

Consultation meeting notes

Meeting : Tahmoor Coking Coal Operations and NSW Department of Planning and Environment (DPE)
Location : DPE Sydney Office
Properties : 320 Pitt Street, Sydney
Date : 26 February 2019
Time : 10:00 am – 10:30 am
Attendees: : Ron Bush (RB) - Tahmoor Coking Coal Operations
 April Hudson (AH) - Tahmoor Coking Coal Operations
 Jessie Evans (JE) – DPE
 Andrew Rode (AR) - DPE

| Item | Summary of Comments | Actions |
|------|---|--|
| 1 | <ul style="list-style-type: none"> » JE required confirmation that the Modification 5 proposal to the Development Consent would be a Section 4.55(2) submission. » JE confirmed that a modification application for the increase in subsidence impact area was sufficient. » RB confirmed that this was correct. | Tahmoor Coal to provide Modification 5 submission. |
| 2 | <ul style="list-style-type: none"> » JE required confirmation that the area of Modification 5 was not in a prohibited area for subsidence. » RB confirmed this was not the case. | None |
| 3 | <ul style="list-style-type: none"> » JE noted that the modified orientation of the LW W1-W2 mine plan may result in delays in mining commencement. » RB noted that this has been accounted for and first workings have already commenced. | None |
| 4 | <ul style="list-style-type: none"> » JE required confirmation that new residential dwellings along Stonequarry Creek Road have been designed with consideration of subsidence effects. » RB noted that they have been advised regarding this development, and it is their understanding that the new residential dwellings have been designed according to the SA NSW Guidelines. | None |
| 5 | <ul style="list-style-type: none"> » JE advised that the provision of the Extraction Plan 3-6 months to DPE prior to the start of mining was sufficient for Extraction Plan assessment. | Tahmoor Coal to provide Extraction Plan. |
| 6 | <ul style="list-style-type: none"> » JE advised that Infrastructure Management Plans are required to be submitted to DPE prior to mining, however do not need to be signed off by DPE. DPE advised that the plans can be submitted to DPE prior to sign-off by the relevant infrastructure owner, however a signed off version of the plan must be submitted prior to mining. » RB noted that they are intending to submit Infrastructure Management Plans with the submission of the Extraction Plan, however some plans may be delayed and submitted later. | Tahmoor Coal to provide Infrastructure Management Plans. |
| 7 | <ul style="list-style-type: none"> » JE clarified that consultation with WaterNSW is only required if the Study Area is within or near Sydney Water drinking catchment areas. DPE advised to consult with WaterNSW regardless via letter initially. | Tahmoor Coal to consult with WaterNSW. |
| 8 | <ul style="list-style-type: none"> » JE requested to be added to the mailing list for updates on mining at Tahmoor Mine. | Tahmoor Coal to add DPE to mailing list. |
| 9 | <ul style="list-style-type: none"> » JE confirmed that they have no preference regarding the naming convention used for longwalls in the Western Domain, as long as naming is consistent. | None. |

| | | |
|----|---|-------|
| | » RB noted that LW W1-W2 would be the longwall names used going forward. | |
| 10 | » JE confirmed that an adequacy review for Extraction Plans is not normally completed, however a review for the Extraction Plan for LW W1-W2 may be completed as it will be the first prepared by Tahmoor Coal. | None. |
| 11 | » JE confirmed that an AHIP (if required) may be submitted prior to the approval of the Extraction Plan. | None. |



Ron Bush
Environment & Community Manager
Tahmoor Coking Coal Operations
SIMEC Mining
PO Box 100
TAHMOOR NSW 2573


Dear Mr Bush

**Tahmoor North Coal Mine (DA 67/98)
Appointment of Persons to Prepare Extraction Plans**

I refer to your letter of 3 March 2019 seeking approval of suitably qualified and experienced persons to prepare the relevant Extraction Plan/s for the Western Domain area (ie Longwalls 33-36) in accordance with condition 13H(i) of the development consent.

The Secretary has approved yourself and April Hudson, Approval Coordinator to prepare the Extraction Plan and its relevant sub-components. The Department understands that the Extraction Plan would be informed by technical reports from specialists.

Should you have any enquiries in relation to this matter, please contact Jessie Evans.

Yours sincerely



Howard Reed 6.3.19
Director
Resource Assessments
As nominee of the Secretary

April Hudson

From: Ron Bush
Sent: Tuesday, 18 June 2019 7:13 AM
To: April Hudson
Subject: FW: Tahmoor Coal - DA67/98 - Condition 13G(4) - First Workings

Ron Bush

Environment and Community Manager

T: +61-2-4640-0100
M: +61 437 266 998
F: +61-9-4640-0140
E: Ron.Bush@simecgrg.com

SIMEC Mining

2975 Remembrance Driveway
Bargo NSW 2574
simec.com



From: Ray Ramage
Sent: Wednesday, 29 May 2019 2:44 PM
To: Ron Bush <Ron.Bush@simecgrg.com>
Subject: RE: Tahmoor Coal - DA67/98 - Condition 13G(4) - First Workings

Ron,

Noted.

Thanks

Ray Ramage

Senior Mine Safety Officer - Subsidence
Resources Regulator
8 Hartley Drive | THORNTON NSW 2322
PO Box 343 HRMC NSW 2310
T 02 4063 6485 M 042 2551 293

E ray.ramage@planning.nsw.gov.au W www.resourcesregulator.nsw.gov.au

Please update your address books to reflect my new mail address, phone number and @planning address.

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I wish to acknowledge the Traditional Custodians of the land and pay respect to all Elders past and present.

From: Ron Bush <Ron.Bush@simecgfg.com>
Sent: Monday, 20 May 2019 7:46 AM
To: Ray Ramage <ray.ramage@planning.nsw.gov.au>
Subject: Tahmoor Coal - DA67/98 - Condition 13G(4) - First Workings

Ray,

Please see attached correspondence in relation to first working in our Western Domain.

Ron Bush
Environment and Community Manager

T: +61-2-4640-0100
M: +61 437 266 998
F: +61-9-4640-0140
E: Ron.Bush@simecgfg.com

SIMEC Mining
2975 Remembrance Driveway
Tahmoor NSW 2574
simec.com



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Our Ref: DOC19/400863

The Manager
Tahmoor Colliery
Tahmoor Coal Pty Ltd
PO Box 100,
Tahmoor NSW 2573

Attention: Ron Bush

Tahmoor North-Western Domain Longwalls W1-W2 Extraction Plan

Dear Ron

I refer to your letter and email of 29 April 2019 (Our Reference: DOC19/368952) requesting the Department of Planning and Environment provide comments for the preparation of the Extraction Plan for Tahmoor North – Western Domain Longwalls W1-W2. This request has been allocated to the Resources Regulator to review and provide comments.

The Resources Regulator notes the General Layout Plan that was provided in the correspondence indicates that three creeks: - Matthews Creek, Cedar Creek and Stonequarry Creek are located within the study area (i.e. within the predicted 20mm Subsidence Contour and the 35^o Angle of Draw Line). In relation to the development of the Extraction Plan and Supporting Documentation, Tahmoor Coal should consider the following comments:

- It is noted that the proposed Longwalls do not directly undermine the creeks mentioned above, however subsidence may still impact the creeks. It is recommended that consideration be given to increasing the stand-off distance from creek lines to avoid/minimise impacts, or investigate other longwall layout configurations.
- If creeks are potentially going to be impacted, it would be beneficial to prove that Tahmoor Coal can successfully complete successful rehabilitation of impacted creeks. Demonstrated progress of remediation at Myrtle Creek and Redbank Creek would provide additional confidence that Tahmoor Coal can effectively remediate creek impacts which do occur.
- It would be advisable to start collecting detailed baseline data for ground and surface waters as soon as practicable to help inform the subsidence monitoring program and development of completion criteria for rehabilitation.

Should you require any further information please contact me on (02) 4276 7428 or minres.environment@planning.nsw.gov.au

Yours sincerely

 23/05/2019

Greg Kininmonth
Manager Environmental Operations (Southern)
Resources Regulator
NSW Department of Planning and Environment

April Hudson

From: Ron Bush
Sent: Thursday, 9 May 2019 12:02 PM
To: April Hudson
Subject: FW: Tahmoor Coal - Western Domain - LW W1 & W2 - Extraction Plan

April – see below from DPE – DRG (which was formerly DRE)

Ron Bush

Environment and Community Manager

T: +61-2-4640-0100
M: +61 437 266 998
F: +61-9-4640-0140
E: Ron.Bush@simecgrg.com

SIMEC Mining

2975 Remembrance Driveway
Tahmoor NSW 2574
simec.com



From: Alex Love <alex.love@planning.nsw.gov.au>
Sent: Thursday, 9 May 2019 10:37 AM
To: Ron Bush <Ron.Bush@simecgrg.com>
Subject: RE: Tahmoor Coal - Western Domain - LW W1 & W2 - Extraction Plan

Nothing specific south Ron

You have it all covered

Alex

Alex Love

Advisory Officer | Assessment Coordination
Division of Resources and Geoscience | Resource Operations
Level 3 Block F 84 Crown Street Wollongong
PO Box 674 Wollongong NSW 2500
T 02 8275 1961 M 0448 556 823



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From: Ron Bush <Ron.Bush@simecgfg.com>
Sent: Thursday, 9 May 2019 8:01 AM
To: Alex Love <alex.love@planning.nsw.gov.au>
Subject: RE: Tahmoor Coal - Western Domain - LW W1 & W2 - Extraction Plan

Alex

The Extraction Plan will include a Resource Recovery Plan that will detail the resource (geology, tonnage, quality, yield, etc), extraction method, mining schedule etc

This documents is currently being prepared but if there is anything specific that you would like included please let me know and we will include it.

Ron Bush

Environment and Community Manager

T: +61-2-4640-0100

M: +61 437 266 998

F: +61-9-4640-0140

E: Ron.Bush@simecgfg.com

SIMEC Mining

2975 Remembrance Driveway

Tahmoor NSW 2574

simec.com



From: Alex Love <alex.love@planning.nsw.gov.au>
Sent: Wednesday, 8 May 2019 5:13 PM
To: Ron Bush <Ron.Bush@simecgfg.com>
Subject: RE: Tahmoor Coal - Western Domain - LW W1 & W2 - Extraction Plan

Hi Ron

For the western domain DRG (as opposed to RR) is concerned with recovery.

Do you have any preliminary data about recovery at this stage (or changed timing) or is that still being processed.

My point being that whenever that is ready we will be able to comment further

Regards

Alex

Alex Love

Advisory Officer | Assessment Coordination
Division of Resources and Geoscience | Resource Operations
Level 3 Block F 84 Crown Street Wollongong
PO Box 674 Wollongong NSW 2500
T 02 8275 1961 M 0448 556 823



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From: Ron Bush <Ron.Bush@simecgfg.com>
Sent: Thursday, 2 May 2019 10:29 AM
To: Alex Love <alex.love@planning.nsw.gov.au>
Subject: RE: Tahmoor Coal - Western Domain - LW W1 & W2 - Extraction Plan

Alex

Only layout details at this stage – we are preparing the document and will incorporate any preliminary comments that you may have into the draft.

Ron Bush

Environment and Community Manager

T: +61-2-4640-0100
M: +61 437 266 998
F: +61-9-4640-0140
E: Ron.Bush@simecgfg.com

SIMEC Mining

2975 Remembrance Driveway
Tahmoor NSW 2574
simec.com



From: Alex Love
Sent: Tuesday, 30 April 2019 1:57 PM
To: Ron Bush <Ron.Bush@simecgfg.com>
Subject: RE: Tahmoor Coal - Western Domain - LW W1 & W2 - Extraction Plan

Hi Ron

Will you sending us a copy of the EP as drafted to date or just looking for layout details at this stage?

Alex

PS I will liaise with our Resocovery Unit in the interim

Alex Love

Advisory Officer | Assessment Coordination
Division of Resources and Geoscience | Resource Operations
Level 3 Block F 84 Crown Street Wollongong
PO Box 674 Wollongong NSW 2500
T 02 8275 1961 M 0448 556 823



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From: Ron Bush <Ron.Bush@simecgfg.com>
Sent: Monday, 29 April 2019 4:22 PM
To: Alex Love <alex.love@planning.nsw.gov.au>
Cc: April Hudson <April.Hudson@simecgfg.com>
Subject: Tahmoor Coal - Western Domain - LW W1 & W2 - Extraction Plan

Alex,

Please see attached letter seeking any comments from the DPE-DRG regarding Tahmoor Coal’s Extraction Plan for LW W1 and W2 for our Western Domain.

Ron Bush

Environment and Community Manager

T: +61-2-4640-0100
M: +61 437 266 998
F: +61-9-4640-0140
E: Ron.Bush@simecgfg.com

SIMEC Mining

2975 Remembrance Driveway
Tahmoor NSW 2574
simec.com



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OEH Meeting – Hurstville Offices

| | | | | | |
|---------------|--------|----------------|--|------------------|----|
| Start | 2:00pm | Date | 21 March 2019 | Minutes | FR |
| Finish | 3:00pm | Present | Andrew Stuart (AS), Fiona Robinson (FR), Ron Bush (RB) April Hudson (AH) Martin Krogh (MK) Meagan Hinds (MH) | Apologies | |

| | Person | Date raised | Due |
|---|--------|-------------|---------|
| 1. Environmental Management Plan LW32 | | | |
| <ul style="list-style-type: none"> Reviewed the EMP for LW32 that has been submitted. MK said that they will give comments to the Resources Regulator (RR) that Redbank Creek is suffering death by 1000 cuts Issue with Gauging station data in presentation – to be reviewed. Ensure AHD of all boreholes referenced in future graphs | Note | 21/3/19 | |
| <ul style="list-style-type: none"> Action: Send Martin Krogh the original baseline data from Redbank Creek | RB | 21/3/19 | 29/3/19 |
| 2. Western Domain | | | |
| <ul style="list-style-type: none"> Western Domain Extraction Plan progress presented | Note | 21/3/19 | |
| <ul style="list-style-type: none"> MK Stated the is much better than the LW31-37 SMP application, however there are still issues. If we pulled out longwalls back an extra 200m there would be no issues. | Note | 21/3/19 | |
| <ul style="list-style-type: none"> MK Stated that adaptive management review of impacts to LW W1 will be too late for impacts to Cedar Creek and Stonequarry Creek as a result of LW W1. Recent studies noted impacts to creeks (upsidence and valley closure) within 450m of mining. | Note | 21/3/19 | |
| <ul style="list-style-type: none"> MK Stated the Extraction Plan should contain strong justification for mining in proximity to Cedar Creek and Stonequarry Creek | Note | 21/3/19 | |
| <ul style="list-style-type: none"> MH Stated that they would like to see the baseline studies for biodiversity completed by Niche. RB noted these would be included in the Extraction Plan. | Note | 21/3/19 | |
| <ul style="list-style-type: none"> Action: Send MK through the Ian Grey Stress report | RB | 21/3/19 | 29/3/19 |
| <ul style="list-style-type: none"> Action: MK stated photogrammetry on Matthews Creek would be highly valuable and would recommend he said this would allow more information for approval | FR | 21/3/19 | |
| 3. CMAP | | | |
| <ul style="list-style-type: none"> Presented works to date on Myrtle Creek CMAP | Note | 21/3/19 | |
| <ul style="list-style-type: none"> Action: Email Martin a copy of both the Myrtle and Redbank Creek CMAP | RB | 21/3/19 | |
| <ul style="list-style-type: none"> Action: Organise HCS to put pressure sensor in Pool 20 | AS | 21/3/19 | 20/4/19 |
| <ul style="list-style-type: none"> Action: MK suggested mapping pools downstream of impact zone. Need more information on evaporation and pool regression | AS | 21/3/19 | 20/4/19 |
| <ul style="list-style-type: none"> Action: Review cosmetic works done at Marnies Hole | AS | 21/3/19 | 20/4/19 |
| 4. Tahmoor South | | | |
| <ul style="list-style-type: none"> Made comment on the fact Tahmoor South report does not deny impacts on Thirlmere Lakes. MK and MH did not require more information regarding the project. They had read the EIS and had submitted comments | Note | 21/3/19 | |



OEH Meeting – Hurstville Offices

| | | | | | |
|---------------|--------|----------------|--|------------------|----|
| Start | 2:00pm | Date | 21 March 2019 | Minutes | FR |
| Finish | 3:00pm | Present | Andrew Stuart (AS), Fiona Robinson (FR), Ron Bush (RB) April Hudson (AH) Martin Krogh (MK) Meagan Hinds (MH) | Apologies | |



CONSULTATION MEETING NOTES

Meeting : THNSW – Loop line Rail Subsidence Management Meeting
Location : THNSW - Thirlmere
Date : Friday 24 May 2019
Time : 10:00 am – 1:30 pm
Attendees: : David Talbert (DT), Ron Bush (RB), Kevin Golledge (KG), Ian Cochran (IC), Graeme Robinson (GR), Allan Pidgeon (AP), David Horner (DH), John Thorogood (JT), Daryl Kay (DK), Mark Delaney (MK), Chris Bloor (CB), Gang Li (GL), John Matheson (JM)

Train Operations

- JT advised 3-5 train movements per week, no set time timetable however major events are scheduled.
- Blanket speed max 40km/h
- AP asked about speed restrictions, lowest speed is 20km/h. JT advised grade is 1:40 going into Sydney, this is difficult to control the train on grade at a lower speed.
- JT advised that THNSW has completed a track trolley run.
- THNSW are required to do a track Hi-Rail inspection 72hrs before a train.
- JL advised Steam locomotive maintenance is an important part of operations
- AP asked whether alternatives exist for maintenance. JL advised at this stage no, however plan was to develop the site at Chullora to manage some works in the future. (2020)

Access to Corridor

- IC asked about access arrangements with THNSW.
- JT advised that a Safety Interface Agreement was in place.
- RB commented that negotiations were continuing with asset owner RailCorp in regard to a final Access Deed, however an Early access deed has been approved allowing initial subsidence investigation works to proceed.
- JT advised that THNSW are responsible Environmental Management within the corridor and had approved access to complete clearing works.
- RB advised that there are also legal obligations between asset owner RailCorp and TCC.
- JT commented that RailCorp doesn't control environmental issues at THNSW.

Rail Standards and Track Condition

- IC asked about rail standards that are appropriate to the loop-line railway. KG advised generically class 5 track. IC commented that definition of intervention limits is important when developing management strategy.
- DH advised infrastructure manual is available at THNSW (copy to be obtained and emailed to IC)

SIMEC MINING

2975 Remembrance Drive, Bargo NSW 2574
Tahmoor Coal Pty Ltd ABN: 97 0766 639 68

T: +61 (02) 4640 4100
E: Tahmoorenquiries@simecghg.com
simec.com



- IC commented that electronic monitoring systems as used on the Main Southern Rail are not appropriate for Loop-line railway.
- DK advised plan was to inspect track prior to train movements.
- JT advised Infrequent time of trains needs to be considered in regard to inspection.
- IC suggests
 - Trolley run 24hrs before or as close as possible to train movements, then track inspection
 - Weekly surveys
- IC commented how risks to jointed track are proposed to be managed and how TCC propose to monitor joint gaps.
- GR advised visual inspections will also be carried out as part of track inspections Regime.
- AP commented on track type and condition. Single track no creeping in direction of travel.
- Inspection will be needed to look at rail joints and consider the need for track to be cleaned and greased and re-bolted to enable some movement if subjected to ground strain.
- IC asked what typical diurnal movements are associated with fish plated rail. AP advised depends on upon level of restraint.
- AP commented rates of change are gradual on track which enables management during subsidence.
- DK discussed installing seven (7) GNSS units on or close to loopline including their function and accuracy.
- DK advised that GNSS units at the Picton viaduct needs to be cleared of trees as impacting on operation.

Culverts

- JMA to complete structural review of culvert once deveg and access is available.
- IC commented on the accepted approach of sleeving culverts to manage subsidence
- JT commented that the heritage value of the culverts is important and that they need to end up looking the same as current if any damage occurs (even though they are not heritage listed).

Regulator Input.

- GL commented that as a last resort stopping trains must be a consideration.
- DK commented that because of flexibility and infrequent operations of the loopline railway, there are significantly more opportunities to manage track issues as compared to MSR.
- JH asked about duration for monitoring of loop-line railway. – DK advised that a management plan will say how often but monitoring may continue for an extended period & needs to be agreed between the parties.
- GK?? commented about notice of change and RR will review and interject if they do not agree (otherwise they will remain silent).
- GL commented that TCC need to carefully consider timing to install Risk Controls to manage subsidence. "This is a most critical decision for TCC".
- GL commented that Loop-line railway is a Principal Hazard – and directed TCC to consider clause 67.2a
- GL commented on WHSMP Regulation clause 67.2a and directed TCC to review this clause and consider in relation to Loopline railway.

67 Subsidence

- (1) In complying with clause 9, the mine operator of an underground coal mine must manage risks to health and safety associated with subsidence at the mine.
 - (2) Without limiting subclause (1), the mine operator must ensure that:
 - (a) so far as is reasonably practicable, the rate, method, layout, schedule and sequence of mining operations do not put the health and safety of any person at risk from subsidence, and
 - (b) monitoring of subsidence is conducted, including monitoring of its effects on relevant surface and subsurface features, and
 - (c) any investigation of subsidence and any interpretation of subsidence information is carried out only by a competent person, and
 - (d) all subsidence monitoring data is provided to the regulator in the manner and form and at the times required by the regulator, and
 - (e) so far as is reasonably practicable, procedures are implemented for the effective consultation, co-operation and co-ordination of action with respect to subsidence between the mine operator and relevant persons conducting any business or undertaking that is, or is likely to be, affected by subsidence.
- GL commented that competent persons need to be involved in the processes and asked if RMG are involved.
 - RB confirmed work was just getting underway and that RMG would be involved.

- GL advised ARTC are to be involved in regards for Western Domain W1 and W2 risk reviews because of Nepean Fault.
- IC commented that Bridge Structure are brittle and can be damaged from a long way so consideration in the management plan is required.

Track walk completed around culvert at 88.980km

April Hudson

From: Ron Bush
Sent: Wednesday, 8 May 2019 2:32 PM
To: April Hudson
Subject: Fwd: Tahmoor North – Western Domain Longwalls W1-W2 Extraction Plan

Sent from my iPhone

Begin forwarded message:

From: Ellie Randall <ellie.randall@nrar.nsw.gov.au>
Date: 8 May 2019 at 2:19:26 pm AEST
To: <Ron.bush@simecgfg.com>
Subject: Tahmoor North – Western Domain Longwalls W1-W2 Extraction Plan

Hi Ron,

Thank you for your letter dated 29th April 2019 regarding input into Tahmoor North's Extraction Plan for Longwalls W1-W2.

NRAR has no comments into the preparation of the Extraction Plan, however looks forward to reviewing the draft once available.

Regards,

Ellie Randall | Water Regulation Officer

Natural Resources Access Regulator | Water Regulation (East)
Level 0 | 84 Crown Street | Wollongong NSW 2500
PO Box 53 Wollongong NSW 2520
T: +61 2 4224 9745 | F: +61 2 4224 9740
E: ellie.randall@nrar.nsw.gov.au
W: www.industry.nsw.gov.au



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April Hudson

From: Ravi Sundaram <ravi.sundaram@waternsw.com.au>
Sent: Monday, 29 April 2019 11:34 AM
To: Ron Bush; April Hudson
Cc: Peter Dupen
Subject: Tahmoor North - Western Domain Longwalls W1-W2 Extraction Plan

Hello Ron/April

Thank you for consulting with WaterNSW regarding the preparation of the above Extraction Plan.

The extraction plan area is located outside the Sydney Drinking Water Catchment area and therefore WaterNSW will not be providing any further comments on this application.

Regards

Ravi

Ravi Sundaram

Mining Catchment Specialist



Level 14, 169 Macquarie Street

Parramatta NSW 2150

P: 9865 2507 **M:** 0428 226 152

Ravi.Sundaram@waternsw.com.au

www.waternsw.com.au

April Hudson

From: Ron Bush
Sent: Tuesday, 7 May 2019 10:40 PM
To: April Hudson
Subject: FW: Tahmoor Coal - Western Domain - LW W1 & W2 - Extraction Plan

Ron Bush

Environment and Community Manager

T: +61-2-4640-0100

M: +61 437 266 998

F: +61-9-4640-0140

E: Ron.Bush@simecfig.com

SIMEC Mining

2975 Remembrance Driveway

Tahmoor NSW 2574

simec.com



From: Peter Dupen <Peter.Dupen@waternsw.com.au>
Sent: Monday, 6 May 2019 11:56 AM
To: Ron Bush <Ron.Bush@simecfig.com>
Subject: RE: Tahmoor Coal - Western Domain - LW W1 & W2 - Extraction Plan

Hi Ron

just confirming that as this application is outside the Sydney declared catchments we won't be providing comment on the EP.

Pete

Pete Dupen
Mining Manager



PO Box 398, Parramatta NSW 2124
Level 14, 169 Macquarie Street
Parramatta NSW 2150

T: 02 9865 2509
M: 0438 729 164
peter.dupen@waternsw.com.au
www.waternsw.com.au

From: Ron Bush <Ron.Bush@simecgfg.com>
Sent: Monday, 29 April 2019 7:29 AM
To: Environmental Assessments <Environmental.Assessments@waternsw.com.au>
Cc: April Hudson <April.Hudson@simecgfg.com>
Subject: Tahmoor Coal - Western Domain - LW W1 & W2 - Extraction Plan

Clay,

Please see attached letter seeking any comments from WaterNSW regarding Tahmoor Coal's Extraction Plan for LW W1 and W2 for our Western Domain.

Ron Bush
Environment and Community Manager

T: +61-2-4640-0100
M: +61 437 266 998
F: +61-9-4640-0140
E: Ron.Bush@simecgfg.com

SIMEC Mining
2975 Remembrance Driveway
Tahmoor NSW 2574
simec.com



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7 May, 2019

Ron Bush
Environment and Community Manager
Tahmoor Coking Coal Operations
SIMEC Mining

Our ref: 10.121.046.

Your ref:

Dear Ron,

**Tahmoor North – Western Domain
Longwalls W1-W2 Extraction Plan**

The proposed Tahmoor North – Western Domain does not lie within a DSC Notification Area. The closest Notification Area lies well to the east and surrounds the Nepean Dam and its storage.

Therefore the DSC has no requirements for Longwalls W1-W2 Extraction Plan.

Yours faithfully,


C. Satkovic
Executive Engineer
Dams Safety Committee

April Hudson

From: Andrew Couldridge <Andrew.Couldridge@epa.nsw.gov.au>
Sent: Tuesday, 14 May 2019 1:04 PM
To: Ron Bush
Cc: April Hudson
Subject: RE: Tahmoor Coal - Western Domain - LW W1 & W2 - Extraction Plan

Hi Ron and April,

Thank you for the invitation for the EPA to comment on the Longwalls W1-W2 Extraction Plan.

As the proposed activity does not include works that require modification of surface facilities or changes to the licence, the EPA has no comments to provide on the Extraction Plan.

Regards Andrew.

Mr Andrew Couldridge

Senior Operations Officer – Metropolitan Illawarra

Regulatory Services Division, NSW Environment Protection Authority

+61 2 4224 4106 +61 439 706 236

andrew.couldridge@epa.nsw.gov.au www.epa.nsw.gov.au [@EPA NSW](#)

Report pollution and environmental incidents 131 555 (NSW only) or +61 2 9995 5555

From: Ron Bush <Ron.Bush@simecgfg.com>
Sent: Monday, 29 April 2019 4:16 PM
To: Andrew Couldridge <Andrew.Couldridge@epa.nsw.gov.au>
Cc: April Hudson <April.Hudson@simecgfg.com>
Subject: Tahmoor Coal - Western Domain - LW W1 & W2 - Extraction Plan

Andrew,

Please see attached letter seeking any comments from the EPA regarding Tahmoor Coal's Extraction Plan for LW W1 and W2 for our Western Domain.

Ron Bush

Environment and Community Manager

T: +61-2-4640-0100

M: +61 437 266 998

F: +61-9-4640-0140

E: Ron.Bush@simecgfg.com

SIMEC Mining

2975 Remembrance Driveway



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PLEASE CONSIDER THE ENVIRONMENT BEFORE PRINTING THIS EMAIL

April Hudson

From: Wendy Goodburn <wendy.goodburn@dpi.nsw.gov.au>
Sent: Wednesday, 1 May 2019 4:54 PM
To: Ron Bush; April Hudson
Subject: Tahmoor North – Western Domain Longwalls W1-W2 Extraction Plan
Attachments: DPI Ag comments on Tahmoor coal land and agricultural assessemnt for Extraction plan Letter to SIMEC.docx

Dear Ron and April,

Thank you for your correspondence on this matter. I have forward a response from NSW DPI in relation to the extraction plans for the mine.

Please contact me if you have any questions or concerns.

Cheers
Wendy

--

Wendy Goodburn | Agricultural Land Use Planner
Agricultural Land Use Planning
NSW Department of Primary Industries | Agriculture NSW
PO Box 389 | 159 Auburn Street | Goulburn NSW 2800
T: +61 2 4824 3736 | M: 0402 069 605 | E: wendy.goodburn@dpi.nsw.gov.au



Please note: I do not work on Fridays

"Plan- Resource -Grow"

Building thriving, sustainable Agriculture for tomorrow's communities

Please note:

Land use planning information and guidelines are available at:

<http://www.dpi.nsw.gov.au/agriculture/resources/lup>

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OUT19/5714

30 April 2019

Mr Ron Bush and Ms April Hudson
Tahmoor Coking Coal Operations
SIMEC Mining
PO Box 100,
Tahmoor, NSW, 2573
contact@simecgg.com

Dear Mr Ron Bush and Ms April Hudson,

Tahmoor North – Western Domain Longwalls W1-W2 Extraction Plan

Thank you for the opportunity to provide comments prior to the preparation of the Land and Agricultural resource Assessment for Tahmoor North as per your correspondence dated 29 April 2019.

The NSW Department of Primary Industries (NSW DPI) Agriculture is committed to the protection and growth of agricultural industries, and the land and resources upon which these industries depend. Important issues for extractive industries are the potential impact on limited agricultural resources and the ability to rehabilitate the land to enable continued agricultural investment.

The poultry industry and protected cropping industries are important industries in the Shire, the region and the state. Some key statistics provided below are sourced from the document titled 'Poultry Industry Overview' prepared by Wollondilly Council:

- Poultry meat in the Sydney peri-urban area provides 46.2% of NSW and 18.0% of Australia's total value
- Poultry meat is the fifth largest agricultural commodity in NSW and is the most consumed meat product in Australia
- In NSW the industry supports 6000 direct jobs and a further 39,000 jobs downstream
- The industry:
 - is forecast to grow by between 3% and 4% a year in the medium term
 - will need to meet demand by building an additional 240 sheds to supply an additional 70 million birds by 2021. This represents an estimated capital investment of approximately \$156 million
 - Requires access to land, infrastructure and investment confidence

Tahmoor north longwalls are in close vicinity to those industries and have the potential to cause impacts of subsidence and water interference. There is at least one poultry farm on the site of the longwalls and 2 others to the west of the site. There are also at least 3 protected cropping businesses to the south of the mine.

The poultry industry and protected cropping industries are significant economic contributors to the region and the Land and Agricultural Resource Assessment should address aspects associated with impacts and interference to those businesses, in particular to enable their continued operation without disruption to their businesses.

Impacts from the mine can potentially include the following:

1. Damage to structures and buildings; surface cracks; erosion and slope instability; disruption of surface and groundwater; increased soil wetness and ponding; access to fields and disrupted farming patterns. Each of those impacts can disrupt the farming cycle and result in economic losses.
2. The Extraction Plan should detail, amongst other things, how matters raised in 1 above for the poultry and protected cropping industries, as well as any other agricultural industries in the vicinity, can be addressed and mitigated with minimal disruption to farm operations and economic output.
3. Additionally the issue of economic compensation should also be detailed in cases where economic loss is experienced due to subsidence or water interference or any other impacts from the longwall mining.

A full assessment of the agricultural industries in the area that may potentially be impacted should also be undertaken to ensure all those industries are captured and considered in terms of impacts and economic interruption.

Should you require clarification on any of the information contained in this response, please contact Agricultural Land Use Planner, Wendy Goodburn on (02) 4824 3736.

DPI Agriculture is working to ensure that the advice provided is of the highest quality. Please take some time to provide us with feedback on our work by completing a [short survey](#).

Yours sincerely



Wendy Goodburn
Agricultural Land Use Planning



Our ref: STH12/00215/04
Contact: Melissa Steep 4221 2771
Your ref: Tahmoor North – Western Domain

13 May 2019

Ron Bush
SIMEC Mining
BY EMAIL: Ron.bush@simecgrg.com

CC: information@planning.nsw.gov.au

REQUEST FOR INPUT – PREPARATION OF EXTRACTION PLAN, TAHMOOR NORTH WESTERN DOMAIN, LONGWALLS W1-W2

Dear Sir,

Roads and Maritime Services (RMS) refers to your correspondence dated 29 April 2019 regarding the subject Extraction Plan.

RMS has reviewed the information provided and notes the requirement to prepare an Extraction Plan to support the proposed extension of underground mining operations. Noting that the proposed extension into the identified Long Walls West 1 (W1) and West 2 (W2) does not appear to directly impact RMS infrastructure, RMS provides the following comments relating to Subsidence and Geological Impact:

- Consent under Section 138 of the Roads Act, 1993 is required for any proposed longwall adjacent to or under the Hume Highway, or any road in the RMS network, as well as any works within the classified road reserve. It should be noted that the proponent would need to enter into a Deed of Agreement to manage the mining impacts and relationships;
- Any longwall within a distance of 5 times the seam depth to an RMS asset needs to be submitted to RMS for risk assessment of subsidence impacts and far-field effects; and
- Consideration of subsidence impacts on RMS infrastructure must include consequential impacts on functionality and user safety, as well as far fields effects.

In addition, RMS highlights that consideration should be given to the impacts of any additional traffic generated by the proposed extension of long wall mining operations. RMS welcomes further consultation in relation to these impacts and requests any further correspondence is sent to development.southern@rms.nsw.gov.au. If you have any questions please contact Melissa Steep on 4221 2771.

Yours faithfully,

Chris Millet
Manager Land Use
Southern Region

April Hudson

From: Ngaire McCarthy <ngaire.mccarthy@member.ses.nsw.gov.au>
Sent: Thursday, 2 May 2019 2:41 PM
To: Valerie Couch
Cc: April Hudson
Subject: Re: Tahmoor Coal - Western Domain - LW W1-W2 Extraction Plan
Attachments: image001.jpg

Hi April,

My name is Ngaire McCarthy and I will ensure you receive feedback from the SES.

Can you please send the plan through again as it wasn't attached to the email Gary sent

Thank you kindly

Ngaire

On Thu, 2 May 2019, 2:15 pm Garry Barnott-Clement, <garry.barnottclement@member.ses.nsw.gov.au> wrote:
Good afternoon April,

I just would like to advise that I have been replaced as Unit Commander of Wollondilly Unit for the SES by Ngaire McCarthy who's email address is ngaire.mccarthy@member.ses.nsw.gov.au.

As you can see I have CCd Ngaire in to my reply to you so she should be making contact with you regarding the request for comments on the Tahmoor Coal's Extraction Plan.

If you could take me off any of the relevant contact lists it would be appreciated.

With regards,

Garry Barnott-Clement



Garry Barnott-Clement MAIES

Deputy Unit Commander | Camden

NSW State Emergency Service - Metro Zone

P 02 4647 0319 M 0428597109 E garry.barnottclement@member.ses.nsw.gov.au

PO Box PO Box 1061 Camden NSW 2570
www.ses.nsw.gov.au



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From: April Hudson <April.Hudson@simecgfg.com>
Sent: Thursday, 2 May 2019 11:55 AM
To: Garry Barnott-Clement
Cc: Ron Bush
Subject: Tahmoor Coal - Western Domain - LW W1-W2 Extraction Plan

Dear Garry,

Please see attached letter seeking any comments from SES regarding Tahmoor Coal's Extraction Plan for LW W1 and W2 for our Western Domain.

We also sent this letter to mtz.admin@ses.nsw.gov.au on the 29 April 2019.

Kind regards,

April Hudson
Approvals Coordinator
Tahmoor Coking Coal Operations

P +61 2 4640 0022
M +61 466 380 992
F +61 2 4640 0140
E april.hudson@simecgfg.com
W www.simecmining.com

2975 Remembrance Drive, Bargo
PO Box 100, Tahmoor NSW 2573



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April Hudson

From: Garry Barnott-Clement <garry.barnottclement@member.ses.nsw.gov.au>
Sent: Thursday, 2 May 2019 2:15 PM
To: April Hudson
Cc: Ron Bush; Ngaire McCarthy
Subject: Re: Tahmoor Coal - Western Domain - LW W1-W2 Extraction Plan

Good afternoon April,

I just would like to advise that I have been replaced as Unit Commander of Wollondilly Unit for the SES by Ngaire McCarthy who's email address is ngaire.mccarthy@member.ses.nsw.gov.au.

As you can see I have CCd Ngaire in to my reply to you so she should be making contact with you regarding the request for comments on the Tahmoor Coal's Extraction Plan.

If you could take me off any of the relevant contact lists it would be appreciated.

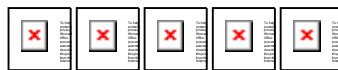
With regards,

Garry Barnott-Clement



Garry Barnott-Clement MAIES
Deputy Unit Commander | Camden
NSW State Emergency Service - Metro Zone
P 02 4647 0319 M 0428597109 E garry.barnottclement@member.ses.nsw.gov.au

PO Box PO Box 1061 Camden NSW 2570
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From: April Hudson <April.Hudson@simecgfg.com>
Sent: Thursday, 2 May 2019 11:55 AM
To: Garry Barnott-Clement
Cc: Ron Bush
Subject: Tahmoor Coal - Western Domain - LW W1-W2 Extraction Plan

Dear Garry,

Please see attached letter seeking any comments from SES regarding Tahmoor Coal's Extraction Plan for LW W1 and W2 for our Western Domain.

We also sent this letter to mtz.admin@ses.nsw.gov.au on the 29 April 2019.

Kind regards,

April Hudson
Approvals Coordinator
Tahmoor Coking Coal Operations

P +61 2 4640 0022
M +61 466 380 992
F +61 2 4640 0140
E april.hudson@simecgrg.com
W www.simecmining.com

2975 Remembrance Drive, Bargo
PO Box 100, Tahmoor NSW 2573



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April Hudson

From: Ngaire McCarthy <freeaz68@gmail.com>
Sent: Tuesday, 18 June 2019 10:53 AM
To: April Hudson; David Gorman
Cc: Ngaire McCarthy; Ron Bush
Subject: Re: Emergency Management Plan

Hi April,

Thank you the data and your patience
At this point there is no further comments and we await the plans development

I have copied in David Gorman from the NSW SES Wingecarribee Unit who made the enquire regarding the Emergency Management Plan and who is very interested in gaining a copy. Is it possible to send a copy over to him?

Please don't hesitate to call me on 0408975529

Kind Regards



Ngaire McCarthy
Unit Commander | Wollondilly Unit
NSW State Emergency Service - South East Zone
M 0408975529 E ngaire.mccarthy@member.ses.nsw.gov.au

65 Bridge Street, PICTON NSW 2571
www.ses.nsw.gov.au



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On Tue, 18 Jun 2019 at 09:57, April Hudson <April.Hudson@simecgfg.com> wrote:

Hi Ngaire,

Thank you for your phone call on Friday.

I can confirm that Tahmoor Mine has an Emergency Management Plan for underground operations – did you want me to provide you with a copy?

As mentioned on Friday, a Flood Impact Assessment has been completed for the Western Domain (LW W1-W2), and modelling predictions indicated a virtually unchanged flood extent in the existing and post-subsidence conditions with no predicted increase in flood level.

Kind regards,

April Hudson

Approvals Coordinator

T: +61 2 4640 0022

M: +61 466 380 992

E: April.Hudson@simecgfg.com

SIMEC Mining

297 Remembrance Driveway

Bargo NSW 2574

simec.com



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29 April 2019

Mr Chris Reynolds
Executive Director
Crown Lands
NSW Department of Industry - Crown Land

Via Email: cl.enquiries@crowland.nsw.gov.au

Dear Sir,

Tahmoor North – Western Domain Longwalls W1-W2 Extraction Plan

The Tahmoor Coal Mine (**Tahmoor Mine**) has been operated by Tahmoor Coal Pty Ltd (**Tahmoor Coal**) since Tahmoor Mine commenced in 1979, and longwall mining methods have been used since 1987. Tahmoor Coal, trading as Tahmoor Coking Coal Operations (**TCCO**), is a wholly owned subsidiary within the SIMEC Mining Division (**SIMEC**) of the GFG Alliance (**GFG**).

Tahmoor Mine is located approximately 80 kilometres south-west of Sydney between the towns of Tahmoor and Bargo. Tahmoor Coal has previously mined 31 longwalls to the north and west of the Tahmoor Mine's current pit top location. Tahmoor Coal is currently mining Longwall 32 in accordance with Development Consents and Subsidence Management Plan Approval.

Tahmoor Coal proposes to extent underground coal mining to the north-west of the Main Southern Railway which will include Longwalls West 1 (W1) to West 4 (W4) at Picton and Thirlmere. These longwalls are located in the Tahmoor North Mining Lease areas. Mining of Longwall W1 is expected to commence in October 2019.

Tahmoor Coal would like to consult with NSW Department of Industry - Crown Land regarding the Extraction Plan for Longwalls W1 and West 2 (W2) being prepared.

Under the conditions of Tahmoor Coal's Development Consent, an Extraction Plan is required for all second workings from Longwall W1. Tahmoor Coal is currently preparing an Extraction Plan for Longwalls W1-W2. The Extraction Plan will be submitted to NSW Department of Planning and Environment for approval.

The Extraction Plan will address the Longwalls W1-W2 Study Area, which comprises the predicted 20 mm Subsidence Contour and the 35° Angle of Draw Line (refer to attached figure).

The Extraction Plan will provide an overview of the project, details of the development of the Extraction Plan, details on how subsidence impacts and environmental consequences will be monitored and managed during and after mining, and details on how the Extraction Plan will be implemented.

SIMEC MINING

Tahmoor Coal Pty Limited ABN 97 076 663 968
PO Box 100, Tahmoor, NSW 2573, Australia

T: +61 (02) 46 400 100
E: contact@simecgfg.com
simecgfg.com



The Extraction Plan will be supported by the following documents:

- » Subsidence Prediction Report;
- » Subsidence Monitoring Program;
- » Biodiversity Management Plan;
- » Heritage Management Plan;
- » Built Features Management Plan;
- » Public Safety Management Plan; and
- » Graphical Plans.

Crown Land in the Study Area includes waterways (Matthews Creek, Cedar Creek, and Stonequarry Creek) and road reserves. Consideration of the management of potential impacts to Crown Land with waterways and road reserves will be included in the Water Management Plan and the Land Management Plan.

We would be pleased to incorporate any of your organisation's comments into the preparation of the Extraction Plan and to facilitate this we would appreciate receiving any comments by **Friday 17 May 2019**.

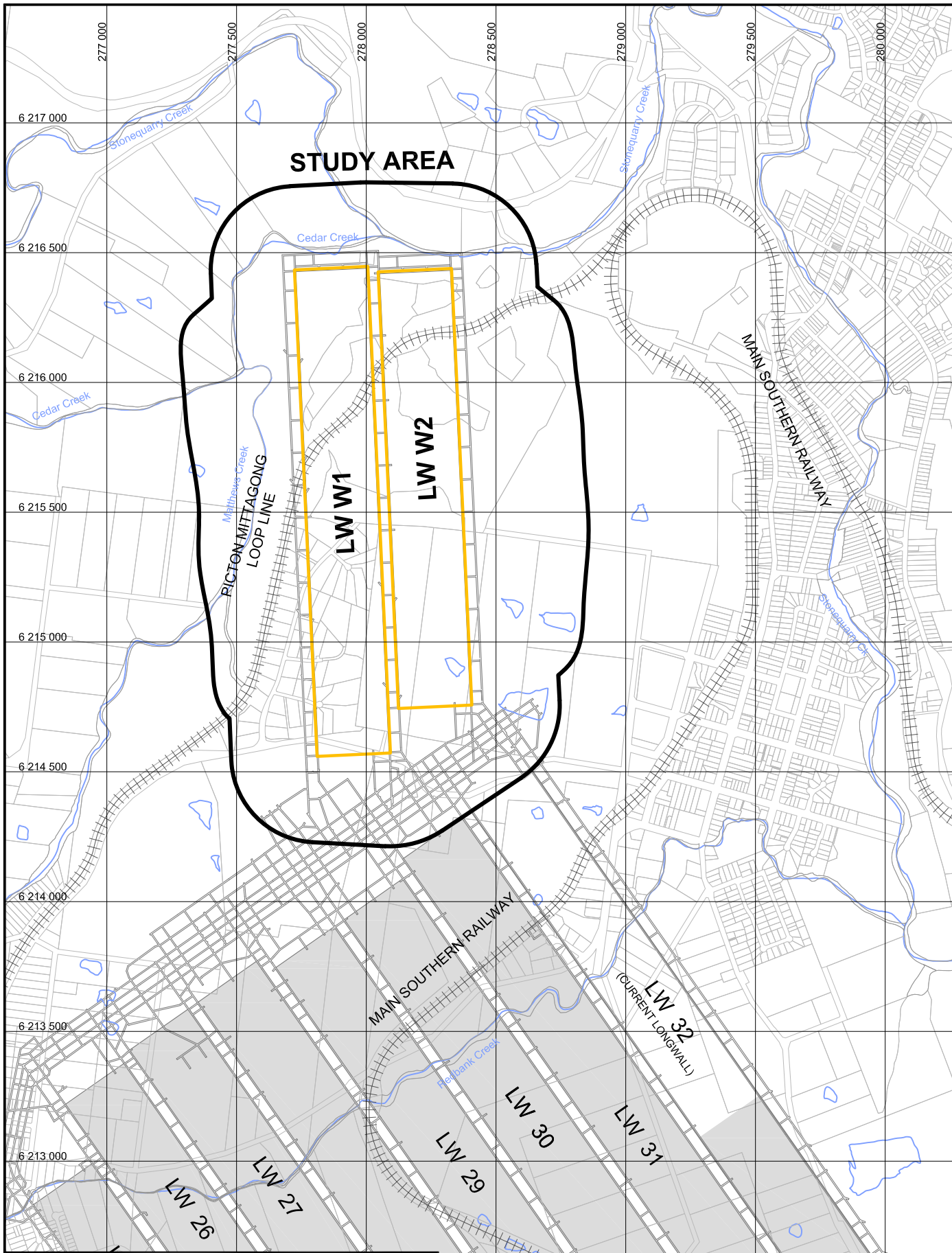
If you would like any further information on this matter, please contact me on 0437 266 998 or Ron.bush@simecgfg.com or April Hudson (Approvals Coordinator) via April.hudson@simecgfg.com or (02) 4640 0022.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Ron Bush", with a long horizontal flourish extending to the right.

Ron Bush
Environment and Community Manager
Tahmoor Coking Coal Operations
SIMEC Mining

Attachment: Tahmoor North Extraction Plan LW W1-W2 General Layout

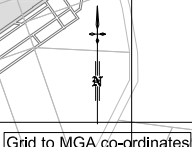


Suite 402, 13 Spring Street, Chatswood NSW 2067
 PO Box 302, Chatswood NSW 2057
 Tel +61 2 9413 3777
 www.minesubsidence.com



**TAHMOOR NORTH
 EXTRACTION PLAN
 LW W1-W2
 GENERAL LAYOUT**

| | | | |
|----------------------|-------------------|----------------------------|---------------|
| DATE: 15 Mar 2019 | SCALE: 1:20000 | DRAWING No: MSEC1019-01 | Rev No: 02 |
|----------------------|-------------------|----------------------------|---------------|



Wollondilly Shire Council Meeting

| | | | | | |
|---------------|---------|----------------|--|------------------|----|
| Start | 9:10pm | Date | 22 March 2019 | Minutes | AS |
| Finish | 10:15am | Present | Andrew Stuart (AS), Fiona Robinson (FR), Ron Bush (RB) April Hudson (AH) Bruce Devonport (BD) David Henry (DH) | Apologies | |

| | Person | Date raised | Due |
|---|---------------|--------------------|------------|
| 1. Environmental Management Plan LW32 | | | |
| <ul style="list-style-type: none"> Reviewed the EMP for LW32 that has been submitted. DH asked if water quality testing will be carried out with groundwater level data – RB said yes it will be | Note | 22/3/19 | |
| 2. Western Domain | | | |
| <ul style="list-style-type: none"> Western Domain Extraction Plan progress presented | Note | 22/3/19 | |
| <ul style="list-style-type: none"> DH expressed his concern of longwalls proximity to Cedar and Stonequarry Creeks. RB said studies had been conducted to determine the optimum distance from the creek to mine and that Tahmoor Coal was comfortable with the potential impacts to the creeks given the proximity. RB also noted that the longwalls have been reorientated to reduce impacts to the creeks. | Note | 22/3/19 | |
| <ul style="list-style-type: none"> DH said Ian Berthon is the appropriate person to review and provide input into the Flood Management Protocol. <ul style="list-style-type: none"> Action: AH to provide a copy of the Flood Management Protocol to Ian Berthon once drafted | AH | 22/3/19 | 29/3/19 |
| 3. CMAP | | | |
| <ul style="list-style-type: none"> Presented works to date on Myrtle Creek CMAP | Note | 22/3/19 | |
| <ul style="list-style-type: none"> ESCP presented to council for feedback <ul style="list-style-type: none"> RB to email soft copy to DH, BD | | 22/3/19 | |
| <ul style="list-style-type: none"> TCCO expressed interest to discuss weed management with council as project progress Council currently have a plan for Myrtle Creek restoration following 2016 East Coast Low. TCCO to tie in works | Note | 22/3/19 | |
| <ul style="list-style-type: none"> TCCO invited to Advisory Committee Meeting to give CMAP update presentation | Note | 22/3/19 | 5/6/19 |

April Hudson

From: Benjamin Logue <Benjamin.Logue@endeavourenergy.com.au>
Sent: Monday, 13 May 2019 3:25 PM
To: April Hudson
Subject: RE: Tahmoor LW W1-W2
Attachments: 2903_001.pdf

Hi,

Please find signed report attached

Kind Regards,

Benjamin Logue
Design Services Manager
Regional Services - Central Network
D: 61 2 9853 7805
M: 0419574106
T: 131 081
E: benjamin.logue@endeavourenergy.com.au

490 Hoxton Park Road
Hoxton Park, NSW 2171

www.endeavourenergy.com.au



From: April Hudson <April.Hudson@simecggf.com>
Sent: Tuesday, 30 April 2019 12:14 PM
To: Benjamin Logue <Benjamin.Logue@endeavourenergy.com.au>
Subject: FW: Tahmoor LW W1-W2

Hi Ben,

I hope you had a great Easter and ANZAC break.

How is the Critical Poles Audit for LW W1-W2 progressing, and what is your likely time to complete? We would appreciate it mid-May if possible.

Kind regards,

April Hudson
Approvals Coordinator
Tahmoor Coking Coal Operations

P +61 2 4640 0022
M +61 466 380 992
F +61 2 4640 0140
E april.hudson@simecggf.com
W www.simecmining.com

2975 Remembrance Drive, Bargo
PO Box 100, Tahmoor NSW 2573



From: April Hudson
Sent: Thursday, 4 April 2019 10:09 AM
To: 'benjamin.logue@endeavourenergy.com.au' <benjamin.logue@endeavourenergy.com.au>
Subject: Tahmoor LW W1-W2

Hi Ben,

I'm just checking in to see how things are going with the Critical Poles Audit for LW W1-W2. Are we still likely to get the drafted audit report by the end of the month?

Kind regards,

April Hudson
Approvals Coordinator
Tahmoor Coking Coal Operations

P +61 2 4640 0022
M +61 466 380 992
F +61 2 4640 0140
E april.hudson@simecqfg.com
W www.simecmining.com

2975 Remembrance Drive, Bargo
PO Box 100, Tahmoor NSW 2573



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April Hudson

From: Benjamin Logue <Benjamin.Logue@endeavourenergy.com.au>
Sent: Thursday, 23 May 2019 7:42 AM
To: April Hudson; Shane Worthington
Cc: Gus WARREN; Ron Bush; Samantha Beresford
Subject: RE: LW W1-W2 Critical Poles Audit amendment

Hi April,

Shane has already made the changes we are now going through the process of getting it signed off. Once complete I will send it over.

Kind Regards

Benjamin Logue
Design Services Manager
Regional Services - Central Network
D: 61 2 9853 7805
M: 0419574106
T: 131 081
E: benjamin.logue@endeavourenergy.com.au

490 Hoxton Park Road
Hoxton Park, NSW 2171

www.endeavourenergy.com.au



From: April Hudson <April.Hudson@simecgfg.com>
Sent: Wednesday, 22 May 2019 4:33 PM
To: Benjamin Logue <Benjamin.Logue@endeavourenergy.com.au>; Shane Worthington <Shane.Worthington@endeavourenergy.com.au>
Cc: Gus WARREN <Gus.Warren@smec.com>; Ron Bush <Ron.Bush@simecgfg.com>; Samantha Beresford <Samantha.Beresford@simecgfg.com>
Subject: LW W1-W2 Critical Poles Audit amendment

Hi Ben and Shane,

I understand that Gus Warren from SMEC has been in contact Shane Worthington on behalf of Tahmoor Coal to clarify the requirements for monitoring of poles with regards to bullet point two on page one of the attached Critical Poles Audit, which states:

Monitoring of the coordinates at the base and top of each of the identified Endeavour Energy "critical poles" to detect any movement.

The outcome of this consultation was that Shane was happy for us to monitor in the same manner we have to date (i.e. a level to a mark in the base of the pole, and measurement of a tilt of the pole in two directions) and that there was no requirement to "coordinate" the base and top of the poles.

Could we please request an amended Critical Poles Audit report to reflect the change in requirement as discussed above?

Kind regards,

April Hudson

Approvals Coordinator
Tahmoor Coking Coal Operations

P +61 2 4640 0022
M +61 466 380 992
F +61 2 4640 0140
E april.hudson@simecgfg.com
W www.simecmining.com

2975 Remembrance Drive, Bargo
PO Box 100, Tahmoor NSW 2573



From: Gus WARREN <Gus.Warren@smec.com>
Sent: Wednesday, 22 May 2019 12:01 PM
To: Daryl Kay <daryl@minesubsidence.com>; April Hudson <April.Hudson@simecgfg.com>
Cc: Ron Bush <Ron.Bush@simecgfg.com>; Samantha Beresford <Samantha.Beresford@simecgfg.com>; Sam LEWTON <Sam.Lewton@smec.com>
Subject: RE: 76280 ~ RE: Longwall West 1-West 2: Survey of Critical Poles

Hi all,

I spoke again this morning to Shane Worthington from Endeavour and he indicated that they would be happy for us to monitor in the same manner we have to date. This means that we will not be required to “coordinate” the poles.

Our field surveyors will be having a look at Pole No.5 on Thirlmere Way this afternoon.

Gary (Gus) Warren

Senior Registered Surveyor
SMEC (Member of the Surbana Jurong Group)
M +61 408 890 054 T +61 2 9900 7128

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15 March 2019

Re: Tahmoor Coal Mine: Proposed Tahmoor Mine Extraction Plan For Longwalls West 1-2. Notification of AHMP preparation and request for information

Dear Sir/Madam,

1 Introduction

EMM Consulting Pty Ltd (EMM) on behalf of Tahmoor Coal Pty Ltd (Tahmoor Coal) would like to notify your party that we are preparing an Aboriginal Heritage Management Plan (AHMP) to support an Extraction Plan for the proposed Longwalls West 1- West 2 (LW W1-W2) at the Tahmoor Coal Mine (Tahmoor Mine).

The Tahmoor Mine is located approximately 80 kilometres south-west of Sydney between the towns of Tahmoor and Bargo. The proposed LW W1-W2 are located at Picton, north-west of the Main Southern Railway. The longwalls are located in the Tahmoor North Mining Lease areas. Aerial imagery of the general location of LW W1-W2 is shown on Plate 1.1 below.

Your organisation registered an interest in consultation on the Aboriginal Cultural Heritage Assessment for Longwall 32 (LW32) (Niche, 2018). LW32 is located adjacent to and south-west of the current study area. Due to the proximity of LW32, EMM are initiating consultation with your organisation about the proposed AHMP; however, please notify us if you do not wish to be consulted.

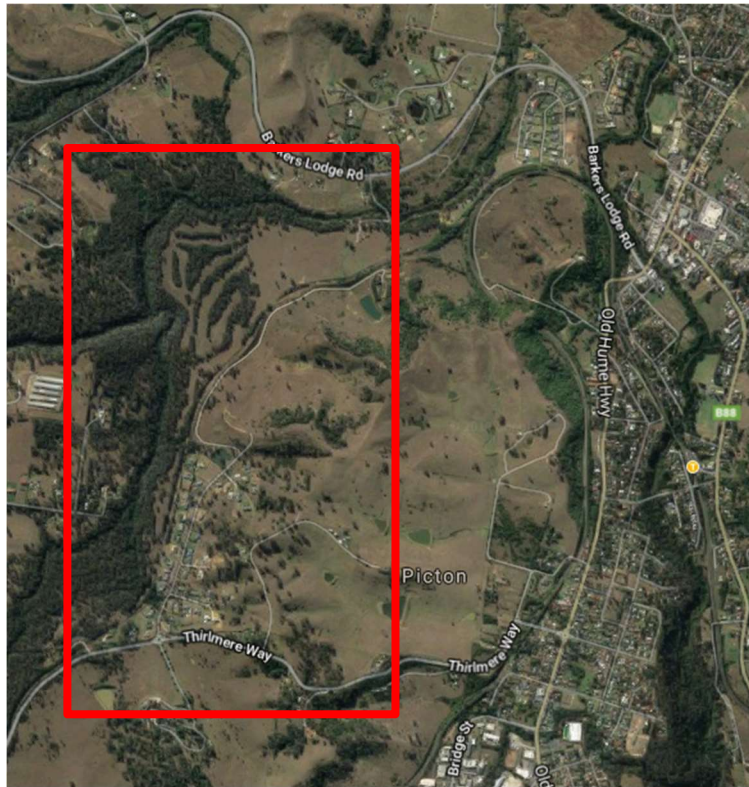


Plate 1.1 Indicative location of Longwall West 1-2.

2 Overview of proposed extraction plan

Tahmoor Coal proposes to extend underground coal mining at the Tahmoor Colliery to the north of LW32, which will include LW W1-W4. Under Condition 13H of DA 67/98 (as modified) an Extraction Plan is required for all second workings from LW W1 onward. The first Extraction Plan will cover LW W1-W2 which is the subject of this letter. An AHMP is required as part of the Extraction Plan for LW W1-W2. A separate Extraction Plan will be prepared for LW W3-W4 which Tahmoor Coal will keep the Aboriginal community updated about.

It is anticipated that the proposed LW W1-W4 will result in negligible subsidence impacts or environmental consequences and negligible loss of heritage value for Aboriginal and historical heritage items.

3 Background of previous archaeological investigations

Niche Environment and Heritage (Niche) completed an Aboriginal and European Heritage Assessment for a previous iteration of LWs 31-37 (which included the LW W1-W2 study area) and identified a number of Aboriginal sites through a search of the Aboriginal Heritage Information System (AHIMS) and additional survey (Niche, 2014). These sites are shown on the figure attached to this letter. Niche's 2014 assessment was completed in consultation with Cubbitch Barta Native Title Claimants and Tharawal Land Council. A copy of the 2014 Niche report is attached to this letter, noting that the design of the longwalls have since been modified to minimise impacts.

4 Objectives of the AHMP

The objectives of the AHMP are to identify the potential impacts to Aboriginal cultural heritage values by the proposed underground coal mining of LW W1-W2 and detail appropriate management measures, procedures

and protocols. The AHMP will include management strategies, controls and monitoring programs to be implemented for the management of Aboriginal heritage sites.

EMM will be conducting baseline recording of the AHIMS listed rock shelters within the study area prior to the commencement of mining. We will also be conducting an archaeological survey of the study area.

5 Methods and indicative timeline

5.1 AHMP

The AHMP and associated Extraction Plan is planned for submission to the Department of Planning and Environment (DPE) in April 2019. EMM will provide a copy of the AHMP to relevant Aboriginal parties upon submission.

Although the study area has previously been surveyed by Niche in 2014, EMM intend to conduct baseline recording relevant Aboriginal sites within the LW W1-W2 study area to increase the robustness of the AHMP. EMM will also conduct a survey of the LW W1-W2 study area with the assistance of suitably qualified Aboriginal representatives to ensure that all visible Aboriginal sites in the LW W1-W2 study area are documented in the AHMP. Details of the survey will be provided in a separate letter.

5.2 Aboriginal cultural heritage assessment

The subsidence associated impacts of LW W1-W2 study area on Aboriginal sites is currently undetermined following realignment of these longwalls since the Niche's 2014 assessment. Considering that the Extraction Plan (including longwall layout and associated subsidence effects and impacts) has changed since Niche's 2014 assessment, a new Aboriginal cultural heritage assessment (ACHA) is required in addition to the AHMP listed above, to determine if an Aboriginal heritage impact permit (AHIP) is needed for works to proceed. The ACHA process is separate to the proposed AHMP but will use information gathered during the AHMP process. The ACHA will intend to cover a proposed LW W1-W4 study area. EMM will be initiating the ACHA process in the near future and will keep the Aboriginal community updated on this matter. The AHMP may need to be updated later this year based on the outcomes of the ACHA.

6 Request for cultural information

To assist in the preparation of the AHMP, EMM are seeking cultural information about the LW W1-W2 study area.

Aboriginal heritage incorporates a wide range of values such as stories, traditions and cultural practices. EMM welcomes advice from the Aboriginal community about Aboriginal cultural values (which might include archaeological sites or other types of values) relevant to the project area and its surrounds.

EMM is relying on the Aboriginal community for advice on non-archaeological, including intangible, Aboriginal values for the study area. We are happy to discuss any information which you are willing to share and will respect confidentiality where requested. Email is our preferred method of communication (see contact details at the end of this letter) but we will also accept letters and telephone conversations. Note that any issues that are unable to be resolved prior to the AHMP submission will be addressed in the subsequent ACHA for the LW W1-W4 study area.

Please contact us at your earliest opportunity and if you have any questions in reference to this project please feel free to contact me via email or my direct number, 0433 398 733.

Yours sincerely

A handwritten signature in black ink that reads "P Chauvel". The letter "P" is large and stylized, with a loop at the top. The first name "P" is followed by a space and then the last name "Chauvel" in a cursive script.

Pamela Chauvel

Consultant Archaeologist

pchauvel@emmconsulting.com.au

LEGEND

- HERITAGE SITES
- ARCHAEOLOGICAL SITES
- AXE GRINDING GROOVES
- OPEN CAMP SITE
- ISOLATED FIND
- SHELTER WITH ART; SHELTER WITH DEPOSIT
- SHELTER AND GRINDING GROOVE
- ▲ BURIAL SITE
- ▲ MODIFIED TREE
- ▲ POTENTIAL ARCHAEOLOGICAL DEPOSIT

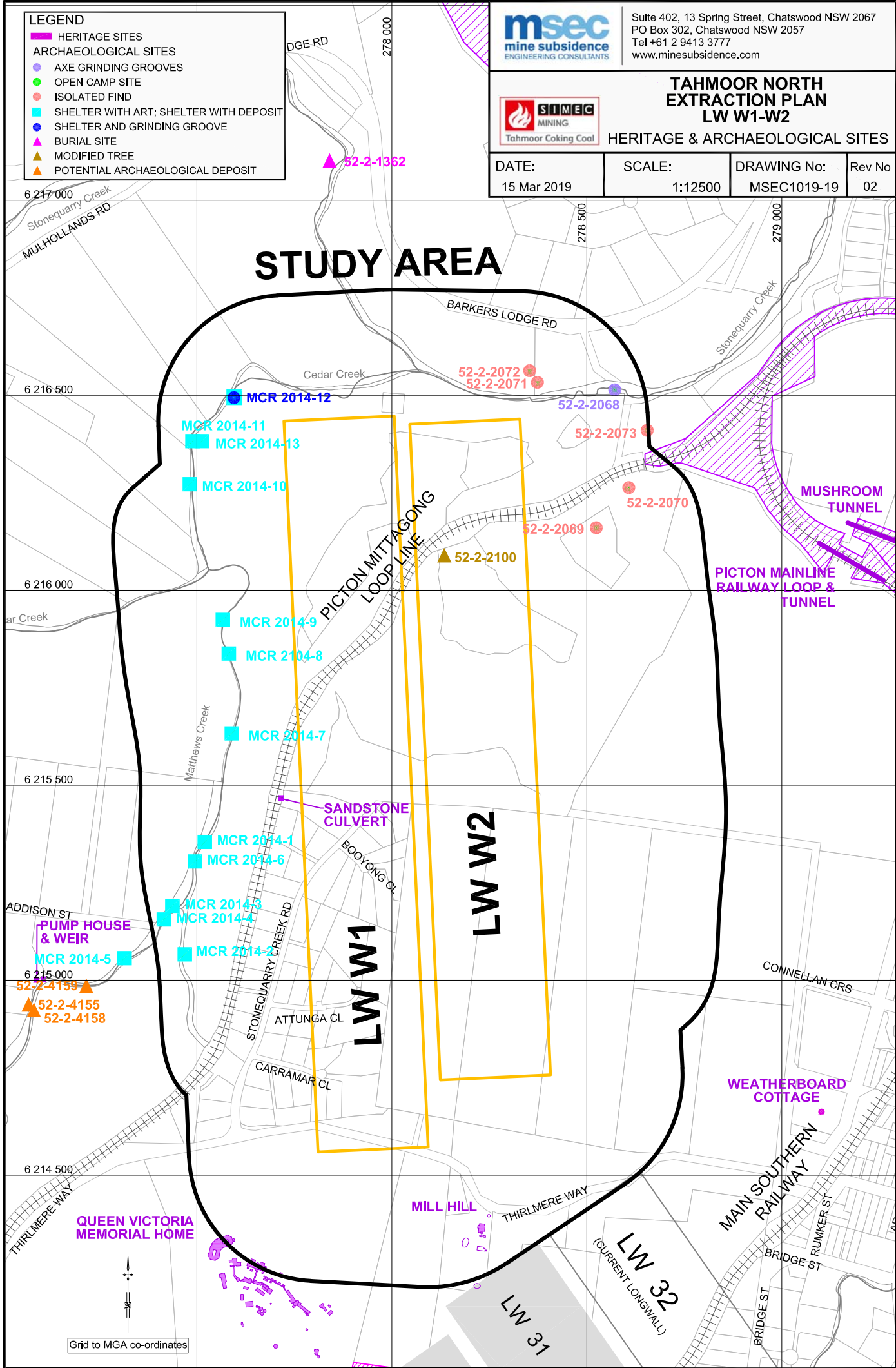


Suite 402, 13 Spring Street, Chatswood NSW 2067
 PO Box 302, Chatswood NSW 2057
 Tel +61 2 9413 3777
 www.minesubsidence.com



**TAHMOOR NORTH
 EXTRACTION PLAN
 LW W1-W2**
 HERITAGE & ARCHAEOLOGICAL SITES

| | | | |
|----------------------|-------------------|----------------------------|--------------|
| DATE: 15 Mar 2019 | SCALE: 1:12500 | DRAWING No: MSEC1019-19 | Rev No 02 |
|----------------------|-------------------|----------------------------|--------------|



Grid to MGA co-ordinates

10 May 2019

Ground floor, 20 Chandos Street
St Leonards NSW 2065
PO Box 21
St Leonards NSW 1590

T 02 9493 9500

E info@emmconsulting.com.au

www.emmconsulting.com.au

Re: Tahmoor Mine LW W1-W4 ACHA methodology and request for cultural information

1 Introduction

Thank you for registering your interest in being consulted on Aboriginal cultural heritage matters for the extraction of Longwalls West 1 to West 4 (LW W1-W4) located in the Tahmoor Mine Western Domain. EMM Consulting Pty Ltd (EMM) is preparing an Aboriginal Cultural Heritage Assessment (ACHA) for the project for Tahmoor Coal Pty Ltd (Tahmoor Coal). The ACHA will support an Aboriginal Heritage Impact Permit (AHIP) application which will be sought for impacts to known sites located within the area of the proposed longwall extension area.

The aims of this letter are to:

- provide an overview of the project and approval pathways;
- establish the purpose and aims of the Aboriginal consultation process;
- provide your party with an opportunity to inform EMM about any Aboriginal cultural heritage values associated with the project and how they may affect, inform or refine the project and/or assessment methods;
- identify any culturally appropriate protocols that registered parties wish to be adopted during the information gathering process (eg protocols during field survey, or handling of culturally sensitive information); and
- present a draft of the intended ACHA methods for your review and comment.

This document is provided in accordance with sections 4.2 and 4.3 of the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, which sets out the Aboriginal consultation requirements for the project.

We welcome your written feedback at your earliest convenience, and no later than **7 June 2019**. **Letters attached to an email is the preferred mode of written communication as it will reduce postal waiting periods.** For those registered parties who are sole traders, we will only be able to accept feedback from the person registered as the sole trader.

2 Project information and Study Area

The Tahmoor Mine is located approximately 80 km south-west of Sydney between the towns of Bargo and Tahmoor in New South Wales (Figure 2.1). Tahmoor Coal has previously mined 31 longwalls to the north and west of the Tahmoor Mine current pit top location and is currently extracting Longwall 32.

Following extraction of Longwalls 26 to 32, Tahmoor Coal proposes to extend underground coal mining to the north-west of the Main Southern Railway in the area referred to as the Western Domain, which will include LW W1 - W4. The first two longwalls to be mined are LW W1 and LW W2.

Longwall mining is a method of underground coal mining that involves the extraction of large panels of coal by progressively shaving slices of coal from the longwall face under the protection of roof supports. As coal is excavated the weight of the overlying ground, originally supported by the coal, becomes supported only by the remaining pillars or walls. This causes the mine void walls to compress and the overlying rock to crack and tilt into the void.

Subsidence occurs as the surface settles. Subsidence effects can include cracking of the ground surface, or areas where the ground surface is pushed upwards.

The Study Area has been defined as the surface area that could be affected by the mining of LW W1-W4 (Figure 2.2). The extent of the Study Area has been calculated by combining the areas bound by the following limits:

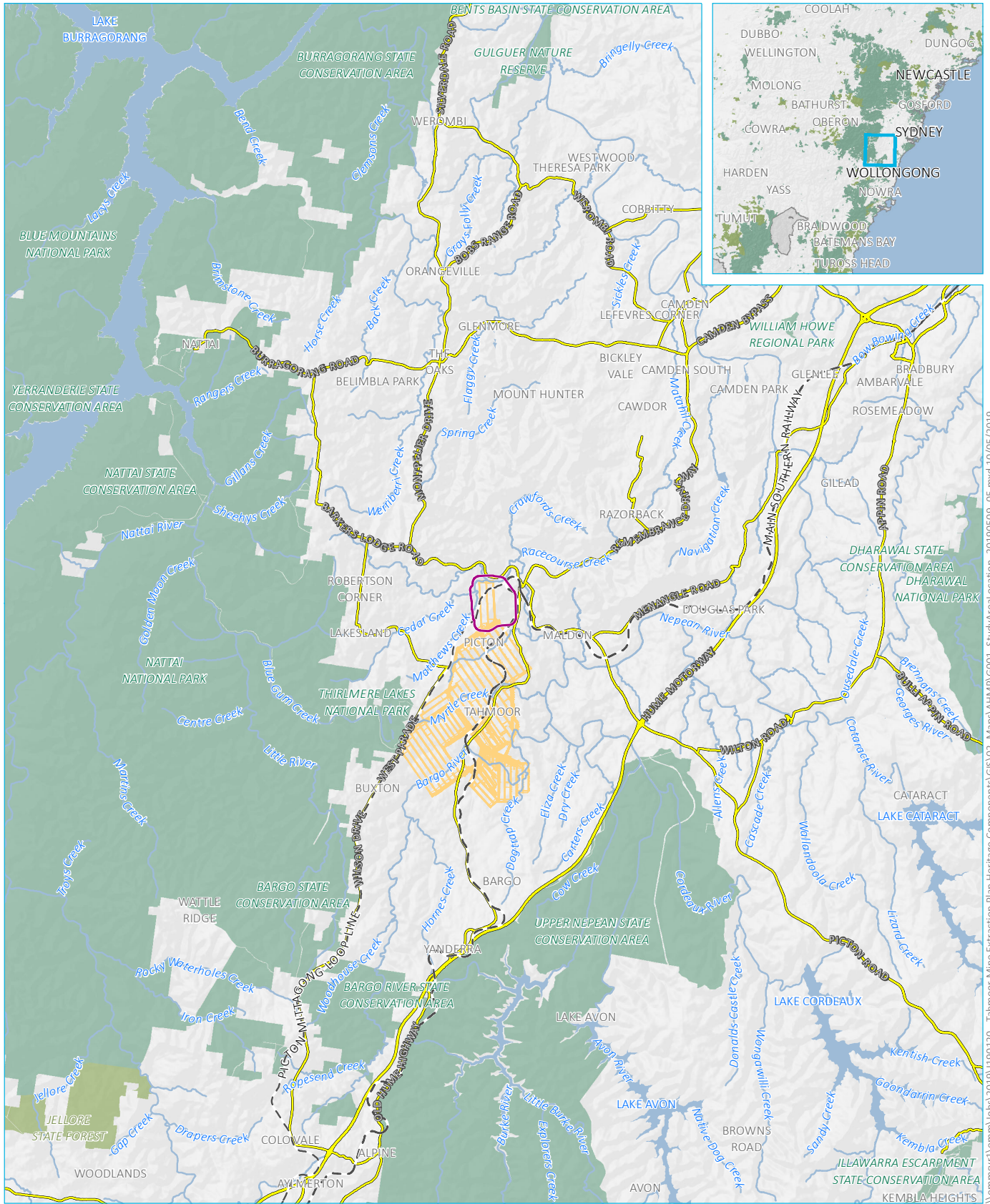
- a 35-degree angle of draw from the extents of LW W1–W4; and
- the predicted limit of vertical subsidence, taken as the 20 mm subsidence contour resulting from the extraction of the proposed longwalls.

A 600 m longwall buffer that encompasses an area wider than the Study Area, is also considered in order to capture sites that could experience far-field or valley related movements and could be sensitive to such movements.

Archaeological sites which are most susceptible to subsidence-induced damage are rock shelters in caves or overhangs, generally associated with cliff lines. Streams and valleys are the natural surface features most sensitive to subsidence movements. Axe grinding groove sites and rockshelters are located along the valleys of streams and therefore could experience valley related movements.

Impacts to open sites, such as open artefact scatters and scarred trees, are limited to cracking in the surface soils which could lead to erosion channels if left untreated. It is unlikely that the artefacts or trees themselves would be impacted by surface cracking.

Longwall mining of LW W1 - W4 will involve subsurface activity only. Surface construction related activities are not anticipated.

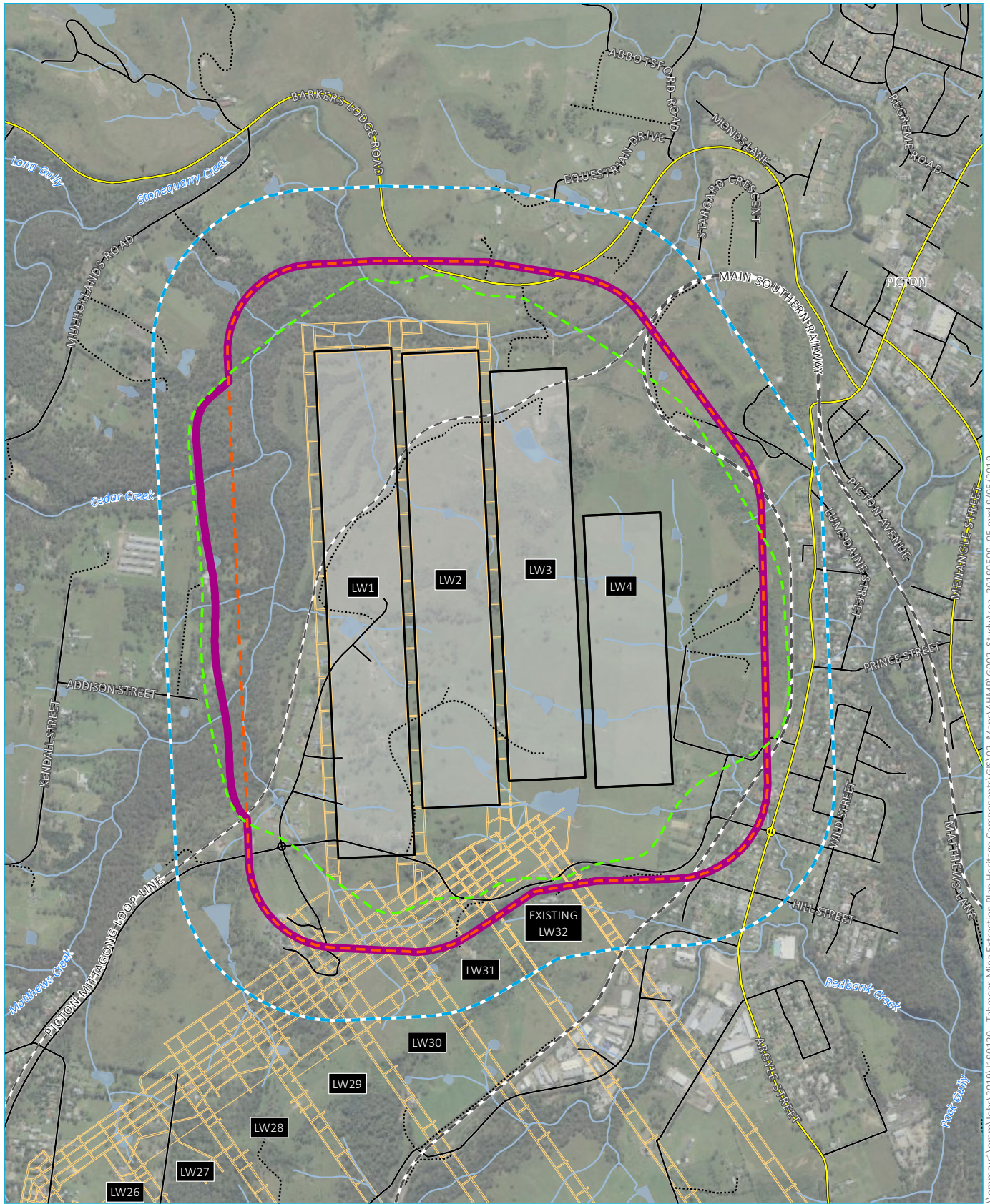


- KEY**
- Study area
 - Mine plan
 - Rail line
 - Main road
 - Watercourse/drainage line
 - Waterbody
 - NPWS reserve
 - State forest

Study area location

Tahmoor coal mine extraction plan LW W1-W4
Aboriginal heritage management plan
Figure 2.1

\\vemmsvr1\emms\Jobs\2019\1190120 - Tahmoor Mine Extraction Plan Heritage Components\GIS\02_Maps\AHMP\G001_StudyAreaLocation_20190509_05.mxd 10/05/2019



Source: EMM (2019); DFSI (2017); GA (2011); SIMEC (2019)

KEY

- Study area
- Predicted 20 mm subsidence
- 35 degree angle of draw
- Longwall buffer (600 m)
- Long wall
- Mine plan
- Rail line
- Main road
- Local road
- Vehicular track
- Watercourse/drainage line
- Waterbody

Study area

Tahmoor coal mine extraction plan LW W1-W4
Aboriginal heritage management plan
Figure 2.2

\\emmsvr1\emms\Jobs\2019\190120 - Tahmoor Mine\Extraction Plan\Heritage Components\GIS\02_Maps\AHMP\G002_StudyArea_20190509_05.mxd 9/05/2019

3 Archaeological background

The following information is provided so that your party is introduced to the landscape within the Study Area and its archaeological context. Hopefully this will allow areas of potential cultural importance to be identified during the early stages so that it can be considered during the upcoming site visit. This is intended as an overview only, and the ACHA will provide the more detailed background research and analysis.

3.1 Landscape overview

The Study Area is located on the south-western edge of the Sydney Basin within the Wollondilly Local Government Area. It sits within the Cumberland Lowlands in a transitional zone between the Cumberland Plain to the north, and the Woronora Plateau to the south-east. The topography of the Study Area is generally hilly and undulating in a rural district that has been largely cleared for pastoral grazing.

The Study Area is dominated by two major landform patterns: rolling hills featuring a ridgeline with associated spurs, and deeply incised stream channels forming cliffs and gorges. The centre of the Study Area is characterised by a broad ridge line that is generally on a north-east/south-west axis. From this major ridgeline there are a series of spur lines, occasionally forming large benches at certain contours, that primarily lead west and east from the ridgeline but occasionally curve to have north-facing aspects. The spurs occur at a range of gradients, often decreasing in slope at the base of the hills and fanning into foot slopes and flats. The southern and eastern portion is predominantly cleared pasture on low rolling hills with minor drainage lines.

The western and northern portion of the Study Area is characterised by the deeply incised stream channels of Matthews Creek, Cedar Creek and, to a lesser extent, Stonequarry Creek. These streams occur on Hawkesbury Sandstone geology and often feature outcropping sandstone rock benches, broken scarps and cliffs and expanses of outcropping sandstone bedrock.

Within the Study Area, the underlying geology is the Wiannamatta Group Shales and Hawkesbury Sandstone with sandstone outcropping exposed along incised and downstream sections of the creeks.

3.2 Overview – Aboriginal sites

This section outlines the findings of prior archaeological assessments of the Study Area. Table 3.1 provides more specific details about the Aboriginal sites that have been identified within the Study Area. A map of these sites is presented as Figure 3.1.

Information about these sites has been informed by:

- An Aboriginal Heritage Information Management System (AHIMS) search by EMM completed on 14 March 2019 which identified 20 sites within the Study Area;
- Niche 2014, Tahmoor North Longwalls 31 to 37: Aboriginal and European Heritage Assessment, report for Tahmoor Coal Pty Ltd; and
- EMM 2019, Tahmoor Coal Mine Extraction LW W1-W2: Aboriginal Heritage Technical Study (AHTS) report for Tahmoor Coal (in draft).

3.2.1 Previous study, Niche (2014)

In 2014, Niche Environment and Heritage (Niche) conducted an ACHA for a previous mine plan which included the current Study Area for LW W1W4. Niche identified a number of Aboriginal sites through a search of the AHIMS and additional survey. Niche's 2014 assessment was completed in consultation with Cubbitch Barta Native Title Claimants and Tharawal Land Council.

Archaeological surveys undertaken by Niche (2014) identified a number of previously unrecorded rockshelters along Matthews Creek and Cedar Creek. Niche found that on the plateau and rolling hills, away from major drainage lines, the archaeological record consisted primarily of stone artefact sites, although detection was limited to areas of exposure and erosion. Larger sites containing stone artefacts, representative of more intensive or repeated use of particular areas by Aboriginal people in the past, were found in close proximity to drainage lines. Niche predicted that the extensive clearing of timber on the plain would have removed most culturally modified trees in the landscape. It was also observed by Niche that the grinding groove site on an exposed sandstone platform (#52-2-2068) is typical for the region and represents utilitarian use of these areas by Aboriginal people in the past.

3.3 EMM assessment for the AHTS LW W1-W2

As part of preparing an Aboriginal Heritage Technical Study (AHTS) for the extraction of the first two longwalls, LW W1W2, EMM conducted a partial survey of the LW W1–W4 Study Area over four days from 25–28 March 2019. During the survey, Stonequarry Creek, Matthews Creek, Cedar Creek and associated tributaries were inspected. The purpose of this fieldwork was to:

- verify the location of all rockshelters and grinding groove sites listed on AHIMS and in Niche (2014);
- record rockshelters to a baseline level sufficient to support future monitoring and recording under this AHTS; and
- meet with representatives of the Aboriginal community from Cubbitch Barta and Tharawal Local Aboriginal Land Council who were registered parties for the 2014 ACHA.

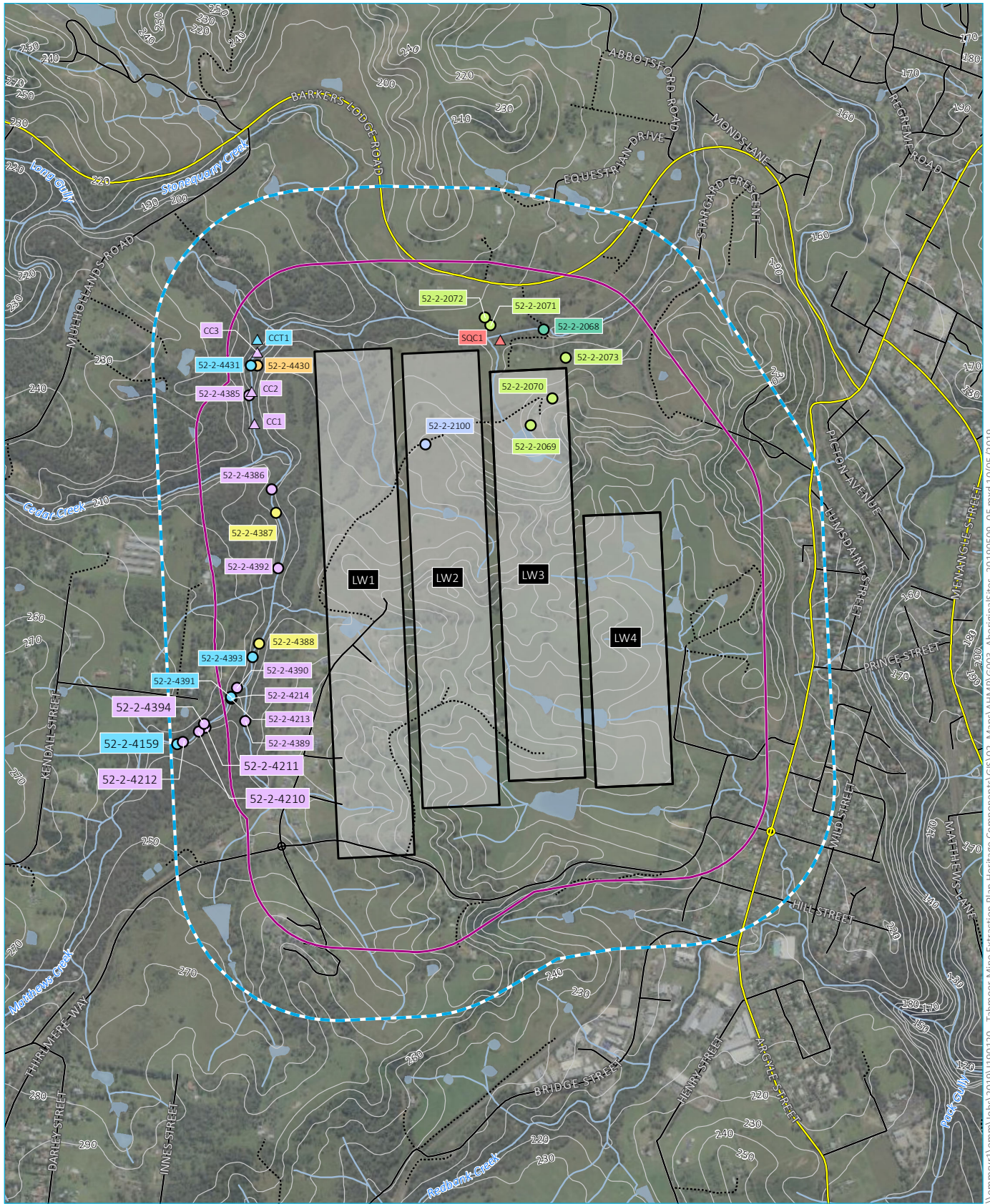
During field assessment for the AHTS, EMM identified an additional four rockshelter sites and one artefact scatter. These site locations are described in Table 3.1 included on Figure 3.1.

Table 3.1 Aboriginal sites within the Study Area

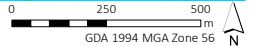
| AHIMS number | Site name | Site type | Description | Landform |
|--------------|---------------------|--------------------------------|---|-----------------|
| 52-2-2068 | Stonequarry Creek 1 | Grinding groove site | Two clusters of axe grinding grooves on a stone platform in the bed of Stonequarry Creek. A total of approximately 90 grooves. | Creek bed |
| 52-2-2069 | Isolated Finds 5 | Isolated find | Silcrete flake identified in a paddock used as grazing pasture. | Lower slope |
| 52-2-2070 | Isolated Finds 9 | Isolated find | Stone artefact identified on pastoral grazing land. | Lower slope |
| 52-2-2071 | Isolated Finds 2 | Isolated find | Flaked piece of white quartz, near a small tributary of Stonequarry Creek. | Lower slope |
| 52-2-2072 | Isolated Finds 1 | Isolated find | Chert flake near a small tributary of Stonequarry Creek. | Lower slope |
| 52-2-2073 | Isolated Finds 3 | Isolated find | Retouched silcrete flake with possible use-wear in a paddock. | Lower slope |
| 52-2-2100 | Clearview | Modified tree | White mahogany tree with scar 0.3x 0.75 cm, on pastoral land. | Lower slope |
| 52-2-4213 | QVMH-RS-001 | Shelter with PAD | Rockshelter with sandstone base, facing west. | Middle scarp |
| 52-2-4214 | QVMH-RS-002 | Shelter with PAD | Large rockshelter with small areas of PAD at either end, facing west. | Middle scarp |
| 52-2-4159 | QVMH-RS-007 | Rockshelter with art and PAD | Rockshelter with charcoal line drawings. | Lower scarp |
| 52-2-4212 | QVMH-RS-008 | Rockshelter with PAD | Rockshelter formed by cavernous weathering adjacent to QVMH-RS-007. | Lower scarp |
| 52-2-4211 | QVMH-RS-09 | Rockshelter with PAD | Rockshelter with areas of PAD at the front of the shelter. | Middle scarp |
| 52-2-4210 | QVMH-RS-010 | Rockshelter with PAD | Rockshelter with areas of PAD at the front of the shelter. | Middle scarp |
| 52-2-4388 | MCR 2014 - 1 | Shelter with artefacts and PAD | Large cavernous rockshelter, 2 artefacts (quartz core and chert distal flake) and PAD. | Middle scarp |
| 52-2-4389 | MCR 2014 - 2 | Shelter with PAD | Small, low rockshelter with PAD. | Scarp footslope |
| 52-2-4390 | MCR 2014 - 3 | Shelter with PAD | Shallow and wide, high sandstone shelter with PAD. | Upper scarp |
| 52-2-4391 | MCR 2014 - 4 | Shelter with art and PAD | Rockshelter with art comprising over 20 red ochre hand stencils on the back wall and ceiling in 4 panels, PAD. RAPs noted that the site has special significance and cultural values. | Middle scarp |
| 52-2-4394 | MCR 2014-5 | Rockshelter with PAD | Large high sandstone rockshelter formed by cavernous weathering with substantial sandy-loamy deposit. | Lower scarp |
| 52-2-4393 | MCR 2014 – 6 | Shelter with art | Rockshelter with art comprising two panels of indeterminate charcoal line drawings overlain with charcoal graffiti. | Middle scarp |

Table 3.1 **Aboriginal sites within the Study Area**

| AHIMS number | Site name | Site type | Description | Landform |
|---------------------|------------------|--|--|-----------------|
| 52-2-4392 | MCR 2014 - 7 | Shelter with PAD | Low rockshelter with PAD. | Middle scarp |
| 52-2-4387 | MCR 2014 - 8 | Shelter with artefacts, PAD | Shelter with substantial soil deposit and artefacts comprising quartz flakes, quartz debitage, a silcrete flake and a chert flake. | Middle scarp |
| 52-2-4386 | MCR 2014 - 9 | Shelter with PAD | Low, cavernous rockshelter with PAD. | Middle scarp |
| 52-2-4385 | MCR 2014 - 10 | Shelter with PAD | Shallow rockshelter with limited PAD. | Middle scarp |
| 52-2-4431 | MCR 2014 - 11 | Shelter with art and PAD | Large rockshelter with art comprising two panels of indeterminate charcoal line drawings on the ceiling. | Middle scarp |
| 52-2-4430 | MCR 2014 – 12 | Shelter with art, grinding groove, and PAD | Large rockshelter with art comprising of at least 5 panels with red ochre infill, charcoal line, charcoal infill and detailed charcoal drawings of fish, kangaroos and wallabies, anthropomorphic figures, eels and boomerangs. 20 artefacts (18 quartz and 2 silcrete) and bone fragments. 5 parallel grinding grooves on a boulder under the drip line in the centre of the shelter. | Middle scarp |
| To be confirmed | CCT 1 | Shelter with art | Rockshelter with charcoal markings beside a western tributary to Cedar Creek. | Middle scarp |
| To be confirmed | CC 1 | Shelter with PAD | Rockshelter formed by cavernous weathering, 5 m from Cedar Creek with PAD at southern end. | Scarp footslope |
| To be confirmed | CC 2 | Shelter with PAD | Rockshelter above Cedar Creek, rockfall has reduced area of PAD. | Middle scarp |
| To be confirmed | CC 3 | Shelter with PAD | Rockshelter with PAD formed by cavernous weathering, above Cedar Creek. | Middle Scarp |
| To be confirmed | SQC 1 | Artefact scatter | Eleven flakes (silcrete, chert and IMT) found within a 20 m ² area of eroding bank beside Stonequarry Creek. | Creek bank |



Source: EMM (2019); DFSI (2017); GA (2011); SIMEC (2019)



KEY

- | | | |
|---------------------------|--|-----------------------------|
| Study area | AHIMS sites | Aboriginal sites (EMM 2019) |
| Longwall buffer (600 m) | Isolated find | Rock shelter |
| Long wall | Rock shelter | Rock shelter with art |
| Contour (10 m) | Rock shelter with art | Artefact scatter |
| Main road | Rock shelter with art and grinding grooves | |
| Local road | Rock shelter, artefacts | |
| Vehicular track | Grinding groove site | |
| Watercourse/drainage line | Modified tree | |
| Waterbody | | |

Aboriginal sites within the study area

Tahmoor coal mine extraction plan LW W1-W4
Aboriginal heritage management plan
Figure 3.1



\\emmsvr1\emms\Jobs\2019\1190\120 - Tahmoor Mine Extraction Plan Heritage Components\GIS\02_Maps\AHMP\G003_AboriginalSites_20190509_05.mxd 10/05/2019

4 Identifying Aboriginal cultural heritage values

If you are aware of any form of Aboriginal cultural heritage values (which might include archaeological sites or other types of values), please let us know so that we can take these values into account in the assessment. We would welcome any statement that describes how the Study Area and its surrounds might be significant.

We invite you to include the following in a letter:

- how the Study Area land is significant to Aboriginal people; and
- your views on the methods described below.

Please respond by email, letter, or fax as soon as possible to allow us to take all values into account in the Aboriginal cultural heritage assessment. We will ensure that the information presented to us is to keep confidential where it is demonstrated that confidentiality is required.

4.1 Identifying intangible and non-archaeological Aboriginal heritage values

Non-archaeological, including intangible, Aboriginal heritage values refer to places which have meaning in accordance with memory or tradition but are not necessarily associated with physical objects. Natural features of the landscape that are associated with non-archaeological Aboriginal heritage value may include places that may figure in traditional stories, places that may be associated with historical resources use, areas that may have been used as historical fringe camps, and areas that may have figured within a known traditional pathway. All such values can only be identified through archival research or interview with Aboriginal people with cultural knowledge.

4.2 Request for cultural information

In accordance with Section 4.3 of the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, EMM is seeking cultural information about the Study Area from Registered Aboriginal Parties (RAPs).

Aboriginal heritage incorporates a wide range of values such as stories, traditions and cultural practices. EMM welcomes advice from the Aboriginal community about Aboriginal cultural values (which might include archaeological sites or other types of values) relevant to the Study Area and its surrounds.

EMM is relying on the Aboriginal community for advice on non-archaeological, including intangible, Aboriginal values for the Study Area. We are happy to discuss any information which you are willing to share and will respect confidentiality where requested. Email is our preferred method of communication (see contact details at the end of this letter) but we will also accept letters and faxes and telephone calls to discuss relevant Aboriginal cultural heritage information. Please contact us at your earliest opportunity.

Knowledge of areas of cultural significance may include, but are not limited to:

- sites or places associated with ceremonies, spiritual/mythological beliefs and traditional knowledge, which date from pre-contact period; these activities do not have to have persisted until the present time;
- sites or places associated with historical associations, which date from the post-contact period and are remembered today (eg plant and animal resource use areas and known camp sites); and
- sites or places of contemporary significance, for which the significance has been acquired in recent times.

5 Draft assessment method

5.1 Relevant documents

This assessment will be completed in accordance with the following documents required to support an AHIP application:

- *Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW (the Code)* (DECCW 2010a);
- *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW* (DECCW 2010b); and
- *Aboriginal Consultation Requirements for Proponents 2010* (DECCW 2010c).

5.2 Assessment methods

The purpose of the assessment is to identify and manage the Aboriginal cultural heritage values of all areas that will be affected by the study. In summary, this will involve.

- consultation with RAPs to identify socio-cultural values of the Study Area and places of special significance that should be considered;
- a search of the AHIMS register for records of previously registered Aboriginal sites;
- a review of past Aboriginal heritage reports covering the Study Area;
- environmental landscape analysis to identify past Aboriginal resources and suitable occupation areas;
- synthesis of background research to develop a predictive model of Aboriginal site location;
- a site inspection of the Study Area with RAPs;
- an assessment of significance for Aboriginal cultural heritage values in the Study Area (with input from RAPs);
- an impact assessment of how the project will affect Aboriginal cultural heritage values in the Study Area; and
- development of management recommendations based on the results of the ACHA and input from RAPs during the consultation process and particularly from the draft ACHA review period.

The ACHA will determine if archaeological salvage works are required subsequent to the AHIP approval.

5.3 Archaeological survey

The archaeological survey sampling strategy for the ACHA is designed to build on the archaeological survey that was done by EMM in March 2019 as part of the AHTS for LW W1-W2, as well as following the requirements of the Code. EMM will identify any gaps in survey coverage and given the larger survey area, will undertake further survey to gather representative samples of landforms with archaeological potential to characterise the archaeological landscape. Additional survey will be subject to land access agreements.

The survey sampling strategy will aim to address the types of potential subsidence impacts from underground coal mining and target sites with the potential for subsidence impacts. In particular, the survey will focus on identifying sandstone-type sites that are deemed potentially susceptible to subsidence impacts. In the Study

Area, these sandstone-type sites include outcropping sandstone in the channels of Cedar, Matthews and Stonequarry Creeks, scarp and cliff landforms, and outcropping sandstone bedrock in the landscape.

The survey strategy will not aim to cover the entire ground surface of the Study Area or beyond. This is because much of the landscape comprises rolling hills that have low to negligible potential for sandstone-type sites to occur and therefore subsidence impacts to Aboriginal objects are considered highly unlikely in such areas.

6 Timeline

EMM will prepare a draft ACHA and provide it to RAPs for review mid-year.

We request that any cultural information held about the Study Area be provided to EMM within the 28-day review period of this letter. Information provided after this review period may not be reflected in the ACHA due to time constraints.

EMM will keep RAPs updated on the ACHA process and timeline.

7 Roles, functions and responsibilities

EMM propose the following general roles, functions and responsibilities for EMM and RAPs.

EMM are responsible for the following:

- conducting the Aboriginal cultural heritage assessment;
- facilitating the Aboriginal consultation process; and
- considering the cultural perspectives, views, knowledge and advice of the RAPs in assessing cultural significance and developing management measures.

RAPs are responsible for the following:

- providing cultural perspectives, views, knowledge and advice to EMM;
- indicating areas of cultural significance (if known and relevant to the Study Area);
- having an awareness and understanding of the commercial environment and constraints in which Tahmoor Coal operates; and
- demonstrating awareness and understanding of the opportunities to input into the ACHA and management recommendations.

We recommend that you refer to the document *Aboriginal Consultation Requirements for Proponents 2010* (DECCW 2010) for further information about the consultation process. This can be downloaded at <https://www.environment.nsw.gov.au/resources/cultureheritage/commconsultation/09781ACHconsultreq.pdf>

8 What's next?

Following feedback from RAPs about the proposed methodology outlined in this letter and responses from RAPs to the request for cultural information regarding the Study Area and its surrounds, a site visit will be organised and RAPs notified of the details.

A draft report will then be prepared by EMM and submitted to all RAPs for review. Each RAP will be invited to submit relevant information on the identified Aboriginal cultural heritage values and management recommendations, which will be addressed in the final report.

9 In closing

We look forward to receiving any response your organisation wishes to make about the proposed method by **7 June 2019**. Your response will be documented and considered in the assessment. Most importantly, your cultural information is also welcome within this timeframe; but it can also be submitted up until the completion of the draft ACHA.

Please feel free to contact me with any questions.

Yours sincerely,

A handwritten signature in black ink that reads "P Chauvel". The signature is written in a cursive style with a large, looped initial "P".

Pamela Chauvel
Consultant Archaeologist
pchauvel@emmconsulting.com.au



Community Information Session Tahmoor North Mining Operations

Picton Bowling Club

Thursday 13 June 2019 | 1pm to 7pm

MEMBER OF



Tahmoor Coking Coal Operations (TCCO) is committed to ensuring the community is informed and up to date with our mining operations. TCCO will commence mining in a new area known as the Western Domain in approximately November 2019.

The consultation process provides the community with the opportunity to ask TCCO and Subsidence Advisory NSW representative's questions regarding:

- Mine subsidence and your property;
- The Mine Subsidence Claims Process;
- The Western Domain proposed mine plan;
- How to arrange a free Pre-Mining Inspection;
- Tahmoor Mine operations; and
- Community Support Opportunities.

If you live in an area that might be affected by mine subsidence, would like to view mine plans, book a pre-mining inspection or would like to learn more about TCCO, please join us at the **Community Information Session** on **Thursday 13 June 2019** from **1pm to 7pm** at the **Picton Bowling Club**.

Samantha Beresford
Community Coordinator

Phone 1800 154 415
tahmoorenquiries@simecggf.com