



RPEQ
CONSULTING

MINING & GEOTECHNICAL ENGINEERING
AUSTRALIA | ASIA-PACIFIC

ANALYSIS
DESIGN
ASSESSMENT
CERTIFICATION

MINING & GEOTECHNICAL

MINING SUBSIDENCE AND GEOTECHNICAL ASSESSMENT

Response to Ipswich City Council
Information Request - Item 1

2 Morris Street
Tivoli QLD 4305

PREPARED FOR
Beige Block Pty Ltd

DEVELOPMENT APPLICATION
11083/2026/RAL

LOT ON PLAN
Lot 43 on
RP14624

LOT 43 | RP14624

2022 AERIAL

SITE CONTEXT

Boundary for orientation only

ASSESSMENT

COUNCIL REFERENCE
11083/2026/RAL

PREPARED BY
Craig Harris | RPEQ 13194
RPEQ Consulting

9 OCTOBER 2026
Revision A
For issue

DOCUMENT REFERENCE
RPEQ-2026-MORRIS-MIN-RPT
rpeq.com.au

Document Control

MINING SUBSIDENCE AND GEOTECHNICAL ASSESSMENT

REVISION A

Project particulars

Site / project	2 Morris Street, Tivoli QLD 4305
Lot on plan	Lot 43 on RP14624
Land area	2,024 m ² on survey/proposal 26-827 PROPOSAL [B], 6 August 2026
Development / scope	Reconfiguring a lot, 1 into 3 lots with access easement; existing dwelling retained
Applicant	Beige Block Pty Ltd
Planner	Steffan Harries Pty Ltd (Alexander Steffan, Director; Brittany Tyne, Graduate Town Planner), ref. STP5109
Council reference	11083/2026/RAL; earlier superseded planning scheme request 10250/2026/SPSR (decision notice 8 July 2026); assessing officer Kahlia Ward, assessing officer
Council request	Information Request issued 24 July 2026, item 1 (Geotechnical Report); response period ends 24 October 2026 per the planner's letter of 27 July 2026
Prepared for	Development application 11083/2026/RAL, as the mining and geotechnical input to the planner's coordinated response to the Information Request
Document number	RPEQ-2026-MORRIS-MIN-RPT

Issue and authorisation

Role	Name	Position	Registration / credential
Prepared by	Craig Harris	RPEQ Civil Engineer	RPEQ 13194
Approved for issue	Craig Harris	Responsible RPEQ	RPEQ 13194

Issue date	9 October 2026
Document status	Revision A, for issue
Issue restriction / purpose	For lodgement by the applicant's planner with the coordinated response to the Ipswich City Council Information Request dated 24 July 2026.

Revision history

Table-1 Revision history

Rev.	Date	Status	Description of change	Prepared	Reviewed	Approved
A	9 October 2026	For issue	First issue, in response to Ipswich City Council Information Request dated 24 July 2026, item 1.	CH	—	CH

Distribution and confidentiality

Distribution	Revision A: applicant (Beige Block Pty Ltd) and planner (Steffan Harries Pty Ltd), for lodgement with Ipswich City Council as part of the development application record.
Confidentiality	This report forms part of the public development application record. Unnecessary personal information is excluded.
Supersession	This report addresses Council item 1 for the application and draws on the July 2026 desktop mining report (Section 5.6).

Certification

This report has been prepared for Beige Block Pty Ltd in relation to development application 11083/2026/RAL over Lot 43 on RP14624, 2 Morris Street, Tivoli QLD 4305, in response to item 1 of the Ipswich City Council Information Request dated 24 July 2026.

It has been prepared and certified by the responsible Registered Professional Engineer of Queensland (RPEQ) named below.

Certification by the responsible RPEQ

The responsible RPEQ is responsible for the whole report, including its assessment, conclusions, recommendations and limitations.

Responsible RPEQ	Craig Harris, RPEQ 13194, RPEQ Consulting, ABN 80 293 733 401
Certifies	This report, including its assessment, conclusions and recommendations.
Signature	
Date	9 October 2026

Specialist peer review

Paul Buddery is the nominated specialist mining peer reviewer for Sections 5, 8, 9 and 10 and Appendix F. His public Board of Professional Engineers of Queensland (BPEQ) profile, checked on 7 October 2026, lists RPEQ 11644, Geotechnical (mining), Current, Practising Engineer, registered to 30 June 2027. The responsible RPEQ's profile lists RPEQ 13194, Civil, on the same current basis. The review scope and statement are recorded in Appendix G. [BPEQ (2026), Professional Engineer Registration Details: RPEQ 13194 and 11644; Appendix G.]

Peer reviewer	Paul Buddery, RPEQ 11644, Geotechnical (mining); specialist mining-subsidence peer reviewer
Reviews	Sections 5, 8, 9 and 10 and Appendix F: the mining-subsidence analysis, conclusions and recommendations
Responsibility	Limited to the peer review stated above; the report is certified by the responsible RPEQ
Signature	
Date	

Table of Contents

Document Control	2
Certification	4
Table of Contents	5
List of Figures	7
List of Tables	8
Abbreviations and terms	9
Executive Summary	10
1. Introduction	10
1.1 Purpose	10
1.2 Application background	11
1.3 Scope of this report	11
1.4 Basis of assessment and responsibility	11
1.5 Structure of this report	11
2. Council Information Request and Response Schedule	12
2.1 The request	12
2.2 Response schedule	12
2.3 Planning basis	13
3. Proposal and Site Context	14
3.1 The proposal	14
3.2 Site description	14
3.3 Access and services	15
3.4 Regional and local setting	16
4. Sources and Method	16
4.1 Sources	16
4.2 Method	17
4.3 Datums, units and terminology	18
5. Geology and Mining History	18
5.1 Regional geology	18
5.2 Coal seams	18
5.3 Collieries and workings	19
5.4 Depth of cover and working heights	19
5.5 Mine entries, shafts and surface features	20
5.6 Reconciliation with the July 2026 desktop mining report	20
5.7 Historical departmental borehole records	22
5.8 Recorded subsidence in Tivoli	23
6. Site Observations and Neighbour Evidence	24
6.1 Site inspection	24
6.2 Observations	24
6.3 Neighbour and local history evidence	24
7. Field Investigation and Laboratory Results	25
7.1 Investigation programme	25
7.2 Subsurface conditions encountered	25
7.3 Laboratory testing	25
7.4 Groundwater	26

8. Mining Subsidence Assessment.....	26
8.1 Conceptual ground and mining model.....	26
8.2 Mechanisms assessed	27
8.3 Pillar stability.....	27
8.4 Shallow collapse and surface expression	27
8.5 Broad-area deformation and adjoining influence	29
8.6 Sensitivity and alternative interpretations.....	29
8.7 Assessed constraint by lot.....	29
9. Development Implications and Recommendations	30
9.1 Proposed reconfiguration	30
9.2 Future structures on the proposed lots.....	30
9.3 Site preparation, earthworks, footings and services	30
9.4 Further investigation, monitoring and remediation	31
10. Basis and Limitations.....	31
10.1 Basis of the assessment.....	31
10.2 Limitations	31
11. Conclusions	31
12. References	33
12.1 References cited in this report.....	33
12.2 Development application records (Appendix H).....	35
Appendix A: Council Information Request and Planner's Letter.....	39
Appendix B: Source Extracts and Mine Plans	50
Appendix C: Maps and Data Sources	59
Appendix D: Site Photographs	67
Appendix E: Borehole Logs and Laboratory Reports	69
Appendix F: Calculations	78
Appendix G: Peer Reviewer Professional History and Review Record	79
Appendix H: Tivoli Development Applications on Mining-Affected Land.....	81

List of Figures

Figure 1 Site and surrounds on State aerial and cadastral context.....	15
Figure 2 Depth of the mine workings beneath the site compared with the local collapse range.....	28
Figure 3 Taylor desktop report: Table 1 seam depths at NS 374 and Garden Seam text	50
Figure 4 Taylor desktop report: Table 2 cover depths and working heights	51
Figure 5 Taylor Plan 4: Garden Seam workings, none beneath Lot 43	52
Figure 6 Taylor Plan 5: Tantivy Seam workings	53
Figure 7 Taylor Plan 11: tunnel entries and estimated reach of undocumented workings	54
Figure 8 Taylor Plan 12: composite of the levels of workings.....	55
Figure 9 Bore NS246 log: tools dropped 3 ft 8 in in old Garden Seam workings	56
Figure 10 Bore NS246 log: Tantivy Seam drop of 8 ft ½ in	57
Figure 11 GSQ Report 30 Figure 5: generalised bore sections including NS374.....	58
Figure 12 Proposal plan and borehole locations	60
Figure 13 Mining overlay OV3 classification of the site (Ipswich Planning Scheme 2006)	61
Figure 14 Mining overlay versions: OV3 and later OV8	62
Figure 15 Historical departmental borehole locations	63
Figure 16 DCP test results, BH1 and BH2.....	64
Figure 17 Taylor Plan 12 workings compared with the proposed lots	65
Figure 18 Rear yard with established trees	67
Figure 19 Rear boundary corner	67
Figure 20 Yard and green-clad structure	68
Figure 21 Roadside and driveway interface	68
Figure 22 Tivoli development applications: locality map	82
Figure 23 Tivoli development applications: locality map key.....	83
Figure 24 Tivoli development applications: Morris Street enlargement	84
Figure 25 Tivoli development applications: Morris Street enlargement key.....	85

List of Tables

Table-1 Revision history	3
Table-2 Council item 1: request components and where the report answers them	12
Table-3 Sources used in this report	16
Table-4 Tivoli development applications on mining-affected land: summary	18
Table-5 Estimated cover depth and working height of the seams beneath the site	19
Table-6 Taylor desktop report reconciliation	20
Table-7 Historical departmental borehole record summary	22
Table-8 Laboratory test results, samples from 0.4 m	26
Table-9 Planning scheme mining provisions and where this report addresses them	39
Table-10 Data and map sources	66
Table-11 Garden Seam cover-to-height ratio	78
Table-12 Tivoli development applications on mining-affected land	86

Abbreviations and terms

Abbreviation or term	Meaning
AHD	Australian Height Datum
BH1, BH2, BH02	Boreholes drilled for this assessment on 25 September 2026
BPEQ	Board of Professional Engineers of Queensland
BYDA	Before You Dig Australia
CA	Combined application (Council application type)
CBR	California Bearing Ratio, a soil strength test for pavements
Class P	Site classification for sites with abnormal moisture conditions, here from trees
CPT	Cone penetration test
CSIRO	Commonwealth Scientific and Industrial Research Organisation
DCP	Dynamic cone penetrometer, a hand-driven probe measuring soil resistance
GDA2020 / MGA zone 56	Geocentric Datum of Australia 2020, Map Grid of Australia zone 56 (map coordinates)
GSQ	Geological Survey of Queensland
H1	Highly reactive clay site class
ICC	Ipswich City Council
IPS	Ipswich Planning Scheme 2006
MA, MAMC, MAOC	Change applications to an existing approval (Council application types)
MCU	Material change of use (Council application type)
Moreton	Moreton Geotechnical Services Pty Ltd
NS	Departmental bore-series prefix used for the historical Ipswich boreholes (for example NS 374)
OD	Other development (Council application type)
OV3	Ipswich Planning Scheme 2006 overlay map OV3, Mining Constrained Area
OV8	Later City Plan mining overlay
OW	Operational work (Council application type)
PSD	Particle Size Distribution, a soil grading test
PSP2	Planning Scheme Policy 2, Information Local Government May Request
RAL	Reconfiguring a lot (Council application type)
RL	Reduced level, a height relative to a datum
RPEQ	Registered Professional Engineer of Queensland
SARA	State Assessment and Referral Agency
SPSR	Superseded planning scheme request
SPT	Standard penetration test
TMR	Department of Transport and Main Roads
Bord and pillar	Underground coal mining method in which roadways (bords) are cut through the seam, leaving pillars of coal to support the roof
Collapse migration (chimneying)	Upward progression of a roof collapse above a mine working; it stops when the broken rock, which bulks as it falls, fills the void
Cover	Thickness of ground between the surface and the roof of a mine working
Cover-to-height ratio	Cover divided by working height; locally, collapse has reached the surface only where this ratio was about 4–7, up to 9
Easement	Registered right of access or services over part of a lot
Factor of safety (pillar)	Pillar strength divided by the load on the pillar; values above 1 indicate the pillar carries its load
Relevellable stumps	Adjustable stumps that allow a house to be relevelled if the ground tilts or settles
Seam	A layer of coal within the rock sequence
Sinkhole	Local depression or hole at the surface caused by collapse into a shallow void
Subsidence (broad-area)	Gradual lowering, tilt and strain of the ground surface over a wide area, from yielding of deep workings
Working height	Height of coal extracted from the seam

Executive Summary

Council requests a geotechnical report, certified by a suitably qualified Registered Professional Engineer of Queensland (RPEQ), commenting on the mining subsidence constraints that may affect future structures on the proposed lots and providing recommendations for the proposed development and future development on the lots. This report draws on the July 2026 desktop mining report (Taylor Mining Services Pty Ltd, 2026), five historical departmental boreholes, published geological records, a site inspection, two boreholes with dynamic cone penetrometer (DCP) testing and laboratory tests, and 40 comparable Tivoli development applications with their mining reports and Council decisions.

Mining beneath the site. Taylor's composite Plan 12 shows the site beneath up to three levels of historical bord-and-pillar workings in the Tantivy, Waterstown and Tivoli seams, at estimated cover depths of 55–95 m, 128–150 m and 207–222 m respectively. No Garden Seam workings are documented beneath the lot: Taylor's Plan 4 shows the Garden Seam tunnels and workings away from Lot 43. Even if undocumented Garden workings were present, Taylor's estimated 16–27 m of cover over 1 m high workings gives a cover-to-height ratio of 16–27, well above the ratio of about 4–7, up to 9, at which collapse has historically reached the surface in the area. [Taylor Mining Services Pty Ltd (2026) PDF pp. 5–8, Plans 4 and 12; Moreton (2009a) PDF p. 6.]

Assessment. At these depths a roof collapse in any of the workings would choke itself off well below the surface, so sinkhole formation beneath the proposed lots is not a credible mechanism (Figure 2). The residual mining risk is gradual, broad-area ground movement of the kind that releveable stumps and flexible services are designed to accommodate. The near-surface profile is sandy clay becoming hard over extremely weathered rock at about 1.6–1.7 m, suitable for footings designed to the site classification.

Conclusion. The site is suitable for the proposed reconfiguration into three lots and for future residential development on each lot. The risk of mining subsidence affecting future structures is low and is managed by the recommendations in Section 9: releveable stumps or an equivalent flexible footing system, flexible service connections and pavements, controlled stormwater, and stop-work assessment of any mine opening encountered during works. These measures are consistent with section 11.4.5(4) of the Ipswich Planning Scheme 2006 and with the conditions Council has applied to comparable Tivoli reconfigurations.

1. Introduction

1.1 Purpose

This report is the mining subsidence and geotechnical assessment requested by Ipswich City Council at item 1 of its Information Request dated 24 July 2026 for development application 11083/2026/RAL, a reconfiguration of Lot 43 on RP14624 at 2 Morris Street, Tivoli QLD 4305 into three lots with an access easement. It is one of four inputs to the planner's coordinated response; the other three items (existing ancillary structures, lot and easement configuration, and the stormwater management plan) are addressed by others and are outside this report.

The report comments on the mining subsidence constraints that may affect future structures on the proposed lots and provides recommendations concerning the proposed development and future

development on the lots, as the request requires. Section 2 reproduces the request and shows where each component is answered.

1.2 Application background

The application was properly made on 9 July 2026 under the superseded Ipswich Planning Scheme 2006, following Council's decision of 8 July 2026 on superseded planning scheme request 10250/2026/SPSR. The Assessment Manager Confirmation Notice dated 23 July 2026 records code assessment with no referral agencies and no public notification. The Information Request was issued on 24 July 2026; the planner's letter of 27 July 2026 reproduces the request and records a response date of 24 October 2026.

Ipswich City Council (ICC) identifies the site as affected by the OV3 Mining Constrained Area overlay (OV3) of the Ipswich Planning Scheme 2006. The lodged Appendix B – Code Response (Steffan Harries Pty Ltd, 2026a, PDF pp. 28–29) addresses the mining overlay but treats the Existing Mined Areas outcomes as not applicable because no buildings are proposed. Council's subsequent Information Request nevertheless requires assessment of subdivision and future structures (ICC, 2026b, p. 1).

1.3 Scope of this report

The scope comprises the desk review of mining and geological records, site inspection, shallow geotechnical investigation, assessment of the mining subsidence mechanisms relevant to the site, and geotechnical recommendations for the reconfiguration and for future dwellings on the proposed lots.

The investigation comprised two auger boreholes, DCP testing and classification laboratory tests, with California Bearing Ratio (CBR) and Particle Size Distribution (PSD) tests on a BH02 sample by Soil Surveys Engineering (Soil Surveys Engineering Pty Limited, 2026a; Soil Surveys Engineering Pty Limited, 2026b). The results are reported in Section 7.

1.4 Basis of assessment and responsibility

The assessment is prepared and certified by Craig Harris, RPEQ 13194, with specialist mining peer review by Paul Buddery, RPEQ 11644, Geotechnical (mining). The request requires certification by an RPEQ experienced in the analysis of underground and surface mining within the Ipswich area; the certification and review arrangement is stated on the Certification page.

Sections 5 to 7 set out the historical mining records, site observations and investigation results. Section 8 assesses each subsidence mechanism against that evidence and states the constraint for each proposed lot. Section 9 gives the recommendations for the reconfiguration and for future dwellings, and Section 11 states the conclusions.

Early specialist comments (Paul Buddery, 21 September 2026) distinguished shallow civil geotechnical design from the mining assessment; that distinction is maintained in Sections 7 to 9.

1.5 Structure of this report

The report is set out as follows.

- **Section 2:** Council request and response schedule

- **Section 3:** Proposal and site
- **Section 4:** Sources and method
- **Section 5:** Geology and mining history, including reconciliation with the July 2026 desktop mining report
- **Section 6:** Site observations and neighbour evidence
- **Section 7:** Field investigation and laboratory results
- **Section 8:** Mining subsidence assessment and the constraint for each lot
- **Section 9:** Recommendations
- **Section 10:** Basis and limitations
- **Section 11:** Conclusions
- **Section 12:** References
- **Appendices:** A Council request and planner letter; B Source extracts and mine plans; C Maps and data sources; D Site photographs; E Borehole logs and laboratory reports; F Calculations; G Peer reviewer; H Tivoli development applications on mining-affected land

2. Council Information Request and Response Schedule

2.1 The request

Item 1 of the original Ipswich City Council Information Request dated 24 July 2026 reads:

The proposed development is identified as being affected by Council's OV3 – Mining Constrained Area overlay under the Ipswich Planning Scheme 2006 (IPS). To address assessment benchmarks within Part 11 - Overlays of the IPS, the applicant is requested to submit a geotechnical report prepared and certified by a suitably qualified RPEQ experienced in the analysis of underground and surface mining within the Ipswich area, generally in accordance with Section 11.4.5 of Division 4, Part 11 – Overlays of the IPS, and Planning Scheme Policy 2 – Information Local Government May Request. The geotechnical report is to comment on the mining subsidence constraints that may affect future structures on the proposed lots, and provide recommendations concerning the proposed development and future development on the lots.

Source: Ipswich City Council (2026b), Information Request 11083/2026/RAL, 24 July 2026, PDF p. 1. The original is reproduced in Appendix A.

2.2 Response schedule

The request is set out below by component, with the section of this report that answers each. Planning Scheme Policy 2 (PSP2) is the planning scheme policy listing the information Council may request.

Table-2 Council item 1: request components and where the report answers them

ID	Request component	Where answered	How the report responds
----	-------------------	----------------	-------------------------

ID	Request component	Where answered	How the report responds
1(a)	Report prepared and certified by a suitably qualified RPEQ experienced in the analysis of underground and surface mining within the Ipswich area	Certification page; Section 1.4; Appendix G	Certified by the responsible RPEQ with specialist mining peer review (Certification page; Appendix G)
1(b)	Generally in accordance with IPS 2006 Section 11.4.5 of Division 4, Part 11 (Overlays)	Section 2.3; Appendix A	Each provision of 11.4.5 mapped to the report section that addresses it; governing scheme version substantiated
1(c)	Generally in accordance with Planning Scheme Policy 2, Information Local Government May Request	Section 2.3; Appendix A	PSP2 information items for mining-constrained land mapped to report content
1(d)	Comment on the mining subsidence constraints that may affect future structures on the proposed lots	Sections 5, 8 and 9; Figures in Appendix C	Each proposed lot and the retained dwelling has a stated constraint and outcome (Section 8.7)
1(e)	Recommendations concerning the proposed development	Section 9; Section 11	Reconfiguration supported; easement, access, drainage and service requirements stated (Sections 9.1 and 9.3)
1(f)	Recommendations concerning future development on the lots	Section 9; Section 11	Footing, certification, drainage and stop-work requirements for future dwellings (Sections 9.2–9.4)

2.3 Planning basis

The assessment basis is the Ipswich Planning Scheme 2006, Version 03/2017, effective 19 October 2018, accepted for this application by Council decision 10250/2026/SPSR dated 8 July 2026 (ICC, 2026c, p. 1). The Information Request identifies the OV3 overlay, section 11.4.5 of Part 11, Division 4, and PSP2. The later City Plan mining overlay (OV8) is referred to only as context.

The report addresses land affected by underground mining under PSP2(3)(c), because the desktop record identifies workings beneath the site; the abbreviated influence-area report under PSP2(3)(d) therefore does not apply. No open-cut mining is recorded on the site; the OV8 surface-disturbance classification is consistent with the former Tivoli Collieries coal-washing facility that Taylor records next to the site (Taylor Mining Services Pty Ltd, 2026, PDF p. 5).

Part 11 section 11.4.5(3) addresses siting, infrastructure, foundations and mine entries. Its probable solutions at (4) include adjustable stumps and distances of 40 m from shafts/tunnel entries and 100 m from known subsidence areas (ICC, 2009, PDF p. 21). Taylor's Plan 4 places the Garden Seam tunnel entries outside the lot, and no subsidence area is known on it; Section 9 adopts adjustable (relevellable) stumps and requires assessment of any entry encountered during works. PSP2(3)(c) requires factual mining information and engineering treatment of cover, pillars, subsidence/strain/tilt, sinkholes, faults, adjoining influence and suitable development locations (ICC, 2006, PDF pp. 4–5). Appendix A maps each provision to the section of this report that addresses it.

3. Proposal and Site Context

3.1 The proposal

The application proposes to reconfigure Lot 43 on RP14624 into three lots with access easements. The existing dwelling is retained on Lot 1, the front lot; Lots 2 and 3 at the rear are intended for future dwellings (Steve Cooper & Associates Pty Ltd, 2026b).

The current proposal plan is Steve Cooper & Associates drawing 26-827, revision B, dated 6 August 2026 (Steve Cooper & Associates Pty Ltd, 2026a, p. 1), referred to in this report as the proposal plan. It shows a site area of 2,024 m² and levels to the Australian Height Datum (AHD). Easement A burdens Lot 1 and benefits Lots 2 and 3; Easement B burdens Lot 2 and benefits Lot 3.

3.2 Site description

The site is at 2 Morris Street, Tivoli, near the intersection with Moores Pocket Road (Figure 25). It has an area of 2,024 m² (Steve Cooper & Associates Pty Ltd, 2026a, p. 1) and falls gently from about 43 m AHD at its north-western corner to about 38 m AHD at its south-eastern corner (Taylor Mining Services Pty Ltd, 2026, PDF p. 3). The existing dwelling and light vegetation occupy the Morris Street half; the rear half is a fenced yard with established trees (Taylor Mining Services Pty Ltd, 2026, PDF p. 3; Section 6). The proposal plan, the two investigation boreholes and site photographs are shown in Appendices C and D.

Site and surrounds

Lot 43 RP14624 • 2 Morris Street, Tivoli

State aerial and cadastral context; existing development shown at capture date.



Aerial: Ipswich 2022, raster 5671; cadastre: Queensland, retrieved September 2026.
 © State of Queensland, CC BY 4.0. Cadastre is orientation only, not a survey.
 RPEQ Consulting | 7 October 2026 | Factual draft for technical review

Figure 1 Site and surrounds on State aerial and cadastral context

Source: State of Queensland, Ipswich 2022 aerial and retained cadastral geometry, CC BY 4.0; GDA2020 / MGA zone 56.
 Boundary is for orientation only. See Appendix C for source dates and coordinate limits.

3.3 Access and services

The site has frontage to Morris Street. Lots 2 and 3 will be reached by a shared driveway on Easements A and B, which will also carry their services. A Before You Dig Australia (BYDA) enquiry

for the site (enquiry 54171688, 8 September 2026) requested underground asset plans from NBN Co, Ipswich City Council, Energex, Telstra, Urban Utilities and APA Group Gas Networks. Ipswich City Council and APA Group Gas Networks reported no assets affected, and the Energex, Telstra and NBN Co networks are within the Morris Street and Moores Pocket Road reserves. Urban Utilities records no water or sewer main within the lot: the water main is in Morris Street, and a sewer main runs within the adjoining lot at 4 Morris Street, parallel to the shared north-eastern boundary. A private underground power supply runs from the dwelling to the shed. Any future excavation on the site requires a current enquiry. Section 9.3 sets out the mining-related requirements for the driveway and services.

3.4 Regional and local setting

Appendix C contains maps of the proposal plan and boreholes, the mining overlays, the historical departmental boreholes and the mine workings beneath the proposed lots. The maps are registered to the cadastre for illustration and do not replace survey control.

Council identified the site under OV3, and the later OV8 classification also places it in a mining-related area, which is the trigger for this assessment. The overlay symbols are schematic; the assessment of the workings rests on the mine records and plans in Section 5.

Residential development over former underground coal workings is established in parts of Ipswich, including Collingwood Park, Dinmore and Bundamba. The published accounts describe pillar-failure subsidence at Collingwood Park and local sinkholes at Dinmore and Bundamba where workings were shallow (Shen et al., 2010, PDF pp. 5 and 15; Taylor Mining Services Pty Ltd, 2013, PDF pp. 6–7). The outcome at any site depends on its own depth of workings and ground conditions, which Sections 5 and 8 assess for 2 Morris Street.

4. Sources and Method

4.1 Sources

The documents cited in this report are listed in Section 12. The main groups of sources are summarised below. Citation abbreviations are ICC (Ipswich City Council), GSQ (Geological Survey of Queensland), BPEQ (Board of Professional Engineers of Queensland) and Moreton (Moreton Geotechnical Services Pty Ltd).

Table-3 Sources used in this report

Source class	Examples	Use in this report
Council request and application documents	ICC (2026b), Information Request Steffan Harries Pty Ltd (2026b), planner letter ICC (2026c), superseded scheme decision ICC (2026a), confirmation notice Steffan Harries Pty Ltd (2026a), code response Steve Cooper & Associates Pty Ltd (2026b), lodged proposal plan	Request wording, planning basis and application details
Prior site-specific report	Taylor Mining Services Pty Ltd (2026), desktop mining report	Principal site-specific mining source (Section 5.6, Table-6)

Source class	Examples	Use in this report
Primary mining and geological records	Department of Development and Mines (n.d.-a–e), five borehole logs GSQ (n.d.-a–e), borehole summary sheets Government Chemical Laboratory (1967, 1968), coal analyses Staines (1964) and Cameron (1969), geological reports Taylor Mining Services Pty Ltd (2026) Plans 4–12, mine plans	Seam depths, working heights and mining history (Section 5)
Spatial data	ICC (2020b), OV3 mining overlay data State of Queensland (2022), aerial imagery Queensland cadastre (2026) GSQ (2026), borehole locations	Maps in Appendix C
Nearby applications and precedent reports	GeoTest Group (2026), 23 Moores Pocket Road Moreton (2009a), 2 Moores Pocket Road Moreton (2011e), 2 and 8 Moores Pocket Road Moreton (2019c), 8A Moores Pocket Road The Soiltesters (2019), 8A Moores Pocket Road	Local comparison of pillar stability, recommendations and ground conditions
Site, neighbour and investigation evidence	Independent Soil Testing (2026), borelogs and laboratory results Soil Surveys Engineering Pty Limited (2026a), CBR Soil Surveys Engineering Pty Limited (2026b), PSD Site photographs, 25 September 2026	Site conditions and near-surface soils (Sections 6–7)

4.2 Method

The assessment comprised verification of the request and planning basis; review and reconciliation of the historical mining and geological records; site inspection and dated site photographs; two boreholes with DCP testing and laboratory tests; assessment of each subsidence mechanism; and comparison with 40 Tivoli development applications and their mining reports (Appendix H).

Appendix H lists 40 Tivoli development applications on mining-affected land, with their mining reports and Council outcomes, and maps them by number. Council approved comparable reconfigurations, including 7655/2010/RAL (22 Boundary Street, Lot 60 on RP14624, one lot into three; Appendix H #9), 7509/2010/RAL (38 Greasley Street; #6), 4371/2011/RAL (36 Greasley Street; #11), 5481/2014/CA (36 Moores Pocket Road, one lot into three; #18) and 10167/2024/RAL (34 Greasley Street; #31), on the basis of desktop mining studies with site or roadside inspection, subject to conditions requiring design to the mining report recommendations and RPEQ structural certification (ICC, 2011c; ICC, 2010b; ICC, 2011a; ICC, 2014b; ICC, 2025a).

Table-4 Tivoli development applications on mining-affected land: summary

Outcome	Applications
Approved by Council	34
Approved on appeal (Planning and Environment Court)	2
Withdrawn	2
No decision found	2
Total	40

Where several publications describe the same historical event, it is counted once (Section 5.8).

4.3 Datums, units and terminology

Levels are referenced to AHD. Historical borehole reduced levels (RL) are reported as recorded; their datum is not stated. Horizontal positions are in GDA2020 / MGA zone 56 (the Geocentric Datum of Australia 2020, Map Grid of Australia zone 56). Historical logs give depths in feet and inches, converted at 1 ft = 0.3048 m.

5. Geology and Mining History

Key finding: Documented bord-and-pillar workings in the Tantivy, Waterstown and Tivoli seams lie about 55 m to 222 m beneath the site; no Garden Seam workings are documented beneath the lot.

5.1 Regional geology

The historical investigations describe the Rylance Abermain area as a faulted coal-bearing sequence with marked lateral variation in seam thickness, coal quality and interseam strata. Staines' Coal Resources—West Moreton (Ipswich) Coalfield, Part 17 (1964), records that the extractable Tantivy section diminished as workings advanced down dip and that faulting materially affected the Tantivy intersection in NS229 (Staines, 1964, PDF p. 6). Cameron's Coal Resources—West Moreton (Ipswich) Coalfield, Report 30 (1969), distinguishes areas on either side of the Tivoli Fault and documents variation and splitting in the Fiery and Waterstown seams (Cameron, 1969, PDF pp. 5–8). For that reason this report uses site-specific cover depths and working heights rather than regional averages.

Taylor describes conglomerate, sandstone, shale and coal, with beds dipping 12–14 degrees to the south-east, and places the site between the Tivoli and Gulland's faults (Taylor Mining Services Pty Ltd, 2026, PDF p. 4).

In this report, cover is the thickness of ground between the surface and the roof of a mine working, and working height is the height of coal extracted. The Abbreviations and terms section defines these and related terms.

5.2 Coal seams

The primary published record confirms mining in the Garden, Tantivy, Fiery, Waterstown, Tivoli and Eclipse sequence in the Rylance Abermain district, although worked seams and dates differ by mine area. Cameron reports that Rylance Abermain No. 2 commenced on the Tantivy seam in 1953 and that deteriorating extractable coal led to cessation on that seam by 1961; the later

development targeted Fiery reserves (Cameron, 1969, PDF p. 5). Staines independently records the deterioration and the cessation of Tantivy mining in September 1961 (Staines, 1964, PDF p. 6).

5.3 Collieries and workings

Key finding: Taylor's mine plans show no Garden Seam workings beneath Lot 43; the documented workings beneath the site are in the deeper Tantivy, Waterstown and Tivoli seams.

Garden Seam mining from the Dolly Varden, Garden and Engine tunnels dates from about 1870. Mine plans are no longer available; the workings were reported to extend up to 230 m from the tunnel entries, all of which had collapsed at the entrance by 1955 (Taylor Mining Services Pty Ltd, 2026, PDF p. 5). Staines reports old workings from the Dolly Varden tunnel encountered in bore NS246, where the log records tools dropping 3 ft 8 in (1.12 m) in the Garden Seam, consistent with Taylor's estimated Garden working height of 1 m. In the Tantivy Seam the same bore records a drop of 8 ft ½ in (2.44 m) from 253 ft (77 m), consistent with Taylor's Tantivy working height of 2.7 m. Taylor's Plan 4 shows no Garden workings beneath Lot 43. [Staines (1964) PDF p. 6; Department of Development and Mines (n.d.-d) pp. 2 and 5; Taylor Mining Services Pty Ltd (2026) PDF pp. 5 and 8, Plan 4; Appendix B.]

Taylor identifies documented bord-and-pillar workings beneath the site in the Tantivy Seam (Rylance Abermain No. 2, 1958 plan), the Waterstown Seam and the Tivoli Seam (Abermain, 1919 plan), and Fiery Seam workings to the south beyond Gulland's Fault, not directly beneath the site. Plan 12 combines them: most of the site lies beneath three levels of workings and the northern part beneath two. Plan 11 shows the estimated reach of undocumented workings from the old tunnel entries; these are historical estimates, not surveyed workings. [Taylor Mining Services Pty Ltd (2026) PDF pp. 6–7, Plans 5–8, 11 and 12.]

Taylor refers to historical creep in the area (Taylor Mining Services Pty Ltd, 2026, PDF p. 6); no surface movement is recorded at this site, and no combustion or ground distress has been reported. A 1993 Tivoli Collieries account records the treatment of mine entries in the area (Tivoli Collieries Pty Ltd, 1993, Building Approval Application – M.R. and L.M. Marsh: 1 Harris Street, reproduced in Moreton, 2025b, Desktop Mining Study at 81 Tantivy Street, Tivoli, PDF pp. 24–26).

5.4 Depth of cover and working heights

Taylor estimates the cover depth and working height of each seam in his text and summarises them in his Table 2; where the two differ, both are tested (Table-5).

Table-5 Estimated cover depth and working height of the seams beneath the site

Seam	Cover in Taylor's text (m)	Cover in Taylor's Table 2 (m)	Range tested in this report (m)	Working height (m)
Garden (if present; no workings documented beneath the lot)	10–30	16–27	16–27 adopted 10–30 tested	1.0
Tantivy	75–95	55–67	55–95	2.7
Waterstown	128–132	135–150	128–150	1.4
Tivoli	—	207–222	207–222	1.5

Fiery Seam workings (118–133 m) lie beyond Gulland's Fault and not beneath the site. Source: Taylor Mining Services Pty Ltd (2026) PDF pp. 5, 6 and 8.

This report adopts the Table 2 values and tests the full range of both; the conclusions in Section 8 hold for every value.

5.5 Mine entries, shafts and surface features

Key finding: No shaft or tunnel entry is recorded on, or has been observed at, the lot; the Garden Seam tunnel entries are outside it.

Taylor's Plan 4 locates the Dolly Varden, Garden and Engine tunnel entries outside Lot 43, and Denmead (1955, cited by Taylor) records that all three had collapsed at the entrance. No shaft or tunnel entry is shown on, or has been observed at, the lot. Section 9.4 sets out the response if an opening is encountered during works. [Taylor Mining Services Pty Ltd (2026) PDF p. 5, Plans 3, 4 and 11.]

The OV8 classification lists Surface Disturbance for the property, while the earlier OV3 classification does not. No open-cut mining is recorded on the site in the mine records reviewed; the classification is consistent with Tivoli Collieries' former coal-washing facility next to the site (Taylor Mining Services Pty Ltd, 2026, PDF p. 5; Figure 14).

A November 1993 Tivoli Collieries letter concerning a proposed nursery at 1 Harris Street reports no observed surface subsidence around specified sealed mine entries since backfilling, verified during a District Mines Inspector visit on 18 November 1993 (Tivoli Collieries Pty Ltd, 1993, reproduced in Moreton, 2025b, PDF pp. 24–26). This is favourable local evidence of the long-term performance of treated entries. The letter also anticipates gradual settlement of the Abermain shaft fill and cautions against building directly over it; Section 9 applies the same precaution to any entry encountered.

5.6 Reconciliation with the July 2026 desktop mining report

Key finding: Taylor's desktop report is the principal mining source; where its text and tables differ, this report tests both values.

The July 2026 Taylor desktop report is the principal site-specific mining source for this assessment. Table-6 sets out its material statements and how each is used here.

Historical bore depths, seam thickness, extracted height and cover are different quantities and are kept distinct. Cover is taken from Taylor's structure contours, which he derived from the listed depths in boreholes NS 374, NS 246, NS 239 and NS 229 (Taylor Mining Services Pty Ltd, 2026, PDF p. 6).

Table-6 Taylor desktop report reconciliation

Source statement	Pinpoint	Use in this assessment	Where used
Garden cover	Taylor Mining Services Pty Ltd (2026) PDF p. 5 estimates 10–30 m; PDF p. 8 gives 16–27 m	Table 2 value of 16–27 m adopted; text estimate of 10–30 m tested. Plan 4 shows no documented Garden workings beneath the lot.	Sections 5.4 and 8.4; Appendix F

Source statement	Pinpoint	Use in this assessment	Where used
Garden extraction height	Taylor Mining Services Pty Ltd (2026) PDF p. 8 gives 1.0 m; PDF p. 6 attributes 1.1 m historical worked sections to Fryar	1.0 m adopted; consistent with the 3 ft 8 in (1.12 m) tool drop in NS246 (Department of Development and Mines, n.d.-d, p. 2).	Section 8.4; Appendix F
Tantivy cover	Taylor Mining Services Pty Ltd (2026) PDF p. 6 gives 75–95 m across the site; PDF p. 8 gives 55–67 m	Table 2 (55–67 m) and text (75–95 m) both tested; outcome unchanged across 55–95 m.	Sections 8.3–8.4; Appendix F
Tantivy height	Taylor Mining Services Pty Ltd (2026) PDF p. 8 estimates 2.7 m. Staines (1964) p. 6 describes an initial worked banded section about 9 ft, later only 4 ft 6 in–5 ft extractable down dip	2.7 m adopted; consistent with Staines' initial worked section of about 9 ft (2.74 m).	Section 8.4; Appendix F
Waterstown cover	Taylor Mining Services Pty Ltd (2026) PDF p. 6 gives 128–132 m; PDF p. 8 gives 135–150 m	Text (128–132 m) and Table 2 (135–150 m) both tested; outcome unchanged across 128–150 m.	Sections 8.3–8.5; Appendix F
Fiery cover/extent	Taylor Mining Services Pty Ltd (2026) PDF p. 8 gives 118–133 m and a footnote that workings are not directly below the site; PDF p. 6 describes possible influence	Adjacent workings beyond Gulland's Fault, not directly beneath the site; considered for adjoining influence.	Section 8.5
Tivoli cover	Taylor Mining Services Pty Ltd (2026) PDF p. 8 gives 207–222 m; Moreton (2009a) PDF p. 5 gives 191 m at another house site	207–222 m adopted from Taylor Table 2.	Sections 8.3–8.5; Appendix F
NS374 depths	Taylor Mining Services Pty Ltd (2026) Table 1, PDF p. 5; Department of Development and Mines (n.d.-e) p. 1; Cameron (1969) Figure 5, PDF p. 24	Published markers of 123, 290, 343 and 580 ft corroborate Taylor's 37, 88, 105 and 176 m depths.	Section 5.7
Bore coordinate/RL basis	GSQ (n.d.-a-e) summary sheets and GSQ (2026), Boreholes Coal service, layer 0: five Ipswich NS boreholes coordinate comparison (Section 5.7) record legacy datum NA and different current GIS positions; Department of Development and Mines (n.d.-e) heading "R.L. Collar 132.52" differs from summary ground RL 39.81	Used for regional seam correlation; site cover is taken from Taylor's structure contours.	Section 5.7
Neighbour FoS/deformation	Moreton (2009a) PDF pp. 5–6 provides Tantivy/Tivoli FoS, strain, compression and tilt for its proposed house	Tantivy factor of safety 3.9 and Tivoli 1.3 at 2 Moores Pocket Road used as comparable local evidence of pillar performance.	Section 8.3
Investigation recommendation	Taylor Mining Services Pty Ltd (2026) PDF p. 8 recommends further investigation, possibly drilling/geophysics or both, under the engaged geotechnical RPEQ	Considered: further drilling or geophysics would not change the assessed mechanisms or recommendations and is not required.	Section 9.4

5.7 Historical departmental borehole records

Key findings

1. Five departmental bores lie within about 860 m of the site; the nearest, NS246 and NS374, are about 140 m and 150 m away.
2. The published GSQ Report 30 section for NS374 corroborates the seam depths Taylor used: 37, 88, 105 and 176 m (Cameron, 1969, Figure 5, PDF p. 24; Taylor Mining Services Pty Ltd, 2026, Table 1).
3. NS246 recorded old Garden Seam workings with a 1.12 m tool drop and a 2.44 m drop in the Tantivy Seam, consistent with Taylor's working heights of 1.0 m and 2.7 m (Staines, 1964, PDF p. 6; Department of Development and Mines, n.d.-d, pp. 2 and 5).

Original records for Ipswich NS 229, NS 239, NS 242, NS 246 and NS 374 were obtained from the Geological Survey of Queensland (GSQ) Open Data catalogue on 19 September 2026 (Department of Development and Mines, n.d.-a–e; GSQ, n.d.-a–e; Government Chemical Laboratory, 1967, 1968). The collection comprises five lithological logs, five summary sheets and two coal-analysis files: 12 PDFs containing 124 pages. These are historical coal-exploration records from the Rylance Abermain No. 2 area.

These are the bores Taylor used: NS 242, NS 246 and NS 374 for seam depths, and NS 374, NS 246, NS 239 and NS 229 for the seam structure contours (Taylor Mining Services Pty Ltd, 2026, PDF pp. 3–5). On the maps they are labelled BH-229 to BH-374.

Table-7 Historical departmental borehole record summary

Map label / NS	GSQ record	Drilling period	Total depth ¹	Held pages ²
BH-229 / 229	BH010179	24 Mar–8 Jun 1961	1496 ft 0 in 455.98 m	43 log + 1 summary 2 analysis
BH-239 / 239	BH010190	3–26 Jul 1961	574 ft 6 in 175.11 m	29 log + 1 summary
BH-242 / 242	BH010194	31 Jul–8 Aug 1961	291 ft 7 in 88.87 m	18 log + 1 summary
BH-246 / 246	BH010198	22 Aug–8 Sep 1961	551 ft 10 in 168.20 m	14 log + 1 summary
BH-374 / 374	BH010344	1–23 Sep 1965	963 ft 7 in 293.70 m	11 log + 1 summary 2 analysis

¹ Drilled depths transcribed from summary sheets; metric equivalents rounded to 0.01 m are conversions, not survey accuracy. ² File page counts, not an assertion of complete recovery or complete surviving records. Source: GSQ (n.d.-a–e), each summary sheet page 1.

The logs record lithology and drilling or recovery intervals. Their first pages distinguish cuttings, coring and missing material: NS 229 has an initial 100 ft (30.48 m) cuttings interval; NS 239 an initial 15 ft (4.57 m) openhole cuttings interval; NS 242 records no core sample for its first 15 ft (4.57 m); and NS 246 changes from openhole to coring at 72 ft 9 in (22.17 m).

The detailed NS374 log records no cuttings in its upper 611 ft 7 in. GSQ Report 30 Figure 5 depicts generalised NS374 depth markers at 123 ft, 290 ft, 343 ft and 580 ft within its open-hole part, equivalent to 37.5 m, 88.4 m, 104.5 m and 176.8 m. These closely corroborate the 37 m, 88 m, 105 m and 176 m attributed to NS374 by Taylor. [Cameron (1969) Figure 5, PDF p. 24; Department of Development and Mines (n.d.-e) p. 1; Taylor Mining Services Pty Ltd (2026) Table 1, PDF p. 5.]

The generalised bore sections support stratigraphic correlation across the area. They are not surveyed sections through the development, and the historical collar levels are on an unstated datum different from the current AHD survey; site cover is therefore taken from Taylor's structure contours rather than by direct level subtraction. [Staines (1964) Figures 3–4, PDF pp. 16–17; Cameron (1969) Figure 5, PDF p. 24; Steve Cooper & Associates Pty Ltd (2026a) p. 1 datum panel; GSQ (n.d.-e) p. 1.]

The NS 229 attachment contains a sample submission and Government Analyst certificate for Benley Seam samples RC 383 and RC 384, taken at 1465 ft 9 in–1470 ft 2 in and 1470 ft 2 in–1475 ft 5 in respectively. The certificate, dated 7 March 1968, reports ash of 33.8% and 66.0%, specific gravities of 1.590 and 2.038, washability fractions and further coal-quality results. The NS 374 attachment identifies Benley Seam tops sample RC 397 at 953 ft 2 in–958 ft 9 in; its 4 May 1967 certificate records 66.8% floats with 22.1% ash and 33.2% sinks with 66.2% ash at specific gravity 1.7 (Government Chemical Laboratory, 1967, 1968, both attachments pages 1–2). These are coal-quality results and are not used in the stability assessment.

5.7.1 Borehole locations

The bore locations are shown in Figure 15 (Appendix C), from the GSQ coal-borehole data (GSQ, 2026). Approximate distances from the centre of the site are:

- NS246: about 140 m
- NS374: about 150 m
- NS242: about 190 m
- NS239: about 390 m
- NS229: about 860 m

All five summary sheets state “NA” for collar height. Their ground-level reduced levels (RL) (19.82, 19.36, 43.66, 27.69 and 39.81 for NS 229, 239, 242, 246 and 374 respectively) have no stated vertical datum; they are retained as recorded and used for seam correlation, not converted to AHD. Taylor's structure contours, derived from these bores, provide the site cover depths used in Section 8. [GSQ (n.d.-a–e) p. 1; Taylor Mining Services Pty Ltd (2026) PDF p. 6.]

5.8 Recorded subsidence in Tivoli

Key finding: The recorded Tivoli subsidence events concern other properties; none is recorded at 2 Morris Street.

Grubb's 2012 study of 20 Boundary Road, Moores Pocket (Council address 20 Boundary Street, Tivoli), describes creep in the Fiery Seam in 1968 with surface effects in the Laurel Court–Boundary Street area (Moreton, 2012a, PDF pp. 3–4). His study of 9 Morris Street describes an

affected area immediately east of that property (Moreton, 2012b, PDF p. 4). Both describe the same 1968 event, and neither records movement or damage at 2 Morris Street.

A 2019 study of 109 Mt Crosby Road recounts a February 2001 inspection at adjoining 111 Mt Crosby Road, where a trench exposed a sandstone crack about 50 mm wide beneath about 0.5 m of soil, which the author attributed to past regional subsidence (Moreton, 2019a, PDF p. 4). The same report describes the available mine plan as showing the pillars remaining (Moreton, 2019a, PDF p. 5).

6. Site Observations and Neighbour Evidence

Key finding: No sinkhole, depression or mine-related ground feature is recorded at the site, and the existing dwelling has no reported distress.

6.1 Site inspection

The site was inspected by the responsible RPEQ on 25 September 2026, the day two boreholes were drilled and tested for this assessment (Section 7). The photographs document the fenced rear yard, established trees, garden edging, exterior structures, drilling and sampling, and the roadside. Independent Soil Testing (2026) describes grass with a few trees and poor surface drainage. No sinkhole, depression or other mine-related surface feature is recorded in the investigation report or the photographs. [Independent Soil Testing (2026) pp. 2 and 5; selected photographs in Appendix D.]

6.2 Observations

The existing dwelling on proposed Lot 1 is an established house over the mapped workings. The owner reports no cracking or structural distress, and no mining-related damage is recorded at the property. That performance is consistent with the assessment in Section 8 that the workings beneath the site do not affect the surface, and with the experience of nearby houses described below. It is supporting evidence of long-term ground behaviour, alongside the mine records and cover depths on which the assessment primarily rests. [Recorded client account, 18 September 2026.]

6.3 Neighbour and local history evidence

A 2019 site classification of 8A Moores Pocket Road, the property adjoining the rear of the site, records variable shallow weathering and reactive clay affected by trees (The Soiltesters, 2019, PDF pp. 3, 7–8, 12 and 15–18). It addresses foundation soils only and excludes mining; it is used here as local geological context.

Published nearby-property observations are consistent with this. Grubb's 2019 report records the apparent good condition of the existing house at 107 Mt Crosby Road and recommends stump-supported construction for the adjoining 109 Mt Crosby Road site (Moreton, 2019a, PDF p. 6).

For 109 Mt Crosby Road, Grubb assesses the Waterstown workings as long-term stable and treats the lower Tivoli and Eclipse workings similarly (Moreton, 2019a, PDF pp. 5–6). The same seams

underlie 2 Morris Street. The 1993 sealing letter for 1 Harris Street (Section 5.5) likewise records no surface subsidence around treated entries.

7. Field Investigation and Laboratory Results

Key finding: The boreholes encountered sandy clay becoming hard over extremely weathered rock at about 1.6–1.7 m, with no voids or disturbed ground; the site is classified Class P.

7.1 Investigation programme

The investigation was carried out on 25 September 2026 by Independent Soil Testing (job 26/2348): two auger boreholes, BH1 and BH2, with DCP tests and samples for laboratory testing. Appendix E reproduces the borelogs and laboratory results (Independent Soil Testing, 2026, pp. 1–3 and 6).

- Borehole positions: BH1 E477546.96 N6947833.61 and BH2 E477569.41 N6947816.19, GDA2020 / MGA zone 56, set out by measurement from the site boundaries (Independent Soil Testing, 2026, p. 2).
- DCP results are reproduced in Appendix E and plotted in Figure 16; refusal (20+ blows per 100 mm) was reached at 1.5 m in BH1 and 1.1 m in BH2 (Independent Soil Testing, 2026, p. 3).
- One PSD test (BH02) was carried out; it is reported for civil design reference. [Soil Surveys Engineering Pty Limited (2026b) p. 1; Appendix E.]
- The BH02 CBR result is available to the civil designer for the Easement B access pavement; pavement design is outside this report. [Soil Surveys Engineering Pty Limited (2026a).]
- Independent Soil Testing (2026) p. 6 lists methods AS 1289 2.1.1, 3.1.2, 3.2.1, 3.3.1, 3.4.1 and 6.3.2. Soil Surveys Engineering Pty Limited (2026a) identifies AS1289.6.1.1 and Soil Surveys Engineering Pty Limited (2026b) AS1289.3.6.1.
- DCP testing was used in place of the standard penetration test (SPT).

7.2 Subsurface conditions encountered

Both logs show shallow gravelly silty sand over gravelly sandy silty clay, becoming hard and grading to extremely weathered rock. The rock description begins at approximately 1.7 m in BH1 and 1.6 m in BH2, with practical refusal at about 1.9 m and 1.8 m respectively. No voids or disturbed ground were encountered. [Independent Soil Testing (2026) p. 3.]

7.3 Laboratory testing

Key finding: The near-surface clay is highly reactive, and the site is classified Class P because trees affect the soil moisture.

Table-8 Laboratory test results, samples from 0.4 m

Property	BH1	BH2
Moisture content	19.0%	15.5%
Liquid limit	51%	57%
Plastic limit	16%	19%
Plasticity index	35%	38%
Linear shrinkage	12.5%	15.5%

Source: Independent Soil Testing (2026) p. 6.

- The material is described as highly reactive (H1), and the site is classified Class P because of tree-related abnormal moisture; cut or fill can change the classification (Independent Soil Testing, 2026, pp. 1–2).
- BH02 sample (0–0.5 m): four-day soaked CBR 3.0% at 2.5 mm penetration, swell 3.0%, standard compaction, 4.5 kg surcharge (Soil Surveys Engineering Pty Limited, 2026a).
- BH02 grading: 63% passing 0.075 mm (Soil Surveys Engineering Pty Limited, 2026b, p. 1).
- Footing design for each dwelling follows the site classification at building stage.

7.4 Groundwater

No groundwater is recorded on the borelogs (Independent Soil Testing, 2026, p. 3). Water in the deep workings is addressed in Section 8.5.

8. Mining Subsidence Assessment

Key finding: Sinkhole formation is not a credible mechanism at the cover beneath the site; the residual mining risk is gradual broad-area movement, managed by the recommendations in Section 9.

This section assesses the mining subsidence constraint for the site from the evidence in Sections 5 to 7: the ground and mining model, the mechanisms by which the workings could affect the surface, the stability of the workings beneath and adjoining the site, and the sensitivity of the outcome to the stated ranges of cover and working height. Section 8.7 states the constraint and outcome for each proposed lot.

8.1 Conceptual ground and mining model

The ground model comprises reactive clay soils over extremely weathered rock at about 1.6–1.7 m, then the Ipswich Coal Measures sequence. Documented bord-and-pillar workings lie beneath the site in the Tantivy (55–95 m cover), Waterstown (128–150 m) and Tivoli (207–222 m) seams, with Fiery workings to the south beyond Gulland's Fault. No Garden Seam workings are documented beneath the lot. [Independent Soil Testing (2026) pp. 2–3; Taylor Mining Services Pty Ltd (2026) PDF pp. 5–8, Plans 4, 6 and 12.]

Figure 17 overlays Taylor's composite Plan 12 on the proposed lots: Lots 1 and 2 lie mainly over the three-level area and Lot 3 straddles the two- and three-level areas. Because all of those workings are deep, the number of levels affects the magnitude of possible broad-area movement, not the potential for collapse to reach the surface. [Taylor Mining Services Pty Ltd (2026) Plan 12, PDF p. 20; Steve Cooper & Associates Pty Ltd (2026a) p. 1; Appendix C.]

8.2 Mechanisms assessed

The mechanisms considered are those relevant to bord-and-pillar workings in the Ipswich Coal Measures: pillar instability and roof collapse; shallow collapse and progressive migration (chimneying) to the surface; sinkhole formation at shafts and shallow entries; broad-area deformation (subsidence, strain, tilt and compression) from pillar or floor failure; the influence of adjoining workings; and water-related change. Alternative causes of ground movement (reactive soil, fill, slope and drainage) are considered so that any distress is not attributed to mining by default.

8.3 Pillar stability

Key finding: Comparable local analysis shows a large margin of safety for the Tantivy pillars; any yielding of the deep Tivoli pillars would produce only gradual broad-area settlement.

Moreton's study of 2 Moores Pocket Road, nearby in the same seams, calculated Tantivy pillar strength of 13.5 MPa against a stress of 3.5 MPa (factor of safety 3.9) and Tivoli pillar strength of 15.0 MPa against 11.9 MPa (factor of safety 1.3) (Moreton, 2009a, PDF pp. 5–6). This is directly relevant local evidence: the Tantivy pillars have a large margin of safety, and the Tivoli pillars, while closer to their strength, lie at more than 200 m depth, where any pillar yielding produces only gradual, broad-area settlement at the surface.

A site-specific factor of safety would require pillar dimensions that the historical plans do not record precisely. It is not needed to reach the conclusions of this report: at the stated depths, the consequence of pillar instability is broad-area movement (Section 8.5), which the recommended footing system accommodates, rather than collapse reaching the surface. [Taylor Mining Services Pty Ltd (2026) Plans 5, 7, 8 and 12; Moreton (2009a) PDF pp. 5–6.]

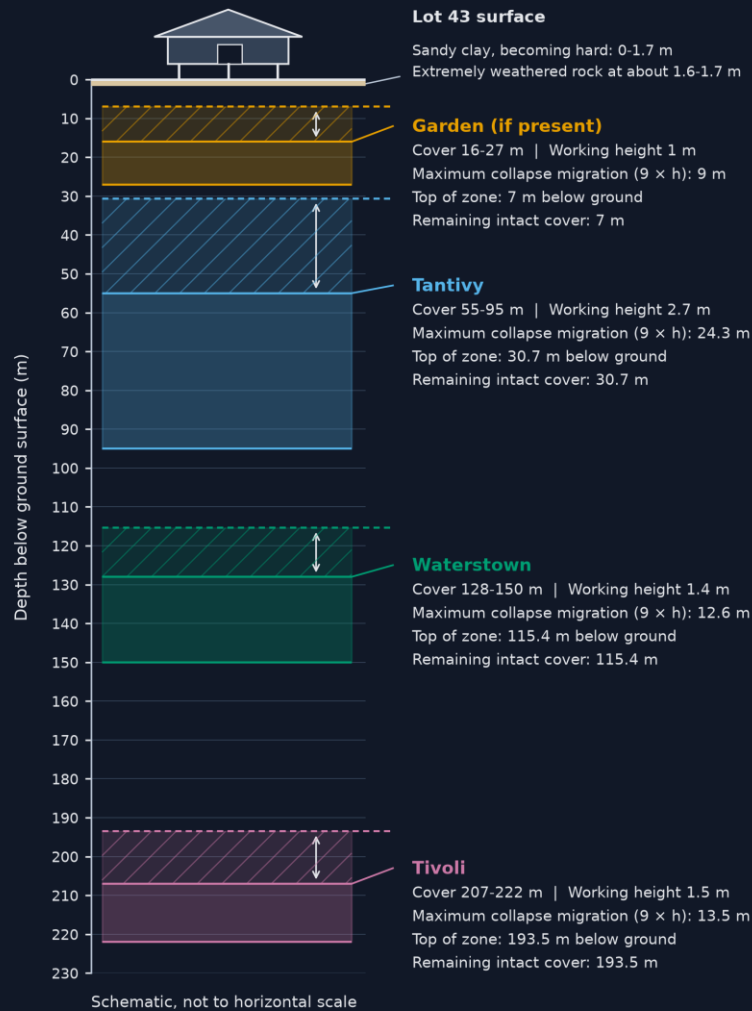
8.4 Shallow collapse and surface expression

Key finding: Every seam's cover-to-height ratio, from 10 to 148, exceeds the local collapse range of 4–9.

Collapse of a bord-and-pillar roof can migrate upward only until the broken rock, which bulks as it falls, fills the void. In the area, collapse has reached the surface only where cover was about 4–7 times the working height, up to 9 (Moreton, 2009a, PDF p. 6). On Taylor's estimates, the cover-to-height ratios beneath the site are: Garden, if present, 16–27 (16–27 m over 1.0 m), and 10 even at the lowest text estimate of 10 m; Tantivy 20–35 (55–95 m over 2.7 m); Waterstown 91–107 (128–150 m over 1.4 m); and Tivoli 138–148 (207–222 m over 1.5 m). Every value exceeds the local range in which collapse has reached the surface. Sinkhole formation from the workings beneath the proposed lots is therefore not a credible mechanism (Figure 2). [Taylor Mining Services Pty Ltd (2026) PDF pp. 5, 6 and 8; Appendix F.]

Depth of the mine workings beneath 2 Morris Street compared with the local collapse range

Cover = depth to workings. Working height (h) = excavated seam height.
Collapse migration = upward spread of a roof collapse.



Cover-to-height ratio (cover ÷ h)

Local collapse range: 4-7, up to 9

Garden
16-27

Tantivy
20-35

Waterstown
91-107

Tivoli
138-148

Solid band: estimated seam-depth range, not seam thickness.
Hatching: 9 × h rise above the shallowest cover; vertical scale is true.
The 9 × h limit is the local comparison, not a site-specific prediction.
Remaining intact cover is calculated and assumes continuous ground.
Garden Seam workings are not documented beneath the lot (Taylor Plan 4).
Shown at Taylor's estimated 16-27 m cover; at his preliminary 10 m estimate the ratio is 10, still above the local collapse range.

Sources: Taylor Mining Services Pty Ltd (2026) PDF pp. 5-8; Moreton Geotechnical Services Pty Ltd (2009a) PDF p. 6; Independent Soil Testing (2026) p. 3. RPEQ Consulting | 9 October 2026

Figure 2 Depth of the mine workings beneath the site compared with the local collapse range

Sources: Taylor Mining Services Pty Ltd (2026) PDF pp. 5-8; Moreton (2009a) PDF p. 6; Independent Soil Testing (2026) p. 3.

Taylor's Plan 11 shows the estimated reach of undocumented workings from the old tunnel entries, a historical estimate rather than surveyed workings. Any such working would be in the Garden

Seam at the cover assessed above. No shaft or tunnel entry is located on the lot. [Taylor Mining Services Pty Ltd (2026) Plans 4 and 11, PDF pp. 12 and 19; Section 5.5.]

8.5 Broad-area deformation and adjoining influence

Key finding: The residual mechanism is gradual broad-area movement, which releveable stumps and flexible services accommodate.

The residual mining mechanism is broad-area deformation: gradual settlement, tilt and horizontal strain at the surface if pillars in the deep workings yield over time. At these depths such movement is spread over a wide area and develops slowly, producing gentle differential movement rather than abrupt displacement. Adjacent workings, including the Fiery workings beyond Gulland's Fault, contribute to the same mechanism (Moreton, 2009a, PDF p. 6). Releveable stumps and flexible service connections, the probable solution in section 11.4.5(4)(a) of the planning scheme (ICC, 2009, PDF p. 21), are designed for exactly this kind of movement: a structure can be releveled if tilt develops.

Mining in the area ceased with the 1974 floods, and mine water has since drained into the lower workings (Taylor Mining Services Pty Ltd, 2026, PDF pp. 5–6). No ground movement is recorded at the site in the more than 50 years since. Monitoring is not required.

The historical subsidence accounts in Section 5.8 concern other properties; no subsidence or mining-related damage is recorded at 2 Morris Street. The shallow investigation encountered no voids or disturbed ground. [Moreton (2012a); Moreton (2012b); Section 7.]

8.6 Sensitivity and alternative interpretations

Appendix F tests the outcome against the full range of Taylor's stated cover depths and working heights; it does not change across that range. Ground distress, if any arises, has other common causes, such as reactive clay, tree-related moisture change, fill and drainage, which footing design at building stage addresses.

8.7 Assessed constraint by lot

Key finding: All three proposed lots are suitable for residential development, subject to the recommendations in Section 9.

Lot 1, retaining the existing dwelling, lies mainly over Taylor's three-level area. No Garden Seam workings are documented beneath it, and the deep workings present no credible collapse mechanism. The existing dwelling has performed without reported distress. Lot 1 is suitable for its continued residential use; any future extension or new structure should follow the recommendations in Section 9.2. [Steve Cooper & Associates Pty Ltd (2026a) p. 1; Taylor Mining Services Pty Ltd (2026) Plan 12, PDF p. 20; Figure 17; Sections 6 and 8.3–8.6.]

Lot 2 lies mainly over the three-level area. Its constraint is possible gradual, broad-area movement from the deep workings. Lot 2 is suitable for a future detached dwelling on releveable stumps or an equivalent flexible footing system with flexible services (Section 9.2). [Steve Cooper & Associates Pty Ltd (2026a) p. 1; Taylor Mining Services Pty Ltd (2026) Plan 12, PDF p. 20; Figure 17; Sections 8.3–8.6.]

Lot 3 straddles the two- and three-level areas, with the same constraint and outcome as Lot 2. No restricted building envelope is required on mining grounds; the dwelling may be located anywhere on the lot that satisfies the planning requirements. [Steve Cooper & Associates Pty Ltd (2026a) p. 1; Taylor Mining Services Pty Ltd (2026) Plan 12, PDF p. 20; Figure 17; Sections 8.3–8.6.]

Easement A (burdening Lot 1 for Lots 2 and 3) and Easement B (burdening Lot 2 for Lot 3) carry the shared driveway and services. They are subject to the same broad-area movement constraint and are addressed by flexible pavement and service details (Section 9.3). [Steve Cooper & Associates Pty Ltd (2026a) p. 1 easement schedule.]

9. Development Implications and Recommendations

On the assessment in Section 8, the site is suitable for the proposed reconfiguration and for future residential development on each lot, subject to the recommendations below. They address the one residual mining mechanism, gradual broad-area movement from the deep workings, and the contingency of encountering an old mine opening during works.

9.1 Proposed reconfiguration

The proposed reconfiguration of Lot 43 into three lots with access easements is supported. No lot requires a restricted building envelope on mining grounds, and no change to the lot layout is recommended. The recommendations in Sections 9.2 to 9.4 are suitable to be applied as conditions of approval and noted for future purchasers and building certifiers. This is consistent with the conditions Council applied to the comparable Tivoli reconfigurations in Section 4.2, which required design to the mining report recommendations and RPEQ structural certification (Appendix H).

9.2 Future structures on the proposed lots

New dwellings and other major structures on Lots 1 to 3 should:

- (a) be supported on adjustable or releveable stumps, or another flexible footing system designed by an RPEQ to accommodate differential movement and tilt from mine subsidence, consistent with section 11.4.5(4)(a) of the planning scheme (ICC, 2009, PDF p. 21) and with the recommendations for nearby 2 and 8 Moores Pocket Road (Moreton, 2009a, PDF pp. 6–7; Moreton, 2010e, PDF p. 2);
- (b) have footings designed to the site classification at building stage, noting the Class P classification arising from tree-related moisture (Independent Soil Testing, 2026, p. 1); and
- (c) be certified by an RPEQ as designed in accordance with this report before building approval.

9.3 Site preparation, earthworks, footings and services

Earthworks, excavation, retaining walls, tanks and service trenches should be kept shallow and should not concentrate stormwater into the ground. Roof and surface water should be piped to the lawful point of discharge; soakage pits and infiltration trenches should not be used. Shared

driveway pavements on Easements A and B should be flexible rather than rigid, and water, sewer and stormwater connections should use flexible joints at each dwelling.

9.4 Further investigation, monitoring and remediation

Taylor recommends further investigation of the potential workings by drilling, geophysics or both, to be considered by the engaged RPEQ (Taylor Mining Services Pty Ltd, 2026, PDF p. 8). Having considered it, further investigation is not required for the reconfiguration or for future dwellings: the documented workings are deep, no Garden workings are documented beneath the lot, every cover-to-height ratio exceeds the local collapse range, and the residual mechanism is addressed by the recommended footing system. Drilling or geophysics would not change these recommendations. If a void, mine opening, subsidence depression or disturbed ground is encountered during any works, work in that area should stop and an RPEQ experienced in mine subsidence should assess it and specify treatment before work resumes. Monitoring is not required.

10. Basis and Limitations

10.1 Basis of the assessment

The assessment is based on the historical mine records and plans, published borehole and geological records, the July 2026 desktop mining report, the site inspection and shallow investigation, and the comparable local studies and Council decisions in Appendix H. Together they are sufficient to assess each subsidence mechanism and to reach the conclusions in Section 11. [Sections 5–7; Appendix H.]

10.2 Limitations

This report addresses the mining subsidence and geotechnical matters of item 1 of the Information Request for the reconfiguration application. It is not a site classification or footing design for any future dwelling; those require site-specific investigation and design at building approval. Interpretation of historical mine records is limited by the accuracy, completeness and survey basis of those records, which are stated for each source. Shallow investigation characterises near-surface conditions and does not directly observe the deep workings.

Historical mine plans are not surveyed to modern standards, and cover depths are estimates derived from borehole structure contours. For that reason the assessment is tested across the full range of Taylor's stated values (Appendix F); the conclusions are unchanged across that range.

11. Conclusions

The site at 2 Morris Street, Tivoli, is underlain by historical bord-and-pillar workings in the Tantivy, Waterstown and Tivoli seams at estimated depths of 55 m to more than 200 m. No Garden Seam workings are documented beneath the lot, and even if present at Taylor's estimated cover they would lie well outside the range in which collapse has reached the surface in the area. At these depths sinkhole formation is not a credible mechanism; the residual mining constraint is gradual broad-area movement, which releveable stumps and flexible services accommodate.

The site is suitable for the proposed reconfiguration of Lot 43 on RP14624 into three lots with access easements, and each proposed lot is suitable for residential development. The risk of mining subsidence affecting future structures is low, provided the recommendations in Section 9 are adopted: releveable stumps or an equivalent flexible footing system designed and certified by an RPEQ; flexible service connections and pavements; controlled stormwater with no soakage; and stop-work assessment of any mine opening or void encountered during works. These recommendations are suitable to be applied as conditions of approval.

12. References

References are listed in two parts: Section 12.1 lists the documents cited in Sections 1 to 11 and Appendices A to G; Section 12.2 lists the development application records cited only in the Appendix H schedule.

12.1 References cited in this report

1. Board of Professional Engineers of Queensland (2026). Professional Engineer Registration Details: RPEQ 13194 and 11644. Public register, checked 7 October 2026.
2. Cameron, J. B. (1969). Coal Resources—West Moreton (Ipswich) Coalfield: Rylance Abermain Nos. 1 and 2 Mine Areas; Supplementary Drilling, Haighmoor Extended Mine Area. Report No. 30. Geological Survey of Queensland.
3. Geological Survey of Queensland (n.d.-a). Summary Sheet for Borehole Ipswich NS 229. Issue date not stated; retrieved 19 September 2026.
4. Geological Survey of Queensland (n.d.-b). Summary Sheet for Borehole Ipswich NS 239. Issue date not stated; retrieved 19 September 2026.
5. Geological Survey of Queensland (n.d.-c). Summary Sheet for Borehole Ipswich NS 242. Issue date not stated; retrieved 19 September 2026.
6. Geological Survey of Queensland (n.d.-d). Summary Sheet for Borehole Ipswich NS 246. Issue date not stated; retrieved 19 September 2026.
7. Geological Survey of Queensland (n.d.-e). Summary Sheet for Borehole Ipswich NS 374. Issue date not stated; retrieved 19 September 2026.
8. Geological Survey of Queensland (2026). Boreholes Coal service, layer 0: five Ipswich NS boreholes. Retrieved 19 September 2026.
9. GeoTest Group (2026). OV3 Mining Influence Area Assessment: 23 Moores Pocket Road, Tivoli. BR237; Council document A12668021. 4 March 2026.
10. Government Chemical Laboratory (1967). Certificate of Analysis: R.C. 397, Ipswich NS 374 Benley Seam. Certificate 29352/64DM. 4 May 1967. Certificate at p. 2; preceding sample submission retained at p. 1.
11. Government Chemical Laboratory (1968). Certificate of Analysis: R.C. 383 and 384, Ipswich NS 229 Benley Seam. Certificate 26300/3DM. 7 March 1968. Certificate at p. 2; preceding sample submission retained at p. 1.
12. Hackworth & Associates Pty Ltd (The Soiltesters) (2019). Site Classification: 8A Moores Pocket Road, Tivoli. 34318; Council document A5757651. 30 January 2019.
13. Independent Soil Testing (2026). Report on Field and Laboratory Testing: Proposed New Residence for RPEQ Consulting, 2 Morris Street, Tivoli. 26/2348. 25 September 2026. Geo Pro Pty Ltd trading as Independent Soil Testing.
14. Ipswich City Council (2006). Planning Scheme Policy 2 – Information Local Government May Request: Mining Subsidence. Council document A12024896. January 2006 mining pages.
15. Ipswich City Council (2009). Ipswich Planning Scheme 2006, Part 11 – Overlays: section 11.4.5. Council document A11855627. February 2009 mining pages.
16. Ipswich City Council (2010b). Development Application Decision Notice. 7509/2010/RAL; Council document A936370. 10 December 2010.
17. Ipswich City Council (2011a). Development application decision notice — 4371/11. 4371/11; Council document A2876237. 31 August 2011.

18. Ipswich City Council (2011c). Development application decision notice — 7655/10. 7655/10; Council document A1071518. 28 January 2011.
19. Ipswich City Council (2014b). Development application decision notice — 5481/2014/CA. 5481/2014/CA; Council document A1441851. 15 December 2014.
20. Ipswich City Council (2020b). Ipswich Planning Scheme overlay OV03 mining (data.gov.au dataset). Published 2 August 2019; downloaded 16 September 2026.
21. Ipswich City Council (2025a). Development application decision notice — 10167/2024/RAL. 10167/2024/RAL; Council document A11300940. 12 March 2025.
22. Ipswich City Council (2026a). Assessment Manager Confirmation Notice. 11083/2026/RAL; Council document A13158249. 23 July 2026.
23. Ipswich City Council (2026b). Assessment Manager Information Request (Planning Act 2016 – Section 12 of the Development Assessment Rules). 11083/2026/RAL. 24 July 2026.
24. Ipswich City Council (2026c). Decision Notice for Superseded Planning Scheme Request. 10250/2026/SPSR; Council document A13114133. 8 July 2026.
25. Moreton Geotechnical Services Pty Ltd (2009a). Mining Study at 2 (Lot 34 on SP119643) Moores Pocket Road, Tivoli. 2008/78; Council document A56941. 4 February 2009.
26. Moreton Geotechnical Services Pty Ltd (2010e). Proposed Boundary Realignment at 2 and 8 Moores Pocket Road, Tivoli. 2008/78/02; within Council document A261981. 12 May 2010. Reproduced at PDF p. 2 of Council document A261981; the 2011 letter occupies p. 1.
27. Moreton Geotechnical Services Pty Ltd (2011e). Proposed Subdivision at 2 and 8 Moores Pocket Road, Tivoli. 2008/78/03; Council document A261981. 9 December 2011.
28. Moreton Geotechnical Services Pty Ltd (2012a). Abbreviated Mining Study at 20 Boundary Road, Moores Pocket. 2012/28; Council document A2083650. 26 June 2012.
29. Moreton Geotechnical Services Pty Ltd (2012b). Mining Study at 9 Morris Street, Tivoli. 2012/49; Council document A220931. 26 October 2012.
30. Moreton Geotechnical Services Pty Ltd (2019a). Mining Study at 109 Mt Crosby Road, Tivoli. 2019/62; Council document A5788353. 11 September 2019.
31. Moreton Geotechnical Services Pty Ltd (2019c). Review of Mining Issues at 8A Moores Pocket Rd, Tivoli. 2016/41/02; Council document A5757653. 17 January 2019.
32. Moreton Geotechnical Services Pty Ltd (2025b). Desktop Mining Study at 81 Tantivy Street, Tivoli. 2024/47; Council document A11870567. 17 March 2025.
33. Queensland Department of Development and Mines (n.d.-a). Diamond Drill Geological Log: Ipswich NS 229, Rylance Abermain No. 2 Area. Drilling 1961; issue date not stated. Geological Survey of Queensland.
34. Queensland Department of Development and Mines (n.d.-b). Diamond Drill Geological Log: Ipswich NS 239, Rylance Abermain No. 2 Area. Drilling 1961; issue date not stated. Geological Survey of Queensland.
35. Queensland Department of Development and Mines (n.d.-c). Diamond Drill Geological Log: Ipswich NS 242, Rylance Abermain No. 2 Area. Drilling 1961; issue date not stated. Geological Survey of Queensland.
36. Queensland Department of Development and Mines (n.d.-d). Diamond Drill Geological Log: Ipswich NS 246, Rylance Abermain No. 2 Area. Drilling 1961; issue date not stated. Geological Survey of Queensland.
37. Queensland Department of Development and Mines (n.d.-e). Diamond Drill Geological Log: Ipswich NS 374, Rylance Abermain No. 2 Area. Drilling 1965; issue date not stated. Geological Survey of Queensland.

38. Shen, B., Alehossein, H., Poulsen, B., Huddleston-Holmes, C., Zhou, B., Luo, X., Wang, H., Qin, J., Duan, J., Jecny, Z., Van de Werken, M., and Williams, D. (2010). Collingwood Park Mine Remediation – Subsidence Control Using Fly Ash Backfilling. EP105068. CSIRO Earth Science and Resource Engineering.
39. Soil Surveys Engineering Pty Limited (2026a). California Bearing Ratio Report: Proposed Building, 2 Morris Street, Tivoli. 1-30991-07.10.2026 CBR; issue 1. 7 October 2026.
40. Soil Surveys Engineering Pty Limited (2026b). Particle Size Distribution: Proposed Building, 2 Morris Street, Tivoli. 1-30991-BH02-B00000; issue 1. 7 October 2026.
41. Staines, H. R. E. (1964). Coal Resources—West Moreton (Ipswich) Coalfield, Part 17: Rylance Abermain No. 2 and No. 1 Mine Areas. Report No. 5. Geological Survey of Queensland.
42. Steffan Harries Pty Ltd (2026a). Appendix B – Code Response: Reconfiguring a Lot (1 into 3), 2 Morris Street, Tivoli. Council document A13114134.
43. Steffan Harries Pty Ltd (2026b). Request for Information: 2 Morris Street, Tivoli. STP5109. 27 July 2026.
44. Steve Cooper & Associates Pty Ltd (2026a). Proposal Plan: Proposed Lot 1 & 2 & 3 Development Plan, Canceling Lot 43 on RP14624 at 2 Morris Street, Tivoli. 26-827 PROPOSAL [B]. 6 August 2026.
45. Steve Cooper & Associates Pty Ltd (2026b). Proposal Plan: Proposed Lot 1 & 2 & 3 Development Plan, Canceling Lot 43 on RP14624 at 2 Morris Street, Tivoli. 26-827 PROPOSAL; Council document A13114138. 18 June 2026.
46. Taylor Mining Services Pty Ltd (2013). Submission “QMSF Consultation RIS”, Appendix E: Plans of Mines and Abandoning Mines – Page 102. 7 November 2013.
47. Taylor Mining Services Pty Ltd (2026). Desktop Mining Report: Lot 43 on RP14624, 2 Morris Street, Tivoli. July 2026.
48. Tivoli Collieries Pty Ltd (1993). Building Approval Application – M.R. and L.M. Marsh: 1 Harris Street, Tivoli. T-PRO-998. November 1993. Letter signed G. R. Maiden, reproduced in Moreton Geotechnical Services Pty Ltd, Desktop Mining Study at 81 Tantivy Street, Tivoli (2025b), pp. 24–26; cover dated 19 November and continuation dated 17 November 1993.

12.2 Development application records (Appendix H)

49. Ipswich City Council (2010a). Development Application Decision Notice. 3110/2010; Council documents A390988, A187508. 6 September 2010.
50. Ipswich City Council (2010c). Development application decision notice — 961/10. 961/10; Council document A2875220. 7 May 2010.
51. Ipswich City Council (2011b). Development application decision notice — 7557/10. 7557/10; Council document A2081514. 28 March 2011.
52. Ipswich City Council (2011d). Development application negotiated decision notice — 7655/2010. 7655/2010; Council document A1725236. 28 February 2011.
53. Ipswich City Council (2012a). Development application decision notice — 3856/2012. 3856/2012; Council document A2541240. 22 August 2012.
54. Ipswich City Council (2012b). Development application decision notice — 7980/09. 7980/09; Council document A1192215. 24 May 2012.
55. Ipswich City Council (2012c). Permissible Change. 3110/2010/MA/A; Council document A982224. 28 March 2012.
56. Ipswich City Council (2013a). Development Application Decision Notice. 108/2013/MCU; Council document A910866. 3 April 2013.
57. Ipswich City Council (2013b). Development application decision notice — 3803/2013/MCU. 3803/2013/MCU; Council document A21192. 11 October 2013.

58. Ipswich City Council (2013c). Development Application Negotiated Decision Notice. 7980/2009/CA; Council documents A656338, A4044349. 5 March 2013.
59. Ipswich City Council (2014a). Development application decision notice — 5250/2012/MCU. 5250/2012/MCU; Council document A2132186. 19 March 2014.
60. Ipswich City Council (2015a). Development application decision notice — 45/2014/CA. 45/2014/CA; Council document A2734637. 26 March 2015.
61. Ipswich City Council (2015b). Development application decision notice — 5518/2015/OW. 5518/2015/OW; Council document A3056302. 2 November 2015.
62. Ipswich City Council (2016). Development Application Decision Notice. 596/2016/OW; Council document A3566931. 16 March 2016.
63. Ipswich City Council (2017). Permissible Change and Extend Relevant Period. 7980/2009/MA/A; Council document A4183847. 31 May 2017.
64. Ipswich City Council (2018a). Development Application Decision Notice. 1017/2018/MCU; Council document A5140899. 18 October 2018.
65. Ipswich City Council (2018b). Development Application Decision Notice. 1159/2018/OW; Council document A5188785. 13 November 2018.
66. Ipswich City Council (2018c). Development Application Negotiated Decision Notice. 1017/2018/MCU; Council documents A5240921, A6259301. 10 December 2018.
67. Ipswich City Council (2019). Development Application Decision Notice. 2492/2019/OW; Council document A5640207. 4 July 2019.
68. Ipswich City Council (2020a). Change Approval Decision Notice. 1017/2018/MAMC/A; Council document A6391503. 30 July 2020.
69. Ipswich City Council (2021). Change Approval Decision Notice. 7980/2009/MAMC/A; Council document A7485944. 17 August 2021.
70. Ipswich City Council (2022a). Change Approval Decision Notice. 5250/2012/MAMC/A; Council document A8009731. 19 April 2022.
71. Ipswich City Council (2022b). Development Application Decision Notice. 1309/2019/OW; Council document A8358661. 10 October 2022.
72. Ipswich City Council (2022c). Withdrawal of Development Application. 9042/2022/MCU; Council document A8325506. 27 September 2022.
73. Ipswich City Council (2023a). Development Application Decision Notice. 12537/2022/MCU; Council document A9568867. 3 November 2023.
74. Ipswich City Council (2023b). Development Application Decision Notice. 12547/2022/CA; Council document A8761787. 17 March 2023.
75. Ipswich City Council (2023c). Development Application Decision Notice. 1928/2023/MCU; Council document A9073217. 29 June 2023.
76. Ipswich City Council (2024a). Development application decision notice — 2060/2023/CA. 2060/2023/CA; Council document A10093542. 17 April 2024.
77. Ipswich City Council (2024b). Development application decision notice — 6058/2024/MCU. 6058/2024/MCU; Council document A10922273. 11 November 2024.
78. Ipswich City Council (2024c). Development application decision notice — 9/2024/RAL. 9/2024/RAL; Council documents A10926178, A11153909, A11516918. 12 November 2024.
79. Ipswich City Council (2024d). Development application negotiated decision notice — 2060/2023/CA. 2060/2023/CA; Council document A10338146. 27 June 2024.
80. Ipswich City Council (2025b). Development application decision notice — 1140/2025/MCU. 1140/2025/MCU; Council document A11282910. 6 March 2025.
81. Ipswich City Council (2025c). Development application decision notice — 2867/2025/OW. 2867/2025/OW; Council document A11872749. 31 July 2025.
82. Ipswich City Council (2025d). Withdrawal of development application — 680/2025/OW. 680/2025/OW; Council document A11200385. 10 February 2025.
83. Ipswich City Council (2026d). Development application decision notice — 3508/2025/MCU. 3508/2025/MCU; Council document A12444966. 7 January 2026.
84. Ipswich City Council (2026e). Development application decision notice — 7107/2026/MCU. 7107/2026/MCU; Council document A13056982. 26 June 2026.

85. Moreton Geotechnical Services Pty Ltd (2007a). Desk-top mining study at Francis Street, Tivoli. 2007/72; Council document A320582. 1 December 2007.
86. Moreton Geotechnical Services Pty Ltd (2007b). Mining Study at 36 Moores Pocket Road, Tivoli. 2007/107; Council document A953218. 17 December 2007.
87. Moreton Geotechnical Services Pty Ltd (2008). Mining Study at 82 Hill Street Tivoli. 2008/29; Council document A812165. 8 April 2008.
88. Moreton Geotechnical Services Pty Ltd (2009b). Mining study at Francis Street Tivoli. 2009/59; Council document A321715. 11 September 2009.
89. Moreton Geotechnical Services Pty Ltd (2010a). Desktop Mining Study at 38 Greasley Street, Tivoli. 2010/70/02; Council document A749443. 8 September 2010.
90. Moreton Geotechnical Services Pty Ltd (2010b). Mining study at Francis Street Tivoli - report 3. 2009/59/06; revision Report 3; Council document A321856. 16 August 2010.
91. Moreton Geotechnical Services Pty Ltd (2010c). Mining study at francis street tivoli - report 4. 2009/59/07; Council document A323396. 4 October 2010.
92. Moreton Geotechnical Services Pty Ltd (2010d). Mining Study at the Abovenoted Address [22 Boundary Street, Tivoli]. 2010/96; Council document A950343. 2 December 2010.
93. Moreton Geotechnical Services Pty Ltd (2011a). Desktop mining study at 36 Greasley Street, Tivoli. 2011/35; Council documents A11192988, A2803552, A8309823. 8 July 2011.
94. Moreton Geotechnical Services Pty Ltd (2011b). Mining study at francis street tivoli - overview report - report 6. 2009/59/11; Council document A322235. 8 July 2011.
95. Moreton Geotechnical Services Pty Ltd (2011c). Mining Study at Francis Street Tivoli – Excavator Trial Pits – Report 5. 2009/59/09; Council document A322952. 6 June 2011.
96. Moreton Geotechnical Services Pty Ltd (2011d). Mining study at Francis Street Tivoli — Excavator trial pits — Report 5A. 2009/59/10; revision Report 5A; Council document A320674. 4 July 2011.
97. Moreton Geotechnical Services Pty Ltd (2013a). Desktop mining study at 18 Hastie Street, Tivoli. 2013/23; Council document A2677656. 13 April 2013.
98. Moreton Geotechnical Services Pty Ltd (2013b). Drilling at the Above Address [9 Morris Street, Tivoli]. 2012/49/02; Council document A728293. 12 March 2013.
99. Moreton Geotechnical Services Pty Ltd (2014a). Previous mining study at 82 Hill Street Tivoli. 2008/29/02; Council documents A2643861, A534484. 24 April 2014.
100. Moreton Geotechnical Services Pty Ltd (2014b). Review of a Desktop Mining Study at the Above Address [36 Moores Pocket Road, Tivoli]. 2007/107/02; Council document A952797. 16 September 2014.
101. Moreton Geotechnical Services Pty Ltd (2016). Mining Study Report Covering the Proposed Tivoli Estate Residential Subdivision at Francis Street Tivoli. 2016/52; Council document A4044348. 18 August 2016.
102. Moreton Geotechnical Services Pty Ltd (2017a). Desktop mining study at 2 – 6 mt crosby road, tivoli. 2017/76; Council document A4634257. 27 October 2017.
103. Moreton Geotechnical Services Pty Ltd (2017b). Mining study report covering the proposed tivoli estate residential subdivision at francis street tivoli. 2016/52/02; Council documents A4132859, A6671467. 30 March 2017.
104. Moreton Geotechnical Services Pty Ltd (2018). Mining study report covering the supplementary drilling at the oaklands estate at francis street tivoli. 2016/52/04; Council document A4934983. 21 June 2018.
105. Moreton Geotechnical Services Pty Ltd (2019b). Review of mining issues at 36 Greasley Street Tivoli. 2011/35/02; Council document A11192981. 28 June 2019.

106. Moreton Geotechnical Services Pty Ltd (2020). Investigation of a Tunnel Entry and Underground Mining Covering the Supplementary Area of the Proposed Tivoli Estate. 2020/31/02; Council documents A6671476, A7395130. 30 September 2020.
107. Moreton Geotechnical Services Pty Ltd (2021a). Design issues relating to the entry road to the tivoli estate. 2020/31/04; Council document A7407257. 12 July 2021.
108. Moreton Geotechnical Services Pty Ltd (2021b). Updated mining study report covering the latest proposed tivoli estate residential subdivision at francis street tivoli. 2020/31/03A; Council document A7369383. 16 June 2021.
109. Moreton Geotechnical Services Pty Ltd (2021c). Updated mining study report covering the proposed tivoli estate residential subdivision at francis street tivoli. 2020/31/03; Council document A7351045. 27 April 2021.
110. Moreton Geotechnical Services Pty Ltd (2022a). Desktop mining study at lot 3 holdsworth road, tivoli. 2022/10; Council document A8830206. 9 February 2022.
111. Moreton Geotechnical Services Pty Ltd (2022b). Desktop Mining Study at Tantivy Street Tivoli. 2022/86; Council document A8705981. 9 December 2022.
112. Moreton Geotechnical Services Pty Ltd (2022c). Report on the drilling and excavator program at holdsworth road tivoli. 2022/10/02; Council document A8506709. 7 April 2022.
113. Moreton Geotechnical Services Pty Ltd (2023). Desktop mining study at 17 tantivy street tivoli. 2023/05; Council document A8714158. 1 February 2023.
114. Moreton Geotechnical Services Pty Ltd (2024a). Desktop mining study at 13A Tantivy Street, Tivoli. 2024/38; Council documents A10707383, A10802497. 17 July 2024.
115. Moreton Geotechnical Services Pty Ltd (2024b). Desktop mining study at 34 Greasley Street, Tivoli. 2024/51; Council document A10626666. 29 August 2024.
116. Moreton Geotechnical Services Pty Ltd (2024c). Mining issues on proposed realigned lots 1 and 2 adjacent to Church Street at 145 – 203 Mt Crosby Road Tivoli. 2024/10/04; Council document A10852183. 19 October 2024.
117. Moreton Geotechnical Services Pty Ltd (2024d). Updated desktop mining study at 145 - 203 Mt Crosby Rd, North Tivoli. 2024/10/02; Council document A10233870. 3 May 2024.
118. Moreton Geotechnical Services Pty Ltd (2025a). Desktop mining study at 19 Tantivy Street Tivoli. 2025/34; Council document A12231762. 17 June 2025.
119. Moreton Geotechnical Services Pty Ltd (2026). Desktop mining study at 9 Mt Crosby Road, Tivoli. 2026/21; Council document A12866288. 21 April 2026.
120. Planning and Environment Court of Queensland (2013a). Judgment — Tamawood Commercial Property Pty Ltd v Ipswich City Council, No. 1303 of 2011 [58 Mount Crosby Road, Tivoli]. No. 1303 of 2011; Council document A3108335. 26 September 2013.
121. Planning and Environment Court of Queensland (2013b). Judgment — Tamawood Commercial Property Pty Ltd v Ipswich City Council, No. 1304 of 2011 [56 Mount Crosby Road, Tivoli]. No. 1304 of 2011; Council document A3081774. 26 September 2013.
122. PTG Consulting (2026a). Mining Investigation Report — Proposed Industrial Subdivision, 145 Mount Crosby Road, Tivoli, QLD 4305. PTG/03342–0002; revision Rev1; Council document A13019023. 15 May 2026.
123. PTG Consulting (2026b). Mining Investigation Report — Proposed Industrial Subdivision, 145 Mount Crosby Road, Tivoli, QLD 4305. PTG/03342–0002; revision RevA on cover; Rev0 in final-report revision register; Council document A12688154. 25 February 2026.
124. Queensland Department of Transport and Main Roads (2026). Decision Notice — Permitted Road Access Location, 81 Tantivy Street, Tivoli (8475/2025/MCU). TMR25-047412; development application 8475/2025/MCU; Council document A13137965. 19 February 2026.
125. RPEQ Consulting (2026). Development Application Documentary Schedule: Tivoli. Appendix H source schedule. Source audit 7 October 2026.

Appendix A: Council Information Request and Planner's Letter

The complete original Council Information Request, application-specific superseded-scheme decision and planner letter are reproduced below.

Council item 1 is addressed through the response schedule in Section 2.2. Items 2–4 are addressed by others in the planner's coordinated response.

Table-9 Planning scheme mining provisions and where this report addresses them

Provision	Meaning and report location	How this report responds
11.4.5 note 1–5, 7–8	Map trigger, intensity and siting informed by site assessment; Sections 2, 3, 8–10	Council notice establishes the trigger; intensity and siting are assessed in Sections 8.7 and 9
11.4.5(3)(a)	Avoid mined/influence areas or particular problem areas; Sections 8.7, 9.1–9.2; Appendix C	All three lots assessed as suitable; dwellings kept clear of any entry verified during works (Sections 8.7, 9.2 and 9.4)
11.4.5(3)(b)	Locate/design infrastructure to minimise subsidence damage; Sections 9.1, 9.3	Flexible pavements and service connections and controlled drainage (Section 9.3)
11.4.5(3)(c)	Foundations minimise potential subsidence impacts; Section 9.2	Relevellable stumps or an equivalent flexible footing system recommended for all new dwellings (Section 9.2)
11.4.5(3)(d)	Fill/seal mine entries against entry/collapse; Sections 5.5, 8.4, 9.4	No mine entry on the lot; any opening found during works is assessed and treated before work resumes (Section 9.4)
11.4.5(4)(a)	Probable solution: adjustable stumps; Section 9.2	Adopted: adjustable/relevellable stumps recommended (Section 9.2)
11.4.5(4)(b)(i)–(ii)	Probable solutions: 40 m from shafts/tunnel entries; 100 m from known subsidence; Sections 5.5, 8.7, 9.2	Mapped entries are outside the lot (Taylor Plan 4) and no known subsidence area is on it; dwelling siting is assessed by an RPEQ against any entry verified during works (Section 9.4)
PSP2(3)(a)(i)–(iii)	Site inspection, mine-plan search and literature; Sections 4–7; Appendices B–E	Site inspection, mine-plan search and literature review completed (Sections 4–7)
PSP2(3)(b)(i)(A)–(N), (ii)(A)–(F)	Open-cut name/extent/depth/wall geometry/fill, geology/seams, instability, underground workings, heating/lease; stability, settlement, pillars, liners, groundwater, other impacts	No open-cut mining recorded on the site; OV8 surface-disturbance classification addressed in Section 5.5

Provision	Meaning and report location	How this report responds
PSP2(3)(c)(i)(A)–(C)	Colliery identity, mine plans to scale against surface control and literature; Sections 5.1–5.6; Appendix B	Collieries identified and mine plans reviewed (Taylor Plans 4–12; Sections 5.1–5.6)
PSP2(3)(c)(i)(D)–(G)	Geology/dip/faults, seams, methods, cover and working height; Sections 5.1–5.7, 8.1	Geology, dip, faults, seams, methods, cover and working heights stated (Sections 5.1–5.7; Table-6)
PSP2(3)(c)(i)(H)–(I)	Subsidence history and undocumented workings; Sections 5.8, 8.4	No subsidence recorded at the site; possible undocumented Garden workings assessed (Sections 5.3 and 8.4)
PSP2(3)(c)(i)(J)–(K)	Dry/flooded workings and lease details; Sections 7.4, 8.1, 10	Mining ceased in 1974; no current mining lease covers the site (Taylor Mining Services Pty Ltd, 2026, PDF pp. 5–6; Section 8.5)
PSP2(3)(c)(ii)(A)	Estimate cover beneath site; Sections 5.4, 8.1; Appendix F	Cover estimated for each seam and tested across the stated range (Section 5.4; Appendix F)
PSP2(3)(c)(ii)(B)	Pillar factor of safety and all workings stability; Section 8.3	Pillar stability assessed with reference to comparable local analysis (Section 8.3)
PSP2(3)(c)(ii)(C)	Subsidence, strain, compression and tilt; Sections 8.5–8.6	Broad-area subsidence, strain and tilt assessed and accommodated by releveable stumps and flexible services (Sections 8.5 and 9.2)
PSP2(3)(c)(ii)(D)–(F)	Sinkholes/remediation, faults and adjoining draw influence; Sections 8.4–8.6	Sinkhole mechanism not credible at the stated cover; faults and adjoining workings considered (Sections 8.4–8.5)
PSP2(3)(c)(ii)(G)–(H)	Suitable/unsuitable areas and best structure locations; Sections 8.7, 9.1–9.2; Appendix C	All three lots suitable for detached dwellings; no restricted envelope required (Sections 8.7 and 9.2)
PSP2(3)(c)(ii)(I)–(J)	Structure/foundation and infrastructure construction; Sections 9.2–9.3	Footing and infrastructure recommendations (Sections 9.2–9.3)
PSP2(3)(c)(ii)(K)–(M)	Entry closure, site management and other impacts; Sections 9.3–9.4, 10	Entry response, drainage management and construction controls (Sections 9.3–9.4)
PSP2(3)(d)(i)–(ii)	Abbreviated report for influence-only land	Not selected: workings are recorded beneath the site, so the full underground-mining assessment is provided

Council-request: original PDF page 1

Your reference
Our reference 11083/2026/RAL
Contact Officer Kahliia Ward
Telephone (07) 3810 6507



Ipswich City Council
1 Nicholas Street
PO Box 191
IPSWICH QLD 4305

Phone (07) 3810 6666
Fax (07) 3810 6731
Email council@ipswich.qld.gov.au

ipswich.qld.gov.au

Beige Block Pty Ltd
C/- Steffan Harries Pty Ltd

24 July 2026

Dear Brittany,

Re: Assessment Manager Information Request (*Planning Act 2016* – Section 12 of the Development Assessment Rules)
Application No: 11083/2026/RAL
Proposal: Reconfiguring a Lot - One (1) Lots into Three (3) Lots
Property Location: 2 Morris Street, Tivoli QLD 4305

Upon review of the abovementioned development application and supporting information, further information is required to satisfactorily assess this application. The information requested is set-out below.

Planning	
1.	Geotechnical Report The proposed development is identified as being affected by Council's OV3 – Mining Constrained Area overlay under the Ipswich Planning Scheme 2006 (IPS). To address assessment benchmarks within Part 11 - <i>Overlays</i> of the IPS, the applicant is requested to submit a geotechnical report prepared and certified by a suitably qualified RPEQ experienced in the analysis of underground and surface mining within the Ipswich area, generally in accordance with Section 11.4.5 of Division 4, Part 11 – <i>Overlays</i> of the IPS, and Planning Scheme Policy 2 – <i>Information Local Government May Request</i> . The geotechnical report is to comment on the mining subsidence constraints that may affect future structures on the proposed lots, and provide recommendations concerning the proposed development and future development on the lots.
2.	Existing Ancillary Structures The submitted plans do not clearly identify the status of existing ancillary structures and retaining walls on the site. In particular, two sheds are noted at the rear of the property however it is unclear whether these structures and existing retaining walls are proposed to be retained, removed, demolished or relocated as part of the development.

Council-request: original PDF page 2

	Having regard to the above the applicant is requested to submit amended plans that clearly identify all existing ancillary structures on the site and specify the proposed outcome for each structure, including whether it is to be retained, removed, demolished, or relocated. Where relocation is proposed, the amended plans should identify the proposed new location and associated works. With regard to retaining walls on site, this item is to be addressed in conjunction with item 3 – <i>Stormwater Management Plan</i>, below.
--	---

3.	Configuration of the Lots
	The submitted lot reconfiguration plan is acknowledged; the applicant is requested to confirm which lot each easement is to be burdened to.

Engineering	
4.	Stormwater Management Plan
	As per Part 12, Div 5 - <i>Reconfiguring a Lot Code</i> of the IPS, the applicant is requested to submit a Stormwater Management Plan (technical note with drainage layout), completed by a RPEQ and prepared in accordance with the council's SC6.2 - <i>General works and Infrastructure Planning Scheme Policy</i> that demonstrates compliance with the relevant assessment benchmarks of the <i>General Works and Infrastructure Code</i> . In particular, the note should include, but not be limited to the following:
(a)	Demonstrate how stormwater from the development will be captured, managed and conveyed to the lawful point of discharge without causing ponding, concentration, or re-direction of flows onto adjoining properties, whilst maintaining pre-development flow conditions.

Pursuant to section 13.2 of the Development Assessment Rules, in response to this Information Request, the applicant may give the assessing authority (in this case the Assessment Manager):

1. All of the information requested; or
2. Part of the information requested and advise the assessing authority that it must proceed with its assessment of the application; or
3. A notice that none of the information will be provided and advise the assessing authority that it must proceed with its assessment of the application.

The information response should include a statement indicating which of the above options describes the response you are providing. To assist in the matter, Appendix 1 provides a checklist that you should complete and return with your response.

Response to this Information Request should be forwarded to:-

Council-request: original PDF page 3

Chief Executive Officer
C/ - Planning Assessment Manager
Development Services Branch
Ipswich City Council
PO Box 191
IPSWICH QLD 4305

Pursuant to section 13.1 of the Development Assessment Rules, the period for the applicant to respond to the information request is **three (3) months from the date** the information request was made or a further period agreed between the applicant and the assessing authority that made the information request.

Pursuant to section 14.2 of the Development Assessment Rules, if the applicant does not respond to the information request within the above period, the Assessment Manager's assessment continues from the day after the day on which the period would have otherwise ended.

If you have any queries regarding this Information Request letter, please contact Kahlia Ward on 3810 6507 for planning related matters or Adrian Bulley on 3810 6190 for engineering related matters.

Yours sincerely,



Naomi McIver
ACTING SENIOR PLANNER (DEVELOPMENT)

Council-request: original PDF page 4

11083/2026/RAL RESPONSE TO ASSESSMENT MANAGER INFORMATION REQUEST

Chief Executive Officer
C/- Assessment Manager
Development Services Branch
Ipswich City Council
PO Box 191
IPSWICH QLD 4305

Date: _____

11083/2026/RAL

2 Morris Street, TIVOLI QLD 4305

In accordance with section 13.2 of the Development Assessment Rules, please find enclosed the applicant's response to the Assessment Manager Information Request, which contains:

- ☐ (a) all of the information requested;
- ☐ (b) part of the information requested; or
- ☐ (c) none of the information requested.

If (b) or (c) above is ticked, in accordance with section 13.3 of the Development Assessment Rules, please advise whether Council is to proceed with its assessment of the application.

- ☐ Yes, Council is advised to proceed with its assessment of this application.
- ☐ No, the applicant intends to provide additional information.

ICC (2026c) scheme decision: original PDF page 1

Your reference
Our reference 10250/2026/SPSR
Contact Officer Kahlia Ward
Telephone (07) 3810 6507



Ipswich City Council

1 Nicholas Street
PO Box 191
IPSWICH QLD 4305

Phone (07) 3810 6666
Fax (07) 3810 6731
Email council@ipswich.qld.gov.au

ipswich.qld.gov.au

Beige Block Pty Ltd
C/- Steffan Harries Pty Ltd

8 July 2026

Dear Sir/Madam

**Re: Decision Notice for Superseded Planning Scheme Request
Planning Act 2016 – Section 29(7)**

Application No: 10250/2026/SPSR

Proposal: Superseded Planning Scheme Request - Reconfiguring a Lot - One (1)
Lot into Three (3) Lots plus Access Easement

Property Location: 2 Morris Street, TIVOLI QLD 4305

I refer to your superseded planning scheme request, dated 26 June 2026 over land described as Lot 43 RP 14624.

Specifically, you are advised that your request for Council to That the Delegate exercise their delegated authority under section 29(6) of the *Planning Act 2016* to accept, assess and decide the development application for Reconfiguring a Lot - One (1) Lot into Three (3) Lots plus Access Easement under the superseded Planning Scheme, specifically the *Ipswich Planning Scheme 2006*, Version 03/2017 that took effect on 19 October 2018, pursuant to section 29(4)(a) of the *Planning Act 2016* is agreed to.

The applicant is further advised that in accordance with section 29(9) of the *Planning Act 2016*, the application agreed to be accepted, assessed and decided under the superseded Planning Scheme must be made within six (6) months after the day this decision notice is given to you. Otherwise, the application under the superseded Planning Scheme cannot be made.

You do not have any appeal rights in relation to this decision.

ICC (2026c) scheme decision: original PDF page 2

If you have any queries regarding this application, please contact Kahlia Ward on the telephone number listed above.

Yours faithfully,



Aidan Brotherton
ACTING PRINCIPAL PLANNER (DEVELOPMENT)

Steffan Harries Pty Ltd (2026b) planner letter: original PDF page 1

Our ref: STP5109

Website: www.steffanharries.au



Monday, 27 July 2026

Attention: Beige Block Pty Ltd
Via email:

RE: REQUEST FOR INFORMATION

Council Ref: 11083/2026/RAL

Address: 2 Morris Street, Tivoli QLD 4305

Dear Beige Block Pty Ltd,

Please find attached a 'Information Request' issued by Ipswich City Council on the 24 July 2026 for your application at 2 Morris Street, Tivoli. After discussions with Council and an internal review of the issues raised, please find below our suggested response/action to each matter.

Matter Raised:

Planning

1. Geotechnical Report

The proposed development is identified as being affected by Council's OV3 – Mining Constrained Area overlay under the Ipswich Planning Scheme 2006 (IPS). To address assessment benchmarks within Part 11 - Overlays of the IPS, the applicant is requested to submit a geotechnical report prepared and certified by a suitably qualified RPEQ experienced in the analysis of underground and surface mining within the Ipswich area, generally in accordance with Section 11.4.5 of Division 4, Part 11 – Overlays of the IPS, and Planning Scheme Policy 2 – Information Local Government May Request. The geotechnical report is to comment on the mining subsidence constraints that may affect future structures on the proposed lots, and provide recommendations concerning the proposed development and future development on the lots.

Suggested Response/ Action

Council has requested a geotechnical report addressing mining subsidence risk on the site, prepared and certified by a suitably qualified RPEQ engineer with experience in underground and surface mining in the Ipswich area. This is a reasonable request given the site is affected by Council's mining overlay.

We understand that a geotechnical report is currently being prepared by a suitably qualified consultant. We'll wait for that to be sent over to be submitted as part of the response to Council. Please let us know if you need any assistance with this aspect.

Matter Raised:

Planning



Reconfiguring a lot (1 into 3)
2 Morris Street, Tivoli QLD 4305
Lot 43 on RP14624

2. Existing Ancillary Structures

The submitted plans do not clearly identify the status of existing ancillary structures and retaining walls on the site. In particular, two sheds are noted at the rear of the property however it is unclear whether these structures and existing retaining walls are proposed to be retained, removed, demolished or relocated as part of the development. Having regard to the above the applicant is requested to submit amended plans that clearly identify all existing ancillary structures on the site and specify the proposed outcome for each structure, including whether it is to be retained, removed, demolished, or relocated. Where relocation is proposed, the amended plans should identify the proposed new location and associated works. With regard to retaining walls on site, this item is to be addressed in conjunction with item 3 – Stormwater Management Plan, below.

Suggested Response/ Action

Council has noted that the plans do not clearly show what will happen to the two sheds and the existing retaining walls at the rear of the property. We need to confirm, for each shed and each retaining wall, whether it will be kept as is, removed, demolished, or moved to a new position. If any structure is being relocated, we will also need the new location so it can be shown on the amended plans.

Please confirm the above and we will arrange for the plans to be updated and resubmitted to Council with the rest of our response.

Matter Raised:

Planning

3. Configuration of the Lots

The submitted lot reconfiguration plan is acknowledged; the applicant is requested to confirm which lot each easement is to be burdened to.

Suggested Response/ Action

Council has asked us to confirm which lot each of the two proposed easements sits over, and which lot benefits from it. We'll need the surveyor to confirm the final easement arrangement, that is, which lot is burdened by Easement A and Easement B, and which lot(s) benefit from each on the plans for the response.

Matter Raised:

Engineering

4. Stormwater Management Plan

As per Part 12, Div 5 - Reconfiguring a Lot Code of the IPS, the applicant is requested to submit a Stormwater Management Plan (technical note with drainage layout), completed by a RPEQ and prepared in accordance with the council's SC6.2 - General works and Infrastructure Planning Scheme Policy that demonstrates compliance with the relevant assessment benchmarks of the General Works and Infrastructure Code. In particular, the note should include, but not be limited to the following:

- (a) Demonstrate how stormwater from the development will be captured, managed and conveyed to the lawful point of discharge without causing ponding, concentration, or redirection of flows onto adjoining properties, whilst maintaining pre-development flow conditions.

Suggested Response/ Action

Council wants a technical Stormwater Management Plan, prepared and certified by a qualified engineer (RPEQ), to confirm that stormwater from the new lots will be properly managed and directed to Morris Street (the lawful point of discharge) without causing flooding, pooling, or redirected flows onto neighbouring properties, and without increasing the amount of stormwater leaving the site compared to today.

Steffan Harries Pty Ltd (2026b) planner letter: original PDF page 3



Reconfiguring a lot (1 into 3)
2 Morris Street, Tivoli QLD 4305
Lot 43 on RP14624

We can reach out to a few civil engineering consultants to get some quotes for reviewing and confirming the development's lawful point of discharge. If you'd like us to proceed, just let us know and we'll get the process underway.

We now have three (3) months to respond to the matters raised which is the 24 October 2026. Should we require additional time to respond, we can stop the current period for up to 130 business days (which can be withdrawn at any time). Once the outlined suggested response/actions have been undertaken, we can respond to Council's Information Request in accordance with the requirements of the Planning Act 2016. We are always happy to discuss any of the matters above if you have any queries.

Please also be advised that any work undertaken to respond to the information request are considered out of scope and will be invoiced at an hourly rate as per our terms of engagement.

[REDACTED]

Should you have any questions or concerns, please do not hesitate to give me a call on the below details.

Kind regards,

A handwritten signature in black ink, appearing to read "Alexander Steffan".

Alexander Steffan | Director
Steffan Harries

[REDACTED]

A handwritten signature in black ink, appearing to read "Brittany Tyne".

Brittany Tyne | Graduate Town Planner
Steffan Harries

[REDACTED]

Appendix B: Source Extracts and Mine Plans

This appendix reproduces the source pages on which the mining assessment in Sections 5 and 8 relies.

Table 1

Coal Seam Depths for NS 374

Seam	NS 374
Garden	-
Tantivy	37
Fiery	88
Waterstown	105
Tivoli	176
Eclipse	212
Benley	283

Note. Depths are measured in m below ground level at the time of drilling

5.0 Mining

There has been extensive underground mining in this area between 1870s and 1974 when the floods forced the closure and abandonment of the mines in North Ipswich and Tivoli coal mines. Mining has been completed by Waterstown, Abermain and Rylance Abermain Collieries.

Tivoli Collieries P/L (previously part of the New Hope Group) used the area next to this Site as a coal washing facility until about the late 1980s.

Plan 4 attached shows the locations of the three tunnel entries depicted on the geology plans along the Garden Seam. This seam was discovered when the Waterstown Colliery established a garden nearby to this Site.

Mining on the Garden Seam has occurred since the earliest coal mining days in Ipswich. Although mine plans are no longer available, this seam is known to have been mined from about 1870 from the Dolly Varden Tunnel which is depicted on Plan 3, Plan 4 and Plan 11.

In GSQ Publication 279, Denmead mentions the Dolly Varden Tunnel and states that there were three tunnels on the Garden Seam in the Abermain Colliery estate (the Garden, Engine and Dolly Varden Tunnels). Denmead (1955) also states that all tunnels have collapsed at the entrance. The workings from the three tunnels were reported to extend up to 230 m from the tunnel entries.

The cover depth of any workings from the Dolly Varden tunnel and other Garden Seam Workings is unknown for this Site but an estimate would be between 10 – 30 m, however since there is no documented workings this Site may be unaffected by this seam.

Figure 3 Taylor desktop report: Table 1 seam depths at NS 374 and Garden Seam text

Source: Taylor Mining Services Pty Ltd (2026) PDF p. 5.

Table 2*Summary of Estimated Cover Depths and Working Heights for the Seams below the Site*

Seam	Approximate Cover Depth (m)	Approximate height of workings (m)
Garden	16 - 27	1
Tantivy	55 – 67	2.7
Fiery	118 – 133*	2.4
Waterstown	135 – 150	1.4
Tivoli	207 – 222	1.5

*Note. This table only shows seams which are known to have been mined below this Site.***The Fiery Seam was not mined directly below but may influence the Site.*

To protect any proposed development of the Site, including infrastructure and personnel we recommend that these potential mine workings be further investigated. Such investigations could include drilling or surface geophysical survey or probably a combination of both. Any such investigations need to be considered in conjunction with or by the RPEQ Geotechnical Engineer engaged for the purpose of meeting Councils development requirements under their mining constrained overlays.

The findings from further investigation would allow for greater understanding of the potential mine workings and whether any risk to development of this Site exists and to what extent.

7.0 Limitations

This factual report contains Figures, Plans, and records that must be read in their entirety.

The work in this Desktop Mining Report was produced for Beige Block Pty Ltd based on information available at the time of writing. This report will not contain sufficient information for other parties and purposes.

While care has been taken in producing this report, it needs to be said that there will always be some risk associated with developing in these settings.

Recommendations put forward in this report are aimed at minimising the risk.

This company accepts no responsibility for works which do not fully comply with the recommendations in this report.

Taylor Mining Services Pty Ltd
July 2026

Figure 4 Taylor desktop report: Table 2 cover depths and working heights

Source: Taylor Mining Services Pty Ltd (2026) PDF p. 8.

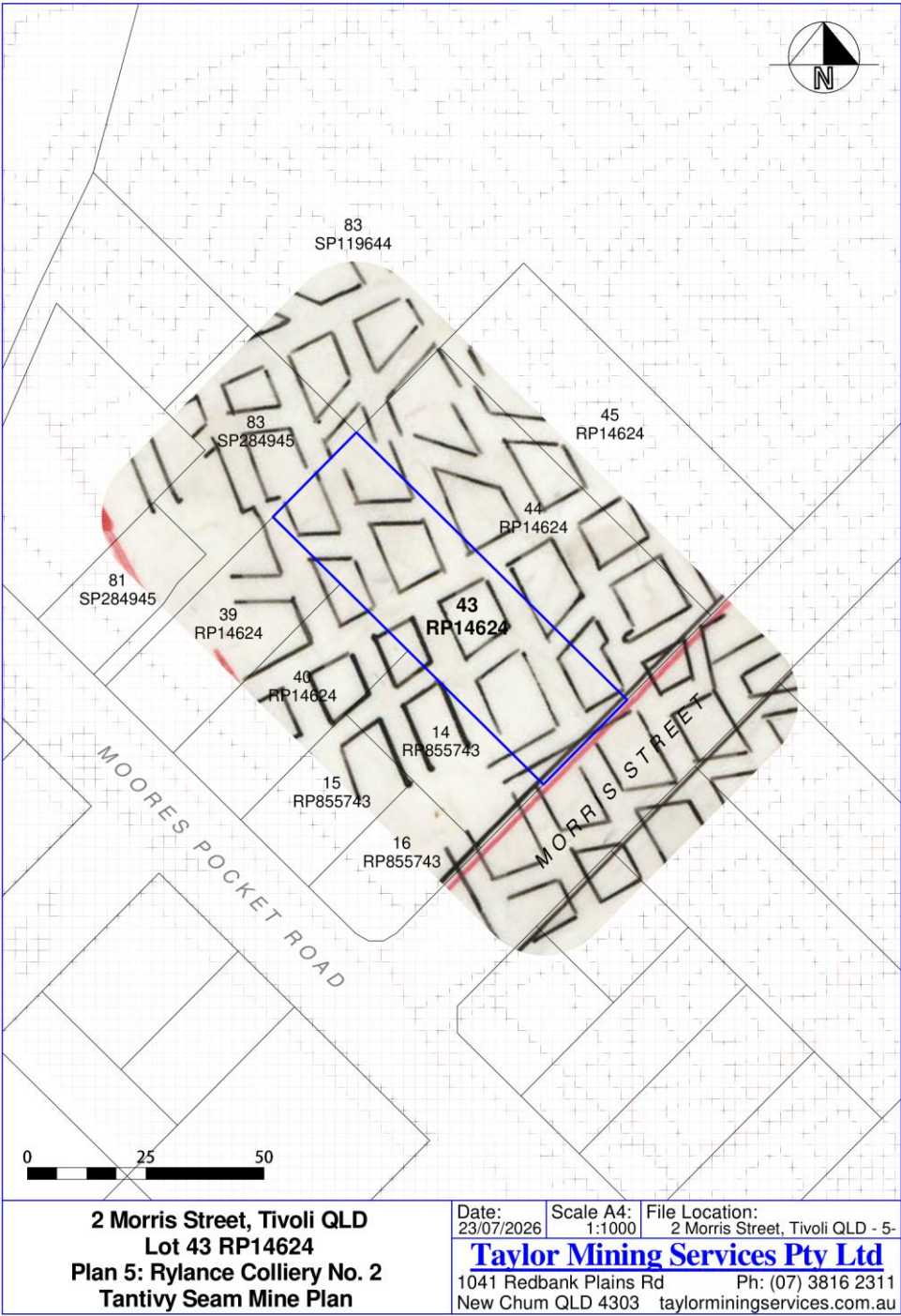


Figure 6 Taylor Plan 5: Tantivy Seam workings

Source: Taylor Mining Services Pty Ltd (2026) Plan 5, PDF p. 13.

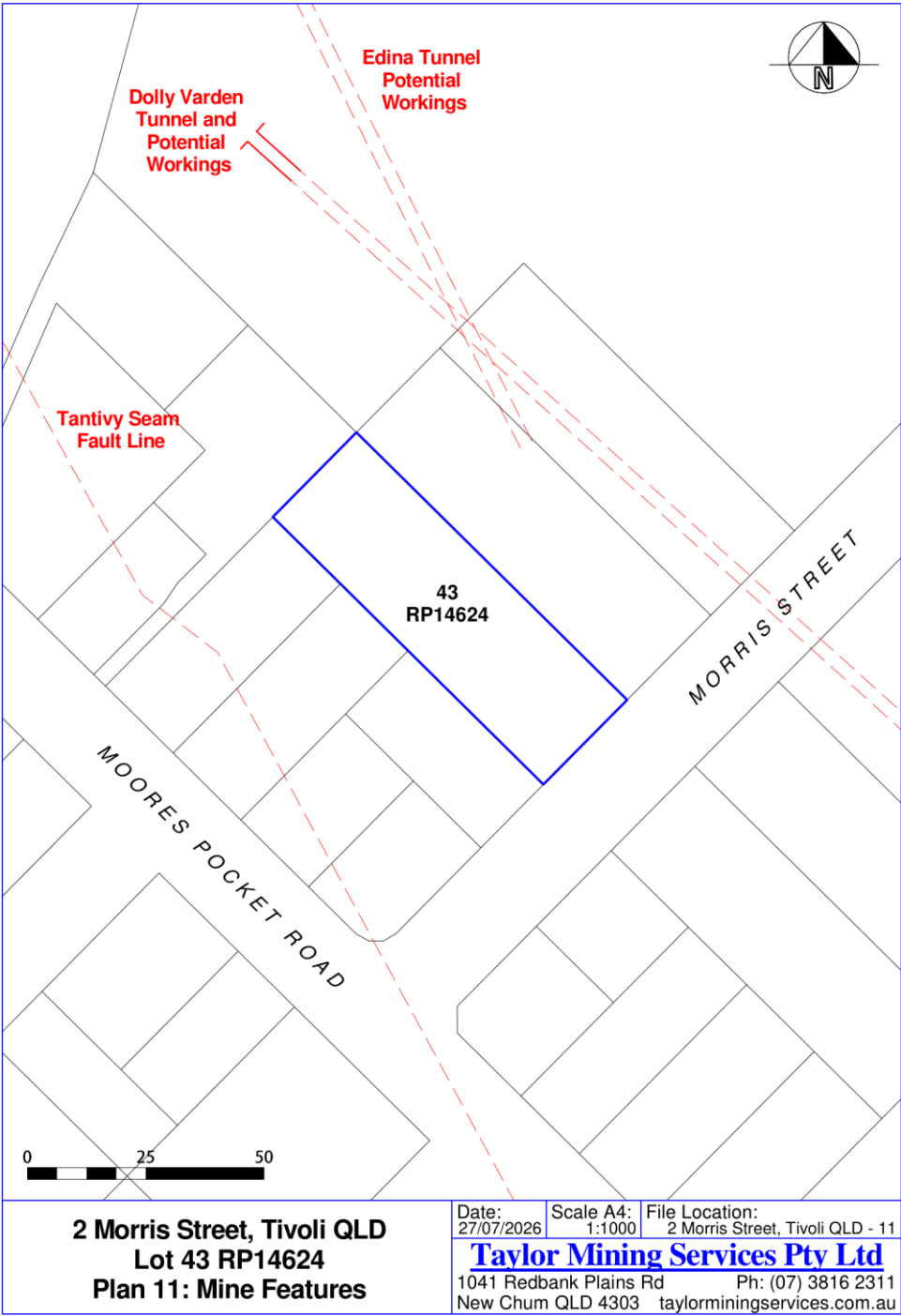


Figure 7 Taylor Plan 11: tunnel entries and estimated reach of undocumented workings

Source: Taylor Mining Services Pty Ltd (2026) Plan 11, PDF p. 19.

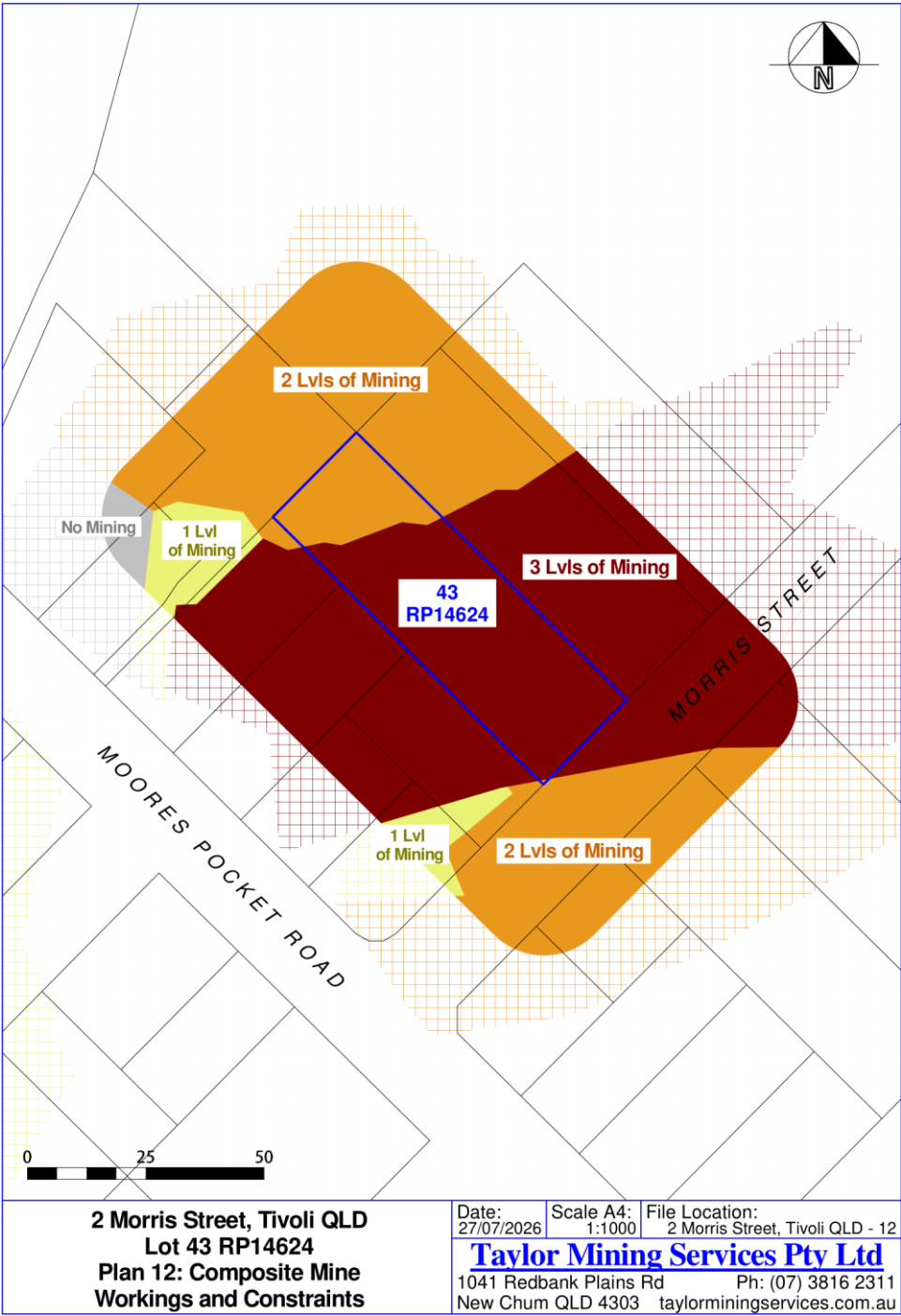


Figure 8 Taylor Plan 12: composite of the levels of workings

Source: Taylor Mining Services Pty Ltd (2026) Plan 12, PDF p. 20.

Appendix C: Maps and Data Sources

This appendix contains the maps referred to in the report (C.1) and the data and map sources used to prepare them (C.2).

C.1 Maps

Proposal and shallow investigation

Proposal 26-827 [B], 6 August 2026; IST job 26/2348, pp. 2-3
Proposed boundaries fitted to cadastre; test positions indicative.



Dashed: proposed lots. Purple A/B: proposed access easements. White: tests.

No surveyed test collar RL, building envelope, finished pad level or mine workings is implied. Plotting precision does not establish location accuracy. BH02 CBR/PSD is a sample identifier; its civil design suitability requires separate adoption.

Aerial: Ipswich 2022, raster 5671; cadastre: Queensland, retrieved September 2026.
© State of Queensland, CC BY 4.0. Cadastre is orientation only, not a survey.
RPEQ Consulting | 9 October 2026

Figure 12 Proposal plan and borehole locations

Historical mining mapping — context

Ipswich Planning Scheme 2006 • OV3 • source distinction

Council's property-specific request

The original Information Request, 24 July 2026, p. 1, identifies this property as affected by the Mining Constrained Area overlay (OV3), and calls for the mining/geotechnical assessment.

Held historical open-data snapshot

ICC's retained OV3 export has feature publication date 2 August 2019; downloaded 16 September 2026. It records mining-constrained, underground-mining and surface-disturbance areas, and shaft/tunnel symbols.

Limits of that source

The snapshot does not itself prove the precise mapped boundary operative for this application. Shaft/tunnel symbols are not surveyed excavation footprints. No historical polygon geometry is reproduced here.

Sources: Council original Information Request p. 1; ICC OV3 Mining Buffer dataset, DATE_PUBLISHED and feature-class attributes; retained source register. RPEQ Consulting | 7 October 2026 | Factual draft for technical review

Figure 13 Mining overlay OV3 classification of the site (Ipswich Planning Scheme 2006)

Mining overlay — source and version

Lot 43 RP14624 • 2 Morris Street, Tivoli

Assessment instrument: OV3

Council Information Request, 24 July 2026, p. 1 identifies the Mining Constrained Area overlay (OV3). Read with the superseded-scheme approval and the report's planning-basis assessment.

Later mapping record: OV8

The retained ePlan property list, viewed 19 September 2026, lists Mining Influence Area, Underground Mining and Surface Disturbance for this property. Current geometry and its publication date are not held.

Interpretation boundary

An overlay is a planning classification, not a mine plan, excavation footprint or measured hazard probability. The recorded surface-disturbance difference needs engineering disposition; no boundary is inferred here.

Sources: Council original Information Request p. 1; retained ePlan property record (19 September 2026), overlay-list block. No ePlan imagery reproduced. RPEQ Consulting | 7 October 2026 | Factual draft for technical review

Figure 14 Mining overlay versions: OV3 and later OV8

Figures 13 and 14 show the OV3 classification that triggered Council's request and the later OV8 classification. They are classification diagrams, not maps of the workings; the OV8 surface-disturbance classification is discussed in Section 5.5.

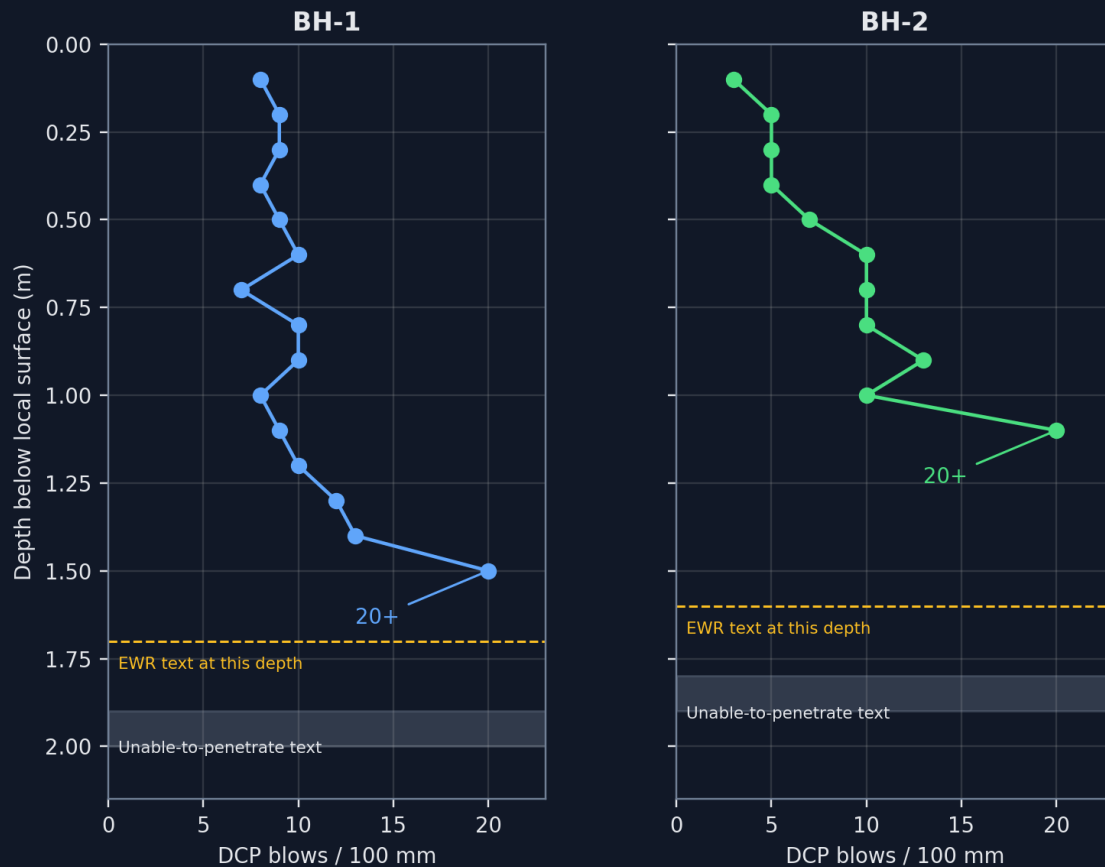


Figure 15 Historical departmental borehole locations

Source: GSQ (2026) borehole locations; Department of Development and Mines (n.d.-a-e); GSQ (n.d.-a-e). BH-229 to BH-374 are Ipswich NS 229 to NS 374. The cadastral outline is for orientation only.

Shallow investigation — recorded DCP profiles

Independent Soil Testing, job 26/2348, 25 September 2026, p. 3
Depth below each local surface; not AHD. No correlation drawn between holes.



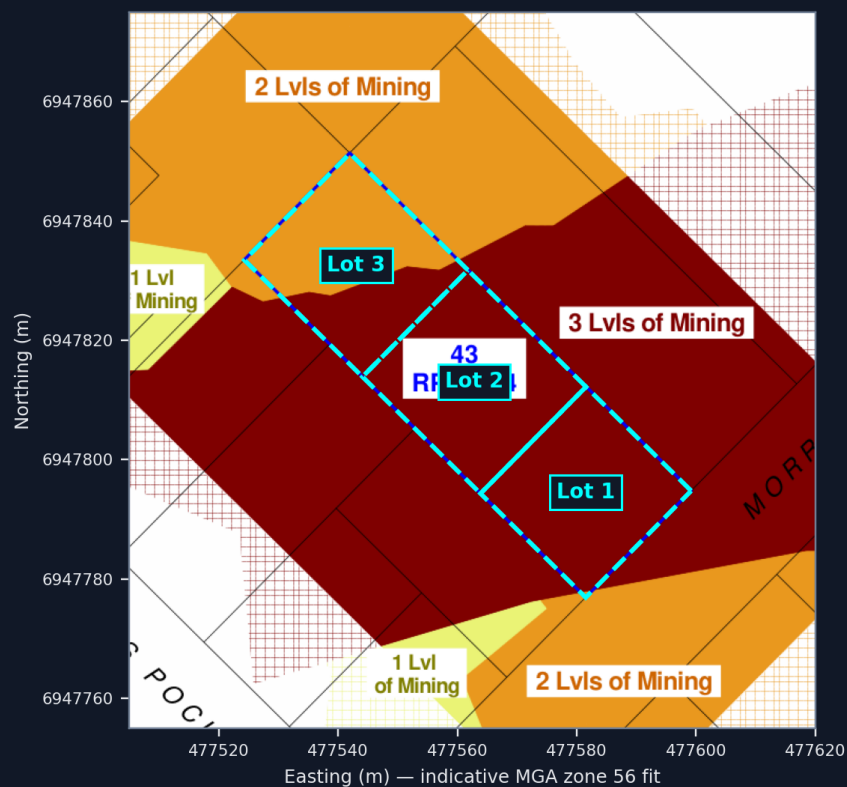
20+ is reproduced as a lower-bound value, not an exact count.
EWR = extremely weathered rock: logged text at BH-1 1.7 m / BH-2 1.6 m.
Grey bands show the depth rows occupied by the refusal wording; no deeper measurements or inferred rock strength are plotted. Samples: 0.4 m, IST p. 6.

No test collar elevation is evidenced. These separate depth columns do not establish seam levels, mine cover, geological continuity or bearing capacity.
Source: IST Site Investigation PDF, pp. 2-3, 6. RPEQ Consulting | 7 October 2026

Figure 16 DCP test results, BH1 and BH2

Taylor composite interpretation and proposed lots

Fitted source comparison only — no assessed constraint or safe envelope



What the fitted source drawing shows

Cyan dashed lines: proposed Lots 1-3.
Source colours and mining-count labels: Taylor.

Lots 1 and 2 predominantly overlap the source's three-level area; Lot 3 crosses its two-/three-level division.

These are drawing relationships, not verified under-lot mining counts or measured boundaries.

Registration and uncertainty

Taylor Plan 12 and Proposal B are each fitted by their subject-parcel corners to cadastre. This aligns drawing frames only. No independent mine-plan control or accuracy bound is held.

Underlying working extent, seam datum, pillar geometry and competent cover remain unadopted. No clearance or safe building area follows. No new mining boundary has been digitised.

Sources: Taylor Desktop Mining Report, July 2026, Plan 12 / PDF p. 20 (dated 27 July); Proposal 26-827 [B], 6 August 2026, p. 1. Retained Queensland cadastre; GDA2020 / MGA zone 56, EPSG:7856. Source rights retained; commissioned project assessment use. RPEQ Consulting | 7 October 2026 | Technical review. No new engineering constraint adopted.

Figure 17 Taylor Plan 12 workings compared with the proposed lots

C.2 Data and map sources

Table-10 Data and map sources

#	Dataset	Publisher	Date	Used for	Licence and limits
1	Mining overlay OV3 (Ipswich Planning Scheme 2006)	ICC, via data.gov.au	Published 2 Aug 2019 Downloaded 16 Sep 2026	Figure 13	CC BY 4.0; schematic symbols
2	Cadastre (lot boundaries)	Queensland Government	Extract 10 Sep 2026 Queried 18–19 Sep 2026	All maps	CC BY 4.0; orientation only, not a survey
3	Coal boreholes	GSQ	Retrieved 19 Sep 2026	Figure 15	CC BY 4.0; approximate published positions
4	OV8 property classification (ePlan)	ICC	Viewed 19 Sep 2026	Figure 14	Map images not reproduced
5	Engineer registrations	BPEQ	Checked 7 Oct 2026	Certification page Appendix G	Public register
6	Aerial imagery, Ipswich 2022	State of Queensland	Captured Jul–Sep 2022 Exported 19 Sep 2026	Cover Figures 25 and 12	CC BY 4.0
7	Site photographs	RPEQ Consulting	25 Sep 2026	Appendix D	Positions not surveyed
8	Civil design markup (CBR test at Easement B)	Client	Received 21 Aug 2026	Section 7.1	—
9	Proposal plan and borehole positions	Steve Cooper & Associates drawing 26-827 revision B Independent Soil Testing (2026) p. 2	6 Aug 2026 25 Sep 2026	Figure 12	Plan fitted to the cadastre for illustration; borehole positions approximate
10	Historical mine plans	Taylor Mining Services Pty Ltd (2026), Plans 4–12	July 2026	Figure 17	Fitted to the cadastre for comparison only, not surveyed

All maps use GDA2020 / MGA zone 56.

Appendix D: Site Photographs

The photographs were taken on 25 September 2026, the day of the site inspection and borehole drilling. They exclude people and vehicle registration plates.



Figure 18 Rear yard with established trees

Source: Project field-photo collection (2026), frame 08:44:35, camera date 25 September 2026, recorded +10:00 offset.



Figure 19 Rear boundary corner

Source: Project field-photo collection (2026), frame 08:45:27, camera date 25 September 2026, recorded +10:00 offset.



Figure 20 Yard and green-clad structure

Source: Project field-photo collection (2026), frame 08:46:14, camera date 25 September 2026, recorded +10:00 offset.



Figure 21 Roadside and driveway interface

Source: Project field-photo collection (2026), frame 09:00:07, camera date 25 September 2026, recorded +10:00 offset.

Appendix E: Borehole Logs and Laboratory Reports

The following originals are reproduced without alteration: Independent Soil Testing job 26/2348, six pages; Soil Surveys CBR report 1-30991-07.10.2026 and PSD report 1-30991-BH02-B00000, one page each.

Independent Soil Testing (2026): original PDF page 1

	INDEPENDENT SOIL TESTING	GEO PRO PTY LTD T/AS INDEPENDENT SOIL TESTING P.O. Box 3234 Victoria Point West Qld 4165
		ABN: 14 676 847 671
25th September 2026		
RPEQ Consulting ch@rpeq.com.au		
Site location: 2 Morris Street, Tivoli	Job No: 26/2348	
Dear Sir/Madam,		
Please find attached soil report carried out at the above location.		
This site has been classified "P" due to the tree influence causing abnormal moisture conditions.		
When large trees are removed from site to make way for the proposed works, the root ball should always be dug out. This can extend up to 1.5 to 2.0 metres deep and laterally 1.5m wide. These holes, even when backfilled and compacted, can cause soft spots in the soil strata and can also absorb a lot more moisture than surrounding areas. If part of a footing or stump is on or through this area it can have detrimental effects on the footing, i.e.: cracking or sinking. Therefore, in this area of the tree removal, it should always be pierced into the natural ground.		
Material taken from site for laboratory testing is of a "H1" classification but under the guidelines of <u>AS2870</u> we must classify this site "P".		
<i>For plumbing purposes, articulation for plumbing fixtures will be required on this site. "H1" class soils.</i>		
Any cut/fill operations carried out after this report may change the classification.		
If you have any further queries, please do not hesitate to contact our office.		
Yours faithfully,		
INDEPENDENT SOIL TESTING		
		
Michael Mulholland Director		
QBCC license no: 15457919		Page 1 of 6

Independent Soil Testing (2026): original PDF page 2

	INDEPENDENT SOIL TESTING	GEO PRO PTY LTD T/AS INDEPENDENT SOIL TESTING P.O. Box 3234 Victoria Point West Qld 4165 ABN: 14 676 847 671
DATE: 25th September 2026		JOB NO: 26/2348
REPORT ON FIELD AND LABORATORY TESTING PROPOSED NEW RESIDENCE FOR RPEQ CONSULTING		
STREET N°: 2 MORRIS STREET, TIVOLI		
<i>SITE CLASSIFICATION "P"</i>		
<u>DIRECTION OF SLOPE</u> East	<u>SLOPE</u> 10°	<u>SURFACE VEGETATION</u> Grass – Few Trees
		<u>SURFACE DRAINAGE</u> Poor
<u>FIELD WORK</u>		
Test bores were put down on the site using a truck mounted drill rig.		
Disturbed and undisturbed samples were obtained in representative soils for checking of field classifications and laboratory testing.		
Dynamic cone penetrometer test or pocket penetrometer test were carried out adjacent or within the bores to provide an indication of density of cohesionless soils and strengths in cohesive soils.		
Test bore locations are as follows: GDA2020 / MGA2020 Zone 56:		
• BH-1 — Easting: 477,546.96 m E; Northing: 6,947,833.61 m N • BH-2 — Easting: 477,569.41 m E; Northing: 6,947,816.19 m N		
Soil Profiles and Dynamic Cone penetrometer test or pocket penetrometer test results at the test bore locations are given in Appendix A1, attached. Appendix A2 contains information useful in interpreting field and laboratory tests.		
<u>LABORATORY WORK</u>		
Testing was carried out on samples recovered during the fieldwork to determine plasticity and shrinkage of the founding soils. Test results are presented in Appendix A2, attached.		
Authorised Signatory		
		
Michael Mulholland		
QBCC license no: 15457919		Page 2 of 6

Independent Soil Testing (2026): original PDF page 3


**INDEPENDENT
SOIL TESTING**

GEO PRO PTY LTD
T/AS INDEPENDENT SOIL TESTING
P.O. Box 3234
Victoria Point West Qld 4165

ABN: 14 676 847 671

APPENDIX A1
BORELOGS

Date: 25th September 2026

2 Morris Street, Tivoli

Job no: 26/2348

BOREHOLE NO. 1

Depth (m)	SOIL CLASSIFICATION	DCP Blows/ 100mm
0.1	GRAVELLY SILTY SAND	8
0.2	Dry moderately dense Brown/Dk Grey	9
0.3	GRAVELLY SANDY SILTY CLAY	9
0.4		8
0.5	Moist very stiff to hard	9
0.6		10
0.7		7
0.8		10
0.9		10
1.0		8
1.1	Brown/Red/Grey	9
1.2	GRAVELLY SANDY SILTY CLAY	10
1.3		12
1.4	Moist hard	13
1.5	TENDING TO WEATHERED ROCK	20+
1.6	Yellow/Orange/Grey	
1.7	EXTREMELY WEATHERED ROCK	
1.8		
1.9	UNABLE TO PENETRATE - WEATHERED ROCK	
2.0		
2.1		
2.2		
2.3		
2.4		
2.5		
2.6		
2.7		
2.8		
2.9		
3.0		
3.1		
3.2		
3.3		
3.4		
3.5		

BOREHOLE NO. 2

Depth (m)	SOIL CLASSIFICATION	DCP Blows/ 100mm
0.1	GRAVELLY SILTY SAND	3
0.2	Dry moderately dense Brown/Dk Grey	5
0.3	GRAVELLY SANDY SILTY CLAY	5
0.4		5
0.5	Moist very stiff to hard	7
0.6		10
0.7		10
0.8		10
0.9		13
1.0	Brown/Red/Grey	10
1.1	GRAVELLY SANDY SILTY CLAY	20+
1.2		
1.3	Moist hard	
1.4	TENDING TO WEATHERED ROCK	
1.5	Yellow/Orange/Grey	
1.6	EXTREMELY WEATHERED ROCK	
1.7		
1.8	UNABLE TO PENETRATE - WEATHERED ROCK	
1.9		
2.0		
2.1		
2.2		
2.3		
2.4		
2.5		
2.6		
2.7		
2.8		
2.9		
3.0		
3.1		
3.2		
3.3		
3.4		
3.5		

QBCC license no: 15457919

Page 3 of 6

Independent Soil Testing (2026): original PDF page 4



INDEPENDENT
SOIL TESTING

GEO PRO PTY LTD
T/AS INDEPENDENT SOIL TESTING
P.O. Box 3234
Victoria Point West Qld 4165

ABN: 14 676 847 671

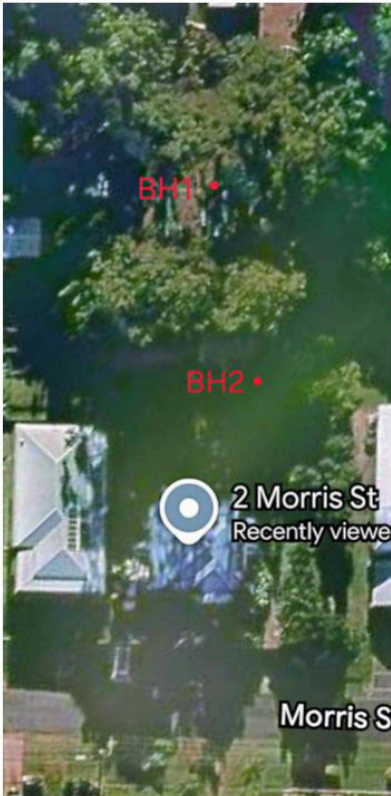
APPENDIX A2

ate: 25th September 2026

SITE SKETCH (Not to Scale)

2 Morris Street, Tivoli

Job no: 26/2348



QBCC license no: 15457919

Page 4 of 6

RPEQ-2026-MORRIS-MIN-RPT Revision A | 73 of 90

Independent Soil Testing (2026): original PDF page 5



**INDEPENDENT
SOIL TESTING**

**GEO PRO PTY LTD
T/AS INDEPENDENT SOIL TESTING
P.O. Box 3234
Victoria Point West Qld 4165**

ABN: 14 676 847 671

PHOTOS OF SITE

ate: 25th September 2026

2 Morris Street, Tivoli

Job no: 26/2348



QBCC license no: 15457919

Page 5 of 6

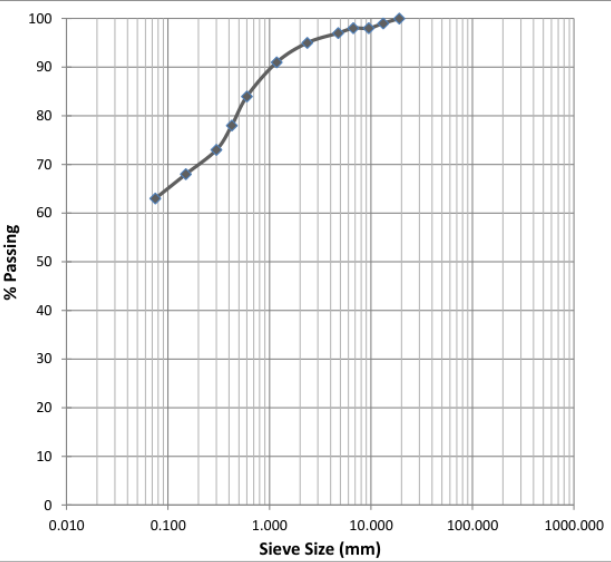
Independent Soil Testing (2026): original PDF page 6

	INDEPENDENT SOIL TESTING	GEO PRO PTY LTD T/AS INDEPENDENT SOIL TESTING P.O. Box 3234 Victoria Point West Qld 4165 ABN: 14 676 847 671
LABORATORY TEST RESULTS		
ate: 25th September 2026 2 Morris Street, Tivoli Job no: 26/2348		
SITE CLASSIFICATION "P"		
BOREHOLE NO.	1	2
DEPTH IN METRES	0.4	0.4
NATURAL MOISTURE CONTENT %	19.0	15.5
LIQUID LIMIT %	51	57
PLASTIC LIMIT %	16	19
PLASTIC INDEX %	35	38
LINEAR SHRINKAGE %	12.5	15.5
TEST METHOD: AS 1289 2.1.1, 3.1.2, 3.2.1, 3.3.1, 3.4.1, 6.3.2		
<i>Disclaimer: The results contained in this report are accurate at the time of testing. Subsequent weather conditions can vary these results and create inconsistencies, especially in regard to bearing capacity. If at the time of excavation, there is any concerns or variations and differences from what has been reported, please contact us immediately. We will attend site free of charge, to confirm any discrepancies and assess the suitability of founding materials. Independent Soil Testing will not be held liable in the event that the soils do vary from those disclosed, and we have not been contacted to rectify any variances before a foundation has been installed.</i>		
QBCC license no: 15457919		<i>Page 6 of 6</i>

Soil Surveys Engineering Pty Limited (2026a): original PDF page 1

 SOIL SURVEYS Soil Surveys Engineering Pty Limited Geotechnical Specialists ABN: 70 054 043 631 www.soilsurveys.com.au		Helensvale Laboratory Gold Coast Unit 8, 140 Millaroo Drive Helensvale QLD, 4212 Tel: 07 3369 6000 info@soilsurveys.com.au	
CALIFORNIA BEARING RATIO REPORT			
Client :	RPEQ Consulting		Report No: 1-30991-07.10.2026 CBR
Client Address :	C/O 1/87 Schneider Road, Eagle Farm QLD 4009		Report Date: 7/10/2026
Project Number :	1-30991		Issue Number: 1
Project :	Proposed Building		Page 1 of 1
Location :	2 Morris Street, Tivoli		
SAMPLE DETAILS:			
Sample ID:	1-30991-BH02-B00000		
Field Sample ID:	-		
Date Sampled:	24/09/2026		
Soil Description:	Silty Sandy Clay (CH) Trace of Gravel & Organics, Brown		
Sampling Method:	As Received		
Sampled by:	Client		
Sample Location:	BH02		
Depth (m):	0.00 - 0.50		
Source:	Borehole		
Material:	Unknown		
Specification:	100% STD		
TEST RESULTS:			
Moisture Content (AS1289.2.1.1)			
Moisture Content (%)	11.0		
Date Tested:	29/09/2026		
Maximum Dry Density - Standard (AS1289.5.1.1):			
Standard Maximum Dry Density (t/m ³):	1.75		
Standard Optimum Moisture Content (%):	16.1		
Oversize Sieve (mm):	19		
Oversize Material (%):	0		
Date Tested:	30/09/2026		
California Bearing Ratio (AS1289.6.1.1):			
CBR Value (%):	3.0		
CBR Penetration :	2.5mm		
Maximum Dry Density (t/m ³):	1.75		
Optimum Moisture Content (%):	16.1		
Dry Density Before Soaking (t/m ³):	1.74		
Density Ratio Before Soaking (%):	99.5		
Moisture Content before Soaking (%):	16.4		
Moisture Ratio before Soaking (%):	102.0		
Dry Density after Soaking (t/m ³):	1.70		
Density Ratio after Soaking (%):	97.0		
Swell (%):	3.0		
Moisture Content of Top 30mm (%):	22.4		
Moisture Content of Remaining Depth (%):	17.8		
Compactive Effort:	Standard		
Surcharge Mass (kg):	4.5		
Period of Soaking (Days):	4		
Oversize Material:	N/A		
Oversize Material (%):	0		
Date Tested:	6/10/2026		
CBR Total Curing Time (hr):	80		
Plasticity Determination:	Tactile Assessment		
Remarks :			
		APPROVED SIGNATORY Zane De Koster  NATA Accred No:15301	
END OF DOCUMENT		FORM NUMBER	REP-CBR-05
		Issue Date	14/4/2026 Rev.0

Soil Surveys Engineering Pty Limited (2026b): original PDF page 1

 SOIL SURVEYS Soil Surveys Engineering Pty Limited Geotechnical Specialists ABN: 70 054 043 631 www.soilsurveys.com.au		Helensvale Laboratory Gold Coast Unit 8, 140 Millaroo Drive Helensvale QLD, 4212 Tel: 07 3369 6000 info@soilsurveys.com.au	
PARTICLE SIZE DISTRIBUTION			
Client :	RPEQ Consulting	Report No:	1-30991-BH02-B00000
Client Address :	C/O 1/87 Schneider Road, Eagle Farm QLD 4009	Report Date:	7/10/2026
Project Number :	1-30991	Issue Number:	1
Project :	Proposed Building	Page 1 of 1	
Location :	2 Morris Street, Tivoli		
SAMPLE DETAILS:			
Sample ID:	1-30991-BH02-B00000		
Date Sampled:	24/09/2026		
Date Tested:	7/10/2026		
Soil Description:	Silty Sandy Clay (CH) Trace of Gravel & Organics, Brown		
Sampling Method:	As Received		
Sampled by:	Client		
Sample Location:	BH02		
Depth (m):	0.00 - 0.50		
Source:	Borehole		
Material:	Unknown		
Test Methods	AS1289.3.6.1		
		TEST RESULTS:	
Sieve Size(mm)	Passing (%)		
150.0			
75.0			
37.5			
26.5			
19.0	100		
13.2	99		
9.5	98		
6.7	98		
4.75	97		
2.36	95		
1.18	91		
0.600	84		
0.425	78		
0.300	73		
0.150	68		
0.075	63		
Remarks :			
		This document is issued in accordance with Soil Surveys Engineering quality requirements. Accredited for compliance with ISO/IEC 17025 - Testing. This document shall not be reproduced, except in full without the approval of Soil Surveys Engineering Pty Limited. Results Only apply to test items in this report	
		APPROVED SIGNATORY Zane De Koster  NATA Accred No: 15301	
END OF DOCUMENT		FORM NUMBER	REP-PSD-06
		Issue Date	14/4/2026
		Rev.	0

Appendix F: Calculations

The following arithmetic tests the cover-to-height ratio for each seam across the full range of Taylor's stated cover depths and working heights (Taylor Mining Services Pty Ltd, 2026, PDF pp. 5–6 and 8), against the local range of about 4–7, up to 9, within which collapse has reached the surface (Moreton, 2009a, PDF p. 6).

Table-11 Garden Seam cover-to-height ratio

Source scenario	Calculation	Result
Taylor Table 2 only, 1.0 m height	$16/1.0$ to $27/1.0 = 16\text{--}27$	Adopted case; well above the local collapse range.
Taylor text cover and 1.0 m height	$10/1.0$ to $30/1.0 = 10\text{--}30$	Lowest text estimate gives 10; still above the local collapse range.
Taylor text cover and historically attributed 1.1 m height	$10/1.1$ to $30/1.1 = 9.09\text{--}27.27$	Using the 1.12 m NS246 tool drop as working height gives 9.1 only at the lowest text cover; on the adopted 16–27 m cover the ratio is 14.5–24.5.

For the deep seams the ratios are: Tantivy $55/2.7$ to $95/2.7 = 20.4\text{--}35.2$; Waterstown $128/1.4$ to $150/1.4 = 91.4\text{--}107.1$; and Tivoli $207/1.5$ to $222/1.5 = 138\text{--}148$. Every case is well above the local collapse range. Inputs: Taylor Mining Services Pty Ltd (2026) PDF pp. 6 and 8.

Appendix G: Peer Reviewer Professional History and Review Record

Review scope: Sections 5, 8, 9 and 10 and Appendix F, covering the site cover and working-height model, the subsidence mechanisms and the lot-specific recommendations.

The reviewer's registration, qualifications and experience are summarised below. Current registration was checked in the public BPEQ register as recorded in BPEQ (2026), Professional Engineer Registration Details: RPEQ 13194 and 11644.

Registration and qualifications

Registration	BPEQ public profile checked 7 October 2026 at 16:36 AEST: RPEQ 11644, Geotechnical (mining), Practising Engineer, Current, registered to 30 June 2027 (BPEQ, 2026, Professional Engineer Registration Details: RPEQ 13194 and 11644). Registration is distinct from project engagement and completed review.
Professional membership	AusIMM Chartered Professional (Geotechnical)
Qualifications	PhD, Mining Rock Mechanics, University of Nottingham, 1980 to 1983; BSc (Hons) Mining Engineering, University of Nottingham, 1977 to 1980; Graduate Diploma, Advanced Rock Engineering, University of the Witwatersrand, 1992 to 1994
Experience	Over 40 years as a coal mining, geotechnical and rock mechanics engineer in South Africa, Australia and the United Kingdom, with work in the USA, Indonesia, Sardinia and Poland; design, planning and operation of longwall, pillar-extraction, bord-and-pillar, auger and partial-extraction mining

Career summary

September 2024 to present	Underground Coal Advisor (contract), MEC: due diligence on underground coal projects in Australia and Canada; surface-stability investigation for overland pipe installation above large-scale historic underground mining; advice to a surface owner undermined by a multi-seam longwall mine
April 2019 to present	Principal Mining and Geotechnical Consultant, Mining Geotechnical Services, Mackay: pillar design (chain, barrier, yield and multi-seam); roof and rib support; mine layout for longwall, bord and pillar, pillar extraction, partial extraction and auger mining; feasibility and due diligence; geotechnical assessments and audits; strata-control incident investigation; expert peer review of design reports
January 2015 to April 2019	Principal Geotechnical Engineer (Underground), Anglo American Metallurgical Coal, Queensland
January 2005 to December 2014	Principal Mining and Geotechnical Engineer, Mining Geotechnical Services, Mackay (services as above)
June 2002 to December 2004	Director, Strata Engineering Australia, Mackay
August 1995 to May 2002	Principal Engineer, CREME; freelance mining and geotechnical engineer
1987 to 1995	Rock Engineering Consultant, Trans Natal / Ingwe, South Africa

Relevance to this review

Bord-and-pillar workings	Design, layout and stability of bord-and-pillar and pillar-extraction workings, including multi-seam pillars: the workings beneath and adjoining the site (Section 5) and pillar stability (Section 8.3)
Surface stability above historic workings	Investigation of surface stability for pipe installation above large-scale historic underground mining (2024 to present)
Peer review	Expert peer review of design reports and engineering documentation
Review statement	To be provided and signed by the reviewer on completion of the review; recorded here at issue

Appendix H: Tivoli Development Applications on Mining-Affected Land

This appendix lists 40 Tivoli development applications on mining-affected land, with the mining reports lodged for each and Council's decision and mining conditions. The # column matches the numbers on the maps (Figure 22 to Figure 25); row 29 could not be placed on the map. Full document details are in Section 12.2.



Figure 22 Tivoli development applications: locality map

Locality application key

Original Appendix H numbers; shared locations retain each application and its outcome.

Table-1 Applications numbered on page 1

#	Address	Application	Outcome
1	14 Church Street	7980/2009/CA	Decision (approved)
2	14 Church Street	7980/2009/MA/A	Decision (approved)
3	14 Church Street	7980/2009/MAMC/A	Decision (approved)
4	95 Mt Crosby Road *	3110/2010/MA/A	Decision (approved)
5	95 Mt Crosby Road *	3110/2010/MCU	Decision (approved)
13	95 Mt Crosby Road	5250/2012/MAMC/A	Decision (approved)
14	95 Mt Crosby Road	5250/2012/MCU	Decision (approved)
23	7 Francis Street	1159/2018/OW	Decision (approved)
24	14 Church Street	1309/2019/OW	Decision (approved)
25	14 Church Street	2492/2019/OW	Decision (approved)
26	161-173 Holdsworth Road	12537/2022/MCU	Decision (approved)
33	145 Mt Crosby Road	9/2024/MAOC/A	Document only
34	52 Church Street and 145 Mt Crosby Road	9/2024/RAL	Decision (approved)
36	145 Mt Crosby Road	2867/2025/OW	Decision (approved)
38	145 Mt Crosby Road	680/2025/OW	Withdrawal

● Decision (approved) ● Court (approved on appeal) ● Withdrawal ● Document only (no decision found)

* Rows 4 and 5 are mapped to verified 95 Mt Crosby Road, Lot 6 RP88961; the conflicting lot description is retained in the source key.

Row 34 represents both 52 Church Street and 145 Mt Crosby Road. Rows 1-3 and 23-25 share the recorded parcel location.

The dashed rectangle on the Locality map identifies the detailed area on page 3. Its applications are listed on page 4.

Outcome labels describe held Appendix H evidence, not current application status or completion of conditions.

Source: Appendix H schedule and retained source verification. Parcel boundaries provide context and are not survey set-out.

RPEQ Consulting | 9 October 2026

2 / 4

Figure 23 Tivoli development applications: locality map key



Figure 24 Tivoli development applications: Morris Street enlargement

Morris Street and nearby applications key

Original Appendix H numbers; shared locations retain each application and its outcome.

Table-2 Applications numbered on page 3

#	Address	Application	Outcome
6	38 Greasley Street	7509/2010/RAL	Decision (approved)
7	56 Mt Crosby Road	7557/2010/MCU	Court (approved on appeal)
8	58 Mt Crosby Road	7558/2010/MCU	Court (approved on appeal)
9	22 Boundary Street	7655/2010/RAL	Decision (approved)
10	7 Tantivy Street	961/2010/OD	Decision (approved)
11	36 Greasley Street	4371/2011/RAL	Decision (approved)
12	17 and 19 Tantivy Street *	3856/2012/RAL	Decision (approved)
15	9 Morris Street	108/2013/MCU	Decision (approved)
16	18 Hastie Street	3803/2013/MCU	Decision (approved)
17	82 Hill Street	45/2014/CA	Decision (approved)
18	36 Moores Pocket Road	5481/2014/CA	Decision (approved)
19	82 Hill Street	5518/2015/OW	Decision (approved)
20	36 Moores Pocket Road	596/2016/OW	Decision (approved)
21	2 Mt Crosby Road	1017/2018/MAMC/A	Decision (approved)
22	2 Mt Crosby Road	1017/2018/MCU	Decision (approved)
27	56 Mt Crosby Road	12547/2022/CA	Decision (approved)
28	1A Savage Street	9042/2022/MCU	Withdrawal
30	17 Tantivy Street	2060/2023/CA	Decision (approved)
31	34 Greasley Street	10167/2024/RAL	Decision (approved)
32	13A Tantivy Street	6058/2024/MCU	Decision (approved)
35	1A Savage Street	1140/2025/MCU	Decision (approved)
37	19 Tantivy Street	3508/2025/MCU	Decision (approved)
39	49 Tantivy Street *	8475/2025/MCU	Document only
40	9 Mt Crosby Road	7107/2026/MCU	Decision (approved)

● Decision (approved) ● Court (approved on appeal) ● Withdrawal ● Document only (no decision found)

Not mapped: #29 | 1 Tantivy Street | 1928/2023/MCU | Decision (approved).

No exact State address match; complete historical application footprint unresolved. No marker is shown.

* Row 12 uses the paired 17/19 Tantivy Street site; row 39 uses the three-parcel application site identified by Council.

Outcome labels describe held Appendix H evidence, not current application status or completion of conditions.

Source: Appendix H schedule and retained source verification. Parcel boundaries provide context and are not survey set-out.

Figure 25 Tivoli development applications: Morris Street enlargement key

Table-12 Tivoli development applications on mining-affected land

#	Application	Address	Development	Mining report(s)	Outcome	Mining conditions
1	7980/2009/CA	14 Church Street Lot 1 on RP135008	4 into 80 lots; material change of use	Moreton (2007a), desktop study, 1 Dec 2007 Moreton (2009b), supplementary study, 11 Sep 2009 Moreton (2010b), drilling and geophysics, 16 Aug 2010 Moreton (2010c), synthesis, 4 Oct 2010 Moreton (2011c), trial pits, 6 Jun 2011 Moreton (2011d), trial pits, 4 Jul 2011 Moreton (2011b), overview, 8 Jul 2011	Approved 24 May 2012; negotiated approval 5 Mar 2013	Development-specific mining conditions 4 and 14, kept in the negotiated approval
2	7980/2009/MA/A	14 Church Street Lot 1 on RP135008	Currency extension and change, 80-lot subdivision	Moreton (2016), mining study attached to the application Moreton (2017b), report review and August 2016 drilling, 30 Mar 2017	Change and extension approved 31 May 2017	Mining-report compliance and further investigations (conditions 4, 14 and 5)
3	7980/2009/MAMC/A	14 Church Street Lot 1 on RP135008	Minor change, 80-lot subdivision	Moreton (2017b), review and drilling Moreton (2020), tunnel trenching and drilling Moreton (2021c), study update Moreton (2021b), study update Moreton (2021a), entry-road design response	Minor change approved 17 Aug 2021	Works to specified reports; further investigation and remediation design where stated (conditions 4 and 14)
4	3110/2010/MA/A	95 Mt Crosby Road Lot 6 on RP88961	Permissible change, caravan park (6 cabins)	No separate mining report	Change approved 23 Mar 2012 (letter 28 Mar 2012)	Mining-report compliance and structural certification (condition 6)
5	3110/2010/MCU	95 Mt Crosby Road Lot 32 on RP23818	Caravan park, 6 cabins	No separate mining report	Approved 6 Sep 2010	Design and construction to Moreton report of 22 Jul 2010; structural certification before building approval (condition 6) Council notice states Lot 32 on RP23818; property is Lot 6 on RP88961
6	7509/2010/RAL	38 Greasley Street Lot 4 on RP14650	1 lot into 2 lots and single dwelling	Moreton (2010a), desktop study with site inspection, 8 Sep 2010	Approved 10 Dec 2010	Mining conditions 9 (lots) and 7 (dwelling)

#	Application	Address	Development	Mining report(s)	Outcome	Mining conditions
7	7557/2010/MCU	56 Mt Crosby Road Lot 41 on RP77382	Single dwelling, development constraints overlay	No separate mining report	Refused 28 Mar 2011; changed application approved on appeal 26 Sep 2013 (appeal 1304/2011)	Refused on mining design; court condition 9: build to Moreton report of 29 Nov 2010, structural certification
8	7558/2010/MCU	58 Mt Crosby Road Lot 42 on RP77382	Single dwelling, development constraints overlay	No separate mining report	Deemed refusal; changed application approved on appeal 26 Sep 2013 (appeal 1303/2011)	Mining-report compliance and structural certification (court condition 9)
9	7655/2010/RAL	22 Boundary Street Lot 60 on RP14624	1 lot into 3 lots	Moreton (2010d), study with roadside inspection, no new drilling, 2 Dec 2010	Approved 28 Jan 2011; negotiated approval 28 Feb 2011	Design and construction to Moreton report of 2 Dec 2010; structural certification (conditions 11 and 7)
10	961/2010/OD	7 Tantivy Street Lot 8 on RP898257	House renovation and build-under (building work)	No separate mining report	Approved 7 May 2010	Design and construction to Moreton desktop report of 16 Mar 2010; structural certification (condition 7)
11	4371/2011/RAL	36 Greasley Street Lot 5 on RP14650	1 lot into 2 lots	Moreton (2011a), desktop study with roadside inspection, no new on-site drilling, 8 Jul 2011	Approved 31 Aug 2011	Mining conditions 8 (lots) and 7 (use), referring to Moreton report 2011/35 of 8 Jul 2011
12	3856/2012/RAL	17 and 19 Tantivy Street Lots 21 and 22 on SP235469	Boundary realignment	No separate mining report	Approved 22 Aug 2012	Advice 4(b) only: mining report required with any future use or building application; no report accepted
13	5250/2012/MAMC /A	95 Mt Crosby Road	Minor change, caravan park extension	No separate mining report	Minor change approved 19 Apr 2022	No mining condition in this change
14	5250/2012/MCU	95 Mt Crosby Road Lot 6 on RP88961	Caravan park extension	No separate mining report	Approved 19 Mar 2014	Moreton report 2010/55 of 22 Jul 2010; structural certification before building approval (condition 13)
15	108/2013/MCU	9 Morris Street Lot 66 on RP14624	Single dwelling, development constraints overlay	Moreton (2012b), study and site inspection, 26 Oct 2012 Moreton (2013b), drilling, three boreholes on 11 Mar 2013, 12 Mar 2013	Approved 3 Apr 2013	Design and construction to Moreton reports 2012/49 and 2012/49/02; structural certification before building approval (condition 6)

#	Application	Address	Development	Mining report(s)	Outcome	Mining conditions
16	3803/2013/MCU	18 Hastie Street Lot 3 on RP84913 and Lot 37 on RP14759	Single dwelling, development constraints overlay	Moreton (2013a), desktop study and site inspection, 13 Apr 2013 Trenching report named in the Council decision, 12 Sep 2013	Approved 11 Oct 2013	Design to Moreton desktop report (13 Apr 2013) and trenching report (12 Sep 2013); structural certification (condition 7)
17	45/2014/CA	82 Hill Street Lot 32 on RP14650	Single dwelling and reconfiguring a lot	Moreton (2008), study with roadside inspection, 8 Apr 2008 Moreton (2014a), review letter, 24 Apr 2014	Approved 26 Mar 2015	Design to mining report; RPEQ structural certification (Attachment A conditions 12(b), 13(a); Attachment B conditions 11–12) Moreton (2014a) was lodged twice; it is one review, not two.
18	5481/2014/CA	36 Moores Pocket Road Lot 1 on RP807134	1 lot into 3 lots; two single dwellings	Moreton (2007b), study with roadside inspection, 17 Dec 2007 Moreton (2014b), desktop study review, 16 Sep 2014	Approved 15 Dec 2014	Infrastructure design and RPEQ structural certification to Moreton reports of 17 Dec 2007 and 16 Sep 2014 (conditions 15(b), 16(a))
19	5518/2015/OW	82 Hill Street Lot 32 on RP14650	Stormwater and drainage works	No separate mining report	Approved 29 Oct 2015 (notice 2 Nov 2015)	No mining condition identified
20	596/2016/OW	36 Moores Pocket Road	Stormwater works	No separate mining report	Approved 16 Mar 2016	No mining condition identified
21	1017/2018/MAMC /A	2 Mt Crosby Road Lot 1 on SL2259	Minor change, shopping centre	No separate mining report	Minor change approved 30 Jul 2020	Mining condition carried forward (renumbered 32/33); structural certification
22	1017/2018/MCU	2 Mt Crosby Road Lot 1 on SL2259	Shopping centre	Moreton (2017a), desktop study, 27 Oct 2017	Approved 18 Oct 2018; negotiated notice 10 Dec 2018 (its decision-date field says 10 Nov 2018)	Further mining/geophysical investigation and signed report (condition 32); structural certification (condition 36)
23	1159/2018/OW	7 Francis Street	Road, drainage, stormwater, earthworks, signage and clearing works	Moreton (2018), supplementary drilling, two boreholes plus earlier drilling, 21 Jun 2018	Approved 12 Nov 2018 (letter 13 Nov 2018)	Condition 7(a): retaining-structure design and geotechnical support
24	1309/2019/OW	14 Church Street	Road, stormwater, drainage, earthworks, signage and clearing works	No separate mining report	Approved 10 Oct 2022	Mining remediation supervision, verification and completion certification by Taylor or Moreton, to plan 790433-002-C1-1011 Rev E (condition 10)

#	Application	Address	Development	Mining report(s)	Outcome	Mining conditions
25	2492/2019/OW	14 Church Street	Street lighting, Oaklands Estate Stages 2A, 2B, 2C	No separate mining report	Approved 3 Jul 2019 (letter 4 Jul 2019)	No mining condition identified
26	12537/2022/MCU	161-173 Holdsworth Road Lot 3 on RP211873	Battery energy storage system (major utility)	Moreton (2022c), drilling and trenching, 7 Apr 2022 Moreton (2022a), desktop study 9 Feb 2022 and supplementary mining review 22 Feb 2023, Taylor assisting	Approved 3 Nov 2023	Mining investigation and design; RPEQ structural certification (conditions 15(c), 16(c), 19(d), 20(a))
27	12547/2022/CA	56 Mt Crosby Road Lot 207 on CH31135	Boundary realignment, 2 lots into 2 lots	No separate mining report	Approved 17 Mar 2023	RPEQ structural certification to the named Moreton and STA reports (condition 8)
28	9042/2022/MCU	1A Savage Street	Single dwelling, development constraints overlay	Moreton (2019b), review and site inspection, 28 Jun 2019 Moreton (2011a), desktop study, 8 Jul 2011	Withdrawn 27 Sep 2022	None (withdrawn) Reports concern the earlier 36 Greasley Street site.
29	1928/2023/MCU	1 and 3 Tantivy Street Lots 1 and 2 on SP142073	Sewage pump station (major utility)	Moreton (2022b), desktop study and site inspection, 9 Dec 2022	Approved 29 Jun 2023	RPEQ structural certification to Moreton desktop study 2022/86 and review 2022/86/2 (condition 16(a))
30	2060/2023/CA	17 Tantivy Street Lot 6 on SP257242	1 into 2 lots; material change of use	Moreton (2023), desktop study with roadside inspection, 1 Feb 2023	Approved 17 Apr 2024; negotiated approval 27 Jun 2024	Slope stability, design to the 1 Feb 2023 desktop mining report, structural certification (conditions 13, 31–33)
31	10167/2024/RAL	34 Greasley Street Lot 6 on RP14650	1 lot into 2 lots	Moreton (2024b), desktop study with roadside inspection, 29 Aug 2024	Approved 12 Mar 2025	Disclose mining report, design to its recommendations, RPEQ structural certification (conditions 6, 10 and 11(a))
32	6058/2024/MCU	13A Tantivy Street	Single dwelling, development constraints overlay	Moreton (2024a), desktop study from records and site inspection, discusses 1994 drilling, 17 Jul 2024	Approved 11 Nov 2024	Infrastructure and structural design and RPEQ certification to Moreton desktop report 2024/38 (conditions 12 and 13(a))
33	9/2024/MAOC/A	145 Mt Crosby Road Lot 1 on RP58274	Other change, 2 lots into 14 lots	Moreton (2024c), review, Taylor assisting, 19 Oct 2024 PTG Consulting (2026b), mining investigation: boreholes, test pits, CPT and seismic PTG Consulting (2026a), mining investigation: boreholes, test pits, CPT and seismic, Rev 1, 15 May 2026	No decision found	No Council decision found

#	Application	Address	Development	Mining report(s)	Outcome	Mining conditions
34	9/2024/RAL	52 Church Street and 145 Mt Crosby Road Lot 2 on RP118315 and Lot 1 on RP58274	Boundary realignment, 2 lots into 2 lots	Moreton (2024d), updated desktop study, Taylor assisting, 3 May 2024 Moreton (2024c), mining review drawing on earlier trenching, Taylor assisting, 19 Oct 2024	Approved 12 Nov 2024	Earthworks and geotechnical requirements, including further field investigation (12(a)), design and certification (conditions 11–16)
35	1140/2025/MCU	1A Savage Street Lot 2 on SP313880	Single dwelling, development constraints overlay	Moreton (2019b), review and site inspection, 28 Jun 2019 Moreton (2011a), desktop study citing earlier off-site drilling, no new investigation, 8 Jul 2011	Approved 6 Mar 2025	Design and construction to listed mining reports; RPEQ structural certification before final inspection (condition 4)
36	2867/2025/OW	145 Mt Crosby Road Lot 1 on RP58274	Earthworks	No separate mining report	Approved 31 Jul 2025	PSM geotechnical report is approved supporting material (condition 3); advice 14 refers to parent 9/2024/RAL
37	3508/2025/MCU	19 Tantivy Street Lot 5 on SP257242	Single dwelling, development constraints overlay	Moreton (2025a), desktop study and site inspection, 17 Jun 2025	Approved 7 Jan 2026	Design and construction to listed mining report; RPEQ structural certification before final inspection (condition 4)
38	680/2025/OW	145 Mt Crosby Road Lot 1 on RP58274	Vegetation clearing	No separate mining report	Withdrawn 10 Feb 2025	None (withdrawn)
39	8475/2025/MCU	49 Tantivy Street (with 81 Tantivy Street and 57 Morris Street)	Warehouse (storage and distribution)	Moreton (2025b), desktop study and general site inspection, Taylor assisting, 17 Mar 2025	No decision found	No Council decision found
40	7107/2026/MCU	9 Mt Crosby Road	Dual occupancy	Moreton (2026), desktop study with roadside inspection, 21 Apr 2026	Approved 26 Jun 2026	Design, construction and RPEQ structural certification to Moreton report 2026/21 of 21 Apr 2026 (condition 11)