

**COALPAC PTY. LIMITED
ACN 003 558 914**

ENVIRONMENTAL ASSESSMENT

FIGURES 8 TO 14

**FOR PROPOSED EXTENSION OF INVINCIBLE
OPEN CUT MINE AND REHABILITATION
ACTIVITIES.**

CULLEN BULLEN N.S.W.

**Prepared By
Craven, Elliston & Hayes (Lithgow) Pty. Limited
March 2006**

Figures

- | | |
|------------|--|
| Figure 8 | Invincible Open Cut Site Plan |
| Figure 9 | Open Cut Proposed Water Management Plan |
| Figure 10 | Plan of Colliery Holding Showing Mine Workings |
| Figure 11 | Open Cut Final Rehabilitation Plan |
| Figure 11a | Cross Section of Natural Surfaces Void and Rehabilitation Surfaces |
| Figure 12 | Regional Topography and Drainage |
| Figure 13 | Seasonal Wind Roses for Wind Data 9 am |
| Figure 13a | Seasonal Wind Roses for Wind Data 3 pm |
| Figure 14 | Location of Environmental Monitoring Stations and Nearest Residences |

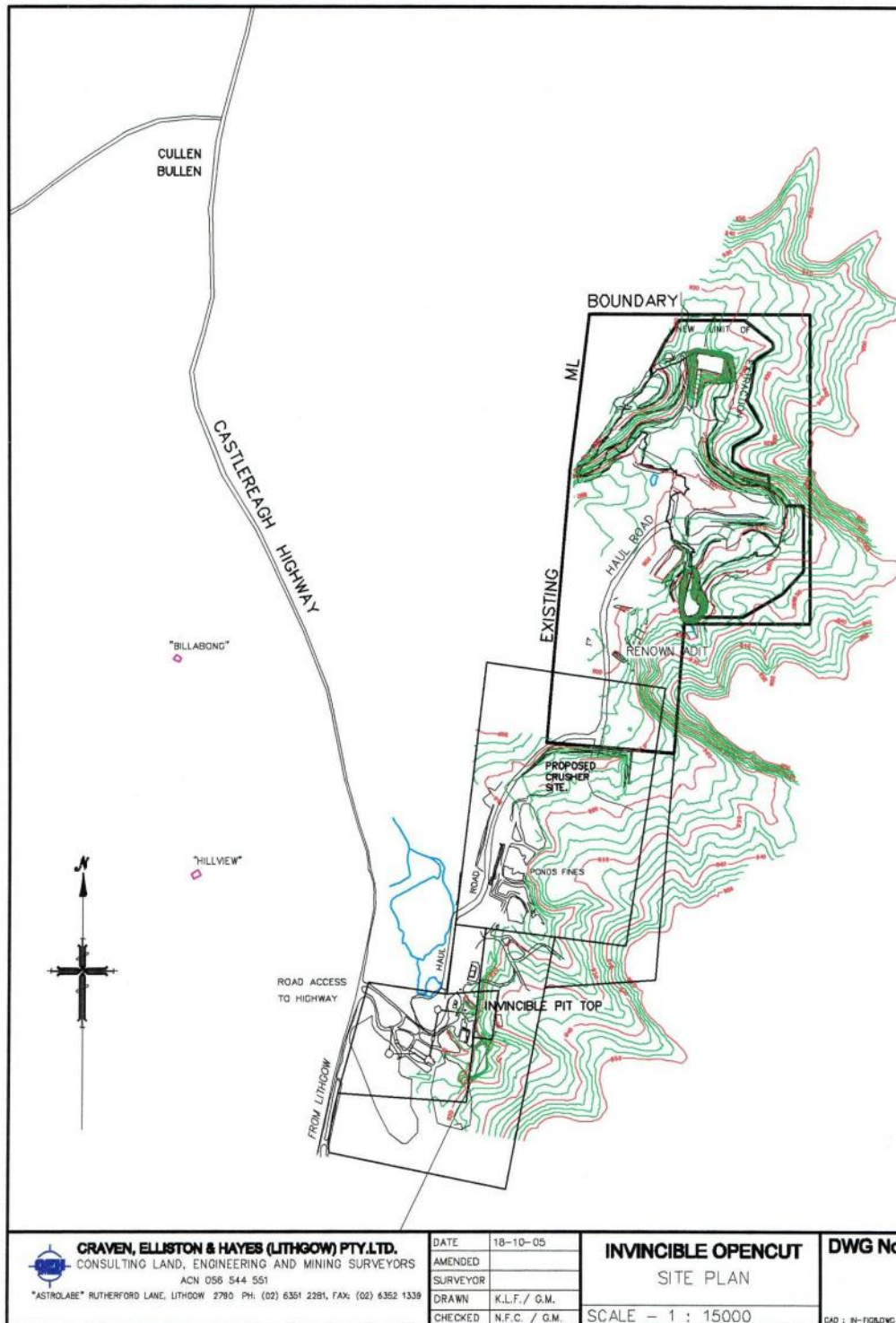


Figure 8 Invincible Open Cut Site Plan

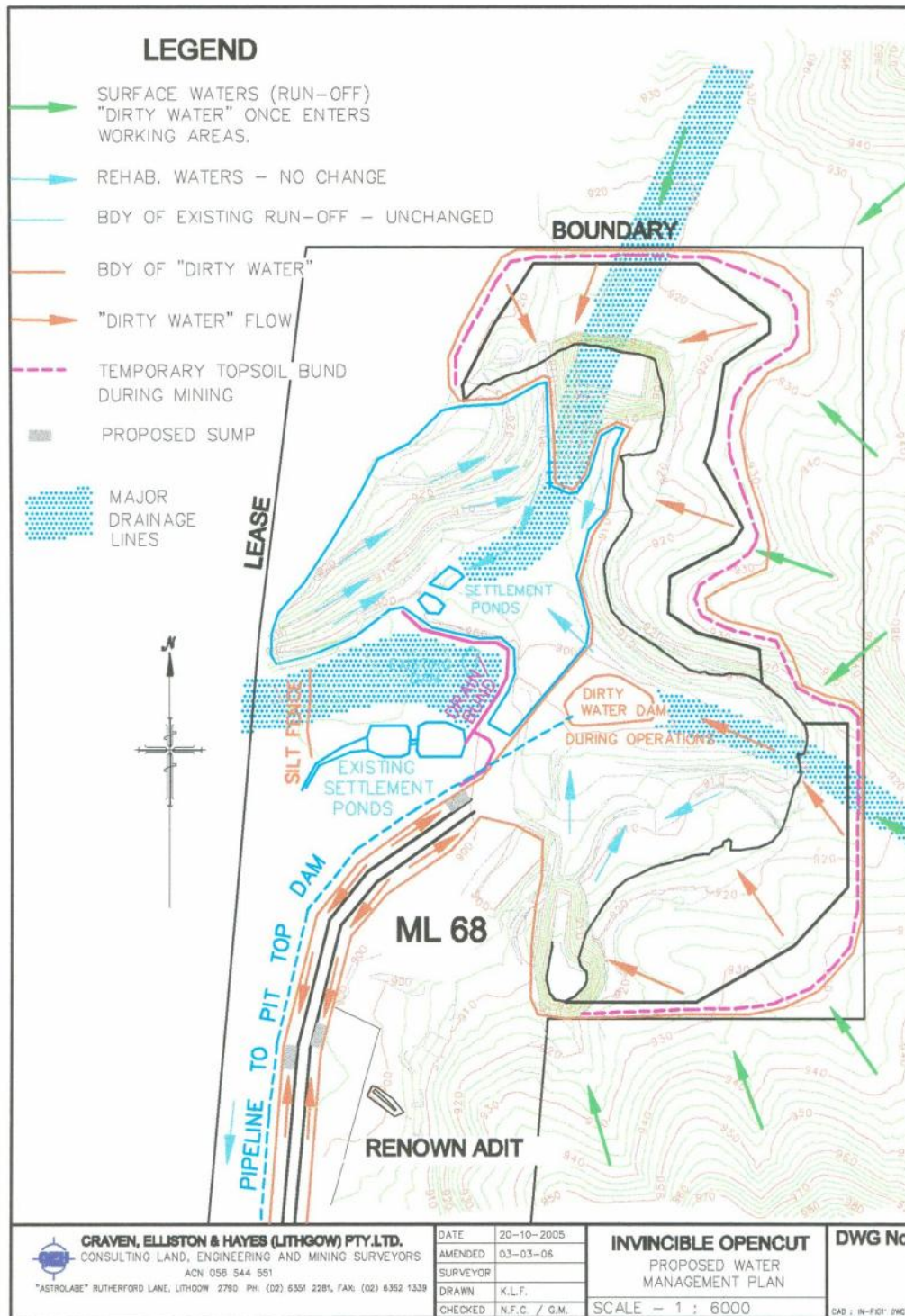


Figure 9 Open Cut Proposed Water Management Plan.

The map displays the Invincible Colliery holding area, outlined in red. Key features include:

- Project Site:** Centrally located, showing extensive underground workings.
- Surrounding Collieries:** Baal Bone Colliery to the north, Renouvol Colliery (abandoned) to the west, Ivanhoe No. 2 Colliery to the southwest, Wang Colliery to the south, and Arous Place Colliery to the east.
- Infrastructure:** A road labeled "TO PORTLAND" runs along the western edge. A "PIT TOP" is marked near the center-left.
- Geological Features:** Labels such as "HEADINGS", "TALL TOWER", "PRESS ZONE", and "NORTH HEADINGS" indicate specific mining areas or structures.
- Scale and Orientation:** A scale of 1:50,000 is provided, along with a north arrow pointing towards the top right.

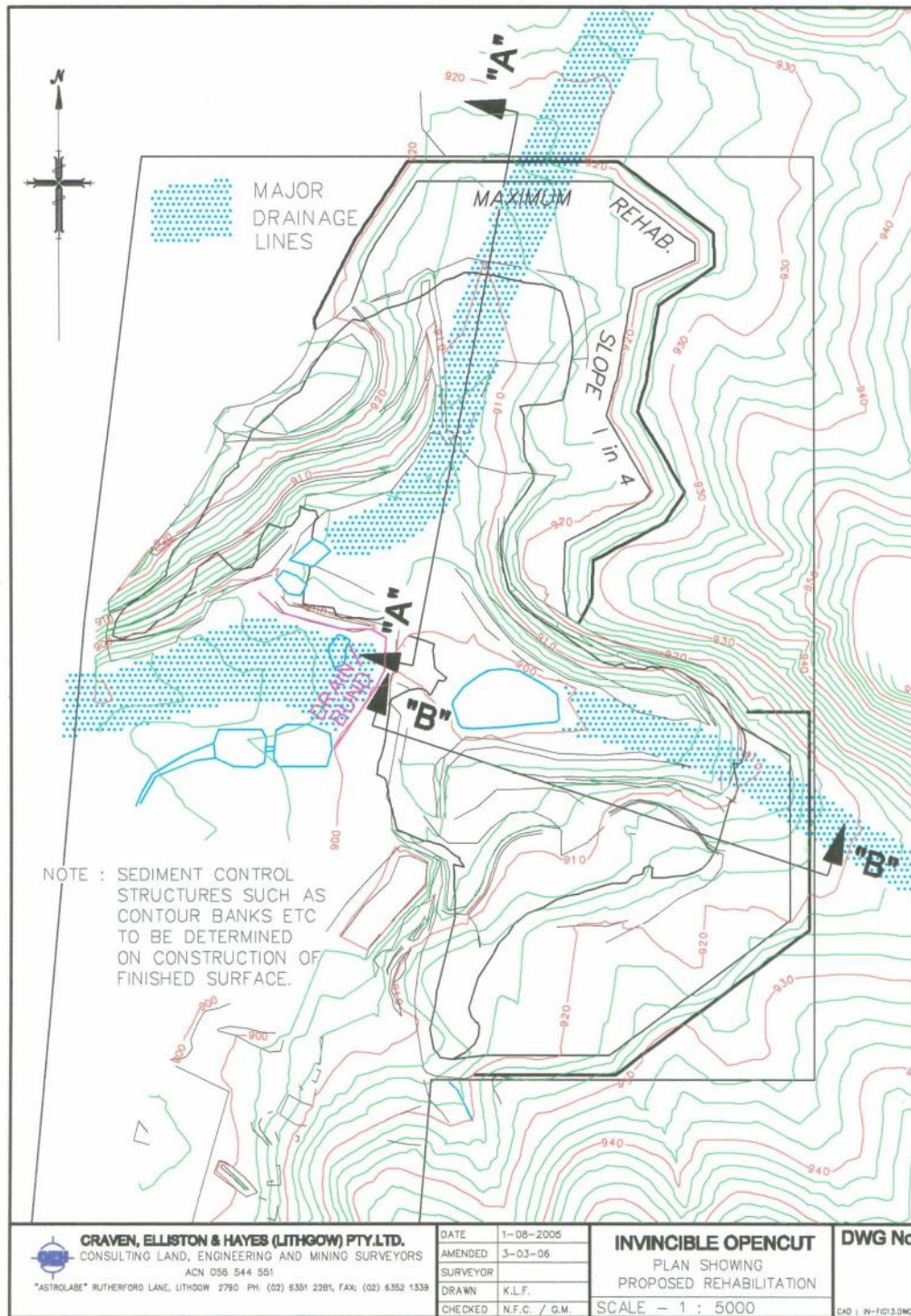


Figure 11 Proposed Rehabilitation Landform.

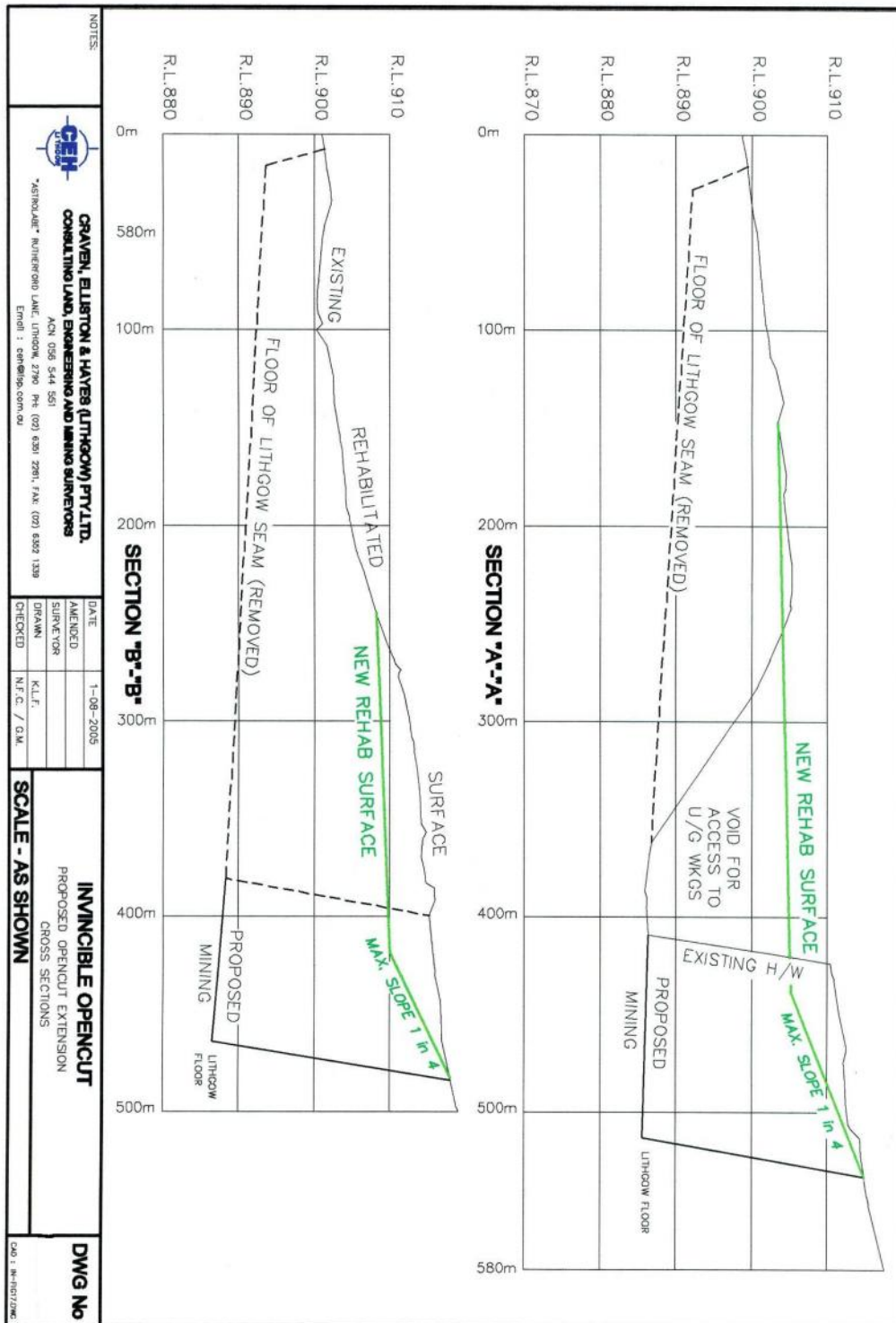


Figure 11a Rehabilitation X-Sections

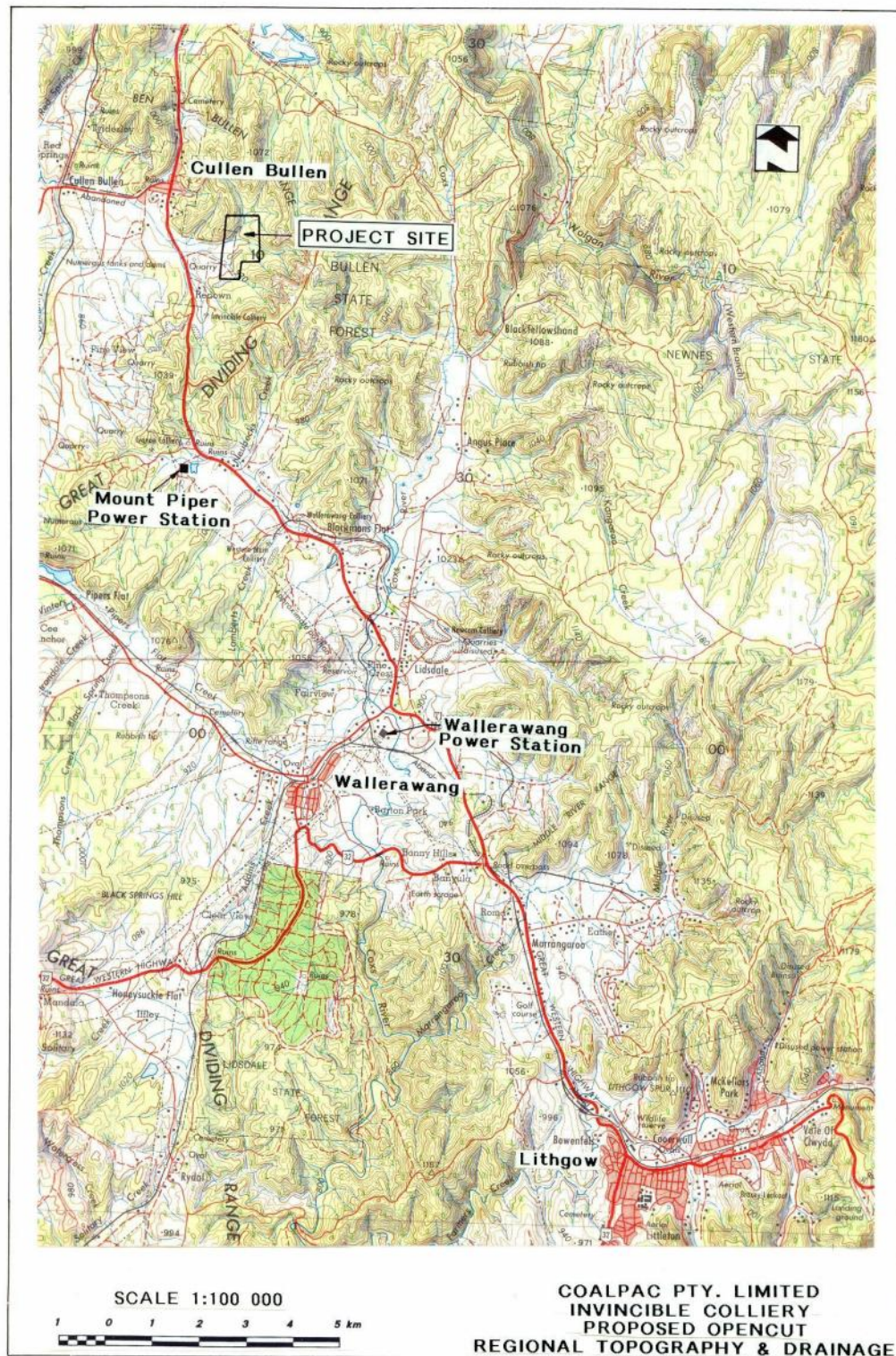
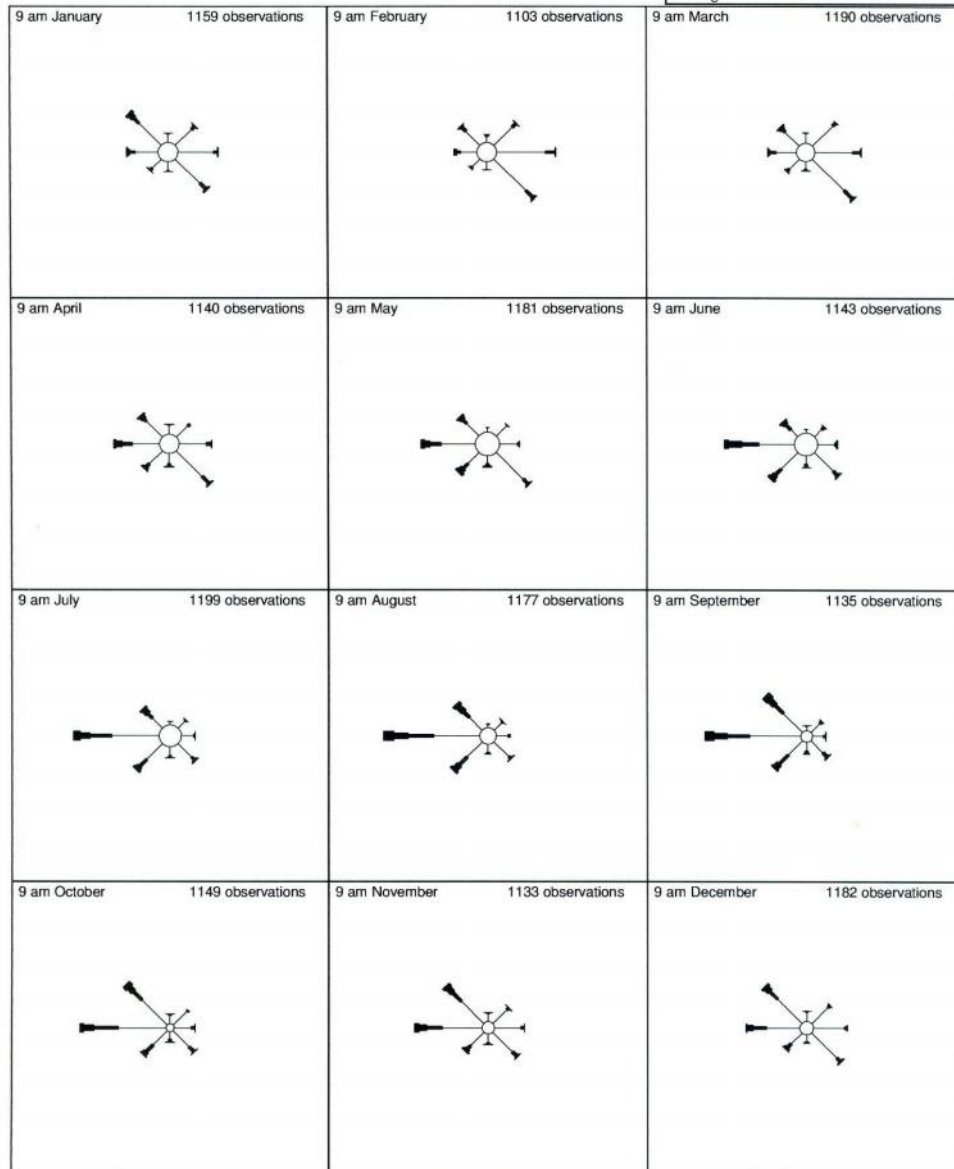
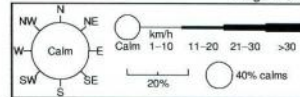


Figure 12 Regional Topography and Drainage.

**Wind Roses using data between Aug 1965 and Aug 2005 for
Lithgow (Birdwood St)**

Site Number 063224 • Locality: Lithgow • Opened Jan 1889 • Still Open
Latitude 33°29'24"S • Longitude 150°08'59"E • Elevation 950m

Page 1 of 2



**Australian Government
Bureau of Meteorology**

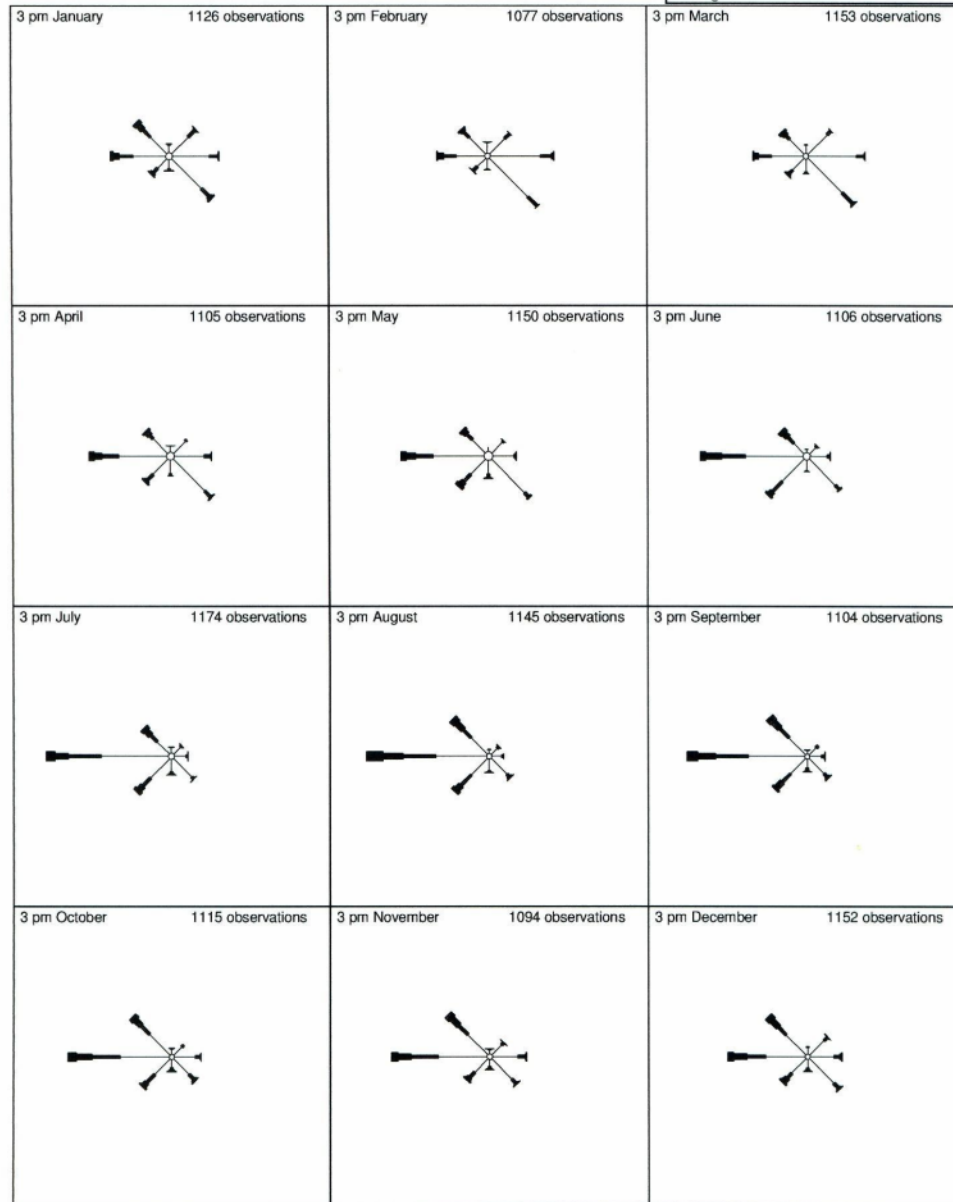
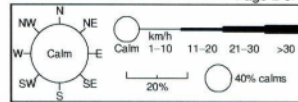
*Prepared by Climate and Consultancy Section in the New South Wales Office of the Bureau of Meteorology. Contact us by phone on (02) 9296 1555, by fax on (02) 9296 1567, or by email on regnsw@bom.gov.au
Copyright © Commonwealth of Australia 2005 Prepared on 3 August 2005
We have taken all due care but cannot provide any warranty nor accept any liability for this information.*

Figure 13 Seasonal Wind Roses (9am)

**Wind Roses using data between Aug 1965 and Aug 2005 for
Lithgow (Birdwood St)**

Site Number 063224 • Locality: Lithgow • Opened Jan 1889 • Still Open
Latitude 33°29'24"S • Longitude 150°08'59"E • Elevation 950m

Page 2 of 2



Australian Government
Bureau of Meteorology

*Prepared by Climate and Consultancy Section in the New South Wales Office of the Bureau of Meteorology. Contact us by phone on (02) 9296 1555, by fax on (02) 9296 1567, or by email on reghsw@bom.gov.au
Copyright © Commonwealth of Australia 2005 Prepared on 3 August 2005
We have taken all due care but cannot provide any warranty nor accept any liability for this information.*

Figure 13a Seasonal wind Roses (3pm)

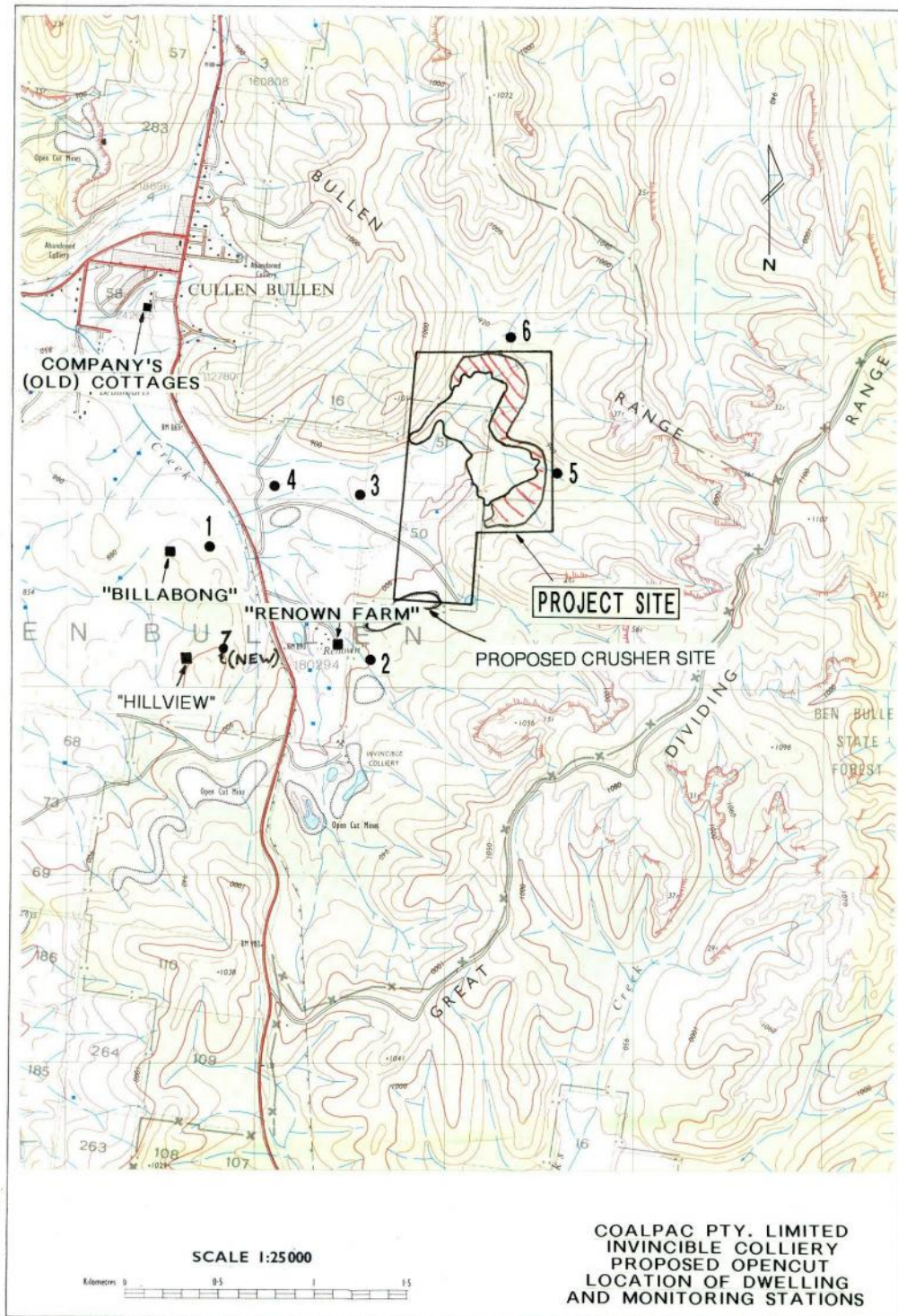


Figure 14 Location of Environmental Monitoring Stations and Nearest Residences