

Appendix 14.4

Construction Noise Predictions

Table 14.1A Unmitigated Construction Noise Predictions for Trans Pennine Diversion

			Site Preparation	Road Construction	Surfacing	Dust Suppression	Complies with 70dB(A) Daytime Noise Limit 0700-1800 and Saturday 0800-1300				Complies with 60 dB(A)Evening & Weekends (Saturday 1300-1900 and Sunday 0700-1900)			
		Distance (m)	LAeq dB(A)				Site Preparation	Road Construction	Surfacing	Dust Suppression	Site Preparation	Road Construction	Surfacing	Dust Suppression
Construction Ref.	Receptor													
	Access Road Construction													
Transpennine Trail Diversion	The Laurels	43	71.1	69.3	71.1	62.0	NO	YES	NO	YES	NO	NO	NO	NO
	1,2,3 The Banks	57	68.7	66.9	68.7	59.5	YES	YES	YES	YES	NO	NO	NO	YES
	11-19 Brookhill Lane	295	54.4	52.6	54.4	45.2	YES	YES	YES	YES	YES	YES	YES	YES
	Dick Royd Farm	313	53.9	52.1	53.9	44.7	YES	YES	YES	YES	YES	YES	YES	YES
			Dumping Material	Rolling and Compaction	Water Bowser	Breaking and Loading	Complies with 70dB(A) Daytime Noise Limit 0700-1800 and Saturday 0800-1300				Complies with 60 dB(A)Evening & Weekends (Saturday 1300-1900 and Sunday 0700-1900)			
		Distance (m)	LAeq dB(A)				Dumping Material	Rolling and Compaction	Water Bowser	Breaking and Loading	Dumping Material	Rolling and Compaction	Water Bowser	Breaking and Loading
	Road Maintenance													
Transpennine Trail Diversion	The Laurels	43	59.3	60.3	61.3	58.3	YES	YES	YES	YES	YES	NO	NO	YES
	1,2,3 The Banks	57	56.9	57.9	58.9	55.9	YES	YES	YES	YES	YES	YES	YES	YES
	11-19 Brookhill Lane	295	42.6	43.6	44.6	41.6	YES	YES	YES	YES	YES	YES	YES	YES
	Dick Royd Farm	313	42.1	43.1	44.1	41.1	YES	YES	YES	YES	YES	YES	YES	YES

Table 14.2A Unmitigated Construction Noise Predictions for Trans Pennine Laydown Areas

			Site Preparation	Road Construction	Moving Materials	Complies with 70dB(A) Daytime Noise Limit 0700-1800 and Saturday 0800-1300			Complies with 60 dB(A)Evening & Weekends (Saturday 1300-1900 and Sunday 0700-1900)		
		Distance (m)	LAeq dB(A)			Site Preparation	Road Construction	Moving Materials	Site Preparation	Road Construction	Moving Materials
Construction Ref.	Receptor										
	Trans Pennine Laydown Areas										
	Winscar Lodge	124	56.9	61.5	58.4	YES	YES	YES	YES	NO	YES
	2-4 Don View	151	55.2	59.7	56.7	YES	YES	YES	YES	YES	YES
	6-8 Don View	169	54.2	58.8	55.7	YES	YES	YES	YES	YES	YES
	10-12 Don View	188	53.3	57.8	54.8	YES	YES	YES	YES	YES	YES
	Southview	138	56.0	60.5	57.5	YES	YES	YES	YES	NO	YES
	Well	83	60.4	64.9	61.9	YES	YES	YES	NO	NO	NO
	Bar House	48	65.2	69.7	66.7	YES	YES	YES	NO	NO	NO
	The Laurels	45	65.7	70.3	67.2	YES	NO	YES	NO	NO	NO
	1,2,3 The Banks	69	62.0	66.5	63.5	YES	YES	YES	NO	NO	NO

Table 14.3A Unmitigated Construction Noise Predictions for Bridge Construction and Dismantling.

		Distance (m)	Site Preparation	Road Construction	Bored Piling	Bridge Assembly	Complies with 70dB(A) Daytime Noise Limit 0700-1800 and Saturday 0800-1300				Complies with 60 dB(A)Evening & Weekends (Saturday 1300-1900 and Sunday 0700-1900)			
			LAeq dB(A)				Site Preparation	Road Construction	Bored Piling	Bridge Assembly	Site Preparation	Road Construction	Bored Piling	Bridge Assembly
Construction Ref.	Receptor													
Bridge Construction														
Bridge 1 Jenga Bridge	1,2,3 The Banks	275	45.2	49.7	49.2	58.2	YES	YES	YES	YES	YES	YES	YES	YES
Temporary Bridge 2	Dick Royd Farm	289	44.8	49.3	48.8	57.8	YES	YES	YES	YES	YES	YES	YES	YES
Bridge Dismantling		Distance (m)	Bridge Dismantling	Transport Materials	Dust Suppression		Bridge Dismantling	Transport Materials	Dust Suppression		Bridge Dismantling	Transport Materials	Dust Suppression	
Temporary Bridge 2	Dick Royd Farm	289	54.0	53.6	45.4		YES	YES	YES		YES	YES	YES	

Table 14.4A Unmitigated Construction Noise Predictions for Construction of the Sealing End Compound (SEC)

		Distance (m)	Ground Preparation	Piled Foundations	Site Works	Complies with 70dB(A) Daytime Noise Limit 0700-1800 and Saturday 0800-1300			Complies with 60 dB(A)Evening & Weekends (Saturday 1300-1900 and Sunday 0700-1900)		
			LAeq dB(A)			Ground Preparation	Piled Foundations	Site Works	Ground Preparation	Piled Foundations	Site Works
Construction Ref.	Receptor										
SEC Wogden Foot	Dick Royd Farm	302	56.3	57.8	51.3	YES	YES	YES	YES	YES	YES
	Eltock farm	347	55.1	56.6	50.1	YES	YES	YES	YES	YES	YES

Table 14.5A Unmitigated Construction Noise Predictions for Construction of Access Point 7

		Distance (m)	Earthworks	Bellmouth Construction	Road Surfacing	Complies with 70dB(A) Daytime Noise Limit 0700- 1800 and Saturday 0800-1300			Complies with 60 dB(A)Evening & Weekends (Saturday 1300-1900 and Sunday 0700-1900)		
			LAeq dB(A)			Earthworks	Bellmouth Construction	Road Surfacing	Earthworks	Bellmouth Construction	Road Surfacing
Construction Ref.	Receptor										
Bellmouth AP7	1-8 Brook Hill Lane	165	54.4	57.6	56.7	YES	YES	YES	YES	YES	YES
	Greenstead	161	54.6	57.8	56.9	YES	YES	YES	YES	YES	YES
	Brookside Farm	148	55.4	58.6	57.6	YES	YES	YES	YES	YES	YES

Table 14.6A Unmitigated Construction Noise Predictions for Construction and Maintenance of Northern Access Route

			Site Preparation	Road Construction	Surfacing	Dust Suppression	Complies with 70dB(A) Daytime Noise Limit 0700-1800 and Saturday 0800-1300				Complies with 60 dB(A)Evening & Weekends (Saturday 1300-1900 and Sunday 0700-1900)			
		Distance (m)	LAeq dB(A)				Site Preparation	Road Construction	Surfacing	Dust Suppression	Site Preparation	Road Construction	Surfacing	Dust Suppression
Construction Ref.	Receptor													
	Access Road Construction													
AP7 N. Access Route	Brookside Farm	104	63.4	61.7	63.5	54.3	YES	YES	YES	YES	NO	NO	NO	YES
	Dick Royd Farm	221	56.9	55.1	56.9	47.7	YES	YES	YES	YES	YES	YES	YES	YES
	Eltock Farm	279	54.9	53.1	54.9	45.7	YES	YES	YES	YES	YES	YES	YES	YES
			Dumping Material	Rolling and Compaction	Water Bowser	Breaking and Loading	Complies with 70dB(A) Daytime Noise Limit 0700-1800 and Saturday 0800-1300				Complies with 60 dB(A)Evening & Weekends (Saturday 1300-1900 and Sunday 0700-1900)			
		Distance (m)	LAeq dB(A)				Dumping Material	Rolling and Compaction	Water Bowser	Breaking and Loading	Dumping Material	Rolling and Compaction	Water Bowser	Breaking and Loading
	Road Maintenance													
AP7	Brookside Farm	104	51.7	52.7	53.7	50.7	YES	YES	YES	YES	YES	YES	YES	YES
	Dick Royd Farm	221	45.1	46.1	47.1	44.1	YES	YES	YES	YES	YES	YES	YES	YES
	Eltock Farm	279	43.1	44.1	45.1	42.1	YES	YES	YES	YES	YES	YES	YES	YES
			Breaking and Loading	Transport Materials	Dumping Load	Dust Suppression	Complies with 70dB(A) Daytime Noise Limit 0700-1800 and Saturday 0800-1300				Complies with 60 dB(A)Evening & Weekends (Saturday 1300-1900 and Sunday 0700-1900)			
		Distance (m)	LAeq dB(A)				Breaking and Loading	Transport Materials	Dumping Load	Dust Suppression	Breaking and Loading	Transport Materials	Dumping Load	Dust Suppression
	Removal and Reinstatement of Access Roads													
AP7	Brookside Farm	104	66.5	62.5	64.5	54.3	YES	YES	YES	YES	NO	NO	NO	YES
	Dick Royd Farm	221	59.9	55.9	58.0	47.7	YES	YES	YES	YES	YES	YES	YES	YES
	Eltock Farm	279	57.9	53.9	55.9	45.7	YES	YES	YES	YES	YES	YES	YES	YES

Table 14.7A Unmitigated Construction Noise Predictions for rock removal at Dunston Bridge.

			Site Preparation	Rock Breaking	Moving Materials	Complies with 70dB(A) Daytime Noise Limit 0700-1800 and Saturday 0800-1300			Complies with 60 dB(A)Evening & Weekends (Saturday 1300-1900 and Sunday 0700-1900)		
		Distance (m)	LAeq dB(A)			Site Preparation	Rock Breaking	Moving Materials	Site Preparation	Rock Breaking	Moving Materials
Construction Ref.	Receptor										
	Rock Removal at Dunford Bridge										
	Winscar Lodge	82	63.5	67.5	62.0	YES	YES	YES	NO	NO	NO
	2-4 Don View	64	65.7	69.7	64.2	YES	YES	YES	NO	NO	NO
	6-8 Don View	61	66.1	70.1	64.6	YES	NO	YES	NO	NO	NO
	10-12 Don View	54	67.1	71.1	65.7	YES	NO	YES	NO	NO	NO
	Southview	66	65.4	69.4	63.9	YES	YES	YES	NO	NO	NO
	Well	56	66.8	70.8	65.3	YES	NO	YES	NO	NO	NO
	Stanhope	103	61.5	65.5	60.0	YES	YES	YES	NO	NO	NO
	Bar House	127	59.7	63.7	58.2	YES	YES	YES	YES	NO	YES
	The Laurels	142	58.7	62.7	57.3	YES	YES	YES	YES	NO	YES

Table 14.8A Unmitigated Construction Noise Predictions for Sealing End Compound (SEC) Demolition at Dunford Bridge.

			Dismantling	Breaking Concrete	Material Removal	Complies with 70dB(A) Daytime Noise Limit 0700-1800 and Saturday 0800-1300			Complies with 60 dB(A)Evening & Weekends (Saturday 1300-1900 and Sunday 0700-1900)		
		Distance (m)	LAeq dB(A)			Dismantling	Breaking Concrete	Material Removal	Dismantling	Breaking Concrete	Material Removal
Construction Ref.	Receptor										
SEC Dunford Bridge	12 Don View	43	73.2	74.7	68.2	NO	NO	NO	NO	NO	NO
	10 Don View	64	69.8	71.3	64.8	YES	NO	YES	NO	NO	NO
	South View	128	63.7	65.3	58.8	YES	YES	YES	NO	NO	NO
	Stony Gate	140	63.0	64.5	58.0	YES	YES	YES	NO	NO	NO

Table 14.9A Unmitigated Construction Noise Predictions for Construction Compound Setup.

[illegible]

Table 14.10A Unmitigated Construction Noise Predictions for Construction of the Access Roads

[illegible]

Table 14.11A Unmitigated Construction Noise Predictions for Maintenance of the Access Roads

		Distance (m)	Dumping Material	Rolling and Compaction	Water Bowser	Breaking and Loading	Complies with 70dB(A) Daytime Noise Limit 0700-1800 and Saturday 0800-1300				Complies with 60 dB(A)Evening & Weekends (Saturday 1300-1900 and Sunday 0700-1900)			
			LAeq dB(A)				Dumping Material	Rolling and Compaction	Water Bowser	Breaking and Loading	Dumping Material	Rolling and Compaction	Water Bowser	Breaking and Loading
	Road Maintenance													
AP2	Stony Gate	11	71.2	72.2	73.2	70.2	NO	NO	NO	NO	NO	NO	NO	
AP3	Stony Gate	28	63.1	64.1	65.1	62.1	YES	YES	YES	YES	NO	NO	NO	
	South View	149	48.5	49.5	50.5	47.5	YES	YES	YES	YES	YES	YES	YES	
AP4	Well	15	68.5	69.5	70.5	67.5	YES	YES	NO	YES	NO	NO	NO	
AP5	Bar House	43	59.3	60.3	61.3	58.3	YES	YES	YES	YES	YES	NO	YES	
	The Laurels	36	60.9	61.9	62.9	59.9	YES	YES	YES	YES	NO	NO	YES	
	1,2,3 The Banks	60	56.4	57.4	58.4	55.4	YES	YES	YES	YES	YES	YES	YES	
AP6	Rose Cottage	246	44.2	45.2	46.2	43.2	YES	YES	YES	YES	YES	YES	YES	

Table 14.12A Unmitigated Construction Noise Predictions for Reinstatement of the Access Roads

		Distance (m)	Breaking and Loading	Transport Materials	Dumping Load	Dust Suppression	Complies with 70dB(A) Daytime Noise Limit 0700-1800 and Saturday 0800-1300				Complies with 60 dB(A)Evening & Weekends (Saturday 1300-1900 and Sunday 0700-1900)			
			LAeq dB(A)				Breaking and Loading	Transport Materials	Dumping Load	Dust Suppression	Breaking and Loading	Transport Materials	Dumping Load	Dust Suppression
	Removal and Reinstatement of Access Roads													
AP2	Stony Gate	11	86.0	82.0	84.0	73.8	NO	NO	NO	NO	NO	NO	NO	NO
AP3	Stony Gate	28	77.8	73.9	75.9	65.7	NO	NO	NO	YES	NO	NO	NO	NO
	South View	149	63.3	59.3	61.4	51.2	YES	YES	YES	YES	NO	YES	NO	YES
AP4	Well	15	83.3	79.3	81.3	71.1	NO	NO	NO	NO	NO	NO	NO	NO
AP5	Bar House	43	74.1	70.1	72.2	62.0	NO	NO	NO	YES	NO	NO	NO	NO
	The Laurels	36	75.7	71.7	73.7	63.5	NO	NO	NO	YES	NO	NO	NO	NO
	1,2,3 The Banks	60	71.2	67.2	69.3	59.1	NO	YES	YES	YES	NO	NO	NO	YES
AP6	Rose Cottage	246	59.0	55.0	57.0	46.8	YES	YES	YES	YES	YES	YES	YES	YES

Table 14.13A Unmitigated Construction Noise Predictions for Laydown Areas.

			Site Preparation	Road Construction	Moving Materials	Complies with 70dB(A) Daytime Noise Limit 0700-1800 and Saturday 0800-1300			Complies with 60 dB(A)Evening & Weekends (Saturday 1300-1900 and Sunday 0700-1900)		
		Distance (m)	LAeq dB(A)			Site Preparation	Road Construction	Moving Materials	Site Preparation	Road Construction	Moving Materials
Construction Ref.	Receptor										
	Laydown Areas										
	Winscar Lodge	64	62.7	67.2	64.2	YES	YES	YES	NO	NO	NO
	2-4 Don View	55	64.0	68.5	65.5	YES	YES	YES	NO	NO	NO
	6-8 Don View	43	66.1	70.7	67.6	YES	NO	YES	NO	NO	NO
	10-12 Don View	36	67.7	72.2	69.2	YES	NO	YES	NO	NO	NO
	Southview	62	62.9	67.5	64.5	YES	YES	YES	NO	NO	NO
	Well	36	67.7	72.2	69.2	YES	NO	YES	NO	NO	NO
	Bar House	53	64.3	68.8	65.8	YES	YES	YES	NO	NO	NO
	The Laurels	72	61.6	66.2	63.2	YES	YES	YES	NO	NO	NO
	1,2,3 The Banks	66	62.4	66.9	63.9	YES	YES	YES	NO	NO	NO
	11-19 Brookhill Lane	302	49.2	53.7	50.7	YES	YES	YES	YES	YES	YES
	Dick Royd Farm	320	48.7	53.2	50.2	YES	YES	YES	YES	YES	YES

Table 14.14A Unmitigated Construction Noise Predictions for Cable Installation (Trenching).

[illegible]

Table 14.15A Unmitigated Construction Noise Predictions for Pylon Removal.

		Distance (m)	Dismantling	Concrete Breaking	Rubble Dumping	Steel Cutting	Complies with 70dB(A) Daytime Noise Limit 0700-1800 and Saturday 0800-1300				Complies with 60 dB(A)Evening & Weekends (Saturday 1300- 1900 and Sunday 0700-1900)			
			LAeq dB(A)				Dismantling	Concrete Breaking	Rubble Dumping	Steel Cutting	Dismantling	Concrete Breaking	Rubble Dumping	Steel Cutting
Construction Ref.	Receptor													
Pylon 157	Eltock Farm	402	53.6	49.4	48.9	49.9	YES	YES	YES	YES	YES	YES	YES	
Pylon 158	Dick Royd Farm	278	56.8	52.6	52.1	53.1	YES	YES	YES	YES	YES	YES	YES	
	Eltock Farm	289	56.4	52.2	51.8	52.8	YES	YES	YES	YES	YES	YES	YES	
Pylon 159	Brookside Farm	325	55.4	51.2	50.8	51.8	YES	YES	YES	YES	YES	YES	YES	
	11-19 Brookhill Lane	316	55.7	51.5	51.0	52.0	YES	YES	YES	YES	YES	YES	YES	
Pylon 160	Rose Cottage	265	57.2	53.0	52.5	53.5	YES	YES	YES	YES	YES	YES	YES	
	11-19 Brookhill Lane	242	58.0	53.8	53.3	54.3	YES	YES	YES	YES	YES	YES	YES	
Pylon 161	1,2,3 The Banks	353	54.7	50.5	50.1	51.0	YES	YES	YES	YES	YES	YES	YES	
	Rose Cottage	334	55.2	51.0	50.5	51.5	YES	YES	YES	YES	YES	YES	YES	
Pylon 162	1,2,3 The Banks	206	59.4	55.2	54.7	55.7	YES	YES	YES	YES	YES	YES	YES	
	Well	254	57.6	53.4	52.9	53.9	YES	YES	YES	YES	YES	YES	YES	
	The Laurels	249	57.7	53.5	53.1	54.1	YES	YES	YES	YES	YES	YES	YES	
Pylon 163	South View	63	69.7	65.5	65.0	66.0	YES	YES	YES	YES	NO	NO	NO	
	Well	88	66.8	62.6	62.1	63.1	YES	YES	YES	YES	NO	NO	NO	
Pylon 164R	12 Don View	59	70.2	66.0	65.6	66.6	NO	YES	YES	YES	NO	NO	NO	
	10 Don View	63	69.7	65.5	65.0	66.0	YES	YES	YES	YES	NO	NO	NO	
	South View	152	62.0	57.8	57.4	58.4	YES	YES	YES	YES	NO	YES	YES	

Table 14.16A Unmitigated Construction Noise Predictions for Construction of Pylon 157R.

[illegible]

Table 14.17A Construction Vehicle Noise Predictions for Public Roads.

18 hour AAWT						
Location	Total	%HGV	Speed	BNL	Correction	LA10 18hr
A628	10726	18.0	82	69.4	4.0	73.4
Goddard Lane	352	Flows below threshold in CRTN				
A616 Whams Road	3022	18.0	82	63.9	4.0	67.9
Windle Edge north	555	Flows below threshold in CRTN				
A628	10778	18	82	69.4	4.0	73.4
Goddard Lane	452	Flows below threshold in CRTN				
A616 Whams Road	3032	19	82	63.9	4.1	68.0
Windle Edge north	655	Flows below threshold in CRTN				
1 hour AAWT						
Location	Total	%HGV	Speed	BNL	Correction	LA10 1hr
A628	1025	18	82	72	4.0	76.3
Goddard Lane	35	Flows below threshold in CRTN				
A616 Whams Road	289	20	82	67	4.2	71.0
Windle Edge north	38	Flows below thresholds in CRTN				
A628	1031	18	82	72	4.0	76.3
Goddard Lane	45	Flows below thresholds in CRTN				
A616 Whams Road	289	20	82	67	4.2	71.0
Windle Edge north	48	Flows below thresholds in CRTN				

Table 14.18A Unmitigated Construction Vehicle Noise for Haul Roads and Access Roads.

Construction Ref.	Receptor	Distance (m)	Peak 1 hr movements (LAeq, 1hr)	Complies with 70dB(A) Daytime Noise Limit 0700-1800 and Saturday 0800-1300	Complies with 60 dB(A) Evening & Weekends (Saturday 1300-1900 and Sunday 0700-1900)
AP2	Stony Gate	14	59.3	YES	YES
AP3	Stony Gate	28	56.3	YES	YES
	South View	149	49.1	YES	YES
AP4	Well	15	59.0	YES	YES
AP5	Bar House	43	54.5	YES	YES
	The Laurels	36	55.2	YES	YES
	1,2,3 The Banks	60	53.0	YES	YES
AP6	Rose Cottage	246	46.9	YES	YES
AP7	Brookside Farm	104	50.6	YES	YES
	Dick Royd Farm	221	47.3	YES	YES
	Eltock Farm	279	46.3	YES	YES
Transpennine Trail Diversion	The Laurels	43	54.5	YES	YES
	1,2,3 The Banks	57	53.2	YES	YES
	11-19 Brookhill Lane	295	46.1	YES	YES
	Dick Royd Farm	313	45.8	YES	YES