



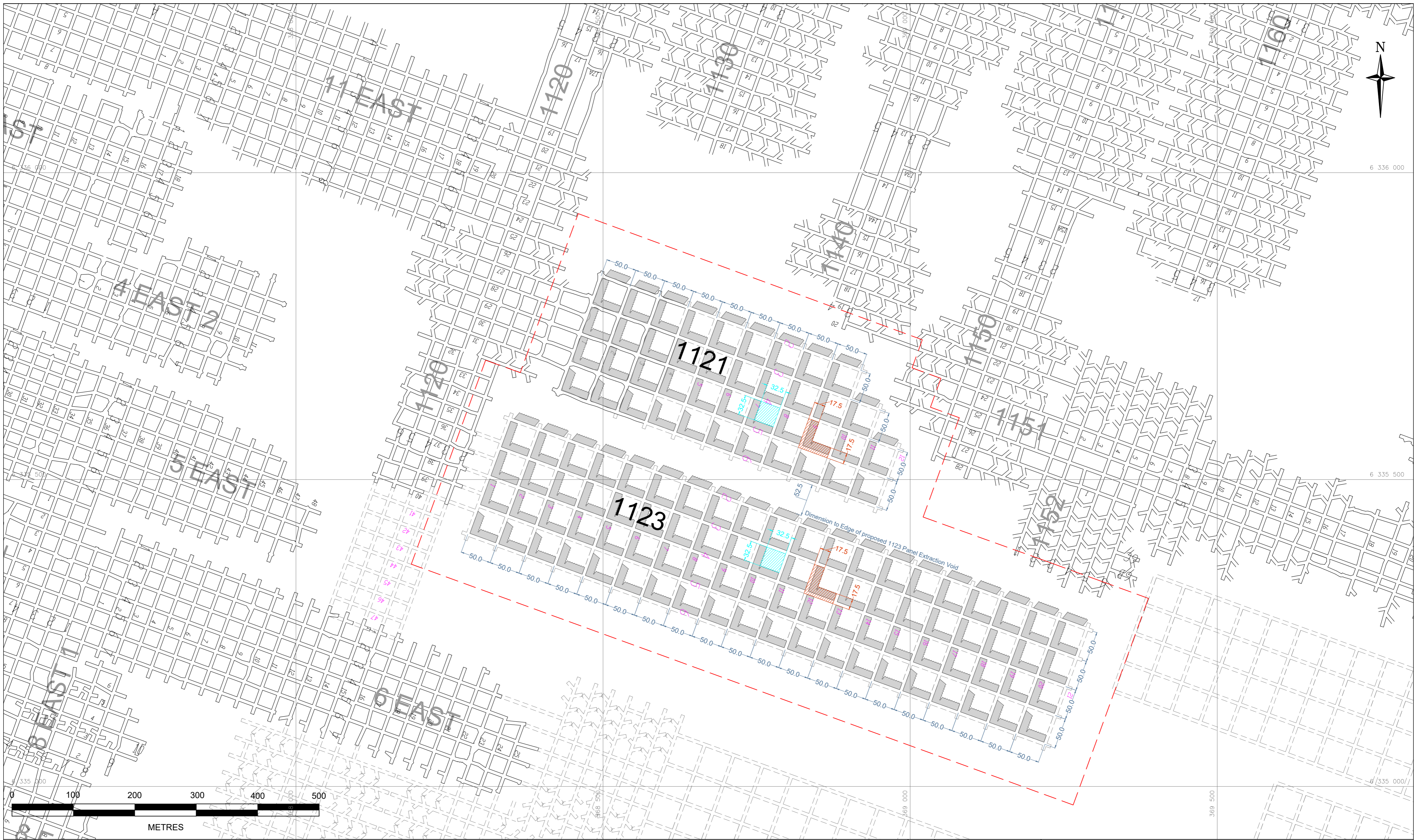
**Volume 2**

# **Graphical Plans**

**Panels 1121 and 1123**

**Myuna Colliery**

**August 2024**



**Legend**

- Current Workings - Dated 14.06.2024
- Proposed Workings
- Extraction Area - Extent of the area that may be affected by subsidence (26.5° Angle of Draw)  
Note: All workings within the Extraction zone of influence are adjacent to West Lake and Swansea North Entrance Mine Subsidence Districts)
- Proposed Pillar Extraction
- Area of Remnant Pillar created by Pillar Extraction (All Dimensions shown are in Metres)
- Area of Void created by Pillar Extraction (All Dimensions shown are in Metres)

**Endorsements**

1. Prepared in accordance with the Survey and Drafting Directions for Mining Surveyors 2020 (NSW Mines)
2. MGA Zone 56, GDA 2020, Australian Height Datum.

**NOTE:** Extraction area lies wholly within The Consolidated Consent - Approval No: 10\_0080, and Mining Lease ML1632

**Certification**

I, Daniel Hart, being a Registered Mining Surveyor, pursuant to the Surveying and Spatial Information Act 2022, and in accordance with the NSW Department of Planning and Environment - Extraction Plan Guideline, Certify the accuracy of this plan at the time of preparation.

NSW BOSSI Registration Identification No: 8421

Name: Daniel Hart Signature: Daniel Hart Date: 04.07.2024

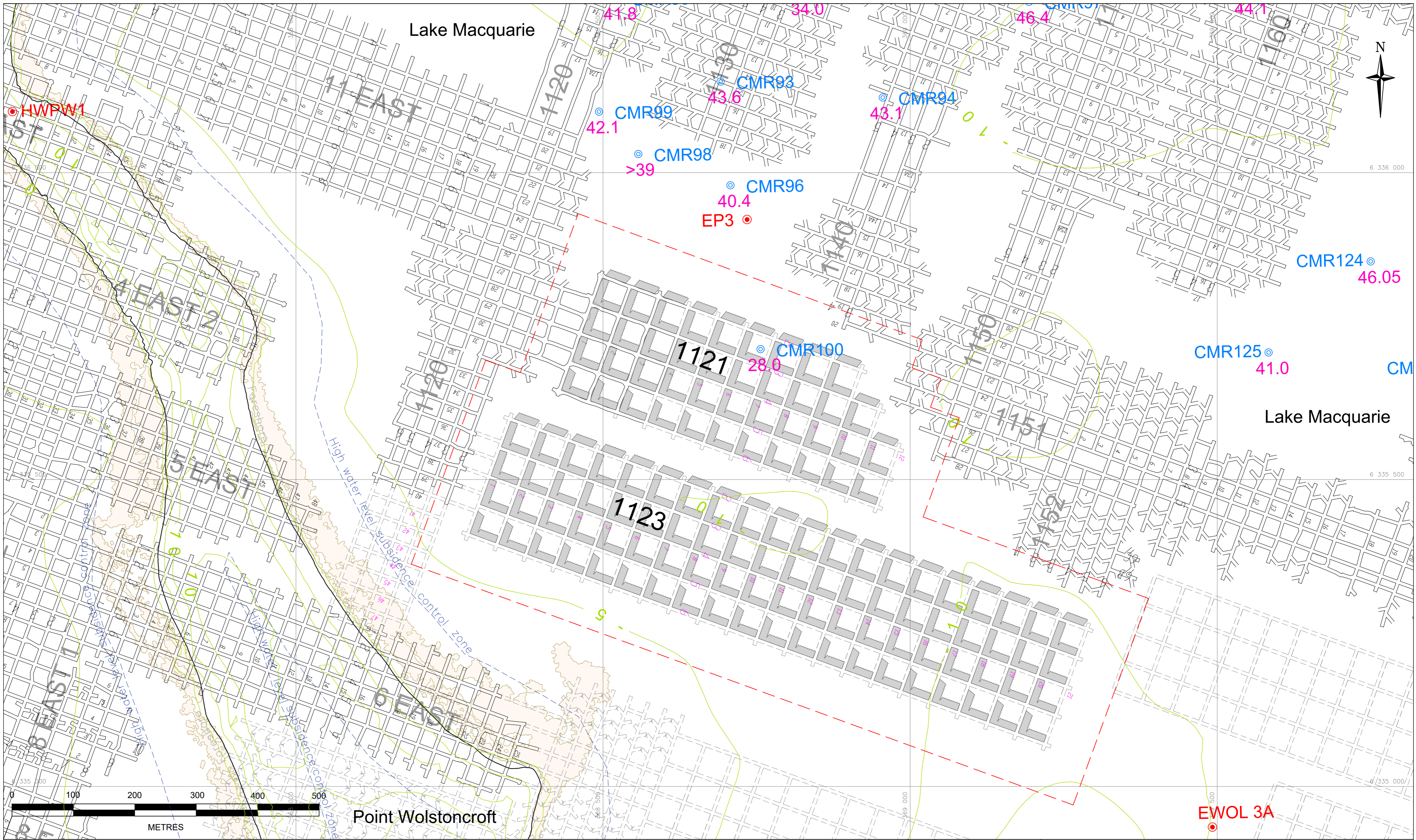
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NSW Mine Managers Practising Certificate No: 2018-0988-1

Name: Owen Farrugia Signature: Owen Farrugia Date: 04.07.2024

DRAWN : DH DATE : 27.06.2024		<b>CENTENNIAL MYUNA COLLIERY</b>	
CHECKED : NK DATE : 01.07.2024		<b>Fassifern Seam 1121 Panel and 1123 Panel Extraction Plan - Figure 1: Extraction Area - Existing and Proposed Workings</b>	
SCALE <b>1:4000</b>	CAD FILE N:/Shared/PLANS/MY/MY11879.dwg N:/Shared/PLDT/MY/MY11879.pdf	PLAN NO. <b>MY11879</b>	REV. <b>A2</b>



**Legend**

- Current Workings - Dated 14.06.2024
- Proposed Workings
- Extraction Area - Extent of the area that may be affected by subsidence (26.5° Angle of Draw)  
Note: All workings within the Extraction zone are adjacent to West Lake and Swansea North Entrance Mine Subsidence Districts
- High Water Level Subsidence Control Zone - HWLSCZ
- Surface contours and Bathymetry (Bottom of Lake bed) AHD and 5m Contour Intervals
- Foreshore of Lake Macquarie
- CMR88 36.9 Rockhead Borehole (Depth to Bedrock at base of Lake Macquarie)
- MYU002\_T 36.9 Borehole - Surface to Inseam

**Endorsements**

- Prepared in accordance with the Survey and Drafting Directions for Mining Surveyors 2020 (NSW Mines)
- MGA Zone 56, GDA 2020, Australian Height Datum.

**NOTE:** Extraction area lies wholly within The Consolidated Consent - Approval No: 10\_0080, and Mining Lease ML1632

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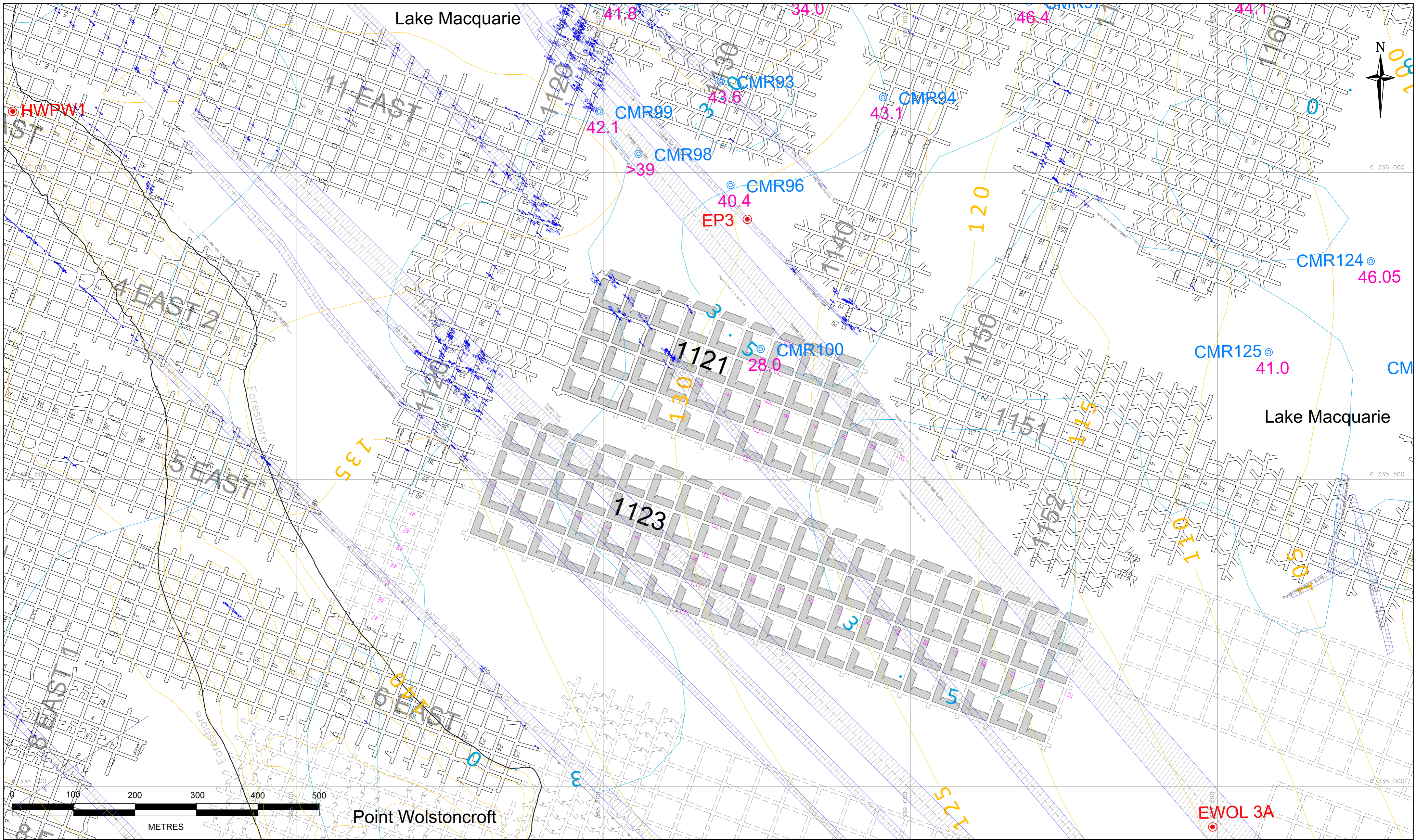
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Name: Owen Farrugia Signature: Owen Farrugia Date: 04.07.2024

DRAWN : DH DATE : 27.06.2024		
	<b>Fassifern Seam 1121 Panel and 1123 Panel Extraction Plan - Figure 2: Surface Features</b>	
CHECKED : NK DATE : 01.07.2024	CAD FILE N:/Shared/PLANS/MY/MY11880.dwg N:/Shared/PL0T/MY/MY11880.pdf	PLAN NO. <b>MY11880</b>
SCALE <b>1:4000</b>	REV.	<b>A2</b>



**Legend**

- Current Workings - Dated 14.06.2024
- Proposed Workings
- Depth of Cover Contours - Land Surface and Lake Macquarie (5m Contours)
- Seam Thickness (Fassifern seam FCR to FE Piles, 0.5m Contour Intervals)
- Foreshore of Lake Macquarie
- Rockhead Borehole (Depth to Bedrock at Base of Lake Macquarie)
- Borehole - Surface to Inseam
- Projected Geological Structure Control Zone
- Mapped Geology - Fassifern seam
- Proposed Pillar Extraction

**Endorsements**

- Prepared in accordance with the Survey and Drafting Directions for Mining Surveyors 2020 (NSW Mines)
- MGA Zone 56, GDA 2020, Australian Height Datum.

**NOTE:** Extraction area lies wholly within The Consolidated Consent - Approval No: 10\_0080, and Mining Lease ML1632

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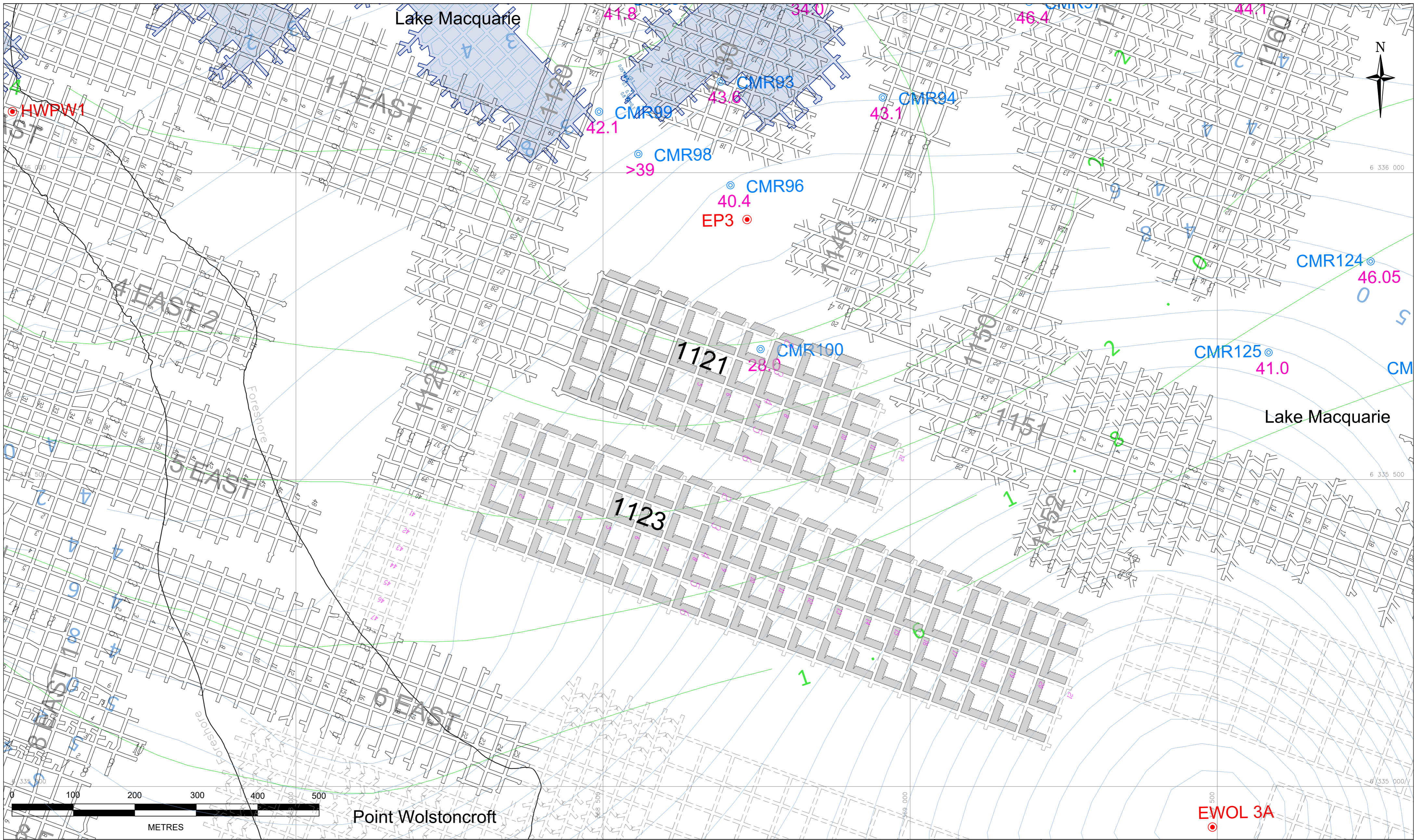
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Name: Owen Farrugia Signature: Owen Farrugia Date: 04.07.2024

DRAWN : DH		<b>MYUNA COLLIERY</b>		
DATE : 27.06.2024		<b>Fassifern Seam 1121 Panel and 1123 Panel Extraction Plan - Figure 3: Proposed Workings and Depth of Cover Seam Thickness and Geology</b>		
CHECKED : NK	<b>MY11881</b>			
DATE : 01.07.2024				
SCALE : 1:4000	CAD FILE N:/Shared/PLANS/MY/MY11881.dwg N:/Shared/PLOT/MY/MY11881.pdf	PLAN NO.	REV.	A2



**Legend**

- Current Workings - Dated 14.06.2024
- Proposed Workings
- Extent of Great Northern Seam Workings and Geology
- Great Northern Seam Thickness Isopachs (0.2m Contour Interval)
- Fassifern to Great Northern seam Interburden Thickness Isopachs (2m Contour Interval)
- Foreshore of Lake Macquarie
- CMR88 Rockhead Borehole (Depth to Bedrock at base of Lake Macquarie)
- MYU02\_T Borehole - Surface to Inseam

**Endorsements**

- Prepared in accordance with the Survey and Drafting Directions for Mining Surveyors 2020 (NSW Mines)
- MGA Zone 56, GDA 2020, Australian Height Datum.

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Proposed Pillar Extraction

**Certification**

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Name: Owen Farrugia Signature: Owen Farrugia Date: 04.07.2024

DRAWN : DH  
DATE : 27.06.2024

CHECKED : NK  
DATE : 01.07.2024

SCALE : 1:4000

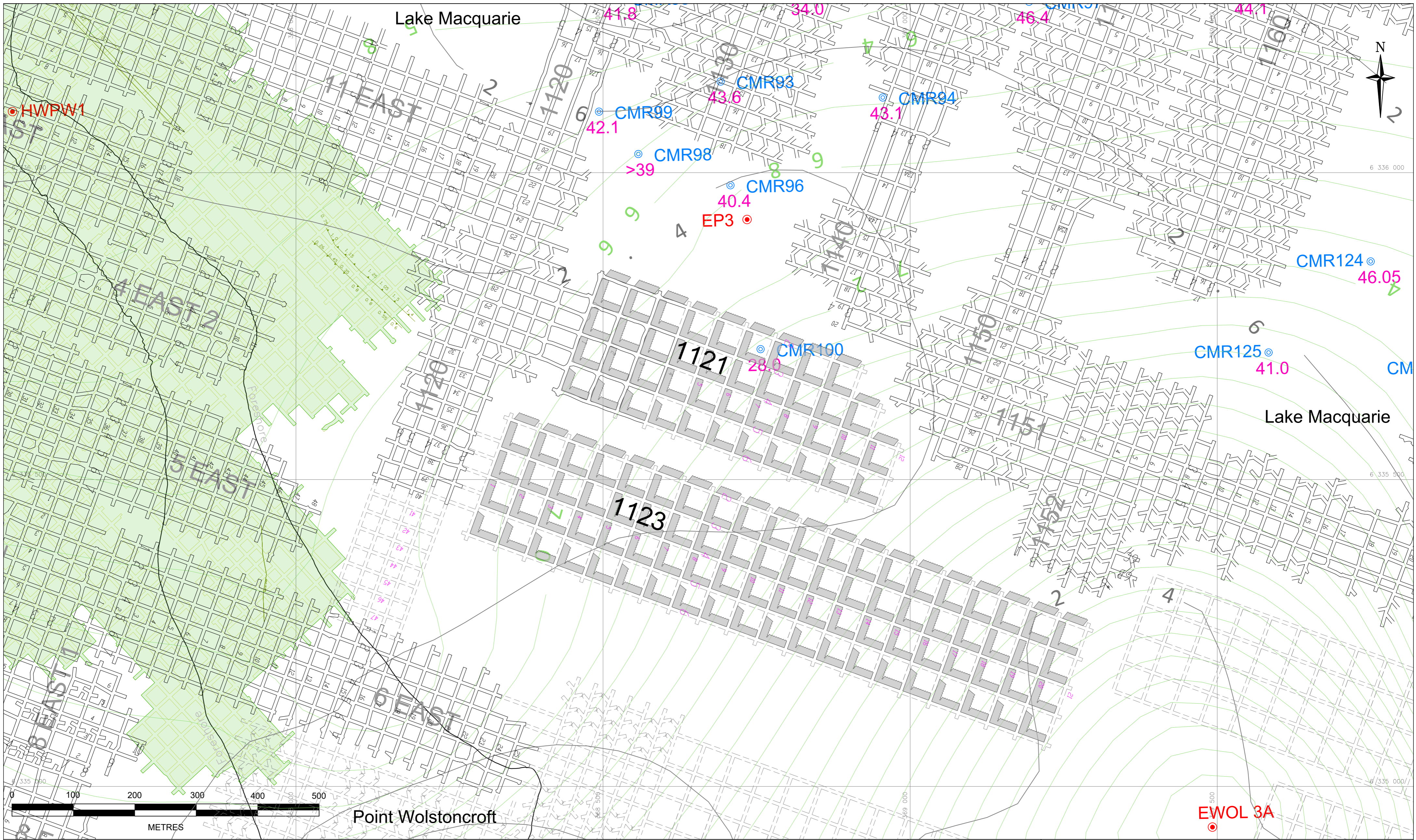
**CENTENNIAL MYUNA COLLIERY**

TITLE: **Fassifern Seam 1121 Panel and 1123 Panel Extraction Plan - Figure 4a: Showing Great Northern seam Workings and Geology with Great Northern to Fassifern seam Interburden and Seam Thickness Isopachs**

CAD FILE: N:/Shared/PLANS/MY/MY11882.dwg  
N:/Shared/PL0T/MY/MY11882.pdf

PLAN NO: **MY11882**

REV. **A2**



**Legend**

- Current Workings - Dated 14.06.2024
- Proposed Workings
- Extent of Wallarah Seam Workings and Geology
- Wallahah Seam Thickness Isopachs (0.2m Contour Intervals)
- Fassifern to Wallarah seam Interburden Thickness Isopachs (2m Contour Intervals)
- Foreshore of Lake Macquarie
- Rockhead Borehole (Depth to Bedrock at Base of Lake Macquarie)
- MYU002\_T Borehole - Surface to Inseam

**Endorsements**

- Prepared in accordance with the Survey and Drafting Directions for Mining Surveyors 2020 (NSW Mines)
- MGA Zone 56, GDA 2020, Australian Height Datum.

**NOTE:** Extraction area lies wholly within The Consolidated Consent - Approval No: 10\_0080, and Mining Lease ML1632

**Proposed Pillar Extraction**

**Certification**

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NSW BOSSI Registration Identification No: 8421

Name: Daniel Hart Signature: Daniel Hart Date: 04.07.2024

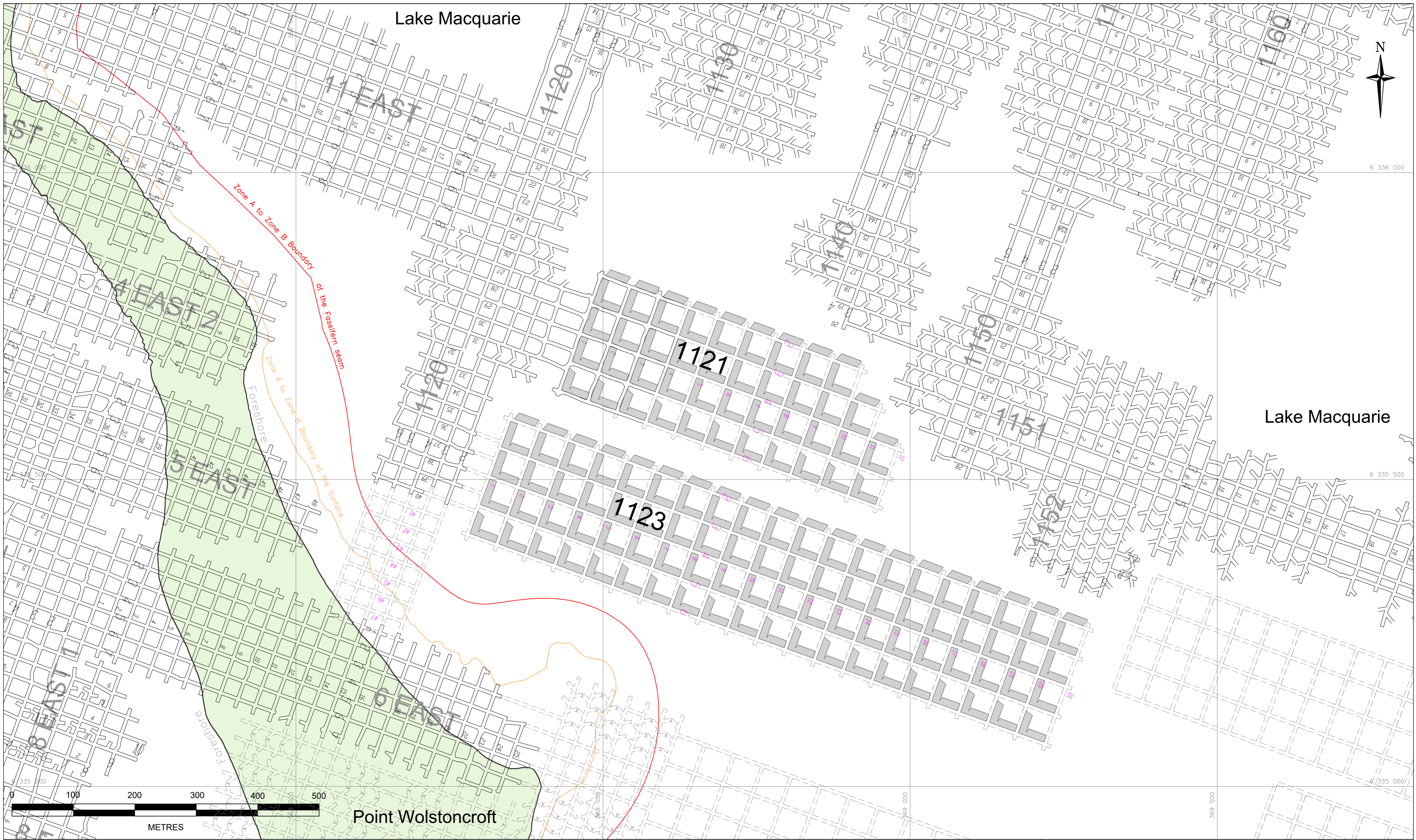
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NSW Mine Managers Practising Certificate No: 2018-0988-1

Name: Owen Farrugia Signature: Owen Farrugia Date: 04.07.2024

DRAWN : DH		<b>MYUNA COLLIERY</b> <b>Fassifern Seam 1121 Panel and 1123 Panel Extraction Plan - Figure 4b:</b> <b>Showing Wallarah seam Workings and Geology with Wallarah to Fassifern seam Interburden and Seam Thickness Isopachs</b>
DATE : 27.06.2024		
CHECKED : NK		
DATE : 01.07.2024		
SCALE : 1:4000	CAD FILE : N:/Shared/PLANS/MY/MY11883.dwg N:/Shared/PL0T/MY/MY11883.pdf	PLAN NO. : <b>MY11883</b>
		REV. : <b>A2</b>



- Legend**
- Current Workings - Dated 14.06.2024
  - Proposed Workings
  - National Parks and Wildlife (NPWS) - Managed Land
  - Foreshore of Lake Macquarie
  - Proposed Pillar Extraction
  - Zone A to Zone B Boundary at the Surface
  - Zone A to Zone B Boundary at the Fassiferu Seam

**Endorsements**

1. Prepared in accordance with the Survey and Drafting Directions for Mining Surveyors 2020 (NSW Mines)
2. MGA Zone 56, GDA 2020, Australian Height Datum.

**NOTE:** Extraction area lies wholly within The Consolidated Consent - Approval No: 10\_0080, and Mining Lease ML1632

**Certification**

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NSW BOSSI Registration Identification No: 8421

Name: Daniel Hart Signature: Daniel Hart Date: 04.07.2024

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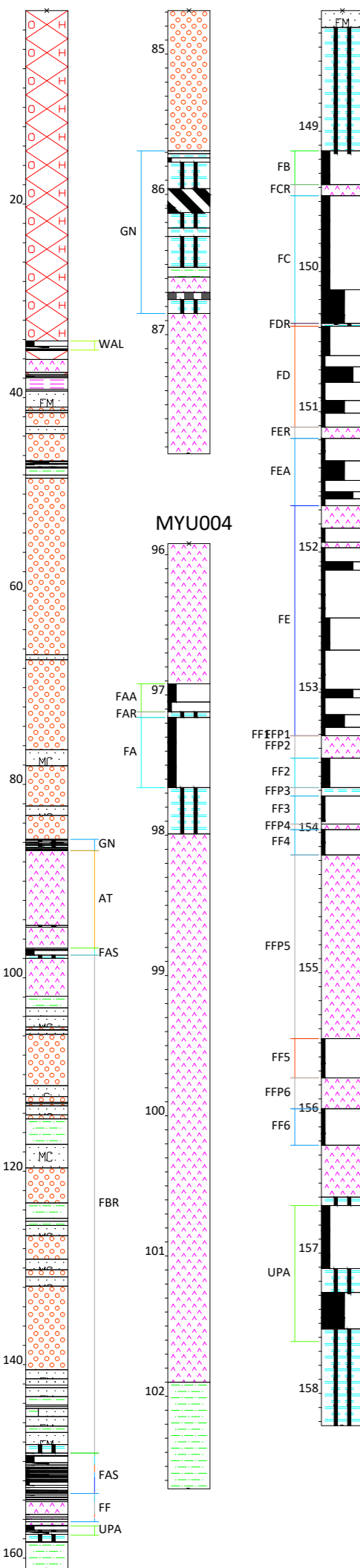
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NSW Mine Managers Practising Certificate No: 2018-0988-1

Name: Owen Farrugia Signature: Owen Farrugia Date: 04.07.2024

DRAWN : DH		<b>TITLE</b> Fassiferu Seam 1121 Panel and 1123 Panel Extraction Plan - Figure 5: Mining Titles and Land Ownership	
DATE : 27.06.2024			
CHECKED : NK			
DATE : 01.07.2024			
SCALE	CAD FILE	PLAN NO.	REV.
1:4000	N:/Shared/PLANS/MY/MY11884.dwg N:/Shared/PL0T/MY/MY11884.pdf	MY11884	A2

MYU004 (1) MYU004 (2) MYU004 (3)



**LEGEND**  
Lithology Reference

- OPEN HOLE
- COAL - dull minor bright
- COAL - interbanded dull & bright
- COAL - dull
- TUFF
- CORE LOSS
- CLAYSTONE
- SANDSTONE - fine grained
- SANDSTONE - fine to medium grained
- CONGLOMERATE
- SANDSTONE - medium to coarse grained
- COAL - banded bright
- CARBONACEOUS MUDSTONE
- SILTSTONE
- MUDSTONE
- COAL - undifferentiated
- COAL - stony
- SANDSTONE - coarse grained
- SANDSTONE
- COAL - dull and bright

**SEAM LEGEND**  
Seam Expansion Reference

- VPT - Vales Point
- WALR - Wallarah
- GN - Great Northern
- AT - Awaba Tuff
- FAA - Fassifern FAA
- FAR - Fassifern FAR
- FA - Fassifern FA
- FBR - Fassifern FBR
- FB - Fassifern FB
- FCR - Fassifern FCR
- FC - Fassifern FC
- FDR - Fassifern FDR
- FD - Fassifern FD
- FER - Fassifern FER
- FEA - Fassifern FEA
- FE - Fassifern FE
- FFP1 - Fassifern FF
- FF1 - Fassifern FF
- FF2 - Fassifern FF
- FFP3 - Fassifern FF
- FF3 - Fassifern FF
- FFP4 - Fassifern FF
- FF4 - Fassifern FF
- FFP5 - Fassifern FF
- FF5 - Fassifern FF
- FFP6 - Fassifern FF
- FF6 - Fassifern FF
- UPA - Upper Pilot A

Not To Scale

**BOREHOLE LOG**

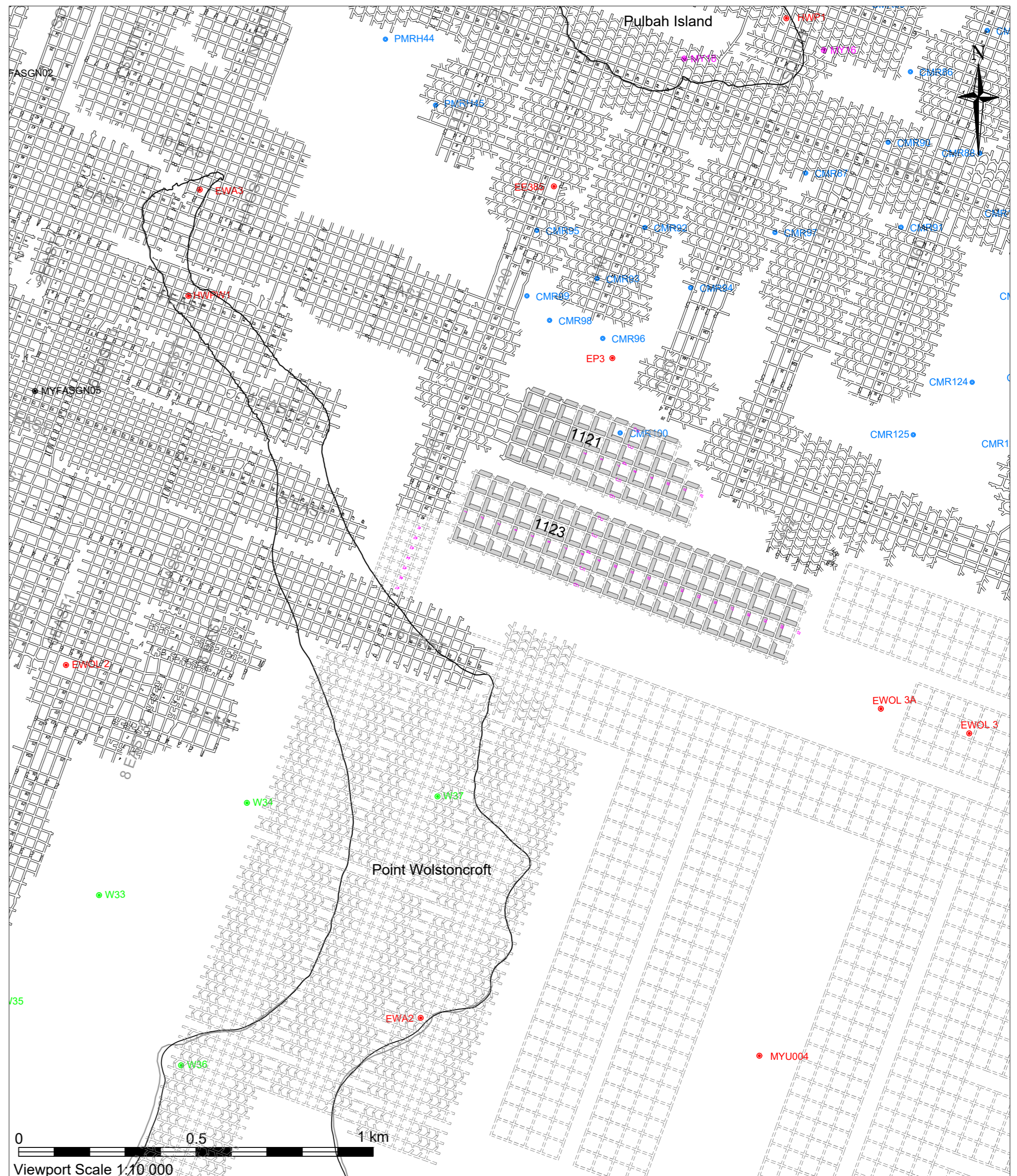
CLIENT: Centennial Myuna Pty Limited		SURFACE LEVEL: COORDINATE E: N		LOCATION ID: MYU 004		
PROJECT: Surface to Seam Drilling		DATE: 20/04/20		PROJECT No: 35253.04		
LOCATION: Lake Macquarie		DATUM/GRID: MGA94 Zone 56		DATE: 20/04/20 - 27/04/20		
		DIPIAZMUTH: 907		SHEET: 15 of 17		
DEPTH (m)	DESCRIPTION OF STRATA	GRAPHIC ORIGIN	ROCK		SAMPLE	TESTING
			WEIGHT (%)	STRENGTH		
140.52	CONGLOMERATE, grey matrix, coarse to sub rounded, F&S angular to 10.0 mm with angular sub-rounded gravel up to 20 mm in size		FS	100	100	
141.1	SANDSTONE, grey fine to medium, trace carbonaceous lenses		FS	100	100	
141.54-141.67m	Siltstone band with siltite		FS	100	100	
141.76-142.11m	Conglomerate band with angular sub-rounded gravel up to 20 mm in size		FS	100	100	
142.11-142.41m	Siltstone band with siltite		FS	100	100	
143.31-143.5m	Siltstone band with siltite		FS	100	100	
143.67-144.19m	Siltstone band		FS	100	100	
144.33-144.56m	Siltstone band		FS	100	100	
144.64-144.79m	Siltstone band		FS	100	100	
144.83-144.85m	Siltstone band		FS	100	100	
145.09-145.34m	Siltstone band		FS	100	100	
145.09-145.09m	Siltstone band		FS	100	100	
145.45-145.8m	Siltstone band with siltite		FS	100	100	
145.84-145.77m	Siltstone band		FS	100	100	
147.4-147.44m	Siltstone band		FS	100	100	
147.67-147.75m	Siltstone band		FS	100	100	
147.8	CARBONACEOUS SILTSTONE, dark grey		FS	100	95	
148.14	COAL, black		FS	100	81	
148.41-148.47m	Carbonaceous claystone		FS	100	81	

PLANT: Hydropower Scout OPERATOR: Total Drilling LOGGED: Benson  
METHOD: WB to 34.15m, then HQ3 to 160.11m CASING: PG to 17.0m, HWV to 34.15m  
REMARKS:

**BOREHOLE LOG**

CLIENT: Centennial Myuna Pty Limited		SURFACE LEVEL: COORDINATE E: N		LOCATION ID: MYU 004		
PROJECT: Surface to Seam Drilling		DATE: 20/04/20		PROJECT No: 35253.04		
LOCATION: Lake Macquarie		DATUM/GRID: MGA94 Zone 56		DATE: 20/04/20 - 27/04/20		
		DIPIAZMUTH: 907		SHEET: 16 of 17		
DEPTH (m)	DESCRIPTION OF STRATA	GRAPHIC ORIGIN	ROCK		SAMPLE	TESTING
			WEIGHT (%)	STRENGTH		
150.36-150.36m	Carbonaceous siltstone band		FS	100	81	
150.84-150.85m	Carbonaceous siltstone band		FS	100	81	
151.11-151.19m	Tuff band		SW	100	81	
151.37-151.72m	Carbonaceous siltstone band		FS	100	81	
151.73-151.85m	Tuff band		SW	100	81	
151.90-151.90m	Tuff band		SW	100	81	
153.31-153.47m	Carbonaceous siltstone band		FS	100	81	
153.69-153.73m	Tuff band		SW	100	81	
153.95-153.97m	Tuff band		SW	100	81	
154.1	TUFF, pale brown		SW	100	81	
155.47	COAL, black		FS	100	81	
155.75	TUFF, pale brown		SW	100	81	
155.9	SILTSTONE, black dark brown, with siltite		SW	100	81	
156.29	TUFF, pale brown		SW	100	81	
156.58	SILTSTONE, black dark brown, with siltite		SW	100	81	
157.0	COAL, black		FS	100	81	
157.12	CARBONACEOUS SILTSTONE, dark grey		FS	100	81	
157.53	COAL, black		FS	100	81	
158.3	CARBONACEOUS SILTSTONE, dark grey		FS	100	81	
159.3-159.47m	Siltstone band		FS	100	87	
159.46-159.82m	Siltstone band		FS	100	87	
159.86-159.86m	Siltstone band		FS	100	87	

PLANT: Hydropower Scout OPERATOR: Total Drilling LOGGED: Benson  
METHOD: WB to 34.15m, then HQ3 to 160.11m CASING: PG to 17.0m, HWV to 34.15m  
REMARKS:



Viewport Scale 1:10 000

- Legend**
- Current Workings - Dated 14.06.2024
  - Proposed Workings
  - Foreshore of Lake Macquarie
  - Rockhead Borehole (Depth to Bedrock at base of Lake Macquarie)
  - MYU002\_T Borehole - Surface to Inseam
  - Proposed Pillar Extraction

Endorsements 1. Prepared in accordance with the Survey and Drafting Directions for Mining Surveyors 2020 (NSW Mines)  
2. MGA Zone 56, GDA 2020, Australian Height Datum.  
NOTE: Extraction area lies wholly within The Consolidated Consent - Approval No: 10\_0080, and Mining Lease ML1632

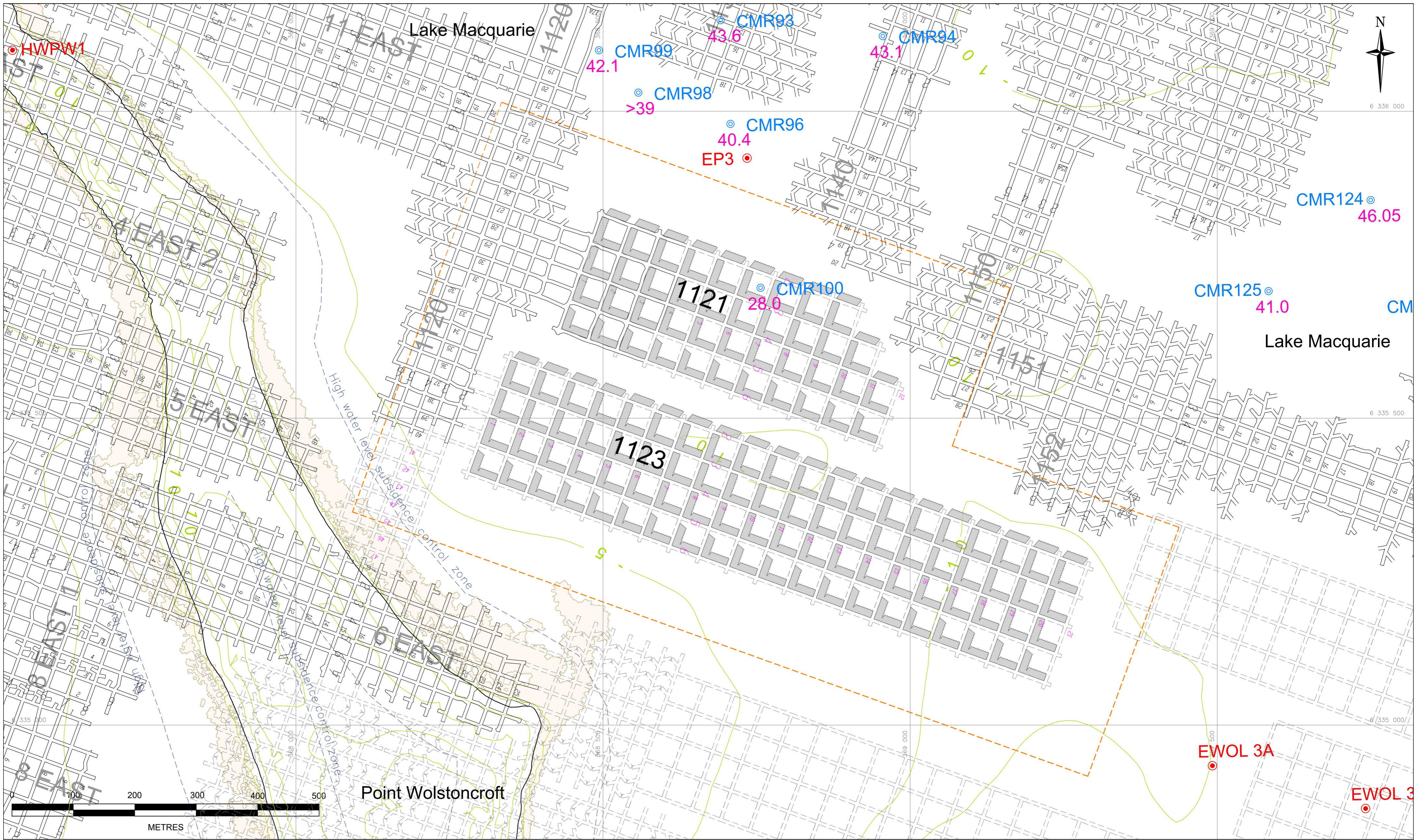
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Name: Daniel Hart Signature: Daniel Hart Date: 04.07.2024  
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Name: Owen Farrugia Signature: Owen Farrugia Date: 04.07.2024

DRAWN : DH  
DATE : 27.06.2024  
CHECKED : NK  
DATE : 01.07.2024

**CENTENNIAL MYUNA COLLIERY**

TITLE  
**Fassifern Seam 1121 Panel and 1123 Panel Extraction Plan - Figure 6: Geological Strata**

SCALE: As shown CAD FILE: N:/Shared/PLANS/MY/MY11886.dwg PLAN NO: MY11886 REV: A2



- Legend**
- Current Workings - Dated 14.06.2024
  - Proposed Workings
  - High Water Level Subsidence Control Zone - HWLSCZ
  - Surface contours and Bathymetry (Bottom of Lake bed) AHD and 5m Contour Intervals
  - Foreshore of Lake Macquarie
  - Rockhead Borehole (Depth to Bedrock at base of Lake Macquarie)
  - Borehole - Surface to Inseam
  - Subsidence Monitoring Boundary (1121 Panel and 1123 Panel)  
NOTE: Bathymetric Subsidence Monitoring to be conducted within the Subsidence Monitoring Boundary at a nominal Grid spacing of 10m x 10m.
  - Proposed Pillar Extraction
  - Extent of Seagrass Beds

**Endorsements**

- Prepared in accordance with the Survey and Drafting Directions for Mining Surveyors 2020 (NSW Mines)
- MGA Zone 56, GDA 2020, Australian Height Datum.

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Name: Owen Farrugia Signature: Owen Farrugia Date: 04.07.2024

DRAWN : DH DATE : 27.06.2024	
CHECKED : NK DATE : 01.07.2024	<b>TITLE</b> Fassifern Seam 1121 Panel and 1123 Panel Extraction Plan - Figure 7: Subsidence Monitoring Survey Plan
<b>SCALE</b> 1:4000	CAD FILE N:/Shared/PLANS/MY/MY11897.dwg N:/Shared/PLDT/MY/MY11897.pdf
<b>PLAN NO.</b> MY11897	<b>REV.</b> A2