine to medium grained sand (Pindan)

Denotes above specification criteria

Appendix 5 - JORC Tables

JORC Code, 2012 Edition – Table 1 report template
Section 1 Sampling Techniques and Data
(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *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.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *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.*	• A combination of aircore, mud rotary and diamond drilling has been completed across the Project by Areva and subsequently Sheffield Resources Ltd. Areva was targeting uranium mineralisation whereas exploration by Sheffield Resources Ltd targeted construction sand potential. • NQ diameter aircore was utilised to collect 2-3kg samples at 1.5m intervals down hole. The exploration conducted is in accordance with mineral sands industry standards
Drilling techniques	• *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).*	• Aircore system NQ diameter holes. • Blade drill bit used for majority of drilling, where hard rock layers intersected and unable to drill with blade bit, a Wallis diamond tipped air core blade was used to penetrate layers. • Aircore system used as an industry standard for sand deposits
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• Sample quality (including wet vs. dry and qualitative recovery) was logged at the drill site. • Orientation process undertaken at the beginning of program to set up sampling system to collect 2-3kg sub-sample from 1.5m intervals. Remainder of sample was disposed of down the drill hole. • Sample weight recorded at laboratory • Drill system is optimised for sands • Duplicate samples are collected at the drill site to enable analysis of data precision
Logging	• *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.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• Every drill sample is washed and panned, then geologically logged on-site in 1.5m intervals, recording primary, secondary and oversize lithology, qualitative hardness, grainsize, rounding, sorting, and washability, visual estimates of HM%, SL% and OS%, and depth to water table. • The entire length of the drill hole is logged; minimum (nominal) interval length is 1.5m. • Logging is suitable such that interpretations of grade and deposit geology can be used, for example, to

		establish context of exploration results and support Mineral Resource Estimation
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *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.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	**Drill Site** • 2-3kg sample collected at 1.5m intervals in numbered bags at the drill site via rotary splitter at cyclone discharge point. • Duplicate samples (field duplicates) collected at drill site 1 in every 40 samples. • Reference standard and blank material samples inserted 1 each in every 40 samples. • Sample submitted to external laboratory for heavy liquid separation (HLS) determination of weight per cent heavy mineral (HM), Slimes (SL) and Oversize (OS). Laboratory • 2-3kg drill sample sub-split via rotary splitter to approx. 200g for analysis. • HM, SL and OS calculated as percentage of total sample weight. • Laboratory repeats are conducted 1 in every 20 samples, and laboratory reference standard inserted 1 in every 40 samples. **All** • Spacing of duplicate, standard, blank and lab repeat samples are designed to identify sample misplacement or misallocation during sample collection and laboratory analysis. • Sample representivity and data precision has been determined as acceptable through analysis of results from field duplicate samples and laboratory repeats. • Visual estimates of HM, Slimes and OS logged at the drill site are compared against laboratory results to identify any major errors. • Analysis of duplicates show the data has acceptable precision, indicating sampling techniques are appropriate for the deposit style. • Techniques are considered appropriate for use in public reporting of exploration results and Mineral Resource estimation.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *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.* • *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.*	• Assay and laboratory testwork procedures are industry standard for sands • QAQC sample frequency is described above. The HM reference sample used is a field homogenised bulk sample with expected values and ranges determined internally from assay results • Reference standards and blanks are examined for performance over time and within laboratory batches. Batches or sub-batches are re-analysed if unacceptable QAQC data are returned. • Analysis of reference standards, blanks and laboratory repeats show the data to be of acceptable accuracy and precision for use in public reporting of exploration results and Mineral Resource estimation.

Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Significant intervals were reviewed by senior Sheffield personnel prior to release. No assays contained significant intersections of valuable heavy mineral. • Data was logged electronically using "validation at point of entry" systems prior to storage in the Company's drill hole database, which is managed by Company personnel and an external consultancy • Documentation related to data custody and validation are maintained on the Company's' server. • No assay data have been adjusted.
Location of data points	• *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.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Hole locations were surveyed by handheld • GPS system with expected accuracy of +/- 15m horizontal. • RL determined by projection to a SRTM DEM model. • Easting and Northing coordinate system is MGA Zone 51 (GDA94) • Topographic control is adequate for exploration results. Detailed topographic survey required for mineral resource estimation
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *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.* • *Whether sample compositing has been applied.*	• Drilling was on a ~1,500m by 950m spacing • Further infill drilling is required to define a mineral resource • Samples were composited to conduct sands testwork
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *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.*	• Strata surrounds a palaeo-embayment where littoral to sub-littoral sands were deposited along the edge. Drilling intersected these peripheral sub-horizontal sands testing for tidal cyclonic deposition of heavy mineral. The vertical drilling approximates a true width of the sand horizons
Sample security	• *The measures taken to ensure sample security.*	• Sample security is not considered a significant risk given the location of the Project. • Nevertheless, the use of recognised transport providers, and sample dispatch procedures directly from the field to the laboratory are considered sufficient to ensure appropriate sample security.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No formal external audits or review have been conducted. • Audits are not considered necessary at this stage of the Project's development. Industry standard methods are being employed.

Section 2 Reporting of Exploration Results
(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *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.*	• Macro's wholly owned subsidiary has purchased a 50% interest in the Project. • There are no known impediments to obtaining a licence to operate in the area.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Diamond exploration has been carried out by Kimberley Diamond Company NL from (1993 2000) exploring for diamonds associated with Tertiary fluvial deposits flowing off the Ellendale field. This project was brought by Blina in (2004 – 2009). • Areva Resources drilled for roll-type uranium reduced facies uranium (2011-2014) • Sheffield conducted aircore drilling and relevant study work with respect to the delineation of construction sands
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Exploration focussed on Cainozoic heavy mineral sands associated with cyclonic events or tidal accumulations along strand and littoral/ sub-littoral zones along palaeo-basin margins. No heavy mineral sands were identified.

Drill hole Information	• *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:*
	  ○ *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.*
		• Refer to body of release

Data aggregation methods	• *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.*	Only aggregate intervals were those composites utilised for sand engineering testwork

Criteria	JORC Code explanation	Commentary
	• *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	
Relationship between mineralisation widths and intercept lengths	• *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').*	• Stratigraphy is assumed to be sub-horizontal to horizontal so drilling intercepts will approximate a true width
Diagrams	• *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.*	• Maps and plans have been included in body of the announcement.
Balanced reporting	• *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.*	• All information has been reported.
Other substantive exploration data	• *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.*	• All exploration data considered meaningful and material has been reported in this announcement.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Geological modelling based on the drilling conducted to date • Infill drilling to confirm geometry and specifications of construction sands