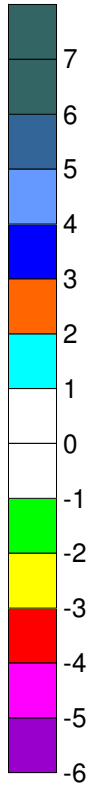








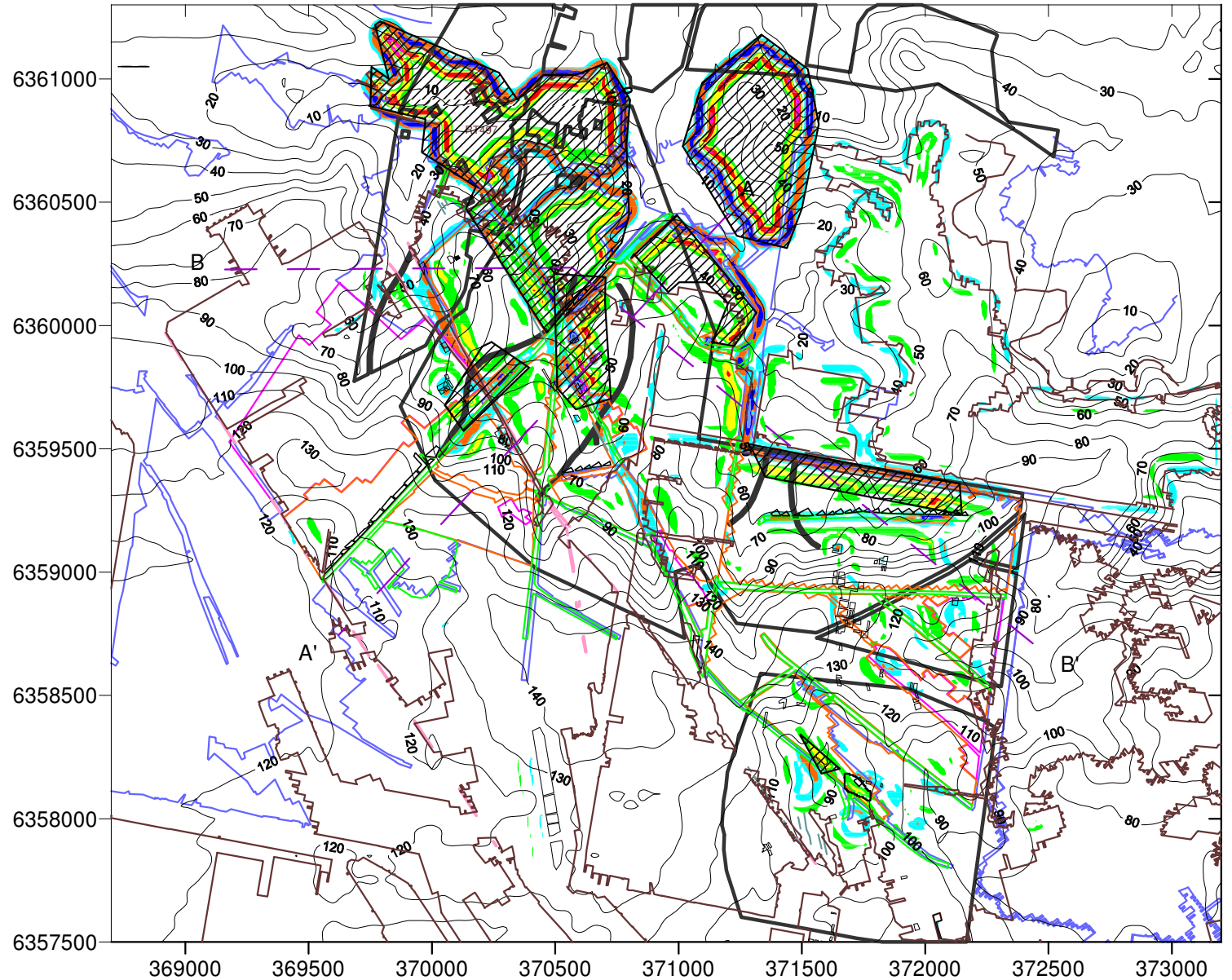



Strain (mm/m)



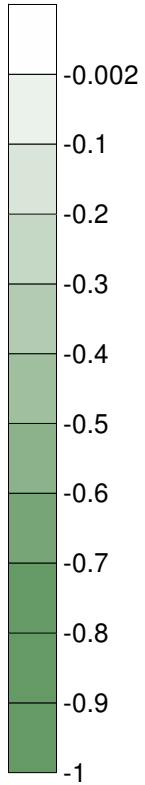
Key

-  High Strain Hazard Zones (>3 mm/m)
-  Moderate Strain Hazard Zones (2-3 mm/m)
-  Site Boundary
-  Normal Fault
-  Igneous Dyke (Very High Strength)
-  Extent of Browns-Minmi & Duckenfield Mines in Borehole Seam
-  Extent of Wallsend Borehole & Gretley Workings in Young Wallsend Seam
-  Depth of Cover above Borehole Seam











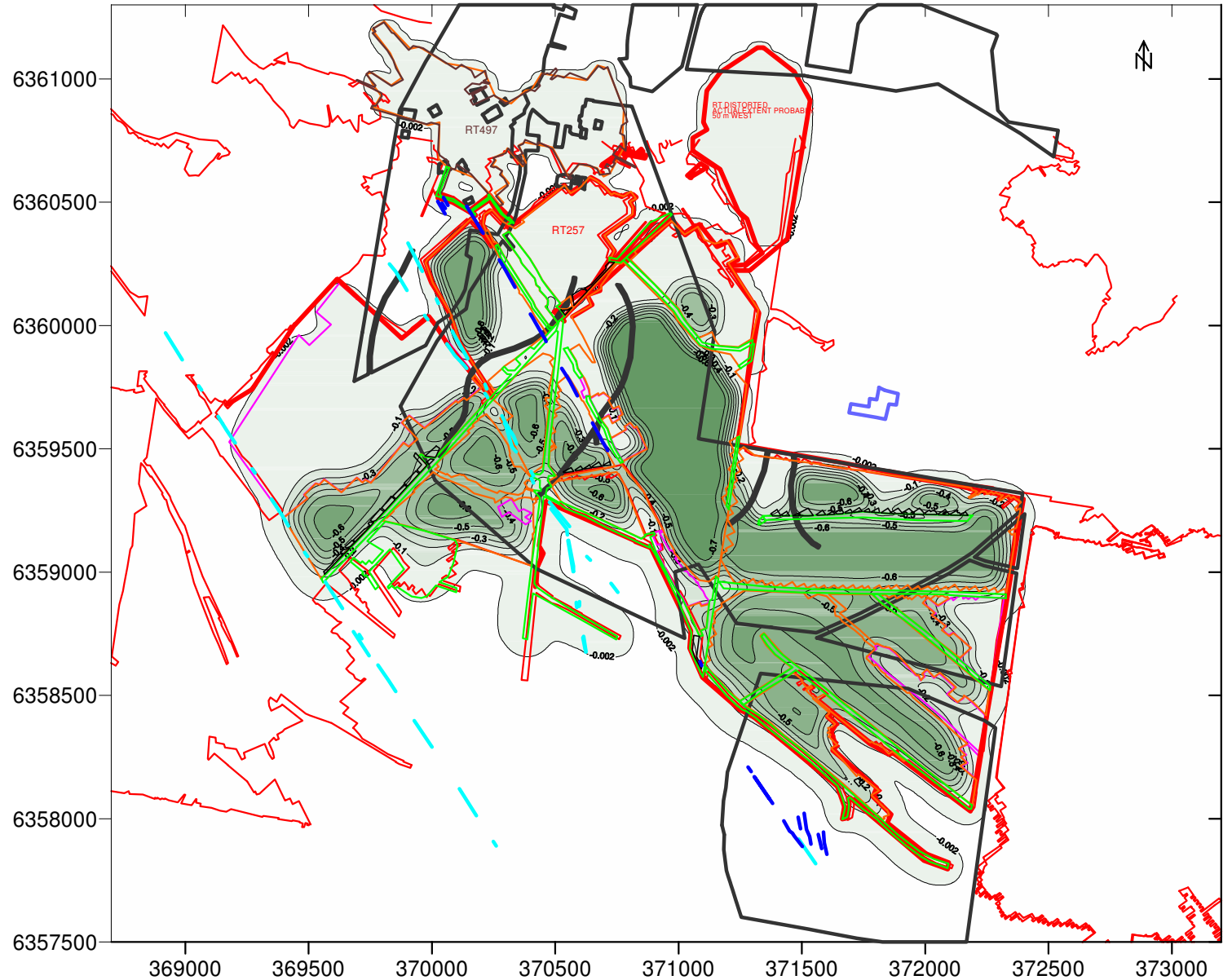
	Engineer:	S.Ditton	Client:	Douglas Partners	
	Drawn:	S.Ditton		DPS-002/1	
	Date:	17.07.08	Title:	Worst-case Future Strain Contours above the Pillar Extraction Panels in the Borehole Seam and Young Wallsend Seams and Ignoring Pillar FoS under FTA Load Case	
			Scale:	1:25,000	Figure No: 10c


Subsidence (m)



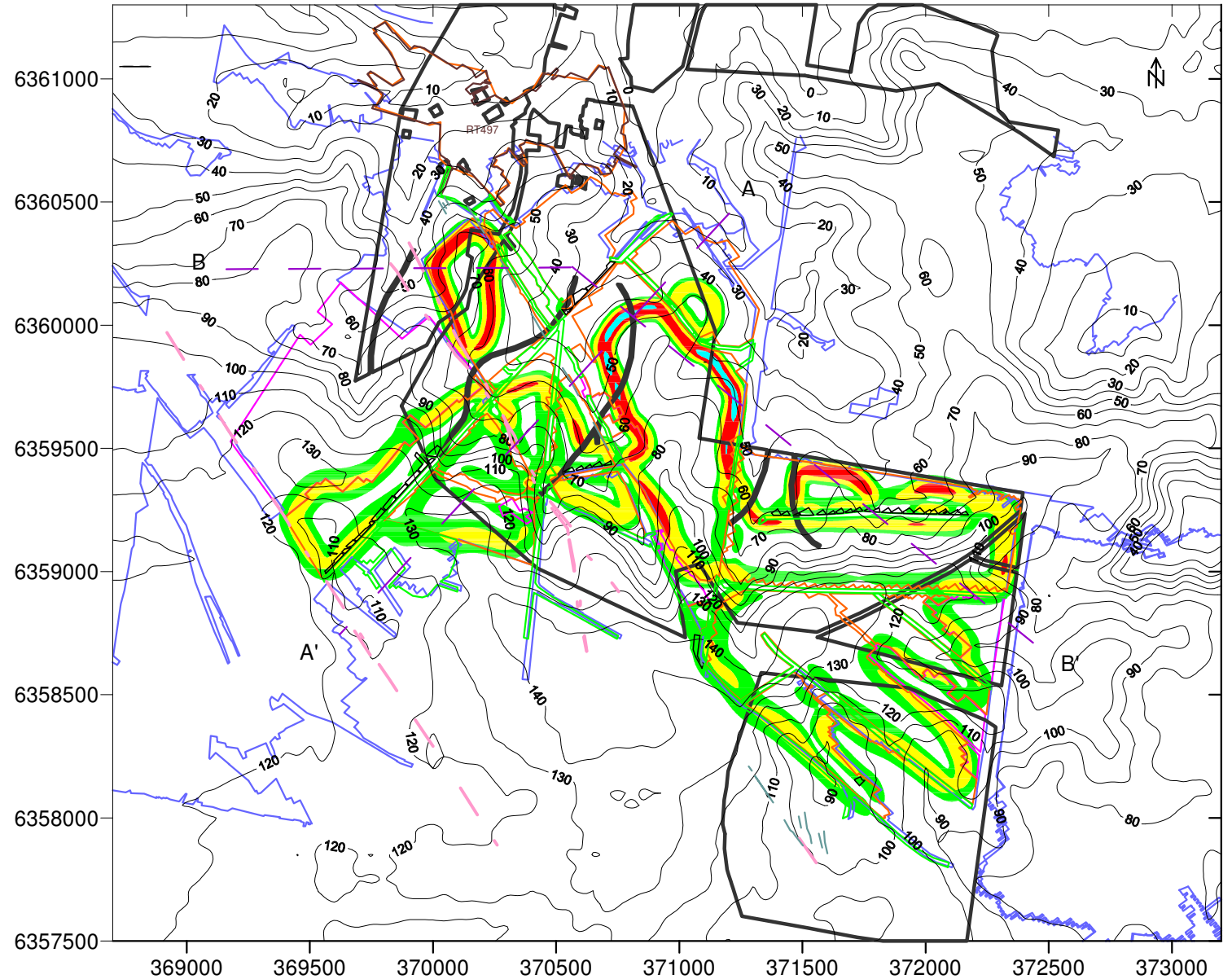
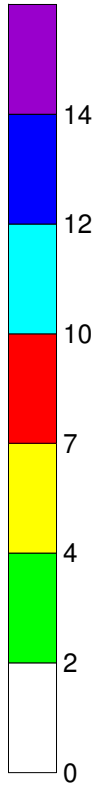
Key

-  Mine Workings Limits (>85% Extraction)
-  Mine Workings Limits (50-70% Extraction)
-  Mine Workings Limits (20-40% Extraction)
-  Site Boundary
-  Normal Fault
-  Igneous Dyke (Very High Strength)
-  Extent of Browns-Minmi & Duckenfield Mines
-  Extent of Browns Pit No.s A, B and C











	Engineer:	S.Ditton	Client:	Douglas Partners
	Drawn:	S.Ditton		DPS-002/1
	Date:	29.11.07	Title:	Worst-case Future Subsidence Contours above the Pillar Extraction Panels in the Borehole Seam (Browns & Duckenfield Collieries) with FoS >2.11 Limits for FTA Load Case
Ditton Geotechnical Services Pty Ltd		Scale:	1:25,000	Figure No: 11a

Tilt (mm/m)

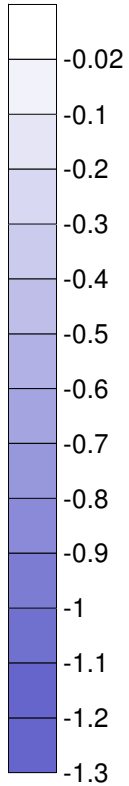


Key

-  High Tilt Hazard Zones (>7mm/m)
-  Moderate Tilt Hazard Zones (4 - 7 mm/m)
-  Site Boundary
-  Normal Fault
-  Igneous Dyke (Very High Strength)
-  Extent of Browns-Minmi & Duckenfield Mines in Borehole Seam
-  Depth of Cover above Borehole Seam

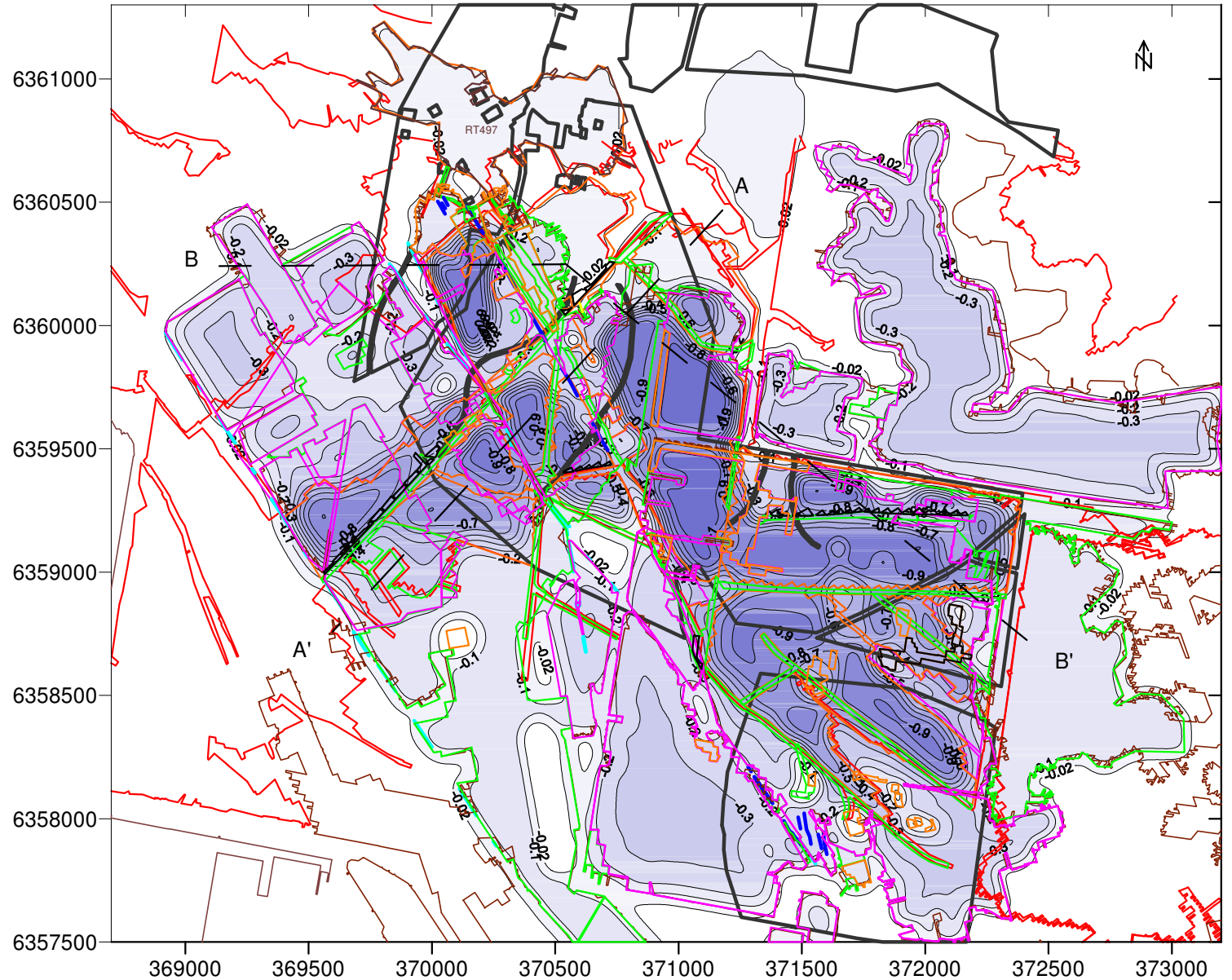
	Engineer:	S.Ditton	Client:	Douglas Partners DPS-002/1	
	Drawn:	S.Ditton	Title:	Worst-case Final Tilt Contours above the Pillar Extraction Panels in the Borehole Seam (Browns & Duckenfield) with FoS >2.11 Limits for the FTA Load Case	
	Date:	17.01.08	Scale:		
Ditton Geotechnical Services Pty Ltd					Figure No: 11b

Subsidence (m)



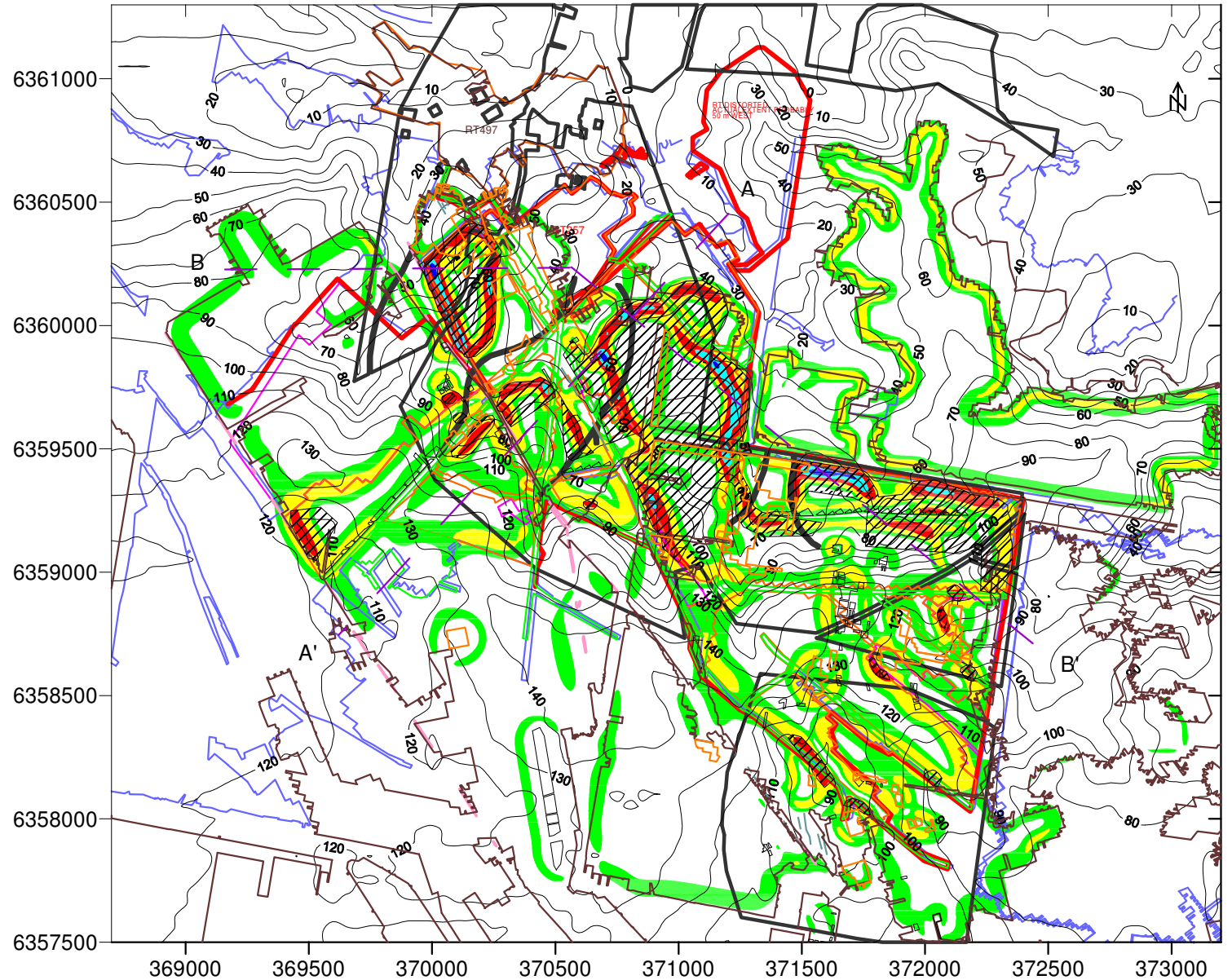
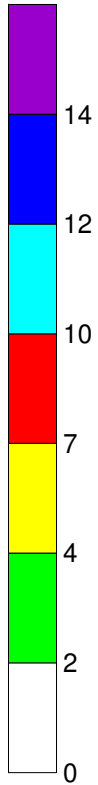
Key

- Mine Workings Limits (>85% Extraction)
- Mine Workings Limits (50-70% Extraction)
- Mine Workings Limits (20-40% Extraction)
- Site Boundary
- Normal Fault
- Igneous Dyke (Very High Strength)
- Extent of Browns-Minmi & Duckenfield Mines
- Extent of Wallsend Borehole & Gretley Mines












	Engineer:	S.Ditton	Client:	Douglas Partners	
	Drawn:	S.Ditton		DPS-002/1	
	Date:	29.07.08	Title:	Predicted Worst-case Subsidence Contours above the Pillar Extraction Panels in the Borehole Seam & Young Wallsend Seams with FoS>2.11 Limits for FTA Load Case	
Ditton Geotechnical Services Pty Ltd			Scale:	1:25,000	Figure No: 12a

Tilt (mm/m)



Key

-  High Tilt Hazard Zones (>7mm/m)
-  Moderate Tilt Hazard Zones (4 - 7 mm/m)
-  Site Boundary
-  Normal Fault
-  Igneous Dyke (Very High Strength)
-  Extent of Browns-Minmi & Duckenfield Mines in Borehole Seam
-  Extent of Wallsend Borehole & Gretley Workings in Young Wallsend Seam
-  Depth of Cover above Borehole Seam

	Engineer:	S.Ditton	Client:	Douglas Partners
	Drawn:	S.Ditton		DPS-002/1
	Date:	17.01.08	Title:	Worst-case Future Tilt Contours above the Pillar Extraction Panels in the Borehole Seam & Young Wallsend Seams with FoS>2.11 Limits for FTA Load Case
Ditton Geotechnical Services Pty Ltd		Scale:	1:25,000	Figure No: 12b