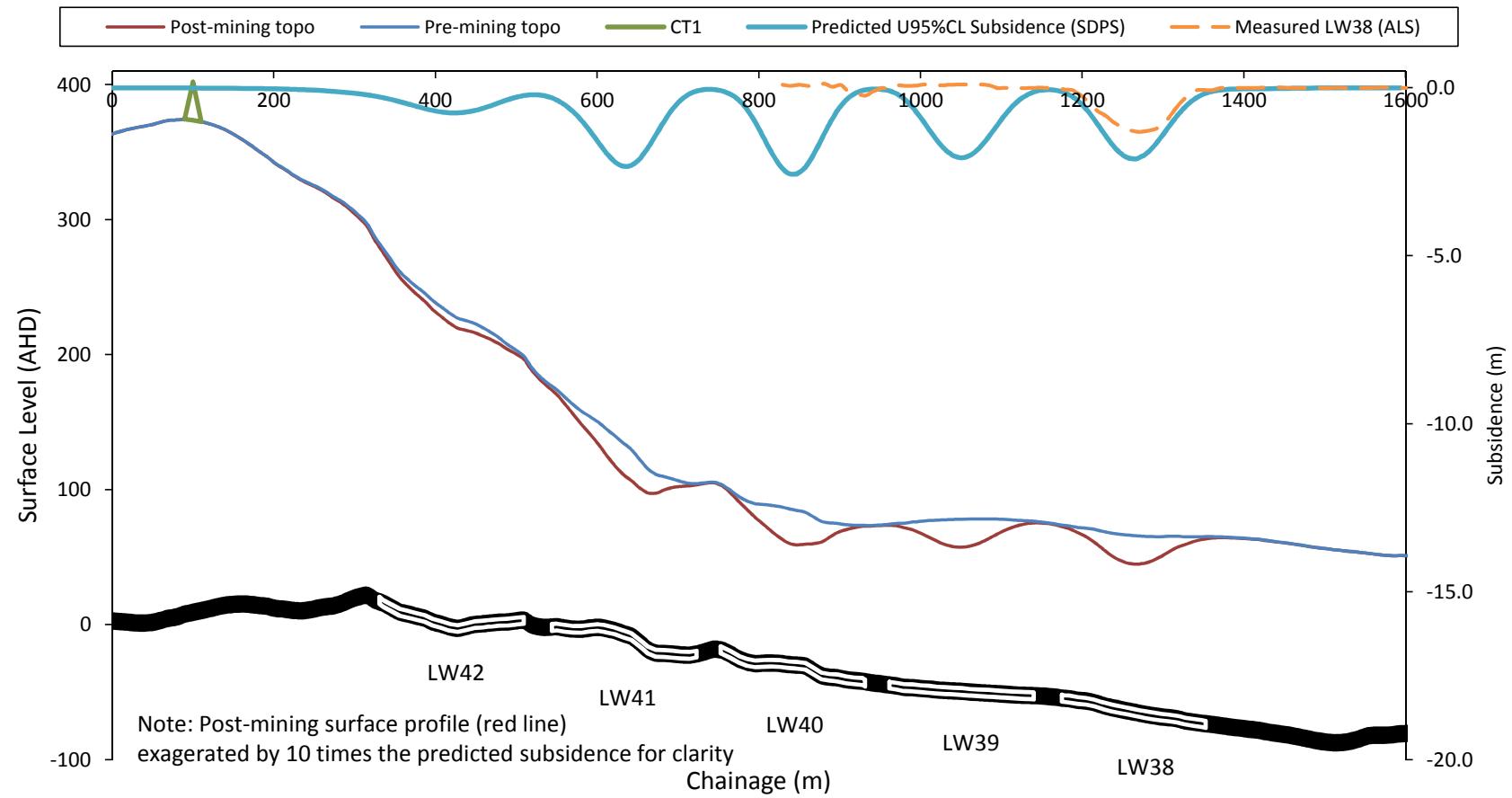
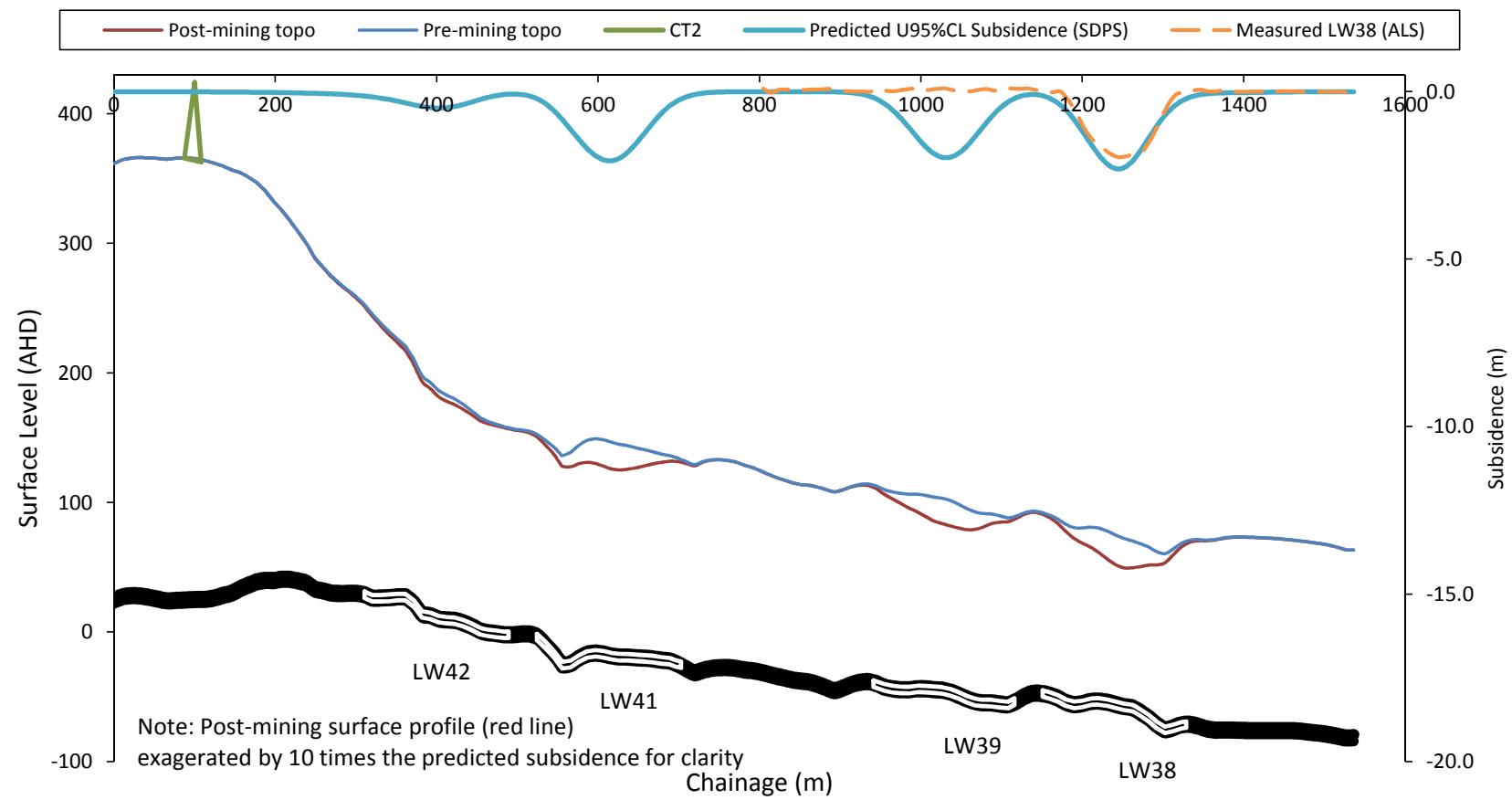


DgS Ditton Geotechnical Services Pty Ltd	Engineer:	S.Ditton	Client:	West Wallsend Colliery WWD-012/7
	Drawn:	S.Ditton		
	Date:	10.08.11	Title:	Predicted Worst-Case Horizontal Strains Contours for Proposed Longwall Layout beneath Steep Slopes and Cliff Lines in the Western and Southern Domains
	Scale:	1:25,000	Figure No:	8

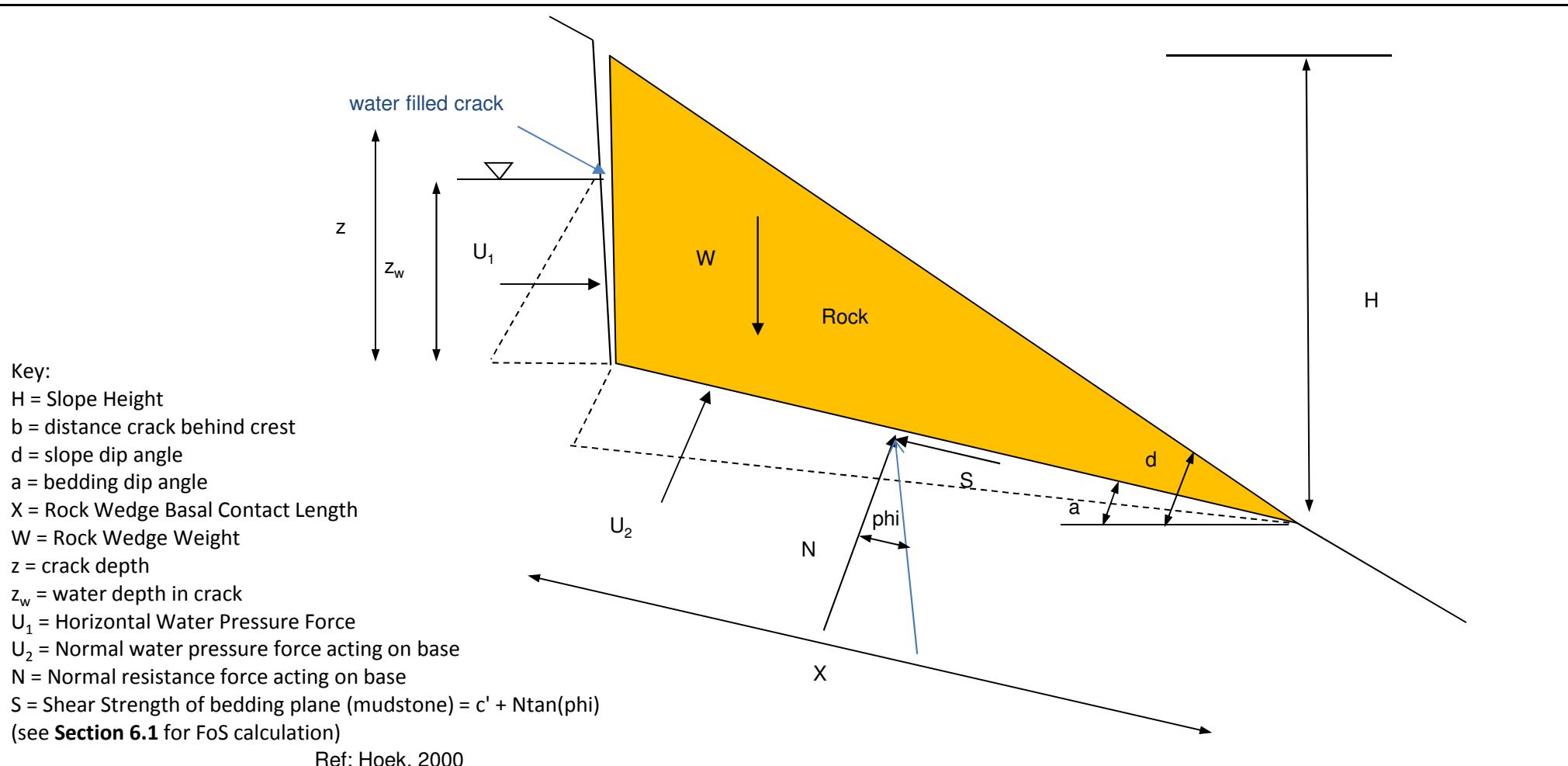


Engineer:	S.Ditton	Client:	West Wallsend Colliery WWD-012/7
Drawn:	S.Ditton		
Date:	25.05.11	Title:	Predicted Pre and Post-Mining Surface Levels Along Mapped Section 12 through Gencom Tower CT1 after LWs 38 to 42
Ditton Geotechnical Services Pty Ltd		Scale:	NTS
		Figure No:	9a



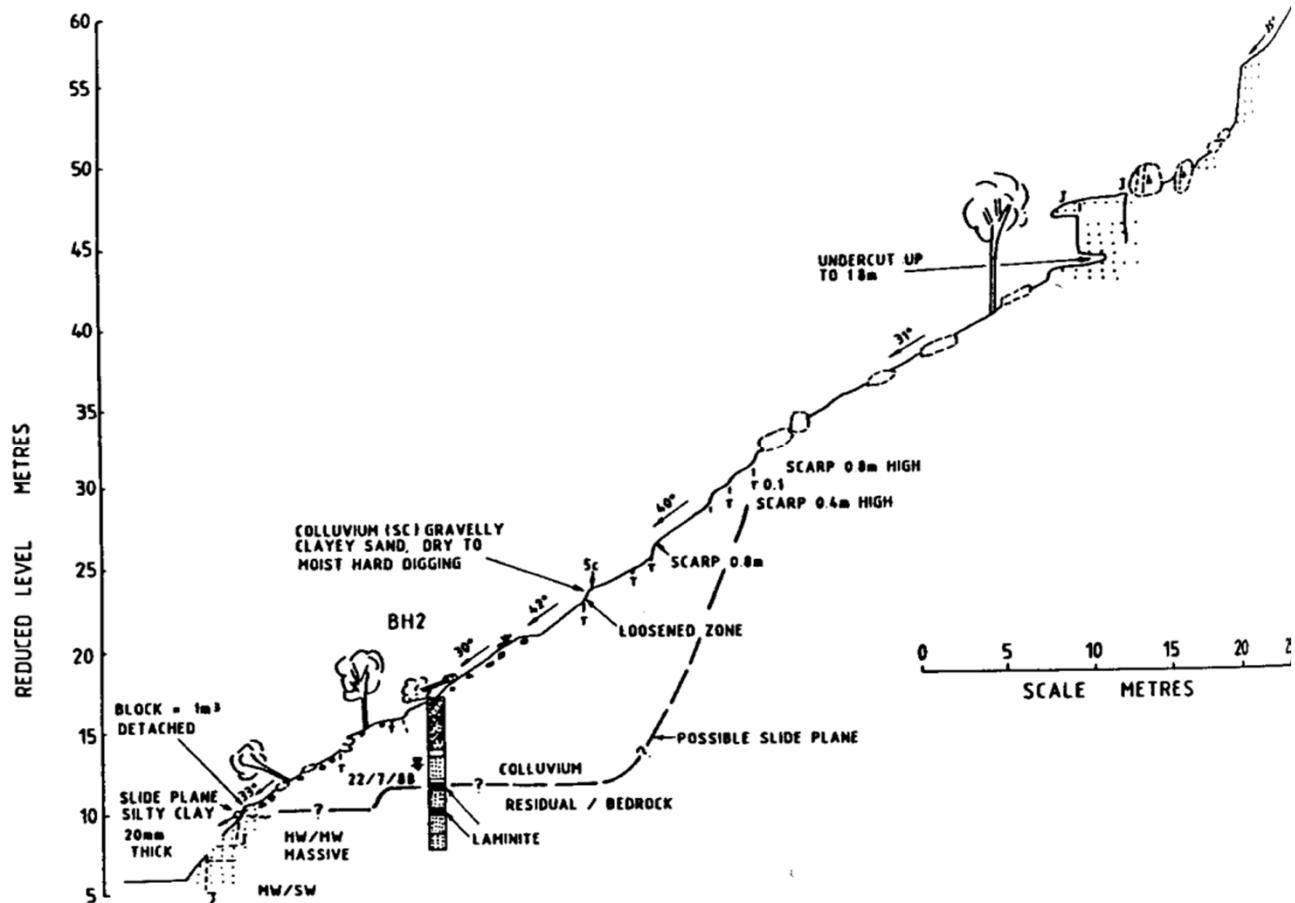
DgS

Engineer:	S.Ditton	Client:	West Wallsend Colliery
Drawn:	S.Ditton		WWD-012/7
Date:	25.05.11	Title:	Predicted Pre and Post-Mining Surface Levels Along Mapped Section 11 through Gencom Tower CT2 after LWs 38 to 42
Ditton Geotechnical Services Pty Ltd		Scale:	NTS
		Figure No:	9b

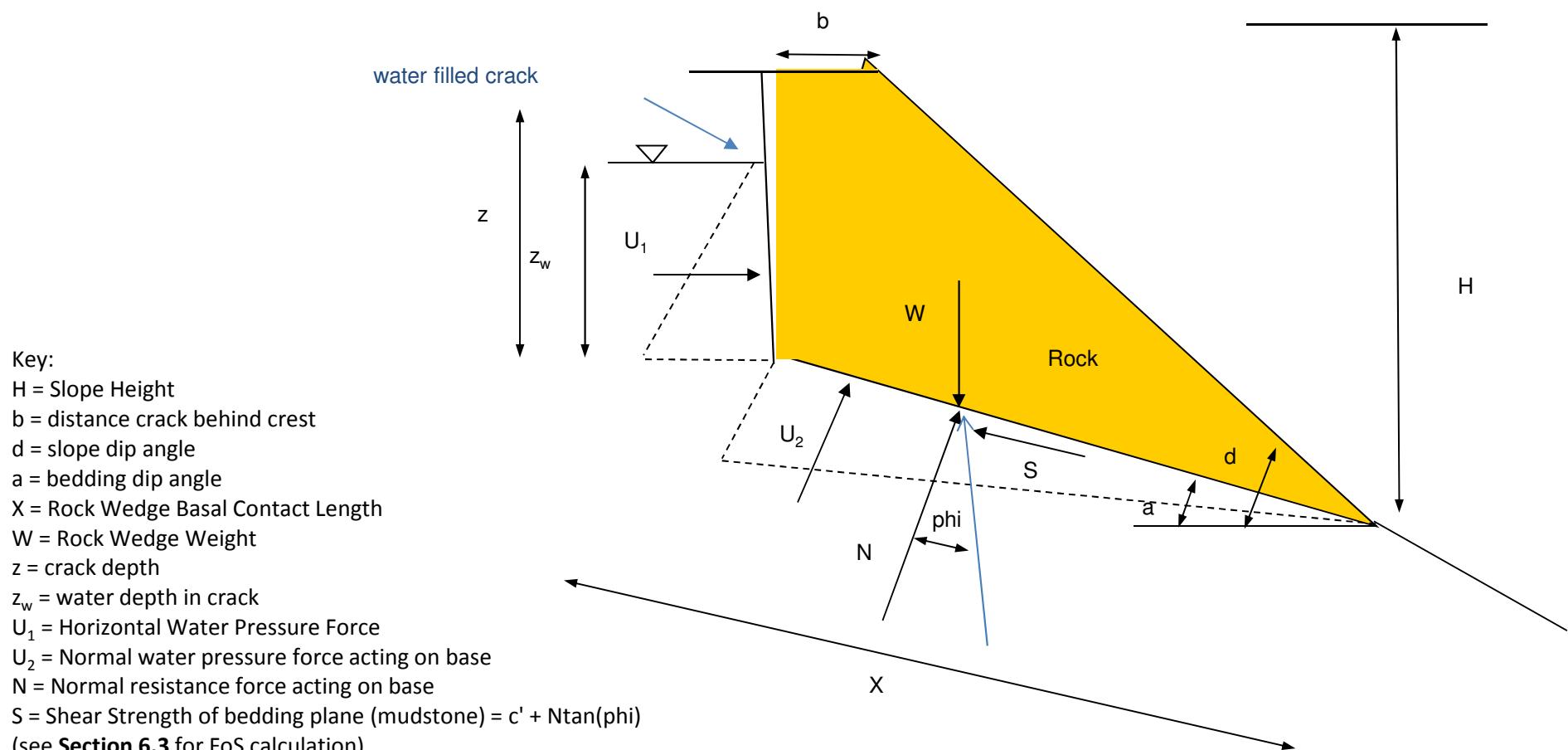


DgS

Engineer:	S.Ditton	Client:	West Wallsend Colliery
Drawn:	S.Ditton		WWD-012/7
Date:	27.07.11	Title:	Force Balance Diagram for Assessing Deep-Seated Sliding Potential on Steep Slopes which have been Tilted and Cracked by Mine Subsidence
Ditton Geotechnical Services Pty Ltd		Scale:	NTS
		Figure No:	10a

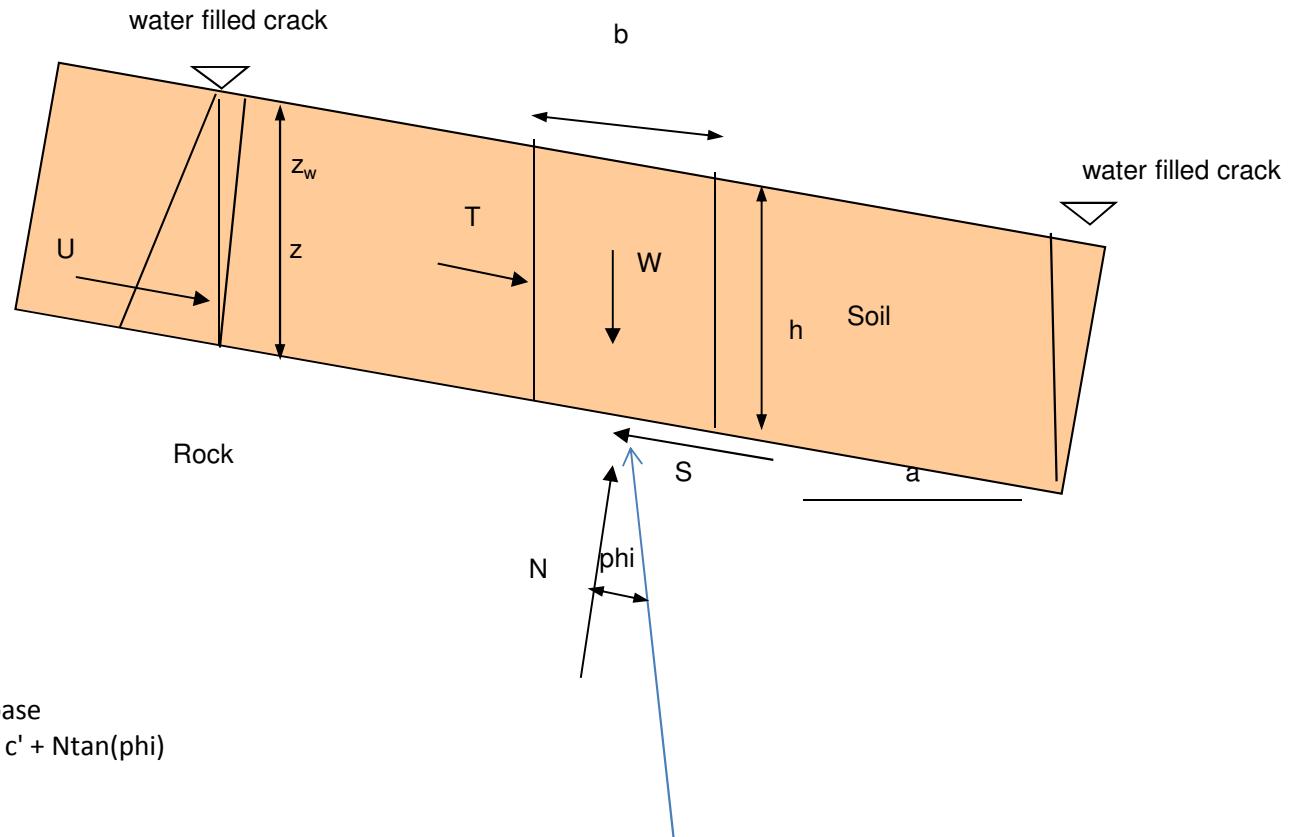


Engineer:	S.Ditton	Client:	West Wallsend Colliery
Drawn:	S.Ditton		WWD-012/7
Date:	25.05.11	Title:	Example of Steep Slope Instability in Clifton Sub Group Sandstones and Claystones
Ditton Geotechnical Services Pty Ltd			Scale: NTS
		Figure No:	10b



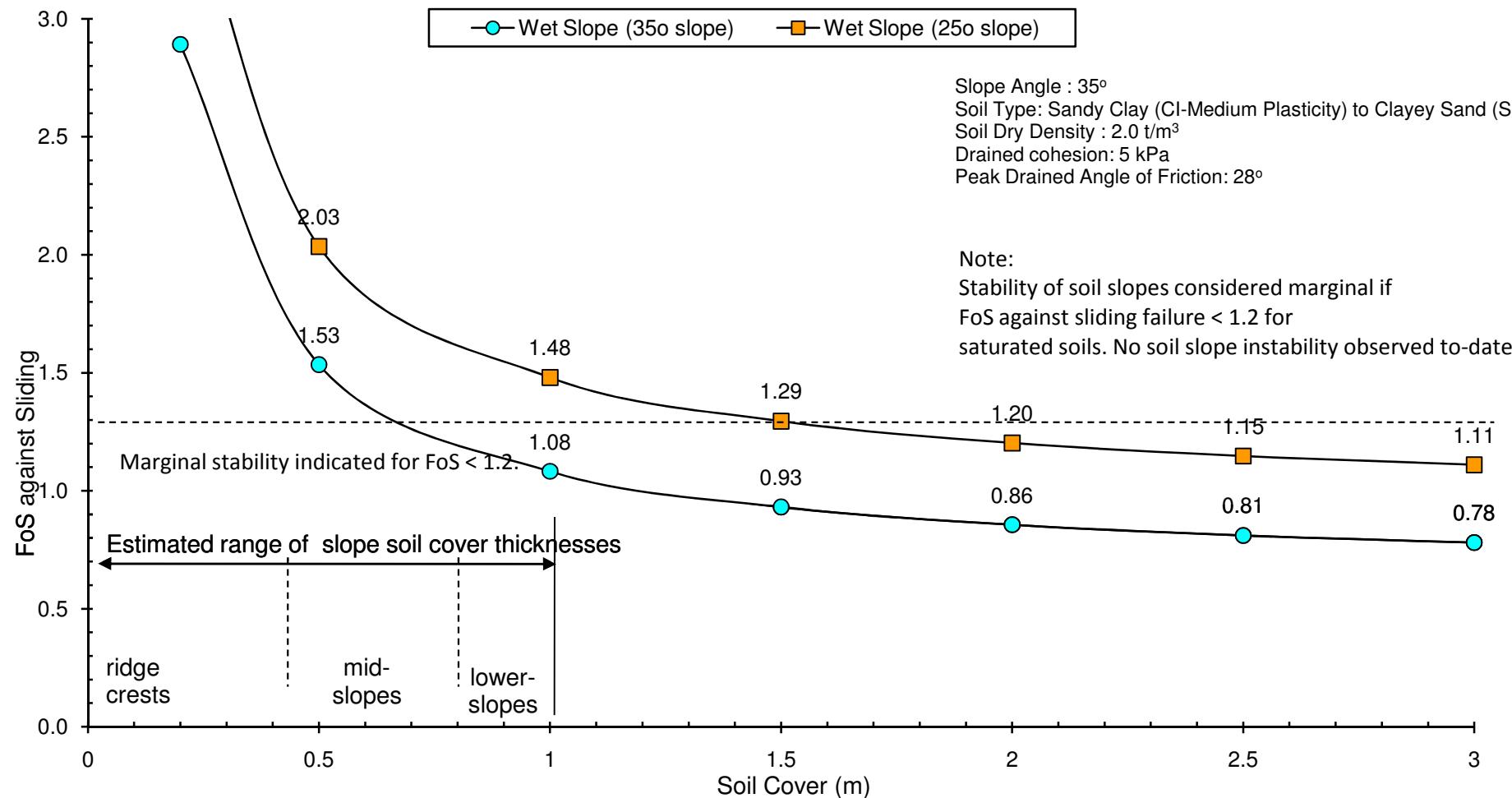
DgS

Engineer:	S.Ditton	Client:	West Wallsend Colliery
Drawn:	S.Ditton		WWD-012/7
Date:	27.07.11	Title:	Force Balance Diagram for Assessing Deep-Seated Sliding Potential on Cliffs which have been Tilted and Cracked by Mine Subsidence
Ditton Geotechnical Services Pty Ltd			Scale: NTS
Figure No:	10c		



Ref: Das, 1998

 DgS <small>Ditton Geotechnical Services Pty Ltd</small>	Engineer:	S.Ditton	Client:	West Wallsend Colliery
	Drawn:	S.Ditton		WWD-012/7
	Date:	27.07.11	Title:	Force Balance Diagram for Assessing Shallow Soil Sliding Potential on Steep Slopes which have been Tilted and Cracked by Mine Subsidence
			Scale:	NTS
			Figure No:	10d



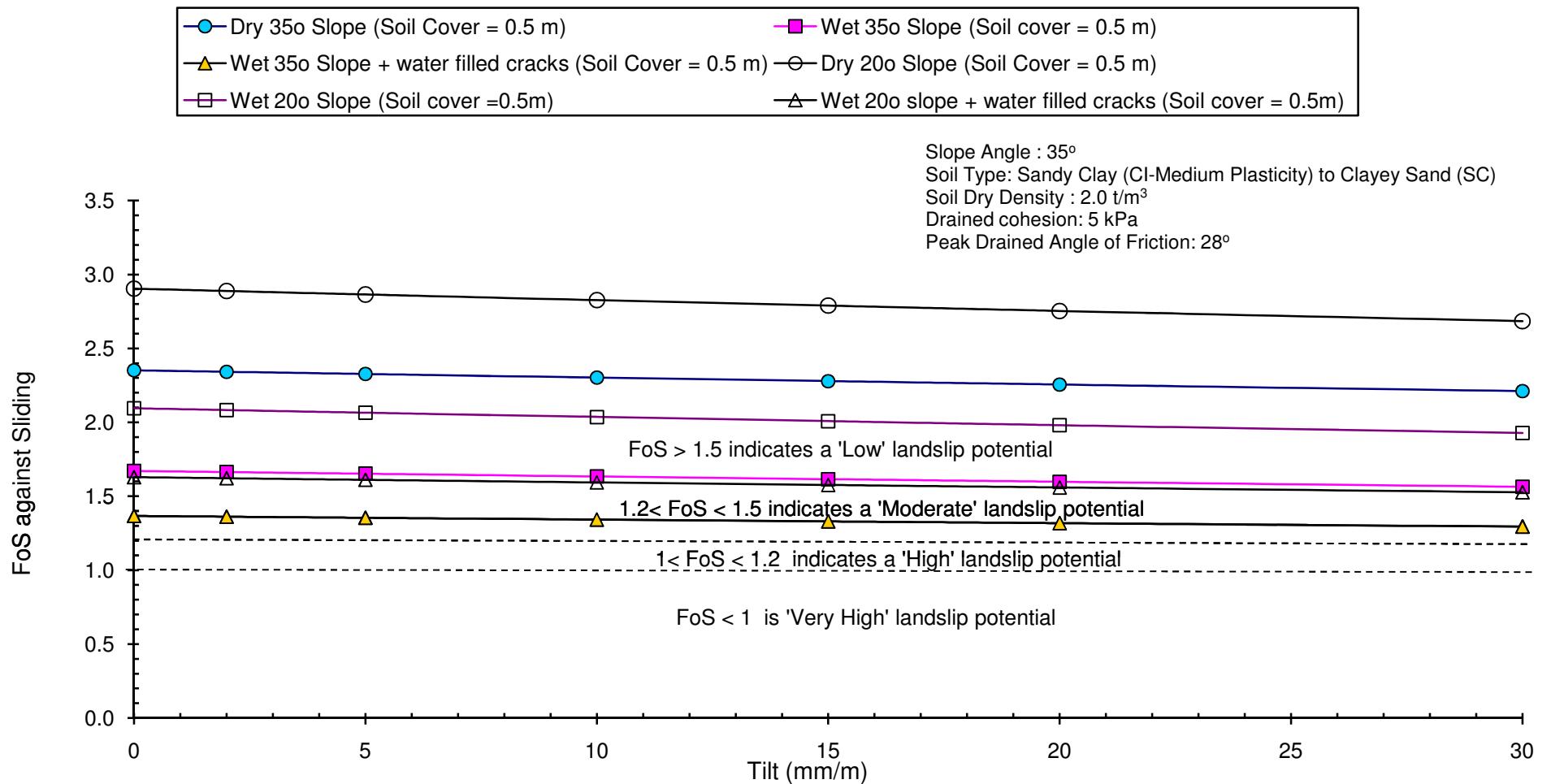
Engineer: S.Ditton
 Drawn: S.Ditton
 Date: 02.02.09
 Ditton Geotechnical
 Services Pty Ltd

Client: West Wallsend Colliery
 WWD-012/7

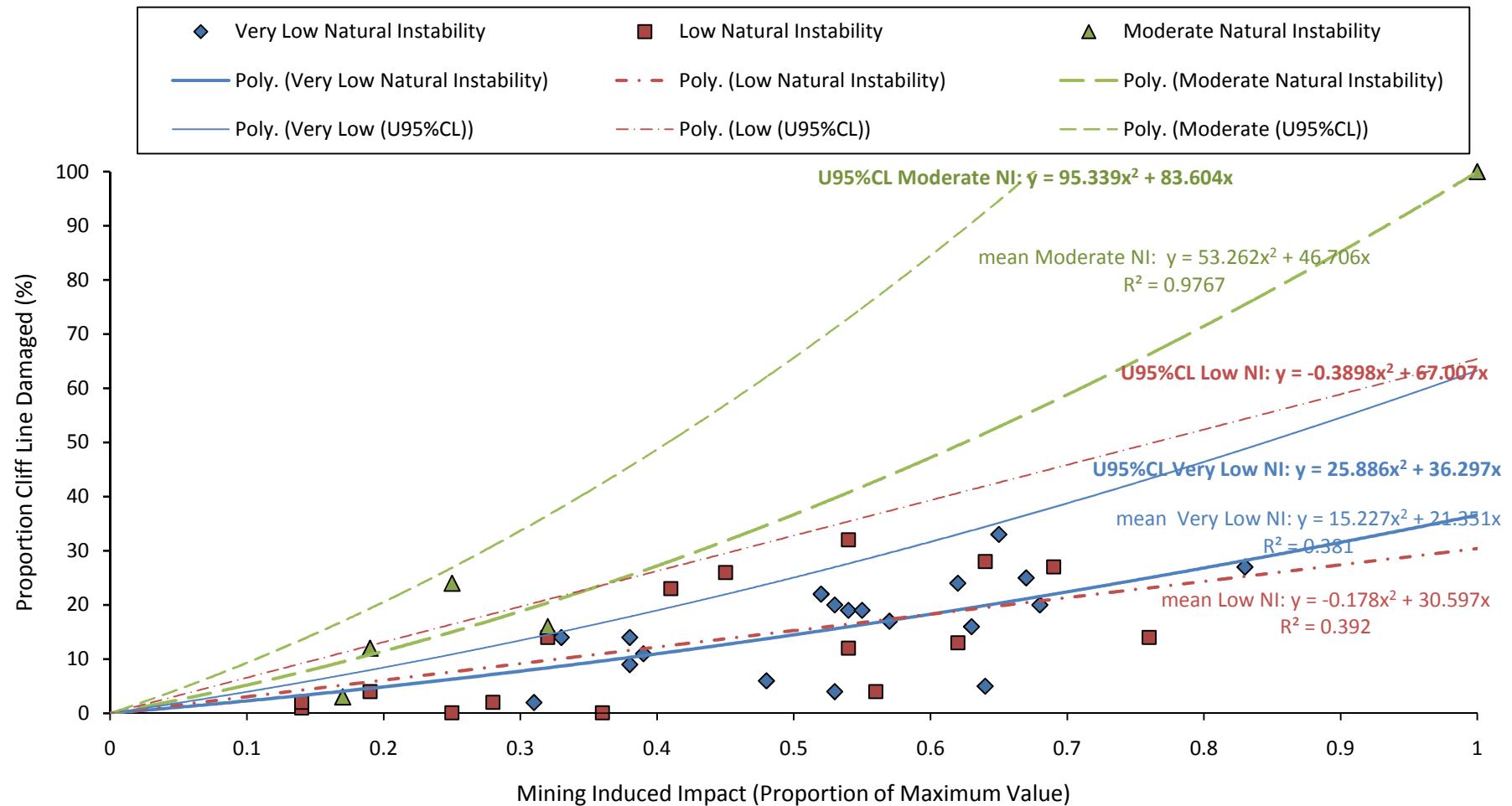
Title: Calibration Results for Estimating Average Soil Thickness on Steep Slopes
 in Western Domain Before Mine Subsidence

Scale: NTS

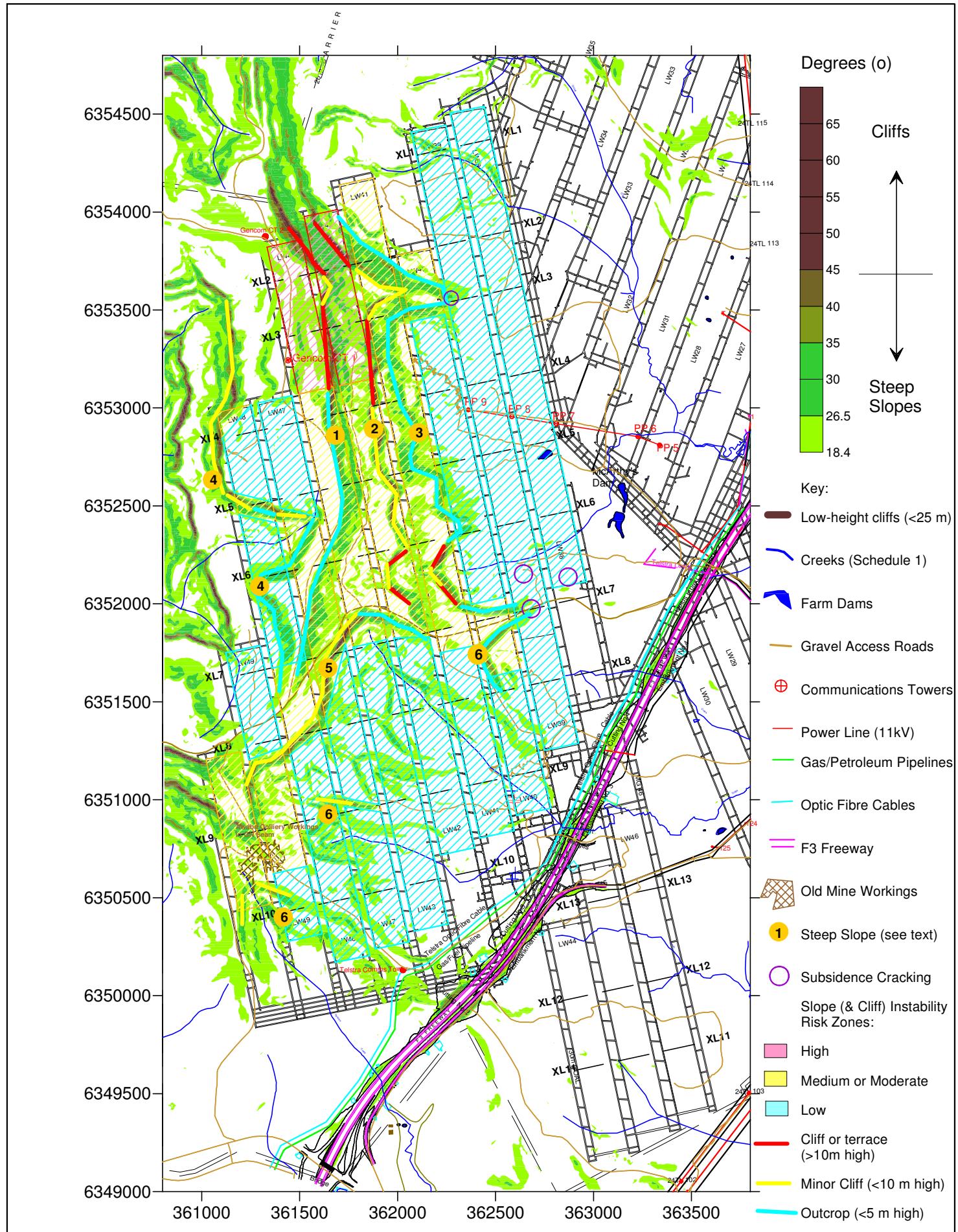
Figure No: 11a



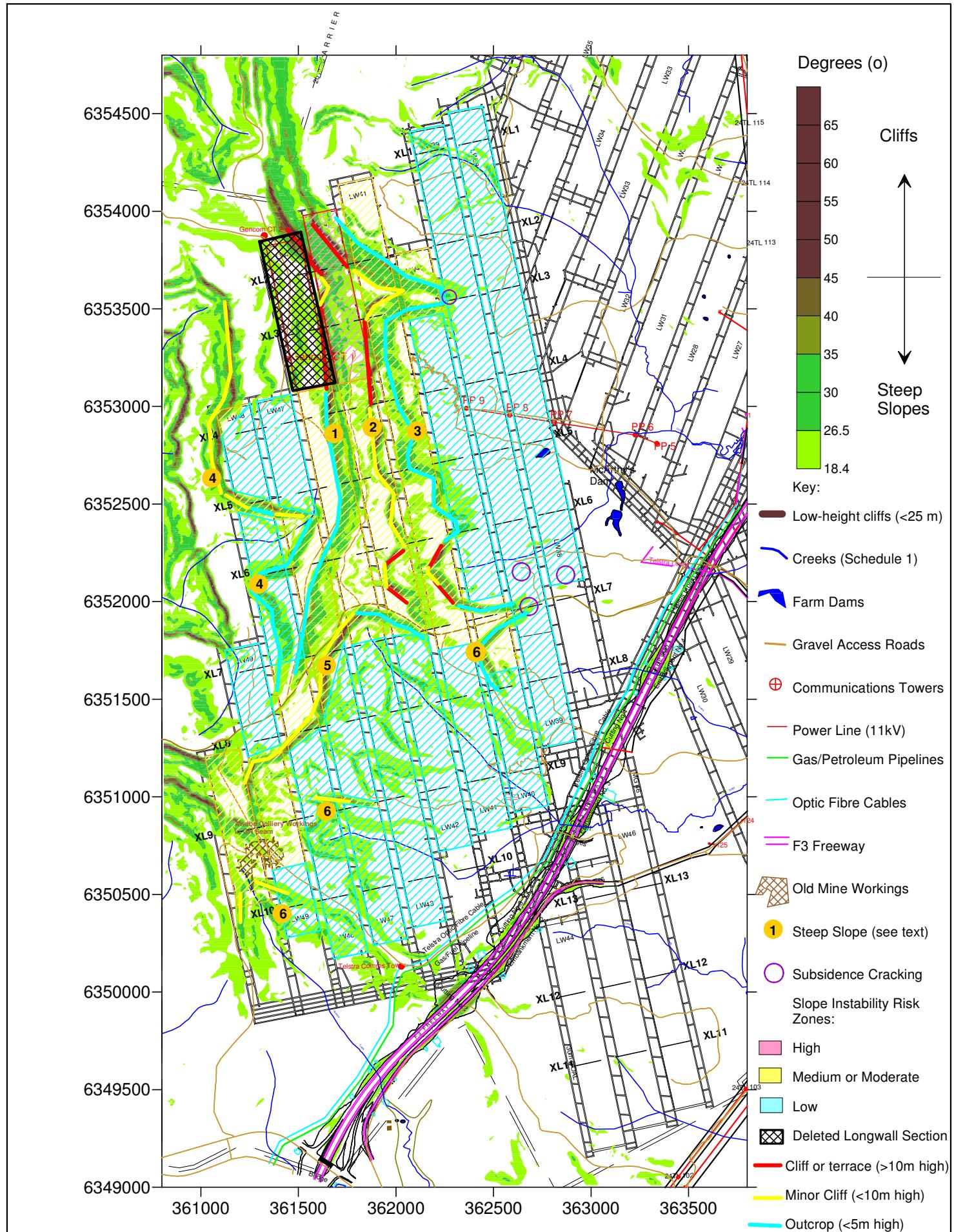
	Engineer:	S.Ditton	Client:	West Wallsend Colliery
	Drawn:	S.Ditton		WWD-012/7
	Date:	02.02.09	Title:	Estimated Factor of Safety Against Sliding of Steep Soil Slopes at West Wallsend Due to Tensile Cracking Through Soil Profile and Range of Predicted Tilt Due to Subsidence
	Ditton Geotechnical Services Pty Ltd		Scale:	NTS
				Figure No: 11b



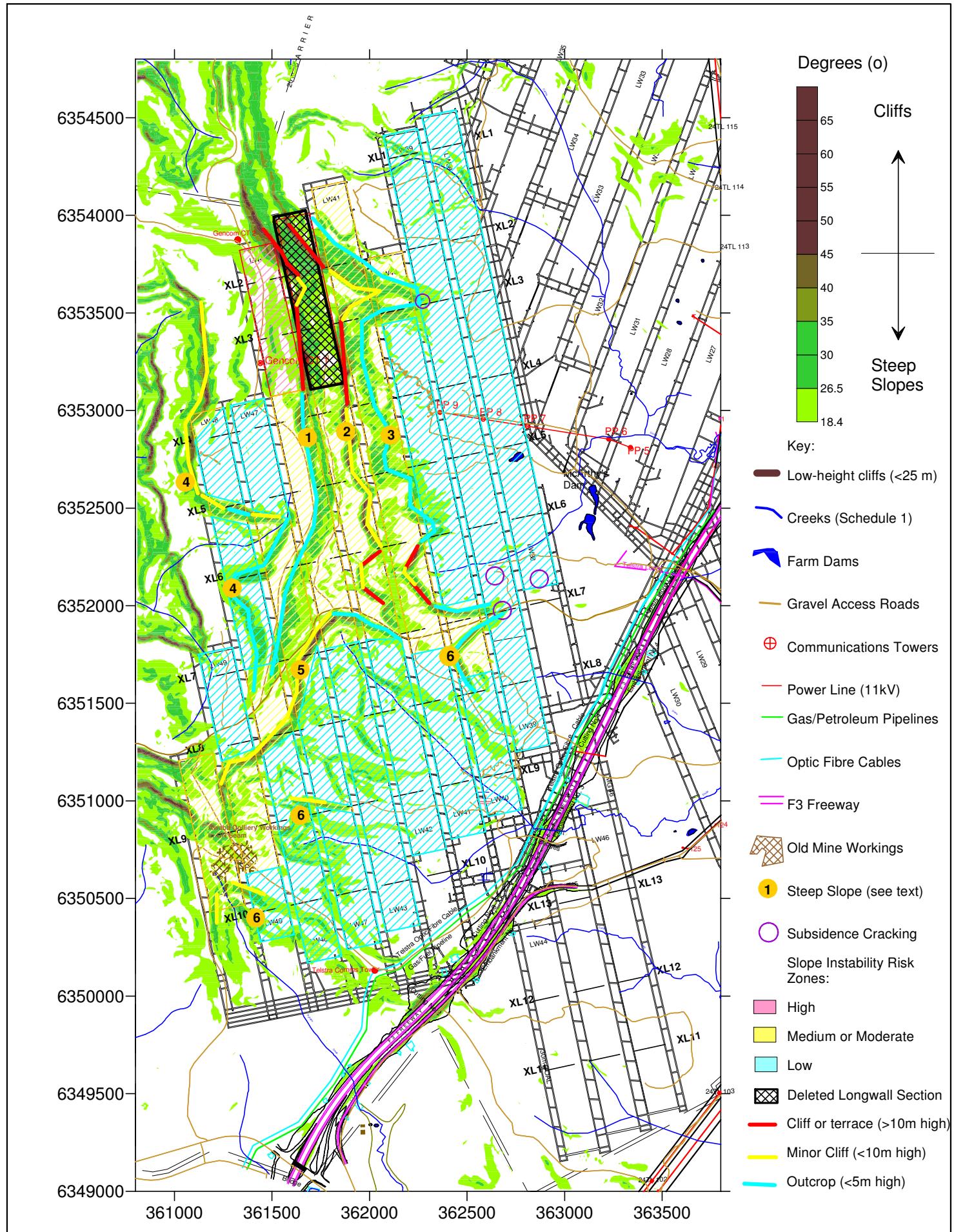
DgS 	Engineer:	S.Ditton	Client:	West Wallsend Colliery		
	Drawn:	S.Ditton		WWD-012/7		
	Date:	25.05.11	Title:	Review of ACARP, 2002 Cliff Damage Assessment Curves in Figure 10.1		
	Ditton Geotechnical Services Pty Ltd		Scale:	NTS		Figure No:
						12



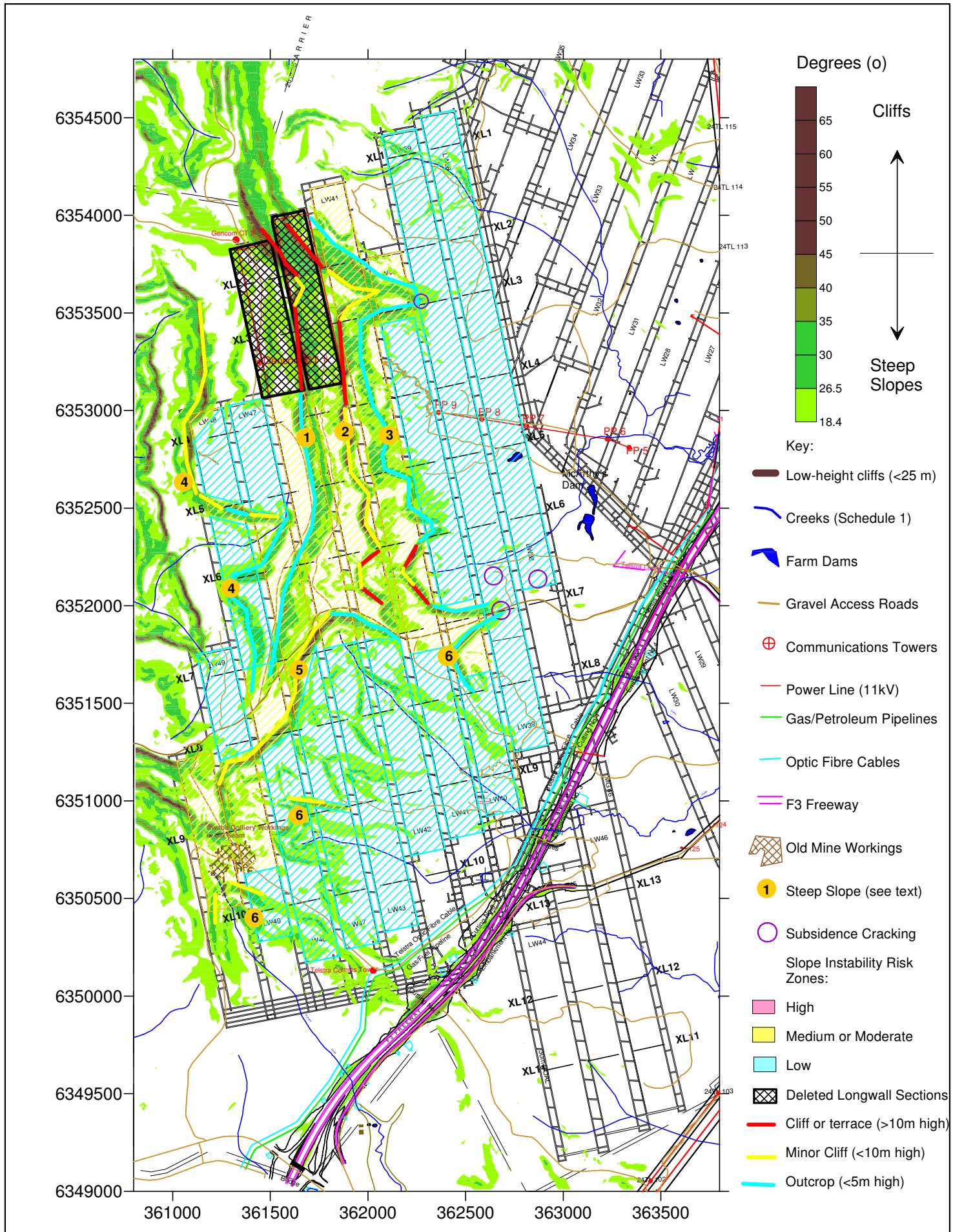
 Ditton Geotechnical Services Pty Ltd	Engineer:	S.Ditton	Client: West Wallsend Colliery WWD-012/7
	Drawn:	S.Ditton	
	Date:	30.05.11	Title: Potential Slope Instability Risk Zones for the Current Longwall Layout



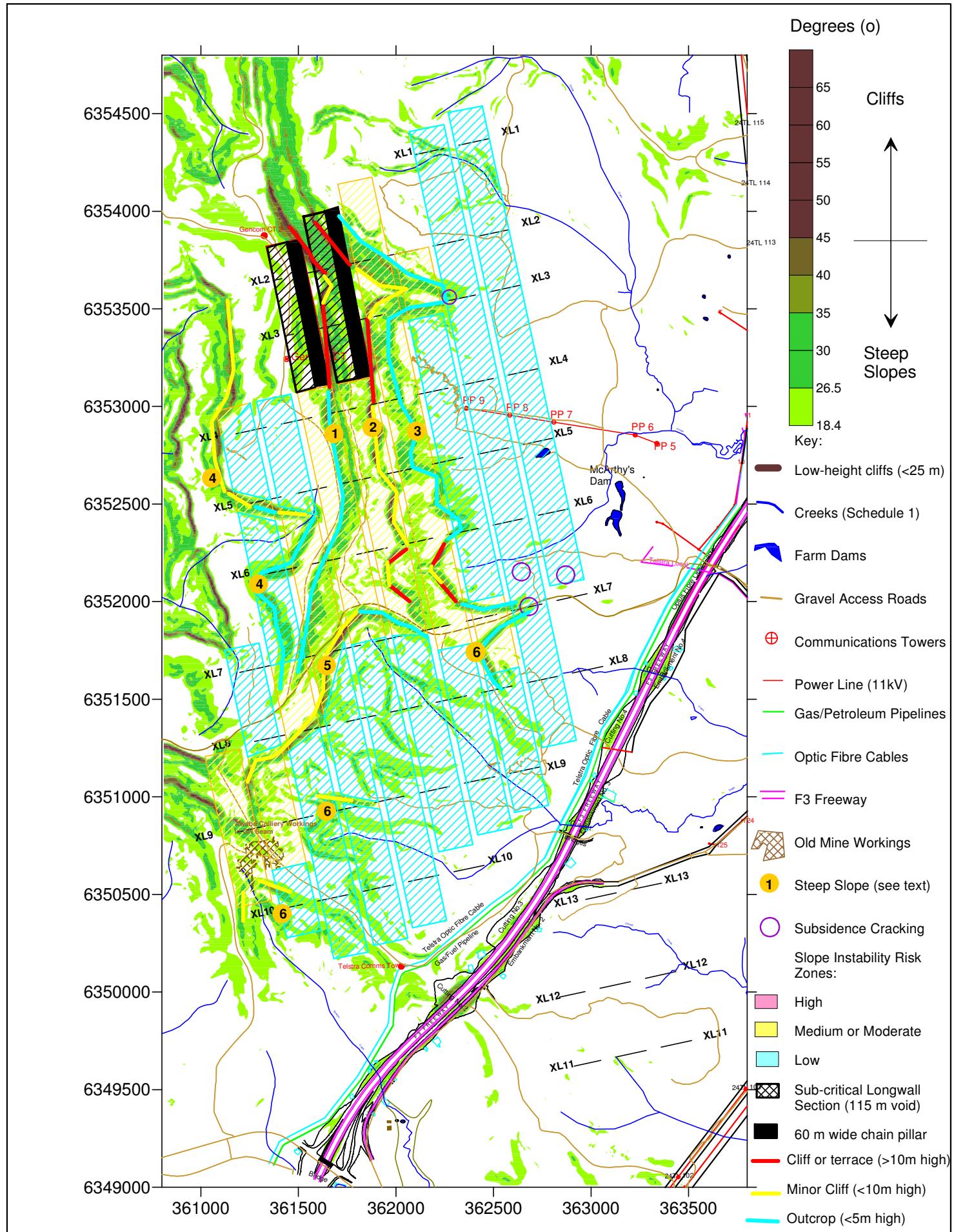
DgS	Engineer:	S.Ditton	Client:	West Wallsend Colliery
	Drawn:	S.Ditton	WWD-012/7	
	Date:	20.07.11	Title:	Amendment Option 1 for the Current Longwall Layout
Ditton Geotechnical Services Pty Ltd	Scale:	1:25,000	Figure No:	14a



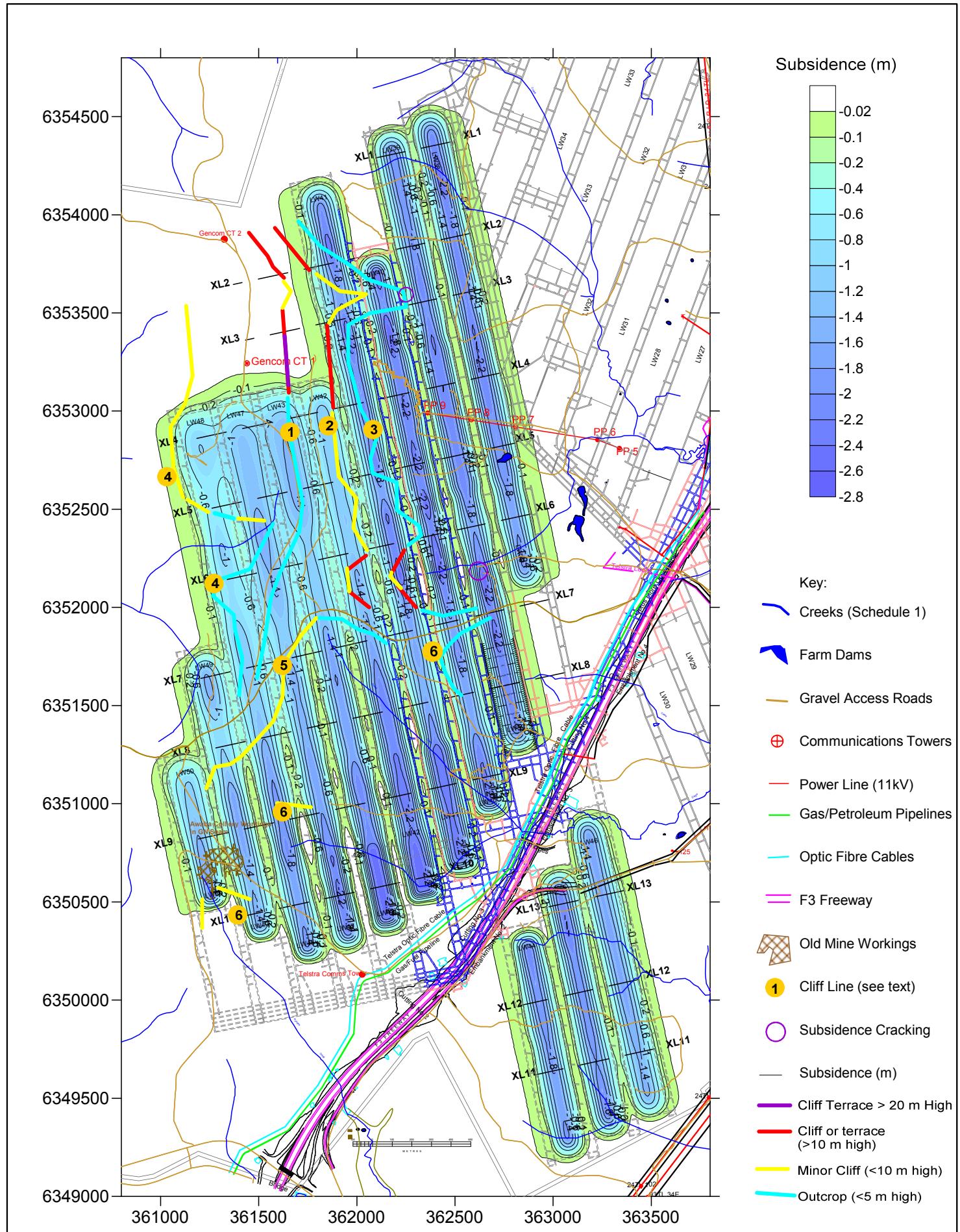
DgS Ditton Geotechnical Services Pty Ltd	Engineer:	S.Ditton	Client:	West Wallsend Colliery
	Drawn:	S.Ditton	WWD-012/7	
	Date:	30.05.11	Title:	Amendment Option 2 for the Current Longwall Layout
	Scale:	1:25,000	Figure No:	14b



 Ditton Geotechnical Services Pty Ltd	Engineer:	S.Ditton	Client: West Wallsend Colliery WWD-012/7
	Drawn:	S.Ditton	
	Date:	30.05.11	
	Title: Amendment Option 3 for the Current Longwall Layout		
Scale: 1:25,000		Figure No:	14c



DgS	Engineer:	S.Ditton	Client:	West Wallsend Colliery
	Drawn:	S.Ditton	WWD-012/7	
	Date:	30.05.11	Title:	Amendment Option 4 for the Current Longwall Layout
Ditton Geotechnical Services Pty Ltd	Scale:	1:25,000	Figure No:	14d



DgS Ditton Geotechnical Services Pty Ltd	Engineer:	S.Ditton	Client:	West Wallsend Colliery
	Drawn:	S.Ditton	WWD-012/7	
	Date:	10.08.11	Title:	Predicted Worst-Case Subsidence Contours for Proposed Case 3 Longwall Layout beneath Steep Slopes and Cliff Lines in the Western and Southern Domains
	Scale:	1:25,000	Figure No:	15a