

Report

Conundrum Holdings Pty Ltd

Expert Air Quality Assessment

175 Northern Highway, Wallan, VIC

April 2022

This report has been requested by Best Hooper on behalf of Conundrum Holdings Pty Ltd.

Environment, Health &
Safety, and Sustainability
Consultants



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USE OF REPORT

The preparation of this report has been undertaken for the purpose of providing expert advice on air quality associated with the proposed development of a quarry at 175 Northern Highway, Wallan, Victoria, for resource extraction activities. The report was prepared for submission to the Beveridge North West Advisory Committee. The report includes opinions on the air quality aspects associated with the proposed North Central Quarry and the impact of the proposed quarry on the development of the Beveridge North Precinct Structure Plan, and it is not intended that this report should be used for any other purpose.

LIST OF ABBREVIATIONS

Act	Environment Protection Act 2017
BOM	Bureau of Meteorology
EPA	Environment Protection Authority Victoria
ERS	Environment Reference Standard
IRAE	Industrial Residual Air Emissions
PEM	Protocol of Environmental Management
PPV	Planning Panels Victoria
PSP	Precinct Structure Plan
SEPP	State Environment Protection Policy
SEPP (AQM)	State Environment Protection Policy (Air Quality Management)
SEPP (AAQ)	State Environment Protection Policy (Ambient Air Quality)
VCAT	Victorian Civil and Administrative Tribunal
VPA	Victoria Planning Authority
VPP	Victoria Planning Provisions
WA	Work Authority

1. EXPERT EVIDENCE DETAILS

1.1 Expert Witness Details

Expert Witness: Mr Peter Ramsay
Address: Level 10, 222 Kings Way, South Melbourne, Victoria, 3205
Company: Peter J Ramsay & Associates Pty Ltd

1.2 Expert's Qualifications and Experience

I am the Managing Director and Principal Consultant of Peter J Ramsay & Associates Pty Ltd. I am a chemical engineer and hold a Graduate Diploma of Management and a Master of Environmental Science. I have over 35 years' experience in environmental auditing, environmental impact assessment, air quality, site assessment and remediation. I also have extensive experience in determining appropriate buffer distances between industrial facilities and sensitive land uses to mitigate the impact of industrial residual air emissions. Prior to establishing Peter J Ramsay and Associates, I was Assistant Director of the Victorian Environment Protection Authority (EPA) and was responsible for Victoria's Air Quality Management Program.

I am a Fellow of Engineers Australia and a Chartered Professional Engineer. I am appointed as an Environmental Auditor under the Victorian *Environment Protection Act 1970* for both Industrial Facilities and Contaminated Land and accredited as a Site Auditor under the New South Wales *Contaminated Land Management Act 1997*. I am a Registered Professional Engineer in Queensland and I have written numerous papers on environmental management.

My curriculum vitae is provided in **Appendix B**.

1.3 Expert's Area of Expertise

My professional career has focused on identifying and resolving environmental issues at industrial and commercial facilities and the interface with residential land uses. This includes assessments of separation distances for industrial premises including landfills. I have expertise and experience in air quality assessments, dispersion modelling, waste management, and environmental auditing of odour emitting facilities.

1.4 Statement of Expertise

In view of my professional qualifications and expertise, I am well qualified to prepare and present this expert witness statement to the panel.

1.5 Other Significant Contributors to the Report

I have been assisted in the preparation of my report by Mr Nathan Williams.

Mr Nathan Williams, Senior Consultant, holds Bachelors' degrees in chemical engineering and science and has seven years' experience in environmental consulting. He is experienced in the preparation of odour impact assessments, air dispersion modelling, and designing and operating equipment for pollution control at industrial facilities. He has specific expertise in assessment of separation distances from industry for amenity impact (dust and odour) and environmental auditing of landfill facilities. Nathan has assisted me in the preparation of numerous expert evidence reports in relation to separation distances and amenity impact in Victoria.

1.6 Instructions that Defined the Scope of the Report

I received written instruction from Best Hooper on behalf of Conundrum Holdings Pty Ltd on 13 November 2020. A copy of the instruction from Best Hooper is provided in **Appendix A**.

The letter of instruction outlines that air quality aspects of a planning application for use and development of the land at 175 Northern Highway, Wallan, Victoria for the purpose of stone extraction be addressed in the expert advice. My opinions are provided in **Section 10** of this report.

1.7 Facts, Matters and Assumptions on which the Report Proceeds

The following facts, matters and assumptions were used in the preparation of this report:

- Proposed quarrying staging areas as per WA1473 Draft Figures prepared by Bell Cochrane for Conundrum Holdings Pty Ltd;
- The facts and matters detailed in the Brief of Documents and Letter of Instruction as provided by Best Hooper Lawyers;
- Draft Beveridge North West Precinct Structure Plan of November 2021, surrounding Precinct Structure Plans and zoning provided by the Victorian Planning Authority;
- Regulatory guidelines and other literature; and
- My professional judgement and expertise as specified in my curriculum vitae in **Appendix B**.

1.8 Documents and Other Materials Used to Prepare the Report

The documentation and materials used to prepare this report included:

1.8.1 Site Visits

Inspection of Conundrum Holding's existing Northern Quarries operations in Epping on 18 February 2021. It is understood that the operations at the proposed North Central Quarry in Wallan will be based on the operations at the Northern Quarries.

I inspected the site from public roads at 12:30pm on 26 April 2022. My observations were:

- The weather was overcast and there were still conditions. The ambient temperature was 21 degrees.
- The proposed quarry site was observed from the Northern highway and from Taylors Lane, approximately 1.8km north of the site. The site appears to be relatively flat and rose to a small hill to its east.
- The housing at Wallan is approximately 1.8 kilometre to the north of the site, bounded by Taylors Lane.
- The land is vacant, and its current use appears to be agricultural land.
- Individual houses were observed along Macsfield Road with the closest approximately 900 m north east of the site boundary (Work Authority boundary).
- It appears from the aerial photograph that there is a residential property on Northern Highway, approximately 690 m from the site boundary, however I did not observe the property from the highway due to its setback from the main road and dense vegetation.
- There are no residences within the 500 m separation distance from the extraction boundary.

Plates showing photographs from this inspection are provided attached in **Appendix D**.

1.8.2 Reports and Documents provided by Best Hooper

On 13 November 2020, along with the written instructions, Best Hooper provided a Brief of Documents (Index to Brief of Documents presented in **Appendix C**).

On 23 November 2021, Best Hopper provided a Brief of Documents in relation to the amendment to the PSP (Index to Brief of Documents presented in **Appendix C**).

The following documents are provided in Best Hooper's subsequent instructions:

- Statement of Grounds of:
 - Deloraine Rural Pty Ltd
 - Mary Gilbo
 - VPA
 - Yarra Valley Water
 - DJPR
 - Ella Ocean

- 90 - Sharon Gaye Yates
- 91 - Teena Lee & Bruce McIntyre
- 92 • Objections and submissions
- 93 • Mitchell Shire Council – Revised Statement of Grounds dated 25 March 2022
- 94 • Ordinary Council Meeting Agenda item 10.7 – C158 7 C161 Beveridge North West PSP & ICP
- 95 Submission to Victorian Planning Authority, Mitchell Shire Council File No: PL/13/031-02,
- 96 dated 21 February 2022
- 97 • Ordinary Council Meeting Minutes, Draft, Mitchell Shire Council, 21 February 2022

98 1.8.3 Legislation and Guidelines

- 99 • Environment Protection Authority 2013, Guideline – Recommended Separation Distances for
- 100 Industrial Residual Air Emissions, Publication 1518, March 2013;
- 101 • Environment Protection Authority, 2019, Assessing and controlling risk: A guide for business
- 102 Publication 1695.1, 30 June 2021, Using SEPPs and WMPs in the new environment
- 103 protection framework guide, Publication 1994;
- 104 • Protocol for Environmental Management, State Environment Protection Policy (Air Quality
- 105 Management) Mining and Extractive Industries, December 2007, Publication 1191
- 106 • Environment Reference Standard, S245, 26 May 2021, Victoria Government Gazette;
- 107 • Environment Protection Act 2017 (Vic);
- 108 • Planning and Environment Act 1987; and
- 109 • State Environment Protection Policy (Air Quality Management), including gazetted variations.

110 1.8.4 Other Information Sources

- 111 • PPV 2020, *Panel Report – Mitchell Planning Scheme Amendment C106mith Beveridge North*
- 112 *West Precinct Structure Plan*, Planning Panels Victoria, 7 October 2020;
- 113 • PPV 2021, *Panel Report, Whittlesea Planning Scheme Amendment C241wsea, Shenstone Park*
- 114 *Precinct Structure Plan*, Planning Panels Victoria, 19 February 2021;
- 115 • *Latrobe Planning Scheme Amendment C97, Explanatory Report*; and
- 116 • Victorian Government, 2021, *Environment Reference Standard*, No. S245 Gazette 26 May 2021

117 1.9 Tests or Experiments

118 No tests or experiments were performed to assist in the preparation of this report.

119 1.10 Summary of Opinions

120 My opinions are summarised in **Section 10** of this report.

121 **1.11 Provisional Opinions**

122 The opinions expressed are not considered to be provisional.

123 **1.12 Limitation**

124 I consider myself qualified to prepare and present the report. I have not addressed questions falling
125 outside my area of expertise, and do not consider it incomplete or inaccurate in any respect.

126 My advice is based on the Brief of Documents, which was provided by Best Hooper, my review of
127 relevant legislation, guidelines and documents referred to in **Section 1.8** and my experience with
128 undertaking air quality assessments on similar sites.

129 **1.13 Declaration**

130 I declare that:

131 *"I have made all the enquiries that I believe are desirable and appropriate and that no matters of*
132 *significance which I regard as relevant have to my knowledge been withheld from the Committee."*

133 Yours sincerely,

134 

135 Peter J Ramsay

136 28 April 2022

2. INTRODUCTION

I was engaged by Best Hooper on behalf of their client, Conundrum Holdings Pty Ltd, in relation to the planning application for use and development of the land at 175 Northern Highway, Wallan, Victoria (the Site) for stone extraction purpose. The planning application is part of the approval process under the Work Authority 1473 and is subject to the Beveridge North West Precinct Structure Plan (the PSP) as part of the Amendment C106 to the Mitchell Planning Scheme.

I have been asked to consider the air quality aspects of the proposed quarry development for submission to the Beveridge North West Advisory Committee as part of the application for a review of failure to grant a planning permit within the prescribed timeframe. A copy of the letter of instruction from Best Hooper regarding my expert witness statement is provided as **Appendix A**.

3. CONTEXT

3.1 The Existing Quarry

Conundrum Holdings operate an existing quarry at 375 Oherns Road, Epping, Victoria. I visited this quarry with my colleague, Nathan Williams to inspect the operation of the facility on 18 February 2021. I was informed of the plant and processes that would be implemented at the proposed quarry. These are based on the existing environmental management practices at the Epping Quarry.

There was a strong northerly breeze. There was full sun and the temperature was quite warm. Conditions were good for the generation of dust.

I observed that the operation of the quarry was in accordance with best practice management. There was a water cart which was in operation wetting down surfaces to reduce wheel generated dust generation. Material in storage and being processes appeared to be adequately control dust generation.

I did not observe visible dust emission across the boundary of the existing quarry.

3.2 The Proposed Quarry

The proposed quarry is located on the land at 175 Northern Highway, Wallan, Victoria that is also identified as Lot 2 / LP6746 Crown allotment 34 Parish of Wallan Wallan (the Site). The Site is on the northern extent of the Beveridge North West Precinct Structure Plan (the PSP).

A planning application (PLP268/19) was lodged with the Mitchell Shire Council (the Council) on 4 October 2019 as part of the approval process under the Work Authority 1473 (WA 1473), to use and

develop the Site for basalt quarrying and creation of access to a road in a Road Zone Category 1. A draft Work Plan received statutory endorsement under the WA 1473 in 2015 and is proposed to be amended to reduce the scale and scope of extraction to accommodate for future development under the proposed PSP.

It is understood that the proposed operations are similar to the operations at Conundrum's Northern Quarries in Epping which is reaching the end of its resource life.

The advertised planning application received a total of 119 objections. Submissions were provided to me by Best Hooper on 4 December 2020 for consideration. It is noted that the majority of the submissions related to potential air quality impacts. These concerns are related to from the proposed quarry are around blasting, dust, environmental/pollution, and noise, with dust being the most concerned aspect (75 out of 119 submissions) and followed by concerns over noise (62 out of 119). It is noted that some submitters referred to more than one environmental aspect.

A Dust assessments was undertaken as part of the planning application and the following report have been considered in provision of my opinion:

- Ektimo 2019, *Updated Dust Impact Assessment for Proposed North Central Basalt Quarry, Wallan*, Ektimo Pty Ltd, September 2019 (the Ektimo report).

The proposed quarry is to be developed in four phases. The location of the area of extraction in each phase of operation progresses in an anticlockwise direction from phase 1 to phase 4. The location of the phases is shown in **Figure 1**, which is an excerpt from **Figure F1** attached to this document.

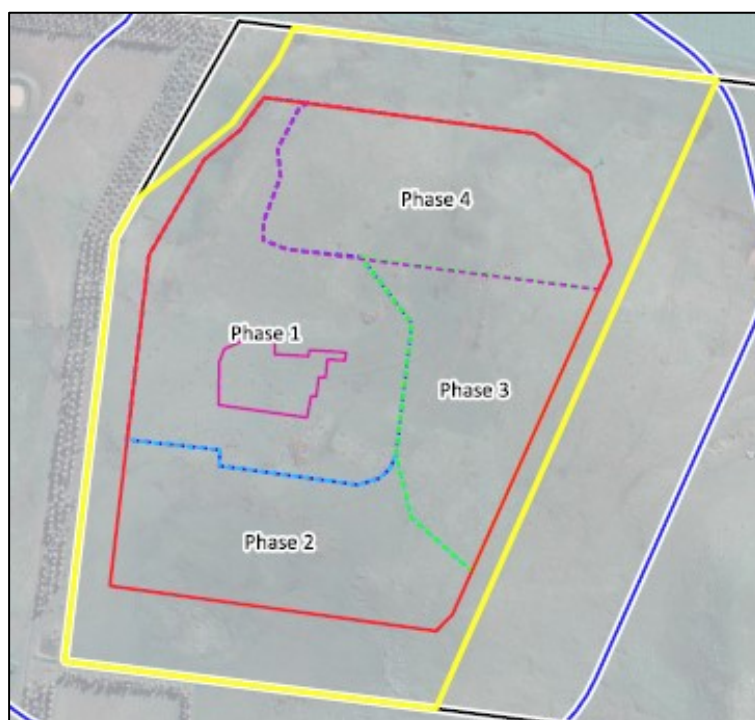


Figure 1 Extraction at Proposed Quarry, Phases 1 to 4

3.3 Beveridge North West PSP

The exhibited Beveridge North West PSP has not incorporated WA1473 in its precinct level planning; however it is understood that the VPA is currently considering the Panel's recommendations including that the PSP be revised to include resource extraction.

Immediately north of the Beveridge North West PSP, the land is within the Wallan South PSP which is currently in the drafting phase and has a residential focus. Land use of the Wallan South PSP that is within the buffer area of WA 1473 should be carefully considered should resource extraction proceed in the Beveridge North West PSP. However, it is understood that large proportion of the land is owned by Crystal Group, a related entity to the landowner of the Site that has been leased to Conundrum for quarrying activities.

Buffers for the quarries with respect to the potential impact on the sensitive uses from different stages of quarry operations as a result of operational noise, blast generated vibration, dust, and fly-rock have been considered and discussed in **Section 9**.

3.4 Quarry Staging

As shown in the attached **Figure F1**, the initial stage of the quarry development is proposed to be on the western boundary during the first 10 years. Quarrying then moves towards the south in phase 2 and progresses north away from the proposed residential area of the PSP in Phase 3 and 4. Conundrum's work plan indicates that progressive rehabilitation will be integrated into daily operations, which will release the land ready for future development in accordance with the recommendations of the PSP.

4. RECOMMENDED SEPARATION DISTANCE

The term 'buffer' and 'separation distance' will be used interchangeably in this report.

In Victoria, requirements on separation distances are provided in two documents:

- Victoria Planning Provisions (VPP) Clause 53.10; and
- EPA Publication 1518

The Victorian Planning Provisions (VPP) includes Clause 53.10, *Uses with Adverse Amenity Potential*. It is incorporated into the Mitchell Planning Scheme and is intended to be used to assess proposals for land uses with adverse amenity potential. Clause 53.10 does not provide recommended separation distances in relation to quarries, and therefore are not considered in this assessment.

4.1 EPA Recommended Separation Distances for Industrial Residual Air Emissions

EPA Publication 1518 "Recommended Separation Distances for Industrial Residual Air Emissions", (EPA Publication 1518) recommends separation distances to account for the potential impact of industrial residual air emissions (IRAEs) on human health and wellbeing, local amenity and aesthetic enjoyment.

IRAEs are unintended emissions which are often intermittent or episodic, including both fugitive emissions and upset conditions. IRAEs include odour and particulate emissions such as dust. Industries are required to implement appropriate pollution controls to prevent offsite impacts, regardless, all industrial facilities will periodically experience upset conditions which are beyond the control of the facility. It is important to note that even 'state of the art' facilities cannot be guaranteed to operate without IRAEs 100 per cent of the time. On such occasions IRAEs can travel beyond the boundaries of the premises. An adequate separation distance should allow IRAEs to dissipate without adverse impacts on sensitive land uses.

The EPA recommended separation distances have been determined through reviewing a large set of empirical data for odour and dust emissions from a range of industries. The aim of the Guidelines is to inform planning authorities, as well as responsible authorities, in the preparation and consideration of planning scheme amendments and planning permit applications. I therefore consider it pertinent to consider the Amendment in the context of the separation distances recommended in the Guidelines.

EPA Publication 1518 clearly states that separation distances should be measured from the activity area of the activity with the potential to cause IRAEs.

The proposed quarrying operations at the Site involves quarrying, blasting, crushing, material processing, stockpiling and hauling. In accordance with EPA Publication 1518, the recommended separation distance is 500 m for quarries with blasting.

For quarries without blasting the recommended separation distance is 250 metres. The quarrying activity at the processing plant does not involve blasting. A 250 m separation distance can be applied to these activities.

The recommended separation distances should be measured from the relevant activity areas. The 500 metre separation from blasting should be measured from the outer extent of the extraction area. The progression of the required buffer land is shown in the attached **Figures F1 to F4**, as the quarry progresses through each of the four extraction phases.

The 250 metre separation from the processing plant should be measured from the outer extent of the processing area. This is shown in the attached **Figure F5**.

4.2 Variation to Recommended Separation Distances

A variation of the recommended separation distance can be sought from EPA if there are considered to be exceptional circumstances at the site that will justify a site-specific variation. A site-specific variation should not be granted until the relevant land use issues have been resolved to the satisfaction of the EPA.

Table 4 of the Guidelines provides a guide to the criteria that must be considered during the assessment of a site-specific variation. Consideration of these criteria is a prerequisite for a site-specific variation, but not a guarantee that a variation is justified.

Summary of my opinion on potential application of a site-specific variation is provided in **Table 1**.

Table 1 Summary of opinion on consideration of site-specific variation

Criteria	Description	Comments
Transitioning of the industry	The industry has formally indicated it will transition out of the area over a specified timeframe.	The operator has offered to restrict operation to a period of 30 years from commencement on site.
Plant equipment and operation	Engineering controls have provided a high standard of emission control technology.	The proposed dust management processes are considered to be industry best practice as observed during the site inspection.
Environmental risk assessment	An Environmental Risk Assessment (ERA) justifies a change in the prescribed separation distance.	An Environmental Risk Assessment could be performed to provide a variation to the separation distance.

Criteria	Description	Comments
Size of the plant	The plant is considerably smaller or larger than comparable industries.	The proposed quarry and processing equipment is neither considerably larger or smaller than typical facilities for hard rock quarries in Victoria.
Topography or meteorology	If the site exhibits exceptional meteorological or topographical characteristics which can affect dispersion.	The location of the Site is within the Kilmore Gap. There is a preponderance of northerly and southerly winds, however this is typical for northern Melbourne. It is not exceptional in and of itself.
Likelihood of IRAEs	Particular IRAEs are either highly likely or highly unlikely to occur.	The proposed equipment is typical for a hard rock quarry in Victoria, the proposed operation does not make IRAEs more or less likely than for similar facilities.

254 Detailed site assessments involving modelling should only be undertaken if a variation from the
 255 recommended Guidelines values can be justified. In view of consideration of the criteria, a site-specific
 256 variation is not justified.

257 5. ASSESSMENT CRITERIA

258 5.1 State Environment Protection Policy (Air Quality Management)

259 Nuisance dust and particulate matters are defined in the State Environment Protection Policy (Air Quality
 260 Management) (SEPP (AQM)). The SEPP (AQM) has been repealed but some clauses are still relevant
 261 to provide guidance on complying with the General Environmental Duty (GED) under the Environment
 262 Protection Act 2017 (EP Act 2017).

263 It is relevant the generators of emissions must comply with the general requirements to apply best
 264 practice management to the control of emissions.

265 5.2 Environment Reference Standard

266 The *Environment Reference Standard* (ERS) is made under the EP Act 2017 and has replaced SEPPs
 267 under the repealed *Environment Protection Act 1970* (EP Act 1970). The ERS provides a basis for
 268 assessing environmental conditions.

269 For quarry operations, air emissions of concern are generally particulate matter such as PM₁₀ and PM_{2.5}.
 270 The relevant part of the ERS document for the proposed quarry is Proposed Final ERS Part 2– Ambient
 271 Air.

272 Ambient Air

273 The relevant criteria for particulate matter are shown in **Table 2**.

274 **Table 2 Criteria for Particulate Matter**

Indicators	Criteria	Averaging Period
PM ₁₀	50 µg/m ³	1 day
	20 µg/m ³	1 year
PM _{2.5}	25 µg/m ³	1 day
	8 µg/m ³	1 year
Visibility reducing particle	20 km	1 hour

275 **5.3 Protocol of Environmental Management for Mining and Extractive Industries**

276 This protocol for environmental management (PEM) is an incorporated document to the SEPP AQM of
 277 the EPA Act 1970. The SEPP AQM has been repealed from 1 July 2021. It is provided in EPA
 278 Publication 1994 that the PEM for Mining and Extractive Industries is still relevant under the new EP Act
 279 2017.

280 The PEM sets out guidance in how to assess the potential impacts of emissions arising from mining and
 281 extractive industries on the air environment.

282 The assessment criteria relevant to the extractive industry for evaluating residual emissions from quarry
 283 operations with appropriate control measures are provided in **Table 3**. The maximum concentration of
 284 pollutants at the sensitive receptors are to be predicted using EPA approved dispersion model AERMOD
 285 to determine compliance with the criteria listed in **Table 3**.

286 **Table 3 Assessment Criteria for Particulate Matter for Extractive Industries (PEM, 2007)**

Indicators	Criteria	Averaging Period
PM ₁₀	60 µg/m ³	24-hour
PM _{2.5}	36 µg/m ³	24-hour
Respirable crystalline silica (as PM _{2.5})	3 µg/m ³	Annual
Deposited dust	4g/m ² /month (<2g/m ² /month above background)	Month

6. SITE SETTING

6.1 Location and setting

The proposed North Central Quarry is located on the northern extent of Melbourne's northern urban growth zone approximately 42 km north of the Melbourne CBD. The proposed location of the quarry is within the Beveridge North West Precinct Structure Plan (PSP) area. The area surrounding the proposed Quarry is currently farmland. The closest sensitive receptor is approximately 660 m southeast of the site. Existing residential area of Wallan is approximately 1.9 km north and northeast of the site and residential developments are underway 2.5 km south of the Site in Beveridge.

The site lies within a relatively flat and slightly undulating plain west of the Spring Hill volcanic cone, with undulating hills running north-south along the urban growth boundary west and east of the Site. The area within the Work Authority boundary is 302m to 330 m in height. Mt Fraser is 1.5 km on the southeast and the 800 m high Mount Disappointment is located approximately 11 km east of the Site.

6.2 Climate

The climate of the region is temperate and typically characterised by cool winters and warm summers. The average minimum and maximum temperatures measured between 1993 and 2020 were 12.4°C and 25.3°C in January (the warmest month) and 4.0°C and 9.2°C in July (the coolest month).

Mean annual rainfall for Wallan (Kilmore Gap) is 674.9 mm. The average mean rainfall between 1993 and 2020 was 45.6 mm in March (driest month) and 67.6 mm in July (wettest month).

The measurements were recorded by the Bureau of Meteorology (BoM) weather station located at Wallan (Kilmore Gap) (station number 088162), approximately 7 km to the north of the site. This BoM site is the closest meteorological station located in a similar environmental setting, therefore data measured from this site are considered to be representative of the climate at the Site.

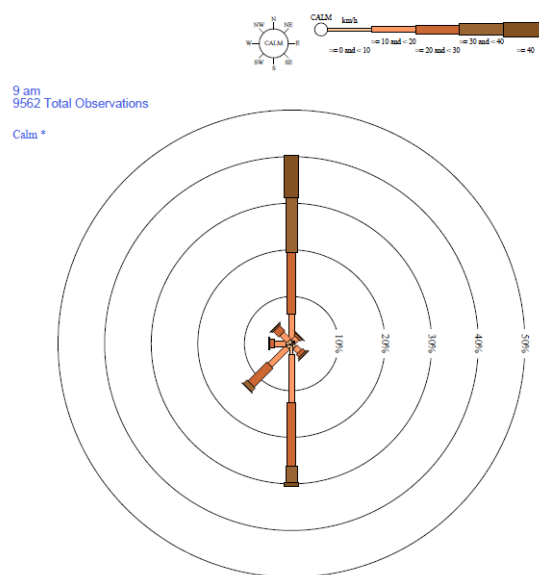
6.3 Wind pattern

Wind roses in **Figure 2** show the annual average wind pattern for Wallan (Kilmore Gap) station for the period 1993 to 2010. Winds are prevalent from the north and the south year round with stronger northerly winds and an annual average wind speed of 25 km/h (or 6.94 m/s). Winds are least prevalent from the northeast but with occasional strong winds (at approximately 10% frequency) from the southwest all day and northwest in the afternoon. The afternoons tend to have more frequent southerly winds with a slightly reduction in the frequency of the northerlies.

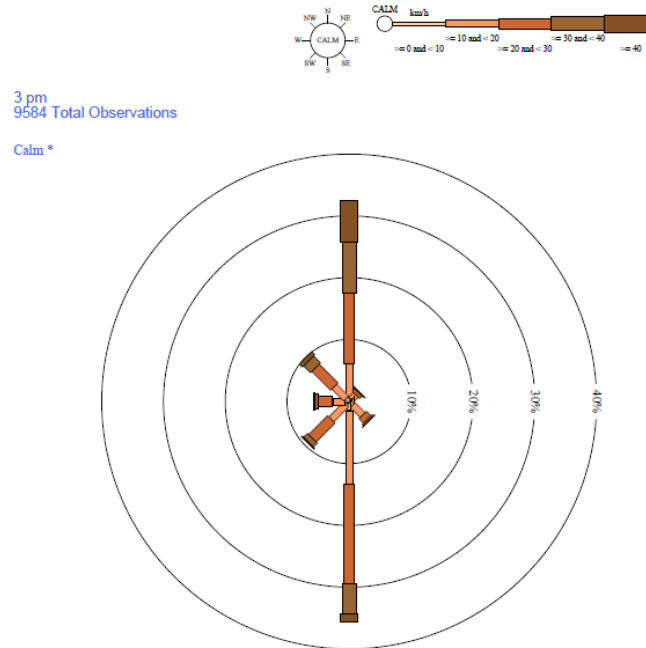
316 The seasonal variations of wind features are provided in **Figure 3**. Strong northerly winds (>20km/hr)
 317 prevail in winter with minimal wind in all other directions. Southerly winds predominant during summer,
 318 especially in the afternoon when the northerlies weaken and become less frequent. Southerly winds also
 319 occur very frequent during shoulder months.

320 Westerlies do not occur as frequent in this location compare to some other locations of Melbourne,
 321 however, winds from the northwest and southwest occur occasionally during autumn and spring.

322 I am only aware of one VCAT case or Planning Panel Report where a variation to a recommended
 323 separation distance was applied due to exceptional topography and meteorology. This was in the case
 324 *Latrobe Planning Scheme Amendment C104*. This concerned an industrial facility located on the floor of
 325 Latrobe valley where special wind patterns driven by the topography were formed that result in poor
 326 dispersion of emissions from a paper mill. The topography or the meteorology of the Conundrum site is
 327 not considered to have equivalent 'exceptional' conditions to affect the dispersion of dust from the site.



328



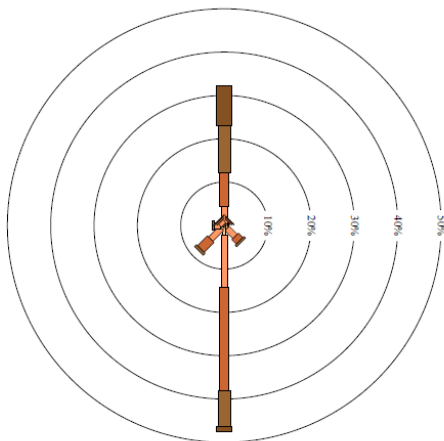
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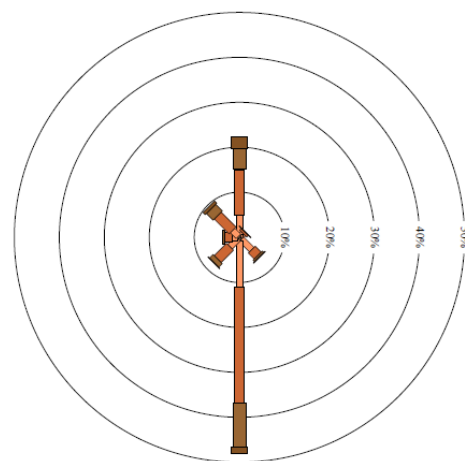
Figure 2 Annual Wind Rose at 9am and 3pm – Wallan (Kilmore Gap) (Station Number 088162) (Source: BoM, 2020)

9 am Jan
809 Total Observations
Calm *



Summer – 9am

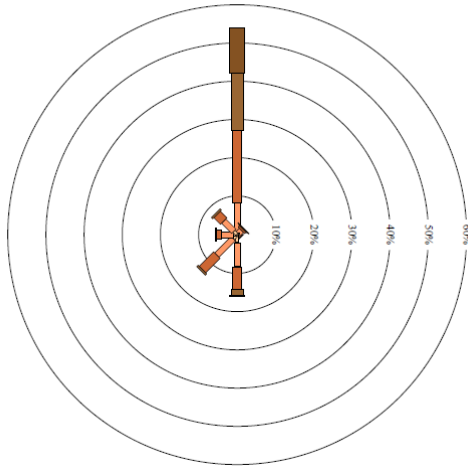
3 pm Jan
819 Total Observations
Calm *



Summer – 3pm

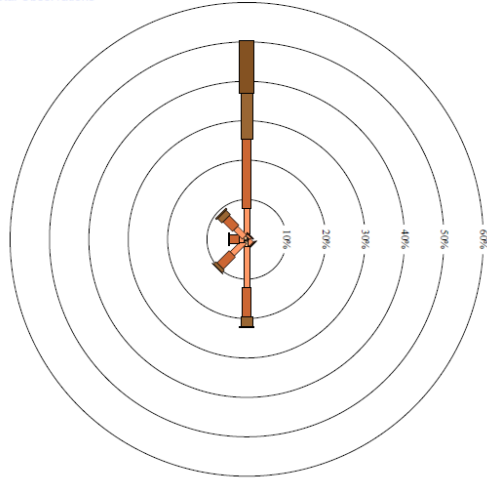
9 am Jul
827 Total Observations

Calm *



3 pm Jul
833 Total Observations

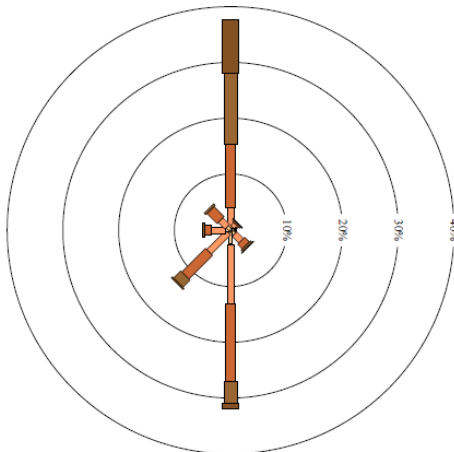
Calm *



Winter – 9am

9 am Oct
785 Total Observations

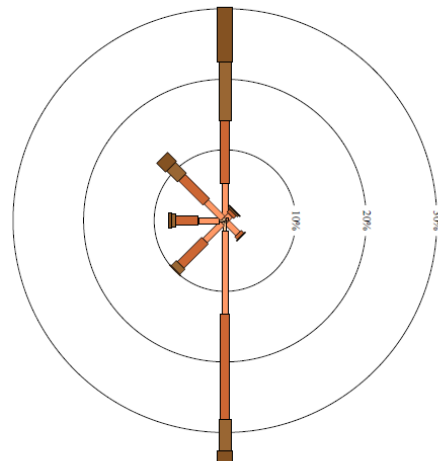
Calm *



Winter – 3pm

3 pm Oct
784 Total Observations

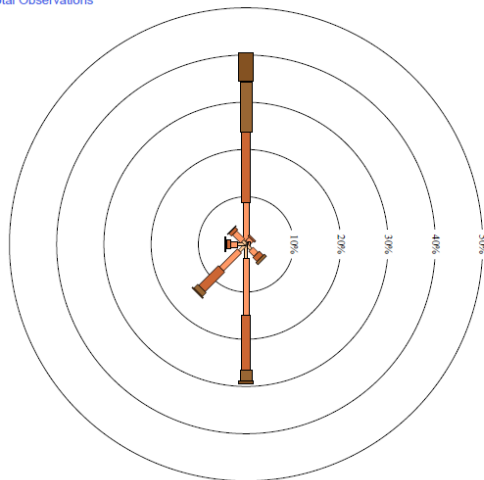
Calm *



Spring – 9am

9 am Apr
804 Total Observations

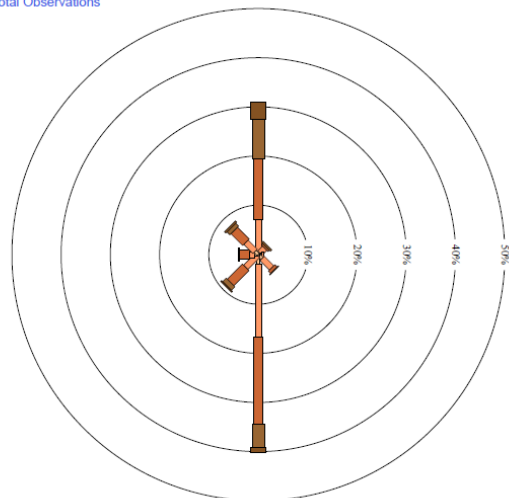
Calm *



Spring – 3pm

3 pm Apr
807 Total Observations

Calm *



Autumn – 9am

Autumn – 3pm

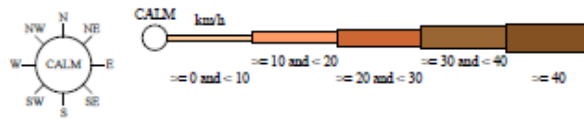


Figure 3 Seasonal Wind Rose at 9am– Wallan (Kilmore Gap) (Station Number 088162) (Source: BoM, 2020)

7. DUST IMPACT ASSESSMENT

The Ektimo Report provides an assessment of the predicted dust impacts in the vicinity of the proposed quarry to accompany the work plan. The Ektimo Report provides dispersion modelling for Phase 1 and Phase 4 of the development of the Quarry. It provides an assessment of air quality impacts from suspended particulates, PM₁₀ and PM_{2.5}. The Ektimo Report does not provide an assessment of potential impact due to dust deposition as nuisance dust.

The dispersion modelling reported by Ektimo indicates that the predicted air quality impacts in the vicinity of the proposed quarry are within the criteria in PEM beyond the recommended separation distance of 500 m.

8. CONSIDERATION OF OBJECTIONS

I was provided with a summary of the 119 objections to the development of the quarry. The complaints were analysed to group them by the category of objection raised, most objections are included in multiple categories.

The categories are; amenity, advertising not sufficient, blasting, damage to property, dust, devalue properties, economic, environmental/pollution, employment, health impact, inadequate planning, inconsistent with planning policy, incompatible use, noise/acoustic, neighbourhood character, prejudices future PSP, proximity, traffic access and safety, structural impact, and visual impact.

The address of the objector was provided, most of the addresses were from Wallan with some from Beveridge. Of the 119 submissions objecting to the quarry, 93 raising concerns of amenity, blasting, damage to property, dust, or noise acoustic. These submissions refer to potential amenity impact from the quarry operation.

Amenity impacts are typically controlled by ensuring that facilities are operated to industry best-practice measures and that a sufficient separation distance is provided to sensitive land use.

In this situation the proposed quarry is to be operated in accordance with industry best practice. The recommended separation distance is provided in EPA Publication 1518 in relation to control from quarries dust impacts.

The guidance in EPA Publication 1518 is specifically concerned with control of dust emissions from quarries. However, in practice the provision of a 500 metre separation distance is demonstrated to provide sufficient buffer to allow control of noise, vibration and blast overpressure. This was discussed at length and accepted in the Planning Panel for the Shenstone Park PSP (Amendment C241wsea to the Whittlesea Planning Scheme).

Amenity impacts due to blasting, including impact from dust, noise, and blasting can be controlled by normal best practice operation to avoid impacting sensitive receptors more than 500 m from the blasting area.

None of the addresses provided in the list of submitters objecting to the development of the quarry are within 500 metres of the proposed extraction area. Therefore, there are not expected to be adverse amenity impact due to the operation of the proposed quarry.

9. BLASTING BUFFER

The buffers recommended in the PSP should include an amenity buffer, 500 metres from the quarry extraction area and 250 metres from the quarry processing plant.

There are additional risks due to the potential for harm due to fly-rock, vibration and blast overpressure from the blasting. These impacts can cause harm to structures that are located too close to blasting. In recent years I note that a buffer of 200 metres from extraction areas is typically applied for hard rock quarries in Victoria.

The quarry blast buffer should be included to prevent inappropriate development such as construction of buildings and structures which could be damaged by blasting.

10. RECOMMENDED SEPARATION DISTANCES

A separation distance of 500 metres from the extraction area boundary of the quarry will prevent conflict between future residents and the operation of the quarry. The position of the buffer can be adjusted through the four phases of the proposed quarry life.

The construction of buildings and structures should be avoided within a 200 metre blast buffer from the extraction area.







The recommended separation distances from the proposed quarry are provided in Figures F1 to F8.

Figures









LEGEND

-  Exhibited Beveridge North West PSP Boundary
-  Property Boundary
-  Proposed Extraction Boundary
-  Work Authority 1473 Boundary
-  Processing Plant Activity Boundary
-  Phase 1 Buffers (200m & 500m)

Quarry Staging

-  Phase 1
-  Phase 2
-  Phase 3
-  Phase 4

Data Sources

Google Maps Basemap
Basemap: Google Maps WMS, © 2019 Google.
Property Lot Boundary: Source - Datashare Victoria, Department of Environment, Land, Water and Planning. Downloaded on 14/04/2022
<https://datashare.maps.vic.gov.au/>
Quarry Staging Area: Digitized from Figure 10 of WA1473 Draft Figures, Prepared for Conundrum Holdings Pty Ltd, 6 September 2019.



0 100 200 300 400 m

Scale 1 : 8,000 @ A3
Coordinate System: GDA94 / MGA Zone 55

QUARRY BUFFER -PHASE 1

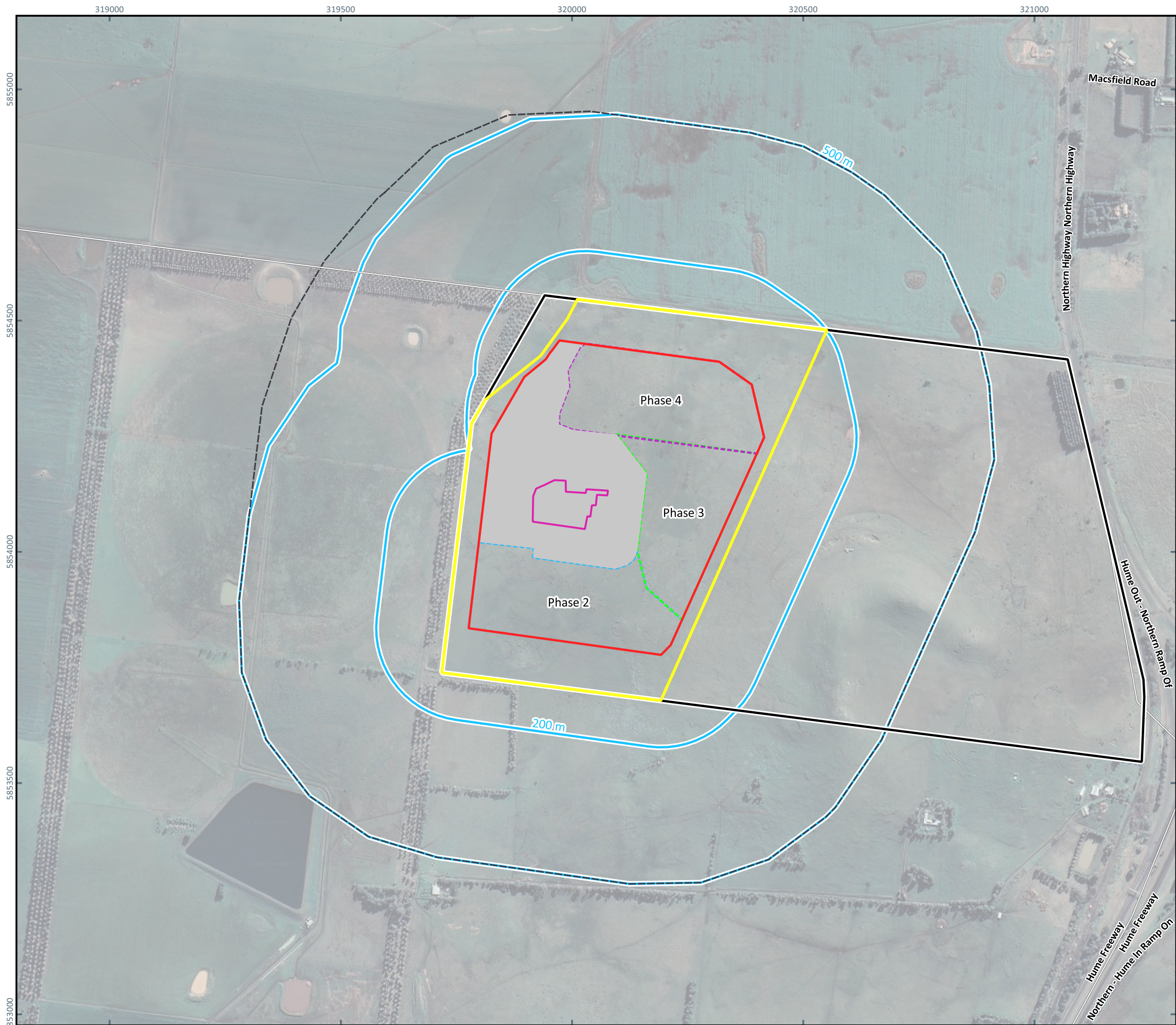
Expert Air Qaulity Assessment

175 Northern Highway, Wallan, VIC













Conundrum Holdings Pty Ltd

Project: 1041.1
Date: 28/04/2022
Revision: Rev00
Designed: NW
Drawn: AD
Reviewed: NW

Figure
F1



LEGEND

-  Exhibited Beveridge North West PSP Boundary
-  Property Boundary
-  Proposed Extraction Boundary
-  Work Authority 1473 Boundary
-  Processing Plant Activity Boundary
-  Completed Area
-  500m Buffer from Extraction Area
-  Phase 2 Buffers (200 & 500m)
- Quarry Staging**
-  Phase 1
-  Phase 2
-  Phase 3
-  Phase 4

Data Sources

Google Maps Basemap
Basemap: Google Maps WMS, © 2019 Google.
Property Lot Boundary: Source - Datashare Victoria, Department of Environment, Land, Water and Planning. Downloaded on 14/04/2022
<https://datashare.maps.vic.gov.au/>
Quarry Staging Area: Digitized from Figure 10 of WA1473 Draft Figures, Prepared for Conundrum Holdings Pty Ltd, 6 September 2019.



0 100 200 300 400 m

Scale 1 : 8,000 @ A3
Coordinate System: GDA94 / MGA Zone 55

QUARRY BUFFER - PHASE 2

Expert Air Qaulity Assessment

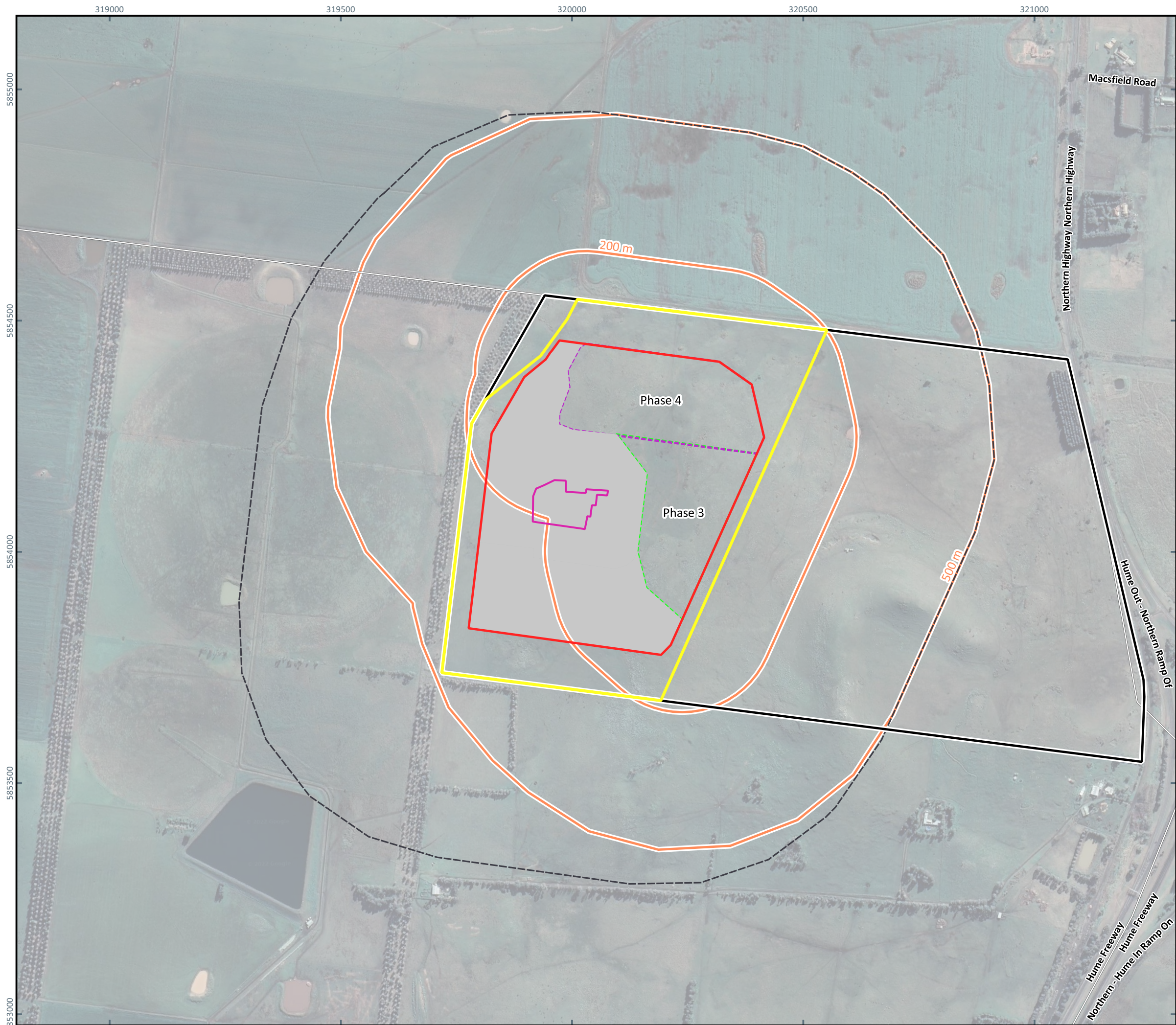
175 Northern Highway, Wallan, VIC

Conundrum Holdings Pty Ltd













Project: 1041.1
Date: 28/04/2022
Revision: Rev00
Designed: NW
Drawn: AD
Reviewed: NW

Figure

F2



LEGEND

-  Exhibited Beveridge North West PSP Boundary
-  Property Boundary
-  Proposed Extraction Boundary
-  Work Authority 1473 Boundary
-  Processing Plant Activity Boundary
-  Completed Area
-  500m Buffer from Extraction Area
-  Phase 3 Buffers (200m & 500m)
- Quarry Staging**
 -  Phase 1
 -  Phase 2
 -  Phase 3
 -  Phase 4

Data Sources

Google Maps Basemap
Basemap: Google Maps WMS, © 2019 Google.
Property Lot Boundary: Source - Datashare Victoria, Department of Environment, Land, Water and Planning. Downloaded on 14/04/2022
<https://datashare.maps.vic.gov.au/>
Quarry Staging Area: Digitized from Figure 10 of WA1473 Draft Figures, Prepared for Conundrum Holdings Pty Ltd, 6 September 2019.



0 100 200 300 400 m

Scale 1 : 8,000 @ A3
Coordinate System: GDA94 / MGA Zone 55

QUARRY BUFFER - PHASE 3

Expert Air Qaulity Assessment

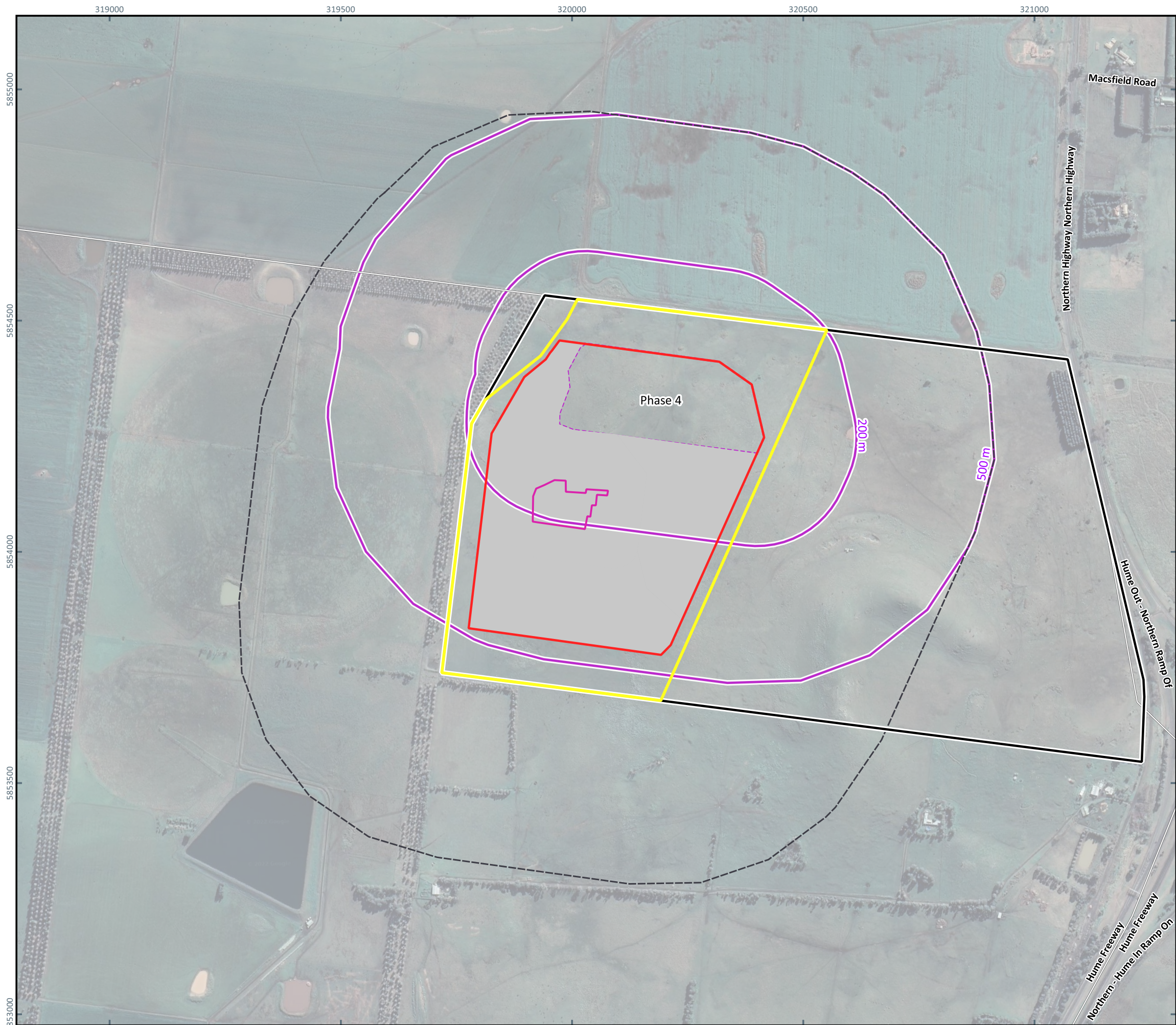
175 Northern Highway, Wallan, VIC

Conundrum Holdings Pty Ltd













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Date: 28/04/2022
Revision: Rev00
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Reviewed: NW

Figure

F3



LEGEND

-  Exhibited Beveridge North West PSP Boundary
-  Property Boundary
-  Proposed Extraction Boundary
-  Work Authority 1473 Boundary
-  Processing Plant Activity Boundary
-  Completed Area
-  500m Buffer from Extraction Area
-  Phase 4 Buffers (200m & 500 m)
- Quarry Staging**
 -  Phase 1
 -  Phase 2
 -  Phase 3
 -  Phase 4

Data Sources

Google Maps Basemap
Basemap: Google Maps WMS, © 2019 Google.
Property Lot Boundary: Source - Datashare Victoria, Department of Environment, Land, Water and Planning. Downloaded on 14/04/2022
<https://datashare.maps.vic.gov.au/>
Quarry Staging Area: Digitized from Figure 10 of WA1473 Draft Figures, Prepared for Conundrum Holdings Pty Ltd, 6 September 2019.



0 100 200 300 400 m

Scale 1 : 8,000 @ A3
Coordinate System: GDA94 / MGA Zone 55

QUARRY BUFFER - PHASE 4

Expert Air Qaulity Assessment

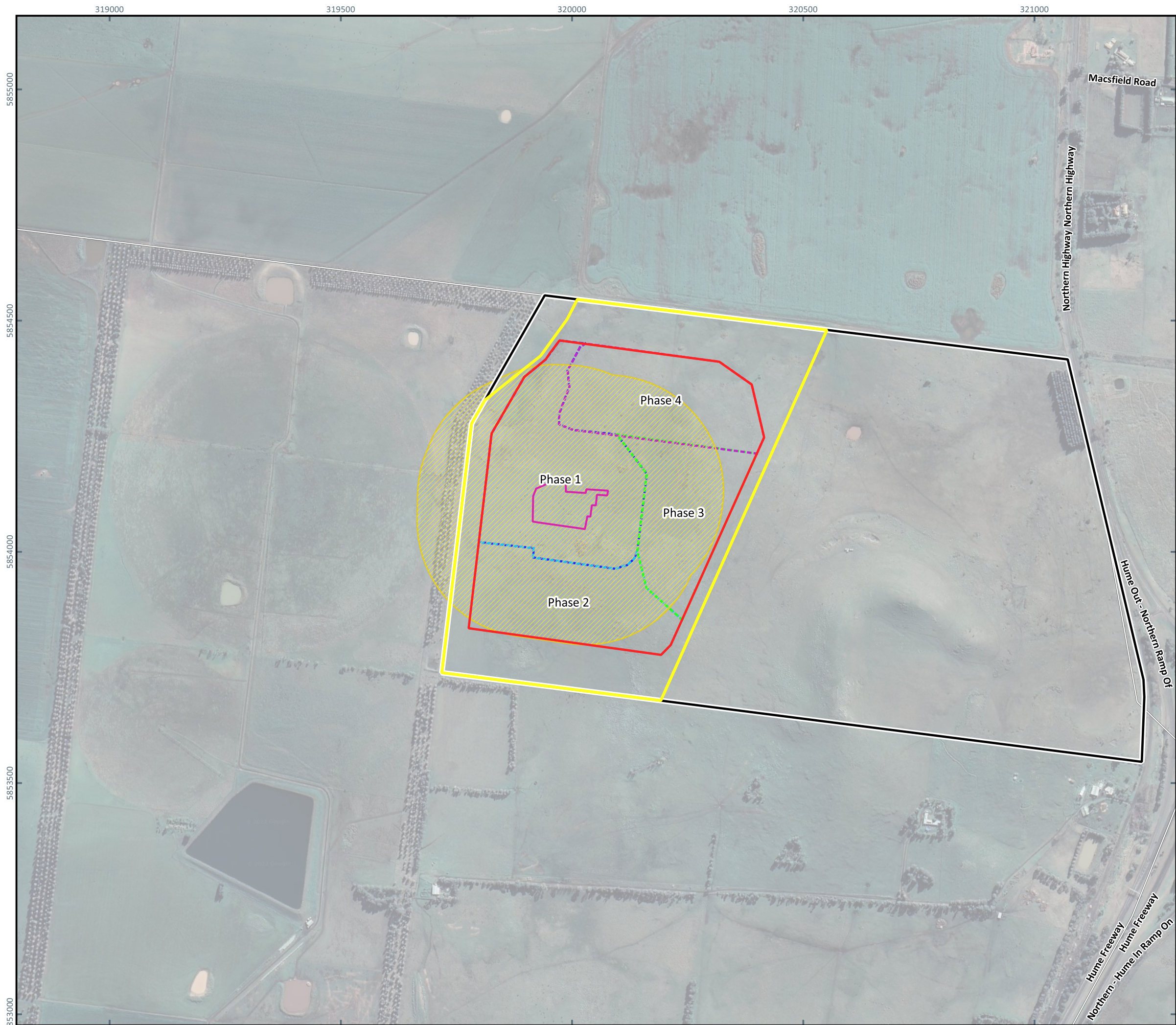
175 Northern Highway, Wallan, VIC

Conundrum Holdings Pty Ltd

Project: 1041.1
Date: 28/04/2022
Revision: Rev00
Designed: NW
Drawn: AD
Reviewed: NW

Figure

F4



LEGEND

- Property Boundary
- Proposed Extraction Boundary
- Work Authority 1473 Boundary
- 250m Buffer from Processing Plant Activity Boundary
- Processing Plant Activity Boundary

Data Sources

Google Maps Basemap
Basemap: Google Maps WMS, © 2019 Google.
Property Lot Boundary: Source - Datashare Victoria, Department of Environment, Land, Water and Planning. Downloaded on 14/04/2022
<https://datashare.maps.vic.gov.au/>
Quarry Staging Area: Digitized from Figure 10 of WA1473 Draft Figures, Prepared for Conundrum Holdings Pty Ltd, 6 September 2019.



0 100 200 300 400 m

Scale 1 : 8,000 @ A3
Coordinate System: GDA94 / MGA Zone 55

QUARRY BUFFER - ACTIVITY BOUNDARY

Expert Air Qaulity Assessment

175 Northern Highway, Wallan, VIC

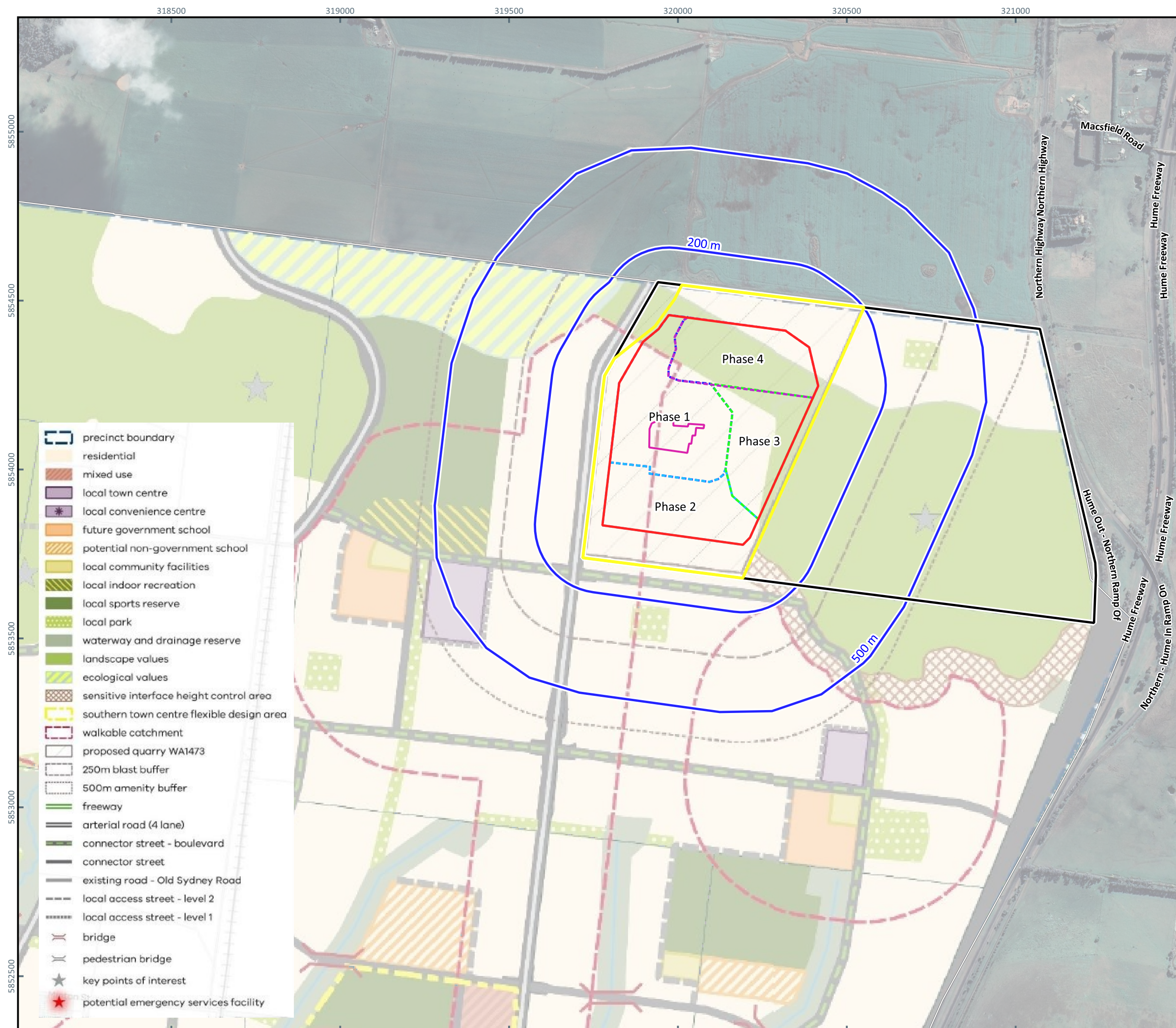
Conundrum Holdings Pty Ltd

Project: 1041.1
Date: 28/04/2022
Revision: Rev00
Designed: NW
Drawn: AD
Reviewed: NW

Figure

F5





LEGEND

- Property Boundary
- Proposed Extraction Boundary
- Work Authority 1473 Boundary
- Processing Plant Activity Boundary
- Quarry Buffers (200m & 500m)

Quarry Staging

- Phase 1
- Phase 2
- Phase 3
- Phase 4

Data Sources

Google Maps Basemap
Basemap: Google Maps WMS, © 2019 Google.
Property Lot Boundary: Source - Datashare Victoria, Department of Environment, Land, Water and Planning. Downloaded on 14/04/2022
<https://datashare.maps.vic.gov.au/>
Quarry Staging Area: Digitized from Figure 10 of WA1473 Draft Figures, Prepared for Conundrum Holdings Pty Ltd, 6 September 2019.
Precinct Structure Plan Map: Plan 3 of Amendment C158 to the Mitchell Planning Scheme, DRAFT Beveridge NorthWest Precinct Structure Plan, November 2021.



0 100 200 300 400 500 m

Scale 1 : 11,000 @ A3
Coordinate System: GDA94 / MGA Zone 55

QUARRY BUFFERS IN RELATION TO PRECINCT STRUCTURE PLAN

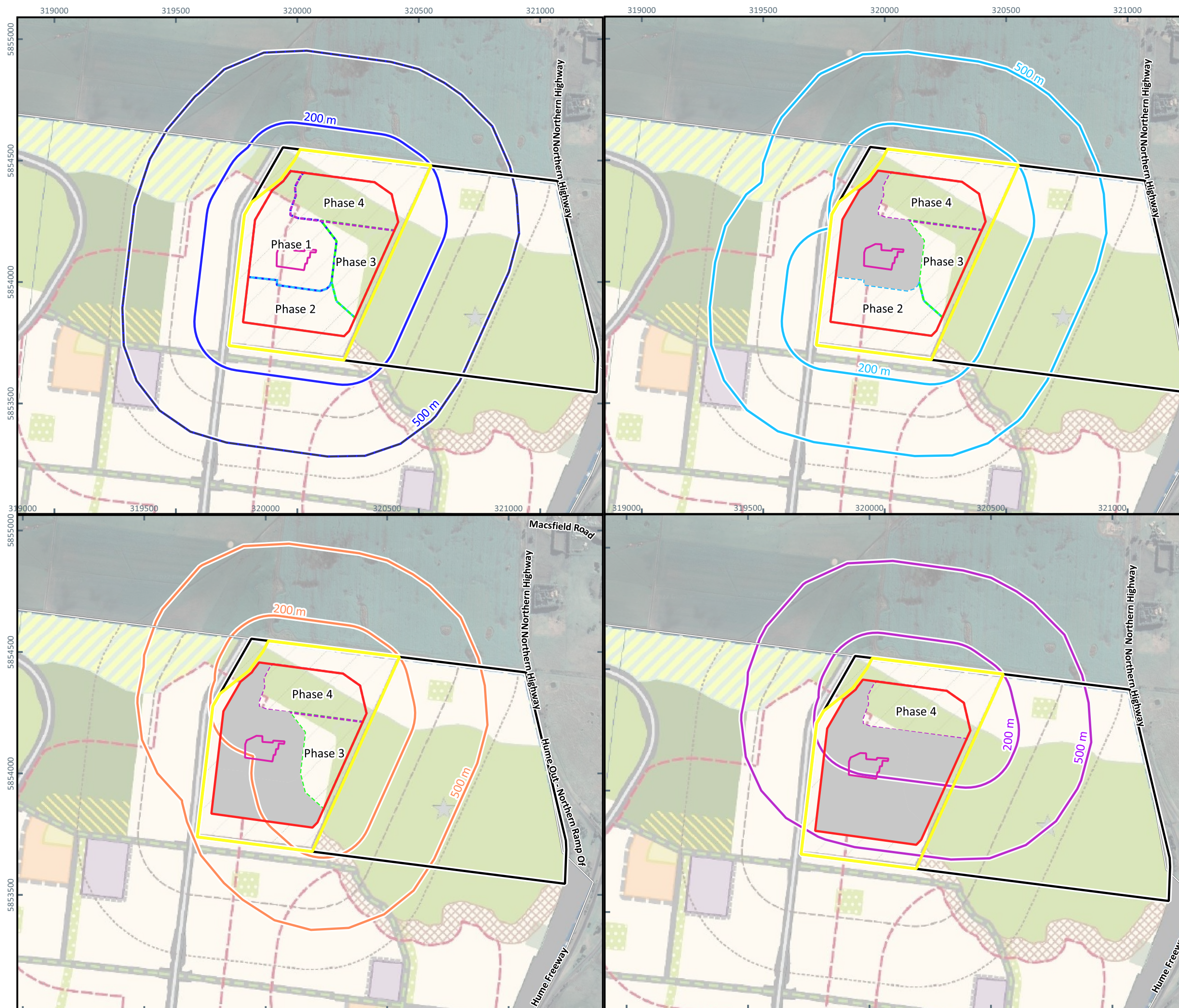
Expert Air Quality Assessment

175 Northern Highway, Wallan, VIC







Conundrum Holdings Pty Ltd

Project: 1041.1
Date: 28/04/2022
Revision: Rev00
Designed: NW
Drawn: AD
Reviewed: NW





Figure
F7



LEGEND

-  Property Boundary
-  Proposed Extraction Boundary
-  Work Authority 1473 Boundary
-  Processing Plant Activity Boundary
-  Completed Area
-  500m Buffer from Extraction Boundary

Quarry Staging

-  Phase 1
-  Phase 2
-  Phase 3
-  Phase 4

Buffers (200m & 500m)

-  Phase 1
-  Phase 2
-  Phase 3
-  Phase 4

Data Sources

Google Maps Basemap
Basemap: Google Maps WMS, © 2019 Google.
Property Lot Boundary: Source - Datashare Victoria, Department of Environment, Land, Water and Planning. Downloaded on 14/04/2022
<https://datashare.maps.vic.gov.au/>
Quarry Staging Area: Digitized from Figure 10 of WA1473 Draft Figures, Prepared for Conundrum Holdings Pty Ltd, 6 September 2019.
Precinct Structure Plan Map: Plan 3 of Amendment C158 to the Mitchell Planning Scheme, DRAFT Beveridge NorthWest Precinct Structure Plan, November 2021.



0 100 200 300 400 500 m

Scale 1 : 15,000 @ A3
Coordinate System: GDA94 / MGA Zone 55

QUARRY BUFFERS IN RELATION TO PRECINCT STRUCTURE PLAN - BY STAGES

Expert Air Quality Assessment

175 Northern Highway, Wallan, VIC

Conundrum Holdings Pty Ltd

Project: 1041.1
Date: 28/04/2022
Revision: Rev00
Designed: NW
Drawn: AD
Reviewed: NW

Figure
F8

Appendix A



Contact: Eliza Minney
Direct line: 03 9691 0205
Email: eminney@besthooper.com.au
Principal: John Cicero
Our Ref: JDC:EZM:200936



13 November 2020

Peter Ramsay
Peter J Ramsay & Associates
Level 10, 222 Kings Way
SOUTH MELBOURNE VIC 3205

By email: peter.ramsay@pjra.com.au

Dear Peter,

VCAT Reference No. P1745/2020
VCAT Appeal - 175 Northern Highway, Wallan VIC 3756

We act for the Permit Applicant/Applicant for Review in relation to the above matter.

The Review Site is currently included within the Farming Zone of the Mitchell Planning Scheme (**Scheme**) and is affected by the Bushfire Management Overlay (as to part), Erosion Management Overlay (as to part), Floodway Overlay (as to part), Land Subject to Inundation Overlay (as to part), Salinity Management Overlay (as to part) and Vegetation Protection Overlay (as to part). The Subject Site is also within an area identified for Aboriginal Cultural Heritage.

Amendment C106 to the Mitchell Planning Scheme (**Amendment**), which seeks to amend the Mitchell Planning Scheme (**Scheme**) to implement the Beveridge North West Precinct Structure Plan, has been exhibited and considered by an independent Planning Panel. The Panel Report is available and the recommendation in chief is that the Amendment be revised to explicitly include precinct level planning for resource extraction for Work Authority 1473, relating to the Subject Site.

An application for Planning Permit was filed with Mitchell Shire Council (**Council**) on 4 October 2019 seeking approval for use and development of the Subject Site for the purpose of stone extraction and creation of access to a road in a Road Zone Category 1.

Council failed to make a decision within the statutory timeframes and, consequently, our client has lodged an appeal with the Victorian Civil and Administrative Tribunal pursuant to section 79 of the *Planning and Environment Act 1987 (Vic)*.

The matter has been listed for a hearing on 3 May 2021 for 5 days. Despite this listing, we anticipate a further 5 hearing days may be required and ask that you please also confirm availability for the week of 10 May 2021.

Having regard to the final hearing date, any amended plans must be circulated by 11 March 2021 and expert evidence must be circulated by 14 April 2021.

On behalf of our client, we seek to engage you to review the proposal and provide air quality evidence at the hearing of this matter should you support the proposal. Should your support be conditional in anyway, we ask that you advise the nature of those changes within 7 days from the date of this correspondence.

Best Hooper Pty Ltd

Level 9/451 Little Bourke Street
Melbourne VIC 3000, Australia

PO Box 13312
Law Courts 8010

T (03) 9670 8951
F (03) 9670 2954

www.besthooper.com.au
ACN 137 307 692

DX 215 Melbourne

conu0001_200936_008.docx

The client will be directly responsible for your fees associated with this matter. We confirm the client details as follows:

Sarah Andrew and Mark Wagner

Conundrum Holdings Pty Ltd

A: GPO Box 100, Kilmore VIC 3765

E: sarah.andrew@conholdings.com.au; mark.wagner@conholdings.com.au

M: (03) 5781 0103

Please find link in covering email containing your brief of material and contact the writer once you have had an opportunity to review. Please advise if you would like to receive a hard copy of the briefing material.

Yours faithfully

A handwritten signature in blue ink, appearing to read 'Eliza Minney', with a stylized flourish at the end.

Eliza Minney

Senior Associate

Appendix B





Fields of Competence

- Lead environmental auditing of landfills and industrial facilities
- Separation distances for industrial facilities and landfills
- Contaminated site assessment and remediation
- Environmental improvement plans and pollution reduction programs
- Environmental impact assessment
- Cleaner production and waste minimisation
- Air quality management
- EHS management

Experience Summary

Peter has been Managing Director and Principal Consultant of Peter J Ramsay & Associates Pty Ltd since February 1988. He has over 30 years' experience in pollution control, cleaner production, due diligence audits, environmental auditing, environmental management systems and environmental assessment. Peter is a Chartered Professional Engineer and a Fellow of the Institution of Engineers Australia. He is appointed as an Environmental Auditor under the Victorian *Environment Protection Act 1970* for both contaminated land and industrial facilities. He is also accredited as a Site Auditor under the New South Wales *Contaminated Land Management Act 1997* and is a registered professional engineer in Queensland.

Education

Diploma of Chemical Engineering, RMIT, 1970.

Graduate Diploma of Management, RMIT, 1973.

Master of Environmental Science, Monash University, 1978.

Language Proficiency

(None, Fair, Moderate, Excellent, Native)

- English: Speak/Read/Write - Native/Native/Native

Professional Affiliations and Registrations

- Fellow of the Institution of Engineers Australia (FIEAust).

- Fellow of The Australian Institute of Company Directors.
- Past Chairman of the Environmental Branch, Victorian Division, Engineers Australia, 1987/88.
- Member of Clean Air Society of Australia and New Zealand.
- Member of Australian Water and Wastewater Association.
- Member of Air and Waste Management Association (USA).
- Australian Environment Business Network
- Australian Sustainable Business Group

Key Projects

Lead auditor for environmental audits of Alcoa aluminium smelters, BHP steel mills and manufacturing facilities.

Management of due diligence audits for mergers and acquisitions for major real estate transactions.

Management of Phase I and II environmental assessments of soil and groundwater at large scale industrial facilities.

Management of remedial projects throughout Australia.

Statutory environmental audits of land under Australian legislation of contaminated sites, landfills and a range of industrial facilities.

Statutory environmental audits of risk to the environment from landfill operations throughout Victoria.

Statutory environmental audits of risk to the environment from the construction of landfill liners throughout Victoria.

Statutory environmental audits of risk of harm to groundwaters at landfills throughout Victoria.

Expert evidence on separation distance for landfills and industrial facilities.

Auditor verification of monitoring programs and cell design at landfills throughout Victoria.

Cleaner production and waste minimisation strategies for industries.

Air quality management and assessment for industry.



Odour control and impact assessment for industrial facilities ranging from poultry farms to manufacturing facilities.

Waste to energy projects and carbon management.

Regulatory permitting for new and existing industrial facilities.

Audits of wastewater treatment facilities and water reuse strategies.

Environmental impact assessment for new facilities.

Environmental Health and Safety (EHS) policies and procedures. Preparing and documenting sound EHS management systems.

Hazard and Operability Studies (HAZOPS) to determine regulatory compliance.

Environmental risk assessment to determine regulatory compliance.

Environment Protection Authority, Publication 148, Melbourne, Australia, 1982.

- Ramsay, P.J. *Stationary Source Control in Victoria: The benefits of Licensing and Monitoring*, 50th Annual Conference of Australian Institute of Health Surveyors, Victoria Division, Moonee Valley, Melbourne, Australia, 22 May 1981.
- Ramsay, P.J. *Air Pollution Control of Aluminium Smelters in North America. A Review of Emission Limits and Control Strategies for Aluminium Smelters in North America with implications for Victoria*, Environment Protection Authority, Publication 114, Melbourne, Australia, 1980.
- Hulme, J. and Ramsay, P. *Industrial Pollution and Community Attitudes*, Monash University. Victoria, Australia, 1978.

Publications

- Ramsay, P.J. *Sustainable Challenges Facing Business*, Paper presented at the Environment Essentials Conference, Australian Environment Business Network (AEBN), Parkville, 16 September 2004.
- Ramsay, P.J. Property Council of Australia *Guide to Due Diligence*, author of Environmental section of the 2003 (current) edition, Brisbane 2003.
- Ramsay, P.J. Property Council of Australia Publication *Guide to Due Diligence*, Author of Environmental section, Brisbane, 1998.
- Ramsay, P.J. and Van Schoten, M.W. *The Critical Need for Quality Assurance in Contaminated Site Assessment*, Paper presented at the 3rd National Hazardous Solid Waste Convention, Darling Harbour, Sydney, 26-30 May 1996.
- Ramsay, P.J. and Thiele, G.A., *Assessment of Odour Buffer Zones for Wastewater Treatment Plants*, Clean Air, Vol. 29, No. 2, pp. 48-52, 1995.
- Ramsay, P.J. and Wareham, A.E. *The Role of Buffer Zones in Environmental Management*, Symposium on Siting, Engineering and Management of Hazardous Industries, Institution of Engineers Australia, Melbourne, Australia, 13 and 14 April 1983.
- Ramsay, P.J. *Report on Study: Fluoride Levels in Vegetation and Ambient Air in the Portland Area*,

Appendix C



Brief of Documents

Documents received 13 November 2021

Application for Review	<ul style="list-style-type: none"> • Letter to VCAT encl. Application for Review, Best Hooper Lawyers, 19 October 2020 • Calculation of elapsed days • Planning Application and associated documents • Victoria Planning Provisions and property report
Amendment C106	<ul style="list-style-type: none"> • Exhibited Material <ul style="list-style-type: none"> - Background reports - Maps - Planning Scheme Ordinance - Beveridge North West Precinct Structure Plan, VPA, August 2019 • Expert Witness Reports at Panels • Conundrum submission <ul style="list-style-type: none"> - Letter from Conundrum Holdings Pty Ltd to Minister, 16 November 2018 - Letter from Minister to Conundrum Holdings, 26 September 2018 - Letter from Ms S Menzies (DELWP) to Conundrum Holdings Pty Ltd, 11 January 2019 - Opening submissions on behalf of Conundrum Holdings Pty Ltd, 27 July 2020 - Closing submissions on behalf of Conundrum Holdings Pty Ltd, 30 July 2020 • Tabled Panel Materials of Amendment C106; • <i>Panel Report – Mitchell Planning Scheme Amendment C106 with Beveridge North West Precinct Structure Plan</i>, Planning Panels Victoria, 7 October 2020.
Background Materials	<ul style="list-style-type: none"> • EY, 2016, <i>Demand analysis of extractive resources in Victoria</i>, prepared by EY for Department of Economic Development, Jobs, Transport and Resources, 16 May 2016; • PWC, 2016, <i>Extractive Resources in Victoria: Demand and Supply Study 2015-2050</i>, prepared by PWC for Department of Economic Development, Jobs, Transport and Resources, May 2016; • PWC, 2017, <i>Memorandum – Development of WA1473</i>, prepared by PWC for Department of Economic Development, Jobs, Transport and Resources, 16 November 2017 • PWC, 2018, <i>Memorandum – Northern Corridor hard rock analysis</i>, prepared by PWC for Department of Economic Development, Jobs, Transport and Resources, 3 May 2018
Referral responses	<ul style="list-style-type: none"> • Referral Response Letter, 6 February 2020 • Melbourne Water Response, 17 December 2019

	<ul style="list-style-type: none"> • DELWP Response, 6 December 2019 • Town Planning Response, 4 December 2019 • VicRoads Response, 6 December 2019 • EPA response, 17 January 2020
--	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Documents received 23 November 2021

Exhibited Documents	<ul style="list-style-type: none"> • Draft Precinct Structure Plan of November 2021 • Letter of correction to Infrastructure Contributions Plan, Victoria Planning Authority, 21 December 2021 • Beveridge North West Precinct Structure Plan Background Report, VPA, Revised November 2021 • Background Study reports • PSP Ordinances • ICP Ordinances • PSP Planning Scheme Maps • ICP Planning Scheme Maps • Beveridge North West PSP Community Brochure, November 2021
	<ul style="list-style-type: none"> • Mitchell C158 Extractive Industry & Buffer Area Beveridge North West Incorporated Document, November 2021
Public Consultation	<ul style="list-style-type: none"> • Public Consultation on the Beveridge North West PSP and ICP and Draft amendment to the Mitchell planning scheme, VPA, 16 November 2021
Council Report	<ul style="list-style-type: none"> • Ordinary Council Meeting Agenda, Mitchell Shire Council, 22 November 2021 • Report on the Mitchell Shire Council Ordinary Council Meeting, Mitchell Shire Council, 22 November 2021

Appendix D



PHOTOGRAPHIC RECORD



PETER J RAMSAY
& ASSOCIATES



Plate: 1 – View looking south to the subject site from Taylors Lane

Date: 26/4/2022



Plate: 2 – View looking north from Taylors Lane to Wallan residential area

Date: 26/4/2022



PETER J RAMSAY
& ASSOCIATES



Plate: 3 – View looking north-east, Macsfield Road intersection with Northern Highway

Date: 26/4/2022



Plate: 4 – View looking southwest to the subject site from the Northern Highway

Date: 26/4/2022



Plate: 5 – View looking west towards subject site from Northern Highway

Date: 26/4/2022



PETER J RAMSAY
& ASSOCIATES