Appendix 6.2

In Combination HGV Summary

Minehead - HGV Schedule

	6 h - 11-11	No.	Monthly (two way) HGV movements
Sinking Sinking	Sub-system Shaft area platform (terrace) Shaft area platform (terrace)	tem Earthworks Earthworks	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 1 1053 1220 1114 1252 1009 936 876 1 1053 1220 1114 1252 1009
Sinking Sinking	Shaft area platform (terrace) Shaft area platform (terrace) Shaft area platform (terrace) Shaft area platform (terrace)	Earthworks Pavement Drainage	323
Sinking Sinking Sinking	Shaft area platform (terrace) Shaft area platform (terrace) Shaft area platform (terrace)	Drainage Site Clearance Site Prep	250 205 233
Sinking Sinking	Site perep Infrastructure	Site Clearance Containerised pre-fabricated structures	18
Sinking Sinking Sinking	Change House/ Ablution Facilities during Sinking only (M&M and Mineral Shaft) Temporary store for cement and sinking store requirements (M&M and Mineral Shaft)	Containerized pre-fabricated structures Containerized pre-fabricated structures Pre-fabricated arrives as "Meccano" set on site	10 10 10 10 10 10 10 10 10 10 10 10 10 1
Sinking Sinking	Temporary fuel farm storage areas for fuel, oil and lubricants (M&M and Mineral Shaft) Temporary sinking maintenance workshop (M&M and Mineral Shaft)	Pre-fabricated arrives as "Meccano" set on site Pre-fabricated arrives as "Meccano" set on site	16 16 8
Sinking Sinking	Site Earthworks Equipment (M&M and Mineral Shaft) Site Earthworks Equipment (M&M and Mineral Shaft)	2 x Dozers, 2 x Tracked Excavators, 6 x Articulated Dumpers, 1 x Crushers 1 x driven Compactor, 1 x small Excavator, 1 x small Compactor	22 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
Sinking Sinking	M&M Shaft water settling arrangement (temporary) M&M Shaft water settling arrangement (temporary)	Excavate, Concrete, Rebar, steel rails, Drizzet oil trap and recirculation pumps with Control Panels Cement	
Sinking Sinking	M&M Shaft water settling arrangement (temporary) M&M Shaft water settling arrangement (temporary)	Fine Aggregate Coarse Aggregate 20mm	5 5 5
Sinking Sinking	M&M Shaft water settling arrangement (temporary) Settling (Attenuation) Pond (x2) (M&M and Mineral Shaft)	Coarse Aggregate 10mm Excavate, Compact and line with HDPE Lining	2
Sinking Sinking	Sinking compressors - 6 per shaft Sinking fans - 3 per shaft	Compressor complete with after coolers and electrical switch gear Fans complete with motors and switchgear	12 12 15 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
Sinking Sinking	Water reticulation for sinking Concrete batch plant. One per shaft	Water storage tanks, valves, pressure relieve valves and control units Two complete batch plants complete with scales and control gear	4 4 4 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
Sinking Sinking	Effluent disposal Cap lamp room	Effluent disposal Cap lamps, cap lamp chargers, repair bench, rescue packs and gas monitoring equip	2 2 2 2 2 2 2 2 2 2 2 2 2 2 3 4 4 4 4 4
Sinking Sinking	Waste Rock (Spoils) Materials Handling & Chamber Sinking	Trucks to transport spoils. Grader and compactor for spoils pile/s Mobile cranes Transport spoils and form of the spoil spoils and branches of the spoils and unable of t	
Sinking Sinking	Sinking Head Frame (Mineral Shaft) Sinking Head Frame (M&M Shaft) Banksman's Cabin (Mineral Shaft)	Temporary head frame, sheaves, tipping chutes and bank steel for sinking duration Temporary head frame, sheaves, tipping chutes and bank steel for sinking duration Containerised / Prefabricated	20 20 20 20 30 30 30 30 30 30 30 30 30 30 30 30 30
Sinking Sinking	ballistian's Cabin (M&M Shaft) Sinking stage 5 x decks (Mineral Shaft)	Containerised pre-fabricated structures	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Sinking Sinking Sinking	Sinking stage 5 x decks (wilder a Jiant) Shaft ventilation Columns (Mineral Shaft)	Complete sinking stage fully equipped Complete sinking stage fully equipped Circular ducting 6 m long	16 16 16 17 16 17 17 17 17 17 17 17 17 17 17 17 17 17
Sinking Sinking	Shaft ventilation Columns (M&M Shaft) Shaft water columns (Mineral Shaft)	Circular ducting 6 m long Pipe 6m long	8
Sinking Sinking	Shaft water columns (M&M Shaft) Concrete (Slick Line) columns (Mineral Shaft)	Pipe 6m long Pipe 6m long	
Sinking Sinking	Concrete (Slick Line) columns (M&M Shaft) Compressed air columns (Mineral Shaft)	Pipe 6m long Pipe 6m long x 200 mm dia	
Sinking Sinking	Compressed air columns (M&M shaft) Steel wire mesh for support (Mineral Shaft)	Pipe 6m long x 200mm dia Mesh	
Sinking Sinking	Steel wire mesh for support (M&M Shaft) Rock anchor bolts (Mineral Shaft)	Mesh Bolts and Resin	
Sinking Sinking	Rock anchor bolts (M&M Shaft) Steel tubbing for ground support (Mineral Shaft)	Bolts and Resin Steel tubbing	2 10 10 10 10 10 10 10 10 10 10 10 10 10
Sinking Sinking	Steel tubbing for ground support (M&M Shaft) Concrete Lining (Men and materials Shaft) Concrete Lining (Men and materials Shaft)	Steel tubbing Cement Characteristics	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
Sinking Sinking	Concrete Lining (Men and materials Shaft) Concrete Lining (Men and materials Shaft) Concrete Lining (Men and materials Shaft)	Sharp Sand Coarse Aggregate 20mm Fine Aggregate 20mm	22 44 75 57 57 62 80 80 80 82 80 82 80 82 80 82 80 82 81 82
Sinking	Concrete Lining (Wineral Shaft) Concrete Lining (Mineral Shaft) Concrete Lining (Mineral Shaft)	Fine Aggregate 20mm Cement Fine Aggregate	1 2 44 80 80 80 80 80 80 80 80 80 80 80 88 80 82 80 82 80 82 80 82 80 82 81 82 81 82 82 82 82 83 82 81
Sinking Sinking	Concrete Lining (Mineral Shaft) Concrete Lining (Mineral Shaft)	Fine Aggregate Coarse Aggregate 20mm Coarse Aggregate 10mm	24 47 86 86 86 86 86 86 86 88 86 86 88 88 86 86
Sinking Sinking	Grout ref WP spreadsheet Grout ref WP spreadsheet	Solids Delivered in 28 tonne tankersMonths 6 to 17 inclusive Solids Delivered in 28 tonne tankersMonths 6 to 17 inclusive	177 177 177 177 177 177 177 177 177 177
Sinking Sinking	Grout ref WP spreadsheet Explosives	Soilids delivered in 28 tonne tankers total tonnage months 21 to 35 inclusive Explosives	2 2 3 4 5 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
Sinking Sinking	Temporary Sinking Pump Station every 300m (Mineral Shaft) Temporary Sinking Pump Station every 300m (M&M Shaft)	Braithwaite water tanks Braithwaite water tanks	
Sinking Sinking	Temporary Sinking Pumps every 300m (Mineral Shaft) Temporary Sinking Pumps every 300m (M&M Shaft)	Complete pumps with motors and switchgear Complete pumps with motors and switchgear	
Sinking Sinking	Temporary Sinking Pumps (Mineral Shaft) Temporary Sinking Pumps (M&M Shaft)	1 Mobile substation 1 Mobile substation	
Shaft Shaft	Nut boxes, steady brackets & pipe clamps (Mineral Shaft) Nut boxes, steady brackets & pipe clamps (M&M Shaft) Temporary shaft screens, gates and draw bridges (Mineral Shaft)	Nut boxes, steady brackets & pipe clamps (Mineral Shaft) Nut boxes, steady brackets & pipe clamps (M&M Shaft) Temporary shaft screens, gates and draw bridges (Mineral Shaft)	
Sinking Sinking	Temporary shart screens, gates and draw bridges (M&M Shaft) Shaft Mucking (Mineral Shaft)	Temporary shaft screens, gates and draw bridges (M&M Shaft) Lashing unit	6 6
Sinking Sinking	Shaft Mucking (M&M Shaft) Shaft Mechanised Drilling (Mineral Shaft)	Lashing unit Jumbo drill rig	
Sinking Sinking	Shaft Mechanised Drilling (M&M Shaft) Pre sink and station development (Mineral Shaft)	Jumbo drill rig Back actors x 2 per shaft.	
Sinking Sinking	Pre sink and station development (M&M Shaft) Shaft Hand held drilling (Mineral Shaft)	Back actors x 2 per shaft. Hand held compressed air drilling machines including drill steel	
Sinking Sinking	Shaft Hand held drilling (M&M shaft) Station development (Mineral Shaft)	Hand held compressed air drilling machines including drill steel Load Haul Dump (LHD)	2 2 6
Sinking Sinking	Station development (M&M Shaft) Station development (Mineral Shaft)	Load Haul Dump (LHD) Multi boom drill rig and Rock Bolter	4 4
Shaft Equipping	Station development (M&M Shaft) Jigging Shed (Mineral Shaft)	Multi boom drill rig and Rock Bolter Pre-fabricated arrives as "Meccano" set on site	4 6 6 6 6
Shaft Equipping Shaft Equipping Shaft Equipping	Jigging Shed (M&M shaft) Bunton sets (Mineral shaft) Bunton sets (M&M Shaft)	Pre-fabricated arrives as "Meccano" set on site Buntonnes sets and bunton support brackets (Jigging done on site) Buntonnes sets and bunton support brackets (Jigging done on site)	29 29 29 29 28 28 28
Shaft Equipping Shaft Equipping	Guides (Mineral Shaft) Guides (M&M Shaft)	Top Hat Steel Guides (6/12m Lengths) Top Hat Steel Guides (6/12m Lengths)	
Shaft Equipping Shaft Equipping	Main pumping column out of the mine (Mineral Shaft) Main pump (Mineral Shaft)	Main pumping column out of the mine (Mineral Shaft) Multi Stage pump with motor x 2	
Shaft Equipping Shaft Equipping	Main pump (Mineral Shaft) Main pump (Mineral Shaft)	Valves, makeup sections, bolts and gaskets Main pump control panels	
Shaft Equipping Shaft Equipping	Water column to clean Mineral Shaft Water column to clean M&M Shaft	1st spray below bank and 2nd spray in mid shaft 1st spray below bank and 2nd spray in mid shaft	
Shaft Equipping	Production Level Station Steelwork and screens (Mineral Shaft) Production Level Station Steelwork and screens (M&M Shaft)	King post, double deck loading, shaft gates and screens King post, double deck loading, shaft gates and screens	
Shaft Equipping Shaft Equipping Shaft Equipping	Loading Level Station Steelwork and screens (Mineral Shaft) Bank Level Station Steelwork and screens (M&M Shaft) Main Fans Surface (x.3)	King post, double deck loading, shaft gates and screens King post, double deck loading, shaft gates and screens Cement	
Shaft Equipping Shaft Equipping	Main Fans Surface (x 3) Main Fans Surface (x 3) Main Fans Surface (x 3)	Lement Fine Aggregate Coarse Aggregate 20mm	
Shaft Equipping Shaft Equipping	Main Fans Surface (x 3) Main Fans Surface (x 3)	Coarse Aggregate 10mm Main Fan and ducting	
Shaft Equipping Shaft Equipping	Main Fans Surface (x 3) Main Fans Surface (x 3)	Motor and switchgear including control gear Main fan control room	6 6 32 32 32 32 32
Head Frame Equipping Head Frame Equipping	Complete Head Frame (Mineral Shaft) Complete Head Frame (M&M Shaft)	Fully equipped head frame Fully equipped head frame	32 32 32 32 32 32 32 32 32 32 32 32 32 3
Mineral Shaft Mineral Shaft	Mineral Hoist (Koepe) Mineral Hoist (Koepe)	Cement Fine Aggregate	3 3 6 6 5 5 11 11
Mineral Shaft Mineral Shaft Mineral Shaft	Mineral Hoist (Koepe) Mineral Hoist (Koepe) Mineral Hoist (Koepe)	Coarse Aggregate 20mm Coarse Aggregate 10mm Enudships	6 6 11 11 1 4 4 8 8
Mineral Shaft Mineral Shaft Mineral Shaft	Mineral Hoist (Koepe) Mineral Hoist (Koepe) Mineral Hoist (Koepe)	Foundation Drum Drum Shaft & Counling	
Mineral Shaft Mineral Shaft Mineral Shaft	Mineral Hoist (Koepe) Mineral Hoist (Koepe)	Drum Shaft & Coupling Motor Brakes & Hydraulics	
Mineral Shaft Mineral Shaft	Mineral Hoist (Koepe) Mineral Hoist (Koepe)	oraxes of ryuraunics Drive Switchgear	6 2
Mineral Shaft Mineral Shaft	Mineral Hoist (Koepe) Mineral Hoist (Koepe)	January Transformers MCC	
Mineral Shaft Mineral Shaft	Mineral Hoist (Koepe) Mineral Hoist (Koepe)	Fasteners & Foundation Bolts Cabling	
Mineral Shaft Mineral Shaft	Mineral Hoist (Koepe) Mineral Hoist (Koepe)	40 Ton Payload Skips Head Ropes	
Mineral Shaft Mineral Shaft	Mineral Hoist (Koepe) Mineral Hoist (Koepe)	Tail Ropes Head Rope Attachments	
Mineral Shaft Mineral Shaft	Mineral Hoist (Koepe) Mineral Hoist (Koepe)	Tail Rope Attachments Inspection Basket	4 2 2
Mineral Shaft Mineral Shaft	Mineral Hoist (Koepe) Rope Tensioner	CLD Reels	
Mineral Shaft Mineral Shaft	Rope Tensioner Mineral Hoist (Koepe) Mineral Hoist (Koepe)	Tensioner Drive Cement Fine Agreement	3 3 6 6
Mineral Shaft	Mineral Hoist (Koepe)	Fine Aggregate	5 5 11 11

Minehead - HGV Schedule

	<u>GV Scriedale</u>		Mon	thly (two-way) HGV movements	
Mineral Shaft	Sub-system Mineral Hoist (Koepe) Mineral Hoist (Koepe)			28	
Mineral Shaft Mineral Shaft	S/Drum Service Winder S/Drum Service Winder	Conveyance Rope			2 2
Mineral Shaft Mineral Shaft	S/Drum Service Winder S/Drum Service Winder	Rope Attachments Inspection Basket			2 2
Nineral Shaft	Loading Level Loading Level	Feed Chutes and Liners Bunker Plate Work			8
fineral Shaft fineral Shaft	Loading Level Loading Level	Bunker Steelwork Cement			1 1 1 1 1 1
lineral Shaft	Loading Level Loading Level	Fine Aggregate Coarse Aggregate 20mm			2 2 2 2 2 2 2 2 2
Nineral Shaft	Loading Level Loading Level	Coarse Aggregate 10mm Bunker Rebar			1 1 1 1 1 1
lineral Shaft	Loading Level Loading Level	Measuring Flask Platework & liners Measuring Flask Steelwork			4 2
lineral Shaft	Loading Level Loading Level	Cement Fine Aggregate			7 4 4
Mineral Shaft	Loading Level Loading Level	Coarse Aggregate 20mm Coarse Aggregate 10mm			8 4 4 5 3 3
lineral Shaft	Loading Level Loading Level	Measuring Flask Rebar Conveyor Plate Work		2	6 6
onveyor Civils	Loading Level Equipping	Conveyor Steelwork Cement			6 6
onveyor Civils onveyor Civils	Equipping Equipping	Fine Aggregate Coarse Aggregate 20mm			7 7
lineral Shaft	Equipping Loading Level	Coarse Aggregate 10mm Conveyor Rebar			2 2
ineral Shaft	Loading Level Loading Level	Conveyor belt rolls Conveyor drives (motor, g/box and pulley)			2
ineral Shaft	Loading Level Loading Level	Container idlers, stringers and impact idlers Vibrating feeders		4	8 12
en and Materials Shaft	Winder Foundations Winder Foundations	Cernent 4 14 Fine Aggregate 6 24	24 19		
en and Materials Shaft	Winder Foundations Winder Foundations Man Hoist	Coarse Aggregate 20mm 6 25 Coarse Aggregate 10mm 4 17	25 20 17 13		
&M Shaft	Man Hoist	Rope Attachments		2	
&M Shaft	Man Hoist Man Hoist	Cabling Conveyance		2 4	
&M Shaft	Man Hoist Materials Winder Materials Winder	Inspection Basket Ropes		2 6 6	
&M Shaft	Materials Winder Materials Winder Kibble Winder (1 ner sinking shaft)	Rope Attachments Conveyance Insurance Insuranc	10	2	
aft Sinking	Kibble Winder (1 per sinking shaft) Kibble Winder (1 per sinking shaft) Kibble Winder (1 ner sinking shaft)	Cement	16 17		
aft Sinking	Kibble Winder (1 per sinking shaft) Kibble Winder (1 per sinking shaft) Kibble Winder (1 per sinking shaft)	Coarse Aggregate 20mm 17 Coarse Aggregate 10mm 11 Foundation 2	11		
naft Sinking	Kibble Winder (1 per sinking shaft) Kibble Winder (1 per sinking shaft) Kibble Winder (1 per sinking shaft)	2 2 2 2 2 2 2 2 2			2 2
aft Sinking	Kibble Winder (1 per sinking shaft) Kibble Winder (1 per sinking shaft)	Toron stant & Cooping 2 2 2 Toron Stant & Cooping 2 2 2 Motor 2 2 2 Motor 2 2 2			2 2 2
aft Sinking	Kibble Winder (1 per sinking shaft) Kibble Winder (1 per sinking shaft) Kibble Winder (1 per sinking shaft)	Ropes 2 2 2 Rope Attachments 2 2 2 2			4
aft Sinking	Kibble Winder (1 per sinking shaft) Kibble Winder (1 per sinking shaft) Kibble Winder (1 per sinking shaft)	Comparison			6
aft Sinking	Kibble Winder (1 per sinking shaft) Kibble Winder (1 per sinking shaft) Kibble Winder (1 per sinking shaft)	Transformers 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			2 2
	Kibble Winder (1 per sinking shaft) Kibble Winder (1 per sinking shaft)	Switchgear 4 4 Cabling 4 4			2 4
aft Sinking	Kibble Winder (1 per sinking shaft) Kibble Winder (1 per sinking shaft) Kibble Winder (1 per sinking shaft)	16 To Kibbles			12
aft Sinking	Stage Winders. 4 per sinking shaft Stage Winders. 4 per sinking shaft	Cement 8 8 8 8			
aft Sinking	Stage Winders. 4 per sinking shaft Stage Winders. 4 per sinking shaft	Fine Aggregate 13 12 13 12 13 14 14 14 14 13 14 13 14 13 14 14 14 14 16 10			
aft Sinking	Stage Winders. 4 per sinking shaft Stage Winders. 4 per sinking shaft	Foundation 2 2 2 2 2 Drum Shaft & Coupling 2 2 2 2 2			8
naft Sinking	Stage Winders. 4 per sinking shaft Stage Winders. 4 per sinking shaft	Drum 2			8 8
naft Sinking	Stage Winders. 4 per sinking shaft Stage Winders. 4 per sinking shaft	Brakes & Hydraulics 2 2 2 2 2 2 0			2 8
naft Sinking	Stage Winders. 4 per sinking shaft Stage Winders. 4 per sinking shaft	Rope 2 2 2 Rope Attachments 1 1 1 1			4 2
aft Sinking	Stage Winders. 4 per sinking shaft Stage Winders. 4 per sinking shaft	1 2 2 2 2 2 2 2 2 2	2		8 8
aft Sinking	Stage Winders. 4 per sinking shaft Stage Winders. 4 per sinking shaft	Fasteners & Foundation Bolts 2 2 2 MCC 2 2 2			
aft Sinking	Stage Winders. 4 per sinking shaft Stage Winders. 4 per sinking shaft	Switchgear 2 2 2			4 4
mporary Power Supply	Sinking Stage Power Sinking Stage Power	Cabling 2 2 2.5MVM Containerised Genset 10 10 Synchronization Substation 2 2			20 2
lk Power Supply	66kV Main Consumer Substation 66kV Main Consumer Substation	High Voltage Switchgear Substation Building		10 4	
lk Power Supply	66kV Main Consumer Substation 66kV Main Consumer Substation	Power Transformers High Voltage Cabling		6 2	
lk Power Supply lk Power Supply	11kV Main Distribution Substation 11kV Main Distribution Substation	Medium Voltage Switchgear Substation Building		20 2	
lk Power Supply lk Power Supply	11kV Main Distribution Substation 11kV Main Distribution Substation	Power Factor Correction and Harmonic Filtering Medium Voltage Cabling		2 2	
k Power Supply k Power Supply	Rock Winder Substation Man and Material Hoist Substation	Medium Voltage Cabling Medium Voltage Cabling			2
k Power Supply k Power Supply	Surface Infrastructure ring Surface Infrastructure ring	Miniature Substations Medium Voltage Cabling		8 2	
lk Power Supply lk Power Supply	Ventilation Substation Ventilation Substation	Medium Voltage Switchgear Substation Building		2 2 2	
lk Power Supply derground Power Supply	Ventilation Substation Services Substation	Medium Voltage Cabling Medium Voltage Switchgear		2 2 2	
derground Power Supply derground Power Supply	Services Substation Services Substation	Substation Building Medium Voltage Cabling	2		
derground Power Supply derground Power Supply	Production Substation Production Substation	Medium Voltage Switchgear Substation Building		8 8	2
derground Power Supply derground Power Supply	Production Substation Production Sections	Medium Voltage Cabling Power Centre			6 4 4
derground Power Supply derground Power Supply	Production Sections Production Sections	Medium Voltage Cabling Trunk Belt MCC			8 6
oduction oduction	Mining Equipment Mining Equipment	Continuous Miners Shuttle cars			8 8 8 8
duction duction	Mining Equipment Mining Equipment	Multibolter Flexible Conveyor Train (FCT)			2 2 2 2 2 24 24 24
duction duction	Mining Equipment Mining Equipment	Dynamic Move-Up Unit (DMU) Feeder breaker			6 6 6 6
luction luction	Out-bye Equipment Out-bye Equipment	Load Haul Dumper Fermel Liberator Prime Mover			2 2 2 2 2 4 4 4 4 4 1 1 1 1 1 1 1 1 1 1
luction luction	Out-bye equipment Out-bye Equipment	Personnel transporter Supervisors Vehicles (LDV)			2 2 2 2
duction	Consumables Out-bye	Consumables 6m shipping container			8 16 24 32 4 4 4 4 4 4
duction duction	Out-bye Out-bye	Modular ablution facility Modular kitchen			6 2 2 2 4 2 2 2
duction	Out-bye Sections	Modular Refuge Chamber (Safe Haven) Support RSis			8 4 4 4 4 2 2 2 2 2 2 2 2 2 2 2
duction duction	Sections Sections	Conveyors (stringers, frames, rolls, idlers) Conveyor belting			4 8 12 16
oduction oduction	Sections Sections	Water handling Services advancing (water handling, electricity, C&I etc.)			2 2 2 4 4 6 8
duction duction	Sections Exploration Equipment	Cassettes (oil, diesel, tools etc.) Long Hole Drilling			2 2 2 4 4 6 8
duction	Exploration Equipment Diesel consumption	Long Hole Drill Rig Stems	24 24 24 85 85 85 93 93 93 93 93 94 94 94 94 94	94 74 74 74 75 74 75 75 75 75 75 75 75 70 70 70 70 70 70 70 70	70 70 70 70 67 65 65 65 65 66 65
ing	Solid Waste Materials Handling	Solid waste disposal 4 4 8	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	94 74 74 74 75 74 74 75 75 75 75 75 75 70 70 70 70 70 70 70 70 70 70 70 70 70	8 8 8 8 8 8 8 8 8 8 8 8
nstruction	Materials Handling	Materials handling plant 8 8			8

Minehead - HGV Schedule

																				Mont	thly (two-v	vay) HGV n	ovement																	
System	Sub-system	ltem	1	2 3	4 5	6	7 8	9 1	10 11	. 12	13 1	14 15	16	17	18 19 2	20 21	22 23	3 24	25 2	6 27	28 29	30	31 32	33 3	35	36 37	38	39 40	41 42	2 43	44 45	46	47 4	8 49	50 51	52	3 54	55 56	57	58 T
Construction	Infrastructure	Containerised pre-fabricated structures												18															18											
Construction	Change House/Ablution facilities for construction	Containerised pre-fabricated structures												8															8											
Men and Materials Drift	Development	Load Haul Dump (LHD)			4										4																									
Men and Materials Drift	Development	Multi boom drill rig and Rock Bolter			4										4																									
Men and Materials Drift	Development	Haul trucks / wagons			4										4																									
Men and Materials Drift	Development	Front end loader		2								2																												
Men and Materials Drift	Development	Sinking fans		4								4																												
Men and Materials Drift	Development	Temporary pumps / piping / valves (300m)		6								6																												
Men and Materials Drift	Development	Temporary ventilation ducts 6m long x 300m length		9	9							9															9													
Men and Materials Drift	Equipping	Cement						10 1	11 10	11	10 1	11																												
Men and Materials Drift	Equipping	Fine Aggregate						17 1	17 17	17	17 1	17																												
Men and Materials Drift	Equipping	Coarse Aggregate 20mm						18 1	19 18	19	18 1	19																												
Men and Materials Drift	Equipping	Coarse Aggregate 10mm						12 1	12 12	12	12 1	12																												
Men and Materials Drift	Equipping	Water piping			2																																			
Men and Materials Drift	Equipping	Power Cable			2																																			
Men and Materials Drift	Equipping	Illumination, electrical fittings			2																																			
Men and Materials Drift	Tunnel	Concrete culverts for box cut section			2 2	2	2	2	2																															
Men and Materials Drift	Support	Wire Mesh & Lacing			3 3	3	3	3	3																															
Men and Materials Drift	Support	Shotcrete			5 5	5 5	5 5	5	5 5	5	5																													
Shafts	Suspension gear	Suspension gear																																				2		
Amenity Block	Foundations	Cement																													7 7	7								
Amenity Block	Foundations	Fine Aggregate																													12 12	12								
Amenity Block	Foundations	Coarse Aggregate 20mm																													13 13	13								
Amenity Block	Foundations	Coarse Aggregate 10mm																													8 8	8								
BUILDINGS	Gate house	Gate house																							4	4 4	4	4 4												
BUILDINGS	Surface Buildings Shaft Platform	Surface Buildings Shaft Platform																												45	65 26	13	11			39 2	6			
Generators and Plant	Diesel Tankers	Diesel Tankers	30 2	25 24	23 5	1 40	46 51	64 1	00 111	111	121 1	21 121	1 121	121	121 121 1	.26 126	126 127	7 140	141 14	11 142	143 14	3 142	143 14	142 13	3 133	130 121	121	122 77	77 7	7 77	77 77	77	61 6	1 77	19					
Minus 360	Development	Bolter																	2							2														
minus 360	Development	Road headers																	8																					
Minus 360	Development	Temp Conveyors																	6		12																			
Minus 360	Development	Roofbolts and Mesh																	4		4		4	4																
Minus 360	Development	Shot crete																	8	3 8	8 8	8	8 8	8 8	8	8														
Minus 360	Construction	Power																	5 5	5																				
Minus 360	Construction	Bunker																								26	25	26 26												
Minus 360	Construction	Bunker machine																								4	4	4 4												
Minus 360	Construction	Magnets																										2 2												
Minus 360	Construction	Chutes, steel work etc																								8	8	8												
Minus 360	Construction	Permanent power																								6	6	6 6												
Minus 360	Construction	Rope reels and friction winch																										14												
Minus 360	Construction	Safe haven																										2												
Minus 360	Construction	Ventilation and air doors																								4	4	2 2												
Minus 360	Construction	Lifting gear, cranes beams etc																									8													
		Monthly (two-way) HGV movemen	ts 66 16	73 166:	1 1667 16	65 1686 1	1682 1684	1 1198 14	401 142	4 1207	1218 12	235 120	3 1170	985	320 792 8	03 828	823 846	6 856	879 87	70 867	889 89	8 901	918 92	873 88	877	861 912	879	383 884	436 44	12 349	309 336	368	362 25	7 284 4	41 183	213 2	73 182	201 26	5 273	492

Vov

Bulk aggregates*
Concerete aggregates
Diesel
Shotcrete aggregates

Dove's Nest MTS- HGV Schedule

	115- HGV Schedule		Monthly (two-way) HGV movements
System	Sub-system Staking	Item Chaft area platform (tourses)	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 Total
Shaft Shaft	Sinking Sinking	Shaft area platform (terrace) Shaft area platform (terrace)	8 8 6
Shaft MTS and Mine	Sinking	Shaft area platform (terrace) Cement	
MTS and Mine	General Allowance for temp on site building found (concrete) General Allowance for temp on site building found (concrete)	Fine Aggregate	7 7 6 7 7
MTS and Mine MTS and Mine	General Allowance for temp on site building found (concrete) General Allowance for temp on site building found (concrete)	Coarse Aggregate 20mm Coarse Aggregate 10mm	8 7 7 8 7 7 8 7 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
Shaft	Sinking	Infrastructure	4 4 2
Shaft Shaft	Sinking Sinking	Change House/ Ablution Facilities during Sinking only (M&M and Mineral Shaft) Temporary store for cement and sinking store requirements (M&M and Mineral Shaft)	
Shaft Shaft	Sinking	Temporary fuel farm storage areas for fuel, oil and lubricants (M&M and Mineral Shaft) Temporary sinking maintenance workshop (M&M and Mineral Shaft)	
Shaft	Sinking Sinking	Site Earthworks Equipment	
Shaft Shaft	Sinking M&M Shaft water settling arrangement (temporary)	Site Earthworks Equipment (M&M and Mineral Shaft) Cement	
Shaft	M&M Shaft water settling arrangement (temporary)	Fine Aggregate	
Shaft Shaft	M&M Shaft water settling arrangement (temporary) M&M Shaft water settling arrangement (temporary)	Coarse Aggregate 20mm Coarse Aggregate 10mm	5
Shaft Shaft	Overland Conveyor	Overland Conveyor	12 12 12 12 13 14 15 15 16 16 17 17 17 17 17 17 17 17 17 17 17 17 17
Shaft	Sinking Sinking	Settling (Attenuation) Pond Sinking compressors - 6 per shaft	
Shaft	Sinking	Sinking fans -2 per shaft	
Shaft Shaft Shaft	Sinking Sinking	Water reticulation for sinking Concrete batch plant. One per shaft	
Shaft Shaft	Sinking Sinking	Effluent disposal Cap lamp room	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Shaft Shaft	Sinking	Waste Rock (Spoils)	
Shaft	Sinking Sinking	Sinking Head Frame Banksman's Cabin	20 20 20 20 20 20 20 20 20 20 20 20 20 2
Shaft Shaft	Sinking Sinking	Sinking stage 5 x decks Shaft ventilation Columns	18 18 18 18 18 19 19 19 19 19 19 19 19 19 19 19 19 19
Shaft	Sinking	Shaft water columns	
Shaft Shaft	Sinking Sinking	Compressed air columns Concrete (Slick Line) columns	2 2 2 2 2 2 2 3 16 3 3
Shaft	Sinking	Steel wire mesh for support Cement	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Shaft Concrete Lining Shaft Concrete Lining	Shaft Concrete Lining Shaft Concrete Lining	Fine Aggregate	41
Shaft Concrete Lining Shaft Concrete Lining	Shaft Concrete Lining Shaft Concrete Lining	Coarse Aggregate 20mm Coarse Aggregate 10mm	36 36 36 36 36 36 36 36 36 36 36 36 36 3
Shaft Anchor bolts	Sinking	Rock anchor bolts	
Shaft Shaft	Sinking Sinking	Temporary shaft screens, gates and draw bridges Shaft Mucking	
Shaft	Sinking	Shaft Mechanised Drilling	
Shaft	Sinking Sinking	Pre sink and station development Shaft Hand held drilling	
Shaft Shaft	Shaft Equipping Shaft Equipping	Alimak Ladder	
MTS	Kibble Winder	Cement	
MTS MTS	Kibble Winder Kibble Winder	Fine Aggregate Coarse Aggregate 20mm	1 4 4 4 5 1 1
MTS	Kibble Winder	Coarse Aggregate 10mm	1 3 3 2 3 1
Shaft	Shaft Sinking Shaft Sinking	Kibble Winder Kibble Winder (1 per sinking shaft)	
MTS Shaft Shaft Shaft Shaft Shaft Shaft	Shaft Sinking Shaft Sinking	Kibble Winder (1 per sinking shaft) Kibble Winder (1 per sinking shaft)	6 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Shaft	Shaft Sinking	Kibble Winder (1 per sinking shaft)	
Shaft	Shaft Sinking Shaft Sinking	Kibble Winder (1 per sinking shaft) Kibble Winder (1 per sinking shaft)	
Shaft Shaft Shaft	Shaft Sinking Shaft Sinking	Kibble Winder (1 per sinking shaft) Kibble Winder (1 per sinking shaft)	
Shaft Shaft	Shaft Sinking	Kibble Winder (1 per sinking shaft)	
Shaft Shaft	Shaft Sinking Shaft Sinking	Kibble Winder (1 per sinking shaft) Kibble Winder (1 per sinking shaft)	
Shaft	Shaft Sinking Shaft Sinking	Kibble Winder (1 per sinking shaft) Kibble Winder (1 per sinking shaft)	
Shaft Shaft Shaft	Shaft Sinking Shaft Sinking	Kibble Winder (1 per sinking shaft) Kibble Winder (1 per sinking shaft)	
Shaft	Shaft Sinking	Kibble Winder (1 per sinking shaft)	1 8 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Shaft MTS	Shaft Sinking Stage Winders. 4 per sinking shaft	Kibble Winder (1 per sinking shaft) Cement	5 5 5 5 5 4 3 3 3 3 3 3 3 3 3 3 3 3 3 3
MTS	Stage Winders. 4 per sinking shaft	Fine Aggregate	5
MTS	Stage Winders. 4 per sinking shaft Stage Winders. 4 per sinking shaft	Coarse Aggregate 20mm Coarse Aggregate 10mm	9 9 9 9 9 8 5 5 6 6 6 6 6 5 5 6 6 6 6 5 6 5 6
Shaft Shaft	Shaft Sinking Shaft Sinking	Stage Winders. 4 per sinking shaft Stage Winders. 4 per sinking shaft	1 8 8 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Shaft Shaft	Shaft Sinking Shaft Sinking	Stage Winders. 4 per sinking shaft	8 8 7 1
Shaft Shaft	Shaft Sinking	Stage Winders. 4 per sinking shaft Stage Winders. 4 per sinking shaft	2 2 3 3 3 3 1 1
Shaft Shaft	Shaft Sinking Shaft Sinking	Stage Winders. 4 per sinking shaft Stage Winders. 4 per sinking shaft	
Shaft Shaft Shaft	Shaft Sinking Shaft Sinking	Stage Winders. 4 per sinking shaft Stage Winders. 4 per sinking shaft	1 8 8 8 8 8 8 1 1 1 1 1 1 1 1 1 1 1 1 1
Shaft	Shaft Sinking	Stage Winders. 4 per sinking shaft	
Shaft Shaft	Shaft Sinking Shaft Sinking	Stage Winders. 4 per sinking shaft Stage Winders. 4 per sinking shaft	2 4 4 4
Shaft Shaft	Shaft Sinking Temporary Power Supply	Stage Winders. 4 per sinking shaft Sinking Stage Power	1 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
Shaft Shaft	Temporary Power Supply Bulk Power Supply	Sinking Stage Power Ventilation Substation	
Tunnel	Roofbolts	Roofbolts	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Tunnel Tunnel	Tracjk Ballast Ballast 66FU	Tracjk Ballast Ballast 66FU	2 1 2 1 3 1 4 1 5 1 1 4 1 5 1 1 4 1 5 1 1 4 1 5 1 1 4 1 5 1 1 4 1 5 1 1 4 1 5 1 1 1 1
Tunnel	LOCO Track	LOCO Track	5 5 5 5 5 5 5 5 5 5 5 5 5 7 7
Tunnel Tunnel	LOCOs Rolling Stock	LOCOs Rolling Stock	16
Tunnel Tunnel	Power Supply Conveyor Structure	Power Supply Conveyor Structure	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Tunnel	Conveyor Belt Temp	Conveyor Belt Temp	3 3 3 3 3 3 3 3 3 3 3 3 3 3 6 6
Tunnel Tunnel	Conveyor Belt Permanent Conveyor Belt Drive Temp	Conveyor Belt Permanent Conveyor Belt Drive Temp	10 8 6 6 3 12 12 12 36 37
Permanent Building Permanent Fans	Structure Structure	Structure Structure	
TBM chamber TBM chamber	Chamber Construction	Cement	43 43 43 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
TBM chamber	Chamber Construction Chamber Construction	Silica Coarse Aggregate 10 -2.5mm	11
TBM chamber TBM chamber	Chamber Construction Chamber Construction	Fine Aggregate (Coarse Sand) Micro Fibre	132 132 132 132 132 133 133 134 135 135 135 135 135 135 135 135 135 135
TBM chamber	Chamber Construction TRM	Chamber Construction	
Construction TBM TBM	TBM TBM	Construction Construction	10 1 11 11 11
TBM costruction items Shotcrete	TBM Tunnel Construction	Construction Cement	10 10 10 10 10 10 10 10 10 10 10 10 10 1
Shotcrete	Tunnel Construction	Silica	3 4 6 6 6 6 6 6 6 6 6 6 1 1 1 6 6 7 7 7 7 7
Shotcrete Shotcrete	Tunnel Construction Tunnel Construction	Coarse Aggregate 10 -2.5mm Fine Aggregate (Coarse Sand)	91 91 174 174 174 174 173 173 173 173 173 2 2 9 9 9 1 9 1 9 1 174 174 174 174 174 174 174 174 174 1
Shotcrete Shotcrete equipment	Tunnel Construction Tunnel Construction	Micro Fibre Tunnel Construction	
Tunnel	Grout for Tunnel	Grout for Tunnel	3 3 3 3 3 3 3 3 2
Tunnel TBM Cable	Additional Support Tunnel Construction	Additional Support Tunnel Construction	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
66kv Cable	Tunnel Construction	Tunnel Construction	
Main Belt Drive and equipment	Motors and Drive	Tunnel Construction	

Dove's Nest MTS- HGV Schedule

														IV.	nonthly (1	two-way) HGV m	ovements													
System	Sub-system	Item		1 2	3 4	5 6	7 8 9 10 11 13	13 14	15 16 17	18 19	20 2	21 22	23 24 2	5 26 2	7 28	29 30	31 32	33 34	35 3	37	38 39 4	0 41 42 43 44	45 46 4	7 48	49 50	51 52	53 54	55 56 5	7 58	Total
Oil and Sundries	Oil and Sundries	Tunnel Construction		2	2 2	2 4	4 4 4 4 4 4	4 4	4 4 4	4 4	4	4 4	4 4	4 4	1 4	4 4	4 4	4 4	4 4	4										136
Tunnel	Tunnel	Tunnel Construction											2 2	2 2 2	2 2	2	2 2	2	2											22
Tunnel	Tunnel	Tunnel Construction											2 2	2 2	2	2	2	2												1/
Tunnel	Tunnel	Tunnel Construction									1	12 10	12 10 1	2 6 8	3 8	10 8	10 10	10			50 50 2	6								25.
Tunnel	Ventilation	Tunnel Construction								2			2	2	2	2	2	2				14								28
Tunnel	Tunnel	Tunnel Construction											2	2 2	2 2	2	2 2	2												16
Tunnel	Site Prep	Membrane for Spoil									20 2	20 20	20 20 2	0 20 2	0 20	20 20	20 20	20 20	20 2	20	20									380
Tunnel	Cranes and Forklifts	Tunnel Construction			4																	4								
Tunnel	Water Treatment Plant	Tunnel Construction				4															4									,
Tunnel	Compressors	Tunnel Construction				4															4									8
Tunnel	Compressed Air Pipes	Tunnel Construction				2						2			2				2											8
Safe Havens	One every 2 km	Tunnel Construction																			6									6
Shaft	Shaft	Scotch Derrick		8					8																					16
			Monthly (two-way) HGV movements	26	14 46	52 46	231 208 197 319 286 19	5 123 123 1	31 121 121	151 258	342 43	20 336	222 369 3	1 471 48	33 486	471 467	483 472	177 459	39 22	0 143	231 62 2	8 38 2								9720

Key

Bulk aggregates*

Concerete aggregates

Diesel

Shotcrete aggregates

Lockwood Beck MTS - HGV Schedule

TOCKMOOD RECK IN 12 - HOV	Schedule															Monthly (t	two-way) HGV	/ movement	S												
System Sinking	Sub-system Shaft area platform (terrace)		470	263 689	689 689	9										27 28	29 30	31 32	2 33	34 35	36 37 38	39 40	41 42 4	43 44	45 46	47 48 4	49 50	51 52 5	3 54 55	56 57	58 Tota 20
Temporary and permananet on site foundations -	Shaft area platform (terrace) Temporary and permananet on site foundations -	Pavement Cement	16	17 16	16 16	7																						40	4	##	14
Temporary and permananet on site foundations - Temporary and permananet on site foundations - Temporary and permananet on site foundations -	Temporary and permananet on site foundations - Temporary and permananet on site foundations - Temporary and permananet on site foundations -	Fine Aggregate	28 19	29 28	27 27 29 29 19 20																										
Sinking Sinking	Shaft area platform (terrace) Shaft area platform (terrace)	Site Prep Site Clearance		8			3																								
Sinking Sinking	Infrastructure Change House/ Ablution Facilities during Sinking only (M&M and Mineral Shaft)	Containerised pre-fabricated structures Containerized pre-fabricated structures	4 2																			4 2									
Sinking Sinking	Temporary store for cement and sinking store requirements (M&M and Mineral Shaft) Temporary fuel farm storage areas for fuel, oil and lubricants (M&M and Mineral Shaft)	Pre-fabricated arrives as "Meccano" set on site Pre-fabricated arrives as "Meccano" set on site	4	4																		4									
Sinking Sinking	Temporary sinking maintenance workshop (M&M and Mineral Shaft) Site Earthworks Equipment	1 x Dozers, 1 x Tracked Excavators, 1 x Articulated Dumpers, 1 x Crushers	4	8																	8	4				8					
Sinking Sinking	Site Earthworks Equipment (M&M and Mineral Shaft) M&M Shaft water settling arrangement (temporary) M&M Shaft water settling arrangement (temporary)	1 x driven Compactor, 1 x small Excavator, 1 x small Compactor Cement Fine Aggregate		8	4																	4						41			
Sinking Sinking Sinking	M&M Shaft water setting arrangement (temporary) M&M Shaft water setting arrangement (temporary) M&M Shaft water setting arrangement (temporary)	Coarse Aggregate 20mm			8																										
Overland Conveyor Sinking	Spoil Distribution Settling (Attenuation) Pond	Spoil Distribution Excavate, Compact and line with HDPE Lining		24	12																	24									
Sinking Sinking	Sinking compressors - 6 per shaft Sinking fans -2 per shaft	Compressor complete with after coolers and electrical switch gear Fans complete with motors and switchgear			6 6								6	6								4									
Sinking Sinking	Water reticulation for sinking Concrete batch plant. One per shaft	Water storage tanks, valves, pressure relieve valves and control units One complete batch plants complete with scales and control gear			6	4							6									4									
Sinking	Effluent disposal Cap lamp room	Effluent disposal Cap lamps, cap lamp chargers, repair bench, rescue packs and gas monitoring equip	2	2 2	2 2	2 2	2 2 2	2 2	2 2 2	2 2	2 2	2	2 2	2 2	2	2 2	2 2	2 2	2	2 2	2 2 2	2 2	2 2	2							
Sinking Sinking	Waste Rock (Spoils) Sinking Head Frame Pankerang's Chin	Trucks to transport spoils. Grader and compactor for spoils pile/s Temporary head frame, sheaves, tipping chutes and bank steel for sinking duration Containaged (Ingolity): 1997				2	20	0 20 2	0													40 20						41			4
Sinking Sinking Sinking	Banksman's Cabin Sinking stage 5 x decks Shaft ventilation Columns	Containerised / Prefabricated Complete sinking stage fully equipped Circular ducting 6 m long				4 4	18		4												18	12						44			
Sinking Sinking	Shaft water columns Compressed air columns	Pipe 6m long Pipe 6m long x 200 mm dia				2 2																2 2									
Sinking Sinking	Concrete (Slick Line) columns Steel wire mesh for support	Pipe 6m long Mesh				2			2 2 2	2			16																		
Shaft Concrete Lining Shaft Concrete Lining	Shaft Concrete Lining Shaft Concrete Lining	Cement Fine Aggregate				2:	1 19 19	9 21 1	9 19 2:	19 19	30 30	19																			
Shaft Concrete Lining Shaft Concrete Lining Sinking	Shaft Concrete Lining Shaft Concrete Lining Grout ref WP spreadsheet	Coarse Aggregate 20mm Coarse Aggregate 10mm Solids Delivered in 28 tonne tankersMonths 6 to 10 inclusive			7 0	2:	7 37 37 5 25 25	33 3 5 21 2	7 32 32	32 32 32 32 21	25 21	25																			
Sinking Sinking Sinking	Grout ret WP spreadsheet Explosives	Solids Delivered in 28 tonne tankersmonths 6 to 10 inclusive Months 6 to 10 inclusive Explosives			46 46	46 46	6 45	8 8	8 8 8	8 8	8 8		8																		
Sinking Sinking	Rock anchor bolts Temporary shaft screens, gates and draw bridges	Bolts and Resin Temporary shaft screens, gates and draw bridges				2 2			5 0 0			6																			
Sinking Sinking	Shaft Mucking Shaft Mechanised Drilling	Lashing unit Jumbo drill rig				4							4 4																		
Sinking Sinking Shaft Equipping	Pre sink and station development Shaft Hand held drilling Alimak	Back actors x 2 per shaft. Hand held compressed air drilling machines including drill steel Alimak				2							2								8										
Shaft Equipping Shaft Equipping Shaft Sinking	Allmak Ladder Kibble Winder	Almak Ladder Cement				3 2	2 3 2														8										
Shaft Sinking Shaft Sinking Shaft Sinking	Kibble Winder Kibble Winder	Tine Aggregate Coarse Aggregate 20mm				4 4	1 4 4	1																							
Shaft Sinking Shaft Sinking	Kibble Winder Stage Winders. 4 per sinking shaft	Coarse Aggregate 10mm Cement				3 3	3 2 3 3 2 3 1 5 5																								
Shaft Sinking Shaft Sinking	Stage Winders. 4 per sinking shaft Stage Winders. 4 per sinking shaft	Fine Aggregate Coarse Aggregate 20mm					5 5																								
Shaft Sinking Shaft Sinking Shaft Sinking	Stage Winders. 4 per sinking shaft Kibble Winder (1 per sinking shaft) Kibble Winder (1 per sinking shaft)	Coarse Aggregate 10mm Drums & Clutches Drum Shaft & Coupling			3	3 3	3 3	4														4						44			
Shaft Sinking Shaft Sinking	Kibble Winder (1 per sinking shaft) Kibble Winder (1 per sinking shaft) Kibble Winder (1 per sinking shaft)	Brakes & Hydraulics Motor						2 2														2									
Shaft Sinking Shaft Sinking	Kibble Winder (1 per sinking shaft) Kibble Winder (1 per sinking shaft)	Ropes Rope Attachments						2														2									
Shaft Sinking Shaft Sinking	Kibble Winder (1 per sinking shaft) Kibble Winder (1 per sinking shaft)	Drive Drive						6														6									
Shaft Sinking Shaft Sinking	Kibble Winder (1 per sinking shaft) Kibble Winder (1 per sinking shaft) Kibble Winder (1 per sinking shaft)	Drive Drive Transformers						6														6							4		
Shaft Sinking Shaft Sinking Shaft Sinking	Kibble Winder (1 per sinking shaft) Kibble Winder (1 per sinking shaft) Kibble Winder (1 per sinking shaft)	Fasteners & Foundation Bolts MCC						6 2 2														2									
Shaft Sinking Shaft Sinking	Kibble Winder (1 per sinking shaft) Kibble Winder (1 per sinking shaft)	Switchgear Cabling						2 8														2 8									
Shaft Sinking Shaft Sinking	Kibble Winder (1 per sinking shaft) Kibble Winder (1 per sinking shaft)	16 Ton Kibbles Cross-Heads						6 4														6									
Shaft Sinking Shaft Sinking	Stage Winders. 4 per sinking shaft Stage Winders. 4 per sinking shaft	Drum Shaft & Coupling Drum Condens					8 8															8 8									
Shaft Sinking Shaft Sinking Shaft Sinking	Stage Winders. 4 per sinking shaft Stage Winders. 4 per sinking shaft Stage Winders. 4 per sinking shaft	Gearbox Brakes & Hydraulics Motor & Motor Coupling					2															2 8						40	4	##	4
Shaft Sinking Shaft Sinking	Stage Winders. 4 per sinking shaft Stage Winders. 4 per sinking shaft	Rope Attachments					4 2															4 2									
Shaft Sinking Shaft Sinking	Stage Winders. 4 per sinking shaft Stage Winders. 4 per sinking shaft	Drive Transformers					8															8									
Shaft Sinking Shaft Sinking	Stage Winders. 4 per sinking shaft Stage Winders. 4 per sinking shaft	Fasteners & Foundation Bolts MCC					2															2								4	
Shaft Sinking Shaft Sinking Temporary Power Supply	Stage Winders. 4 per sinking shaft Stage Winders. 4 per sinking shaft Sinking Stage Power	Switchgear Cabling 2.SMVA Containerised Genset					4															4						44			
Temporary Power Supply Bulk Power Supply	Sinking Stage Power Ventilation Substation	Synchronization Substation Medium Voltage Switchgear					8 2															8 2						4#			
Tunnel Tunnel	Roofbolts Tracjk Ballast	Supports Tracjk Ballast											12 2	13 14	1 14	14 14	2 13 13	13 13	3 13	13 13	13 13 13										
Tunnel	Ballast 66FU LOCO Track	Ballast 66FU											25 28 4 4	97 97 4 4	7 97	97 97 4 5	97 97 5 4	97 97	7 97	97 97 4 4	97 97 97										15
Shafts Shafts Shafts	LOCOs Rolling Stock Bower Sundy	Rolling Stock											10																		
Shafts Shafts Shafts	Power Supply Conveyor Structure Conveyor Belt Temp	Power Supply Conveyor Structure Conveyor Belt Temp												6 8	6	8 8	4 2 8 8 4 4	8 8	8	6 6			22 22								
Shafts Shafts	Conveyor Belt Permanent Conveyor Belt Drive Temp	Conveyor Belt Permanent Conveyor Belt Drive Temp										12				12	12	12	2	12	8 8	36									
Permanent Building Permanent Fans	Structure Structure	Structure Structure																			6 8										
TBM chamber TBM chamber	Chamber Construction Chamber Construction Chamber Construction	Cement Silica Carren Agreemt 10, 2 5 mm									_ c	5																			
TBM chamber TBM chamber TBM chamber	Chamber Construction Chamber Construction Chamber Construction	Coarse Aggregate 10 -2.5mm Finas Aggregate (Coarse Sand) Micro Fibre									13:	38 3 2 132 1 1	2				-														
TBM chamber Site Prep	Chamber Construction Membrane for Spoil geotechnic	Mesh and Roofbolts Membrane for Spoil geotechnic			7						10				10		10		10												
Construction TBM TBM	TBM Construction TBM Construction	Overhead crane TBM Construction											10 40 40 10	30																	
TBM costruction items Tunnel	TBM Construction Tunnel Shotcrete													55	5 55	55 55	55 55	55 55	5 55	55	55										6
Tunnel Tunnel Tunnel Tunnel	Tunnel Shotcrete Tunnel Shotcrete Tunnel Shotcrete	Silica Coarse Aggregate 10-2.5mm Fine Aggregate (Coarse Sand)												168	8 169	168 169	168 169	168 16	9 169	169	6 49										1:
Tunnel	Tunnel Shotcrete Shotcrete equipment	Micro Fibre Shotcrete												2	1	1 1	1 1	1 1	1 1	1	1 2 2	2									
Tunnel Tunnel	Grout for Tunnel Additional Support	Grout for Tunnel												3 5	3	3 3	3 3	2 2 5 6	3 6	2 3 5 6	2 2 6 5										
TBM Cable 66kv Cable	Construction power Permanent Power	Construction power Permanent Power								H				2 2	2	4 2	4 2	2 2	2	2 2	2 4 4 4										
Main Belt Drive and equipment Main Belt Drive and equipment Diesel for Gensets and Vehicles	Motors and Drive Loop etc tankers	Motors and Drive Loop etc		6 11	11 11	20 20	0 20 24	1 24 2	24 24 2	27 27	27 27	26	26 20	26 22	22	32 22	32 22	32 2	2 32	32 32	12 12	3 2									
Diesel for Gensets and Vehicles Tunnel Tunnel	Tunnel Construction Tunnel Construction	diesel Oil and Sundries Tunnel Construction	2 2	2 2	2 4	4 4	1 4 4	4 4	4 4 4	4 4		-		2 2	2	2 2	2 2	2 4	1 2	4	2										
Tunnel Tunnel	Tunnel Construction Tunnel Construction	Tunnel Construction Tunnel Construction												2 2 4 5	6	2 4	6 6	6 6	6	6 6	6 6	30 30	21								
Ventilation Tunnel	Tunnel Construction Tunnel Construction	Tunnel Construction Tunnel Construction											2	2 2	2	2 2	2 2	2 2	2	2	4	14									
Site Prep Cranes and Forklifts Water Treatment Plant	Tunnel Construction Tunnel Construction Tunnel Construction	Tunnel Construction Tunnel Construction		4																			4								
Water Treatment Plant Compressors Compressed Air Pipes	Tunnel Construction Tunnel Construction Tunnel Construction	Tunnel Construction Tunnel Construction Tunnel Construction			4 4																	4									
One every 2 km Shaft	Tunnel Construction Scotch Derrick	Tunnel Construction Construction	8							8												8									
Site Clearance Waste Water	Aggregate removed from Site after construction Tankers on and off site total	Aggregate removed from Site after construction Tankers on and off site total	22 22	22 22	24 24	1 24 96	6 99 99	9 99 9	9 57 57	57 57	57 77	77	7 77 27	47 68	3 88 :	109 129	149 170	190 21	1 231	251 267 2	67 267 267	390 390 27 27	390 390 3 27 27	390 390 3	390 390	400 390					39
				,	1 24	, 1 3	33	3	1 3		1 //						1273	1 =1	, 1	,, ,											

Lockwood Beck MTS - HGV Schedule

	Monthly (two-way) HGV movements	38 984 1005 1016 1067 1103 175 350 335 4	15 352 275 199 206 210 200 204 448 475 33	39 226 205 253 543 570 586 623 636 659 660 705 712 454 734
Key				
Bulk aggregates*				
Concerete aggregates				
Diesel				
Shotcrete aggregates				
#Arrumor a 70% to 20% catio of 20 toppe to 20 toppe payloads (i.e. 26.2 toppe approve payload)				

Ladycross Plantation MTS - HGV Schedule

	Sub-system Shaft area platform (terrace)	Item Pavement	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 15 16 17 18 19 10 10 10 10 10 10 10 10 10 10 10 10 10	45 46 47 48 49 50 51 52 53 54 55 56 57
	Shaft area platform (terrace) Temporary and permananet on site foundations -	Pavement Cement	181 361 268 268 268 4	
	Temporary and permananet on site foundations - Temporary and permananet on site foundations -	Fine Aggregate Coarse Aggregate 20mm	27 27 27 27 27 27 27 27 27 27 27 28 29 29 29 29 29 29 29 29 29 29 29 29 29	
	Temporary and permananet on site foundations - Shaft area platform (terrace) Shaft area platform (terrace)	Coarse Aggregate 10mm Site Prep Site Clearance	19 19 19 19 20 8 8	
	Shart area piactorni (terrace) Infrastructure Change House/ Ablution Facilities during Sinking only (M&M and Mineral Shaft)	site creatative. Containerised pre-fabricated structures Containerized pre-fabricated structures	4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
	Temporary store for cement and sinking store requirements (M&M and Mineral Shaft) Temporary fuel farm storage areas for fuel, oil and lubricants (M&M and Mineral Shaft)	Pre- fabricated arrives as "Meccano" set on site Pre- fabricated arrives as "Meccano" set on site	4 4 4 4	
	Temporary sinking maintenance workshop (M&M and Mineral Shaft) Site Earthworks Equipment	Pre- fabricated arrives as "Meccano" set on site 1 x Dozers, 1 x Tracked Excavators, 1 x Articulated Dumpers, 1 x Crushers		
	Site Earthworks Equipment (M&M and Mineral Shaft) Excavate, Concrete, Rebar, steel rails, Drizzet oil trap and recirculation pumps with Control Pa	1 x driven Compactor, 1 x small Excavator, 1 x small Compactor	4	
	M&M Shaft water settling arrangement (temporary) M&M Shaft water settling arrangement (temporary)	Fine Aggregate Coarse Aggregate 20mm	7 8	
	M&M Shaft water settling arrangement (temporary) Spoil Removal/placement	Coarse Aggregate 10mm Spoil Removal/placement	12 12 2	
	Settling (Attenuation) Pond Sinking compressors - 6 per shaft	Excavate, Compact and line with HDPE Lining Compressor complete with after coolers and electrical switch gear	2 2 2 12 12 12 12 12 12 12 12 12 12 12 1	
	Sinking fans -2 per shaft Water reticulation for sinking Concrete batch plant. One per shaft	Fans complete with motors and switchgear Water storage tanks, valves, pressure relieve valves and control units One complete batch plants complete with scales and control gear		
	Cap lamp room	Effluent disposal Cap lamps, cap lamp chargers, repair bench, rescue packs and gas monitoring equip	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
	Waste Rock (Spoils) Sinking Head Frame	Trucks to transport spoils. Grader and compactor for spoils pile/s Trucks to transport spoils. Grader and compactor for spoils pile/s Temporary head frame, sheaves, tipping chutes and bank steel for sinking duration	4 4 20 20 20 20 4 40 20 4 40 20	
	Banksman's Cabin Sinking stage 5 x decks	Containerised / Prefaircated Complete sinking stage fully equipped		
	Shaft ventilation Columns Shaft water columns	Circular ducting 6 m long Pipe 6m long	18 18 18 18 18 18 18 18 18 18 18 18 18 1	
	Compressed air columns Concrete (Slick Line) columns	Pipe 6m long x 200 mm dia Pipe 6m long	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
ining	Steel wire mesh for support Shaft Concrete Lining	Mesh Cement	2	
ining	Shaft Concrete Lining Shaft Concrete Lining	Fine Aggregate Coarse Aggregate 20mm	55 35 35 35 31 35 30 30 30 30 30 35 35 35 35 31 37 37 37 37 37 37 37 37 37 37 37 37 37	
Buildings	Shaft Concrete Lining Grout ref WP spreadsheet	Coarse Aggregate 10mm Solids Delivered in 28 tonne tankersMonths 6 to 10 inclusive	8 8 8 7	
	Grout ref WP spreadsheet Grout ref WP spreadsheet	Months 6 to 10 inclusive Soilids delivered in 28 tonne tankers total tonnage months 21 to 35 inclusive	32 33 33 32	
s	Explosives Rock anchor bolts Tomporary shaft screens, gates and draw hidges.	Explosives Bolts and Resin Temporary that recease gates and draw hidden	2 2 2 2 2 2 3 6 6	
	Temporary shaft screens, gates and draw bridges Shaft Mucking Shaft Mechanised Drilling	Temporary shaft screens, gates and draw bridges Lashing unit Jumbo drill rig	6 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	
	Shart Mechanised Drilling Pre sink and station development Shaft Hand held drilling	Jumbo drill rig Back actors x 2 per shaft. Hand held compressed air drilling machines including drill steel	2 2 2	
	Shart Hand hed dhilling Ladder Kibble Winder	Ladder Cement	3 2 3 2	
	Kibble Winder Kibble Winder	Fine Aggregate Coarse Aggregate 20mm	4 4 4 4 4 4 4 4 5	
	Kibble Winder Kibble Winder	Coarse Aggregate 10mm Foundation	3 3 2 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	
	Kibble Winder (1 per sinking shaft) Kibble Winder (1 per sinking shaft)	Drums & Clutches Drum Shaft & Coupling		
	Kibble Winder (1 per sinking shaft) Kibble Winder (1 per sinking shaft)	Brakes & Hydraulics Motor	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
	Kibble Winder (1 per sinking shaft) Kibble Winder (1 per sinking shaft)	Ropes Rope Attachments		
	Kibble Winder (1 per sinking shaft) Kibble Winder (1 per sinking shaft)	Drive	6 6	
	Kibble Winder (1 per sinking shaft) Kibble Winder (1 per sinking shaft)	Drive Drive	6 6 6	
	Kibble Winder (1 per sinking shaft) Kibble Winder (1 per sinking shaft) Kibble Winder (1 per sinking shaft)	Transformers Fasteners & Foundation Bolts	2 2 5	
	Kibble Winder (1 per sinking shaft) Kibble Winder (1 per sinking shaft) Kibble Winder (1 per sinking shaft)	MCC Switchgear Cabling		
	Kibble Winder (1 per sinking shaft) Kibble Winder (1 per sinking shaft) Kibble Winder (1 per sinking shaft)	Cabling 16 Ton Kibbles Cross-Heads	8 8 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	
	Stage Winders. 4 per sinking shaft Stage Winders. 4 per sinking shaft	Cement Fine Aggregate	3 2 3 2 3 2	
	Stage Winders. 4 per sinking shaft Stage Winders. 4 per sinking shaft	Coarse Aggregate 10mm	5 4 4 5 5 3 5 4 5 5 3 5 5 5 5 5 5 5 5 5	
	Stage Winders. 4 per sinking shaft Stage Winders. 4 per sinking shaft	Drum Shaft & Coupling Drum	8 8 8	
	Stage Winders. 4 per sinking shaft Stage Winders. 4 per sinking shaft	Gearbox Brakes & Hydraulics	8 8 2 2	
	Stage Winders. 4 per sinking shaft Stage Winders. 4 per sinking shaft	Motor & Motor Coupling Rope	8 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	
	Stage Winders. 4 per sinking shaft Stage Winders. 4 per sinking shaft	Rope Rope Attachments Orive		
	Stage Winders. 4 per sinking shaft Stage Winders. 4 per sinking shaft	Transformers Fasteners & Foundation Bolts	8 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	
	Stage Winders. 4 per sinking shaft Stage Winders. 4 per sinking shaft	MCC Switchgear	4	
	Stage Winders. 4 per sinking shaft Sinking Stage Power	Cabling 2.5MVA Containerised Genset	8 8 8	
	Sinking Stage Power Ventilation Substation Roofbolts	Synchronization Substation Medium Voltage Switchgear Supports	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
	Roofbolts Tracjk Ballast Ballast 66FU	Supports Tracjk Ballast Ballast 66FU	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
	Ballast ber U LOCO Track LOCOs	Ballast 66-U LOCO Track LOCOS	100 100 85 85 85 85 85 85 85 85 85 85 85 85 85	
	EDCUS ROlling Stock Power Supply	Rolling Stock Supply Cable TBM		
	Conveyor Structure Conveyor Belt Temp	Conveyor Structure Conveyor Belt Temp	6 6 6 6 6 6 6 6 6 6 6	
	Conveyor Belt Permanent Conveyor Belt Drive Temp	Conveyor Belt Permanent Conveyor Belt Drive Temp	12 12 12 12 13 8 8 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
g	Structure Structure	Structure Structure	6 6	
	Chamber Construction Chamber Construction	Cement Silica	43 43 43 5 5 5 5 5	
	Chamber Construction Chamber Construction	Coarse Aggregate 10 -2.5mm Fine Aggregate (Coarse Sand)	38 38 38 132 132 132	
	Chamber Construction Chamber Construction	Micro Fibre Mesh and Roofbolts Outland research	1 1 1	
	TBM Construction TBM Construction TBM Construction	Overhead crane TBM Construction TBM Construction	10 40 40 30	
citts	TBM Construction Tunnel Shotcrete Tunnel Shotcrete	TBM Construction Cement Silica	52 52 52 52 52 52 52 52 52 52 52 52 52 5	
	Tunnel Shotcrete Tunnel Shotcrete Tunnel Shotcrete	Coarse Aggregate 10 -2.5mm	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	
	Tunnel Shotcrete Shotcrete equipment	Fine Aggregate (Coarse Sand) Micro Fibre Shotcrete equipment		
	Shotzrete equipment Grout for Tunnel Roof Support	Snotrete equipment Grout for Tunnel Additional Support	2 7 7 7 6 6 7 7 7 6 6 7 7 7 8 9 10 19 20 20 19 20 20 19 20 20 19 20 20 10 20 20 20 10 20 20 20 10 20 20 20 10 20 20 20 10 20 20 20 10 20 20 20 20 20 20 20 20 20 20 20 20 20	
	TBM Cable 66kv Cable	TBM Cable 66kv Cable	2 2 2 4 2 4 2 2 2 2 2 2 2 2 2 2 2 2 3	
	Source Cause Main Belt Drive and equipment Main Belt Drive and equipment	Motors and Drive Loop etc		
	tankers Oil and Sundries	diesel Oil and Sundries		
	Construction Construction	Roof Bolts Mesh	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
	Construction Construction	Ventilation Pipes VentilationBooster fans	2 2 2 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	

Ladycross Plantation MTS - HGV Schedule

System	Sub-system Sub-system	Item	1 :	2 3	4 5 6	6 7	8 9 1	10 11	12 13	14	15 1	16 17	17 18 19 20 21 22 23 24 25	5 26 2	7 28	29 30	31 32 33 34 35 36 37 38 39 40 41 43	43	44	45	46 47 48 49 50 51 52 53 54 55 56	57 58	8 Total
Tunnel	Geotech Membrane for Spoil	Geotech Membrane for Spoil			1	10				10			10		10	10	12		4				62
Tunnel	Cranes and Forklifts	Cranes and Forklifts			4												4	4					8
Tunnel	Water Treatment Plant	Water Treatment Plant			4												4	4					8
Tunnel	Compressors	Compressors					4										4	4					8
Tunnel	Compressed Air Pipes	Compressed Air Pipes					2						2		2		2	4					8
Tunnel	Safe Havens	Safe Havens															8	4					8
Shaft	Scotch Derrick	Scotch Derrick		8							8	8						4					16
MTS	Tankers Total on and off site	Tankers Total on and off site	2	2 22	22 22 2	24 24	24 96 9	99 99	99 99	57	57 5	7 57	57 57 57 57 77 77 27 27	7 47 6	8 88 1	09 129	149 170 190 211 225 225 225 27 27 27 27 27 27						3307
		Monthly (two-way) HGV movements	2	2 786	796 797 85	56 879	220 346 41	18 395 2	260 255	209	205 20	07 199	99 204 420 452 340 364 416 482 45	55 470 5	29 566 5	82 597	605 639 658 678 680 655 661 421 170 338 98 43	6	18				18396

Kev

Bulk aggregates*	
Concerete aggreg	ates
Diesel	
Shotcrete aggrega	ates

Tocketts Lythe MTS - HGV Schedule

	Sub-system	Item				8 9 10	11 12	13 14 15 16	17 18 19	20 21	. 22 23 24 25 26 27 28	29 30 3:	32 33 34 35 36 3	38 39 40 41	42 43 44 45	46 47 48 49 50	0 51 52 53 5	4 55 56
	Shaft area platform (terrace) Shaft area platform (terrace)	Pavement Pavement	304 329		133 137 469 460													
d permananet on site foundations -	Temporary and permananet on site foundations -	Cement			16 17													
d permananet on site foundations -	Temporary and permananet on site foundations -	Fine Aggregate	27	27 27	27 27													
d permananet on site foundations -	Temporary and permananet on site foundations -	Coarse Aggregate 20mm	28	29 28	29 29												4	4
nd permananet on site foundations -	Temporary and permananet on site foundations - Shaft area platform (terrace)	Coarse Aggregate 10mm Site Prep	8 8	19 19	19 20													
	Shaft area platform (terrace)	Site Clearance														8		
	Infrastructure	Containerised pre-fabricated structures			4									2				
	Change House/ Ablution Facilities during Sinking only (M&M and Mineral Shaft)	Containerized pre-fabricated structures			2		\square							4				
	Temporary store for cement and sinking store requirements (M&M and Mineral Shaft) Temporary fuel farm storage areas for fuel, oil and lubricants (M&M and Mineral Shaft)	Pre- fabricated arrives as "Meccano" set on site Pre- fabricated arrives as "Meccano" set on site			4								4	4				_
	Temporary identifies storage areas for rues, oil and libricants (Maximano Mineral Shart) Temporary sinking maintenance workshop (M&M and Mineral Shaft)	Pre-fabricated arrives as "Meccano" set on site Pre-fabricated arrives as "Meccano" set on site	4			4					 		 	4				
	Site Earthworks Equipment	1 x Dozers, 1 x Tracked Excavators, 1 x Articulated Dumpers, 1 x Crushers		4		-										4		
	Site Earthworks Equipment (M&M and Mineral Shaft)	1 x driven Compactor, 1 x small Excavator, 1 x small Compactor		4												4		
	M&M Shaft water settling arrangement (temporary)	Cement				4	\square											
	M&M Shaft water settling arrangement (temporary)	Fine Aggregate				7												
	M&M Shaft water settling arrangement (temporary) M&M Shaft water settling arrangement (temporary)	Coarse Aggregate 20mm Coarse Aggregate 10mm				5												
Conveyor	Overland Conveyor	Overland Conveyor		12	12									24				
	Settling (Attenuation) Pond	Excavate, Compact and line with HDPE Lining												2				
	Sinking compressors - 6 per shaft	Compressor complete with after coolers and electrical switch gear Fans complete with motors and switchgear		6	6	4				6	6			4				
	Sinking fans -2 per shaft Water reticulation for sinking	Water storage tanks, valves, pressure relieve valves and control units			4	4								4				_
	Concrete batch plant. One per shaft	One complete batch plants complete with scales and control gear			6						6							
-	Effluent disposal	Effluent disposal	2	2 2	2 2	2 2 2	2 2	2 2 2 2	2 2 2	2 2	2 2 2 2 2 2 2	2 2 2	2 2 2 2 2 2	2 2				
	Cap lamp room	Cap lamps, cap lamp chargers, repair bench, rescue packs and gas monitoring equip			2									2			الالالالالا	
	Waste Rock (Spoils) Portal crane over shaft	Trucks to transport spoils. Grader and compactor for spoils pile/s Used for shaft Sinking			20	4							30	4				
	Banksman's Cabin	Containerised / Prefabricated				2							20	2				
	Shaft ventilation Columns	Circular ducting 6 m long				2 2	2	2						8				
	Shaft water columns	Pipe 6m long				2								2				
	Compressed air columns	Pipe 6m long x 200 mm dia				2 2	2 2	2 2 2			16			2				
	Concrete (Slick Line) columns Steel wire mesh for support	Pipe 6m long Mesh				2 2		2 2 2			16							
	Shaft Concrete Lining	Cement				8 8 8	8 8	8 8 8 6	6									
	Shaft Concrete Lining	Fine Aggregate			1	13 13 13 14 14 14	13 13	13 13 13 11	11									
	Shaft Concrete Lining	Coarse Aggregate 20mm			1	14 14 14	14 14	14 14 12 12	12								الالالالالا	اللبية
outing Buildings	Shaft Concrete Lining Grout ref WP spreadsheet	Coarse Aggregate 10mm Solids Delivered in 28 tonne tankersMonths 7 to 10 inclusive				9 9 9		9 9 9 9	9									
outing Buildings	Grout ref WP spreadsheet	Months 7 to 10 inclusive			1	1 1 1												
	Grout ref WP spreadsheet	Soilids delivered in 28 tonne tankers total tonnage months 21 to 35 inclusive							8									
	Explosives	Explosives				8 8 8	8 8	8 8 8 8	8									
	Rock anchor bolts Temporary shaft screens, gates and draw bridges	Bolts and Resin Temporary shaft screens, gates and draw bridges				2 2				6								
	Shaft Mucking	Lashing unit				4				4								
	Shaft Mechanised Drilling	Jumbo drill rig				4				4								
	Pre sink and station development	Back actors x 2 per shaft.				4	oxdot			4								
inning	Shaft Hand held drilling	Hand held compressed air drilling machines including drill steel Ladder				2				2			8					
ipping ting	Stage Winders. 4 per sinking shaft	MCC				2							2					+
ting	Stage Winders. 4 per sinking shaft	Switchgear				4							4					
ting	Stage Winders. 4 per sinking shaft	Cabling 2.5MVA Containerised Genset											4					
ry Power Supply er Supply	Sinking Stage Power Ventilation Substation	2.5MVA Containerised Genset Medium Voltage Switchgear				2				,			8	2				4
	Roofbolts								2	2	2 2 2 2 2 2 2	4 2 2	2					
	Tracjk Ballast	Supports Tracik Ballast									15 15 15 15 14 15	15 14 1	5 14					
	Ballast 66FU LOCO Track	Ballast 66FU ARUP London DFS numbers									104 104 104 104 104 104 4 4 5 4 5 5	106 104 10	4 104					
	LOCOs	LOCOs								4		3 4 4	7					
	Rolling Stock	Rolling Stock									16							
	Supply Cable TBM	Supply Cable TBM									2 2 4 2	4 2 2	2					
	Conveyor Structure	Conveyor Structure									6 6 8 8 8 8	8 6 8	4 23 10					
	Conveyor Belt Temp Conveyor Belt Permanent	Conveyor Belt Temp Conveyor Belt Permanent									3 3 3 4 4	4 4 4	10 10 9					
	Conveyor Belt Drive Temp	Conveyor Belt Drive Temp								12	12	1	2 3					
Building	Structure	Structure												6				
Fans	Structure Chamber Construction	Structure Cement							42	3 43 43				8				
ber ber	Chamber Construction Chamber Construction	Silica							43	5 5								
ber	Chamber Construction	Coarse Aggregate 10 - 2.5mm							38	38 38								
ber	Chamber Construction	Fine Aggregate (Coarse Sand)							13:	2 132 132	2							
ber ber	Chamber Construction Chamber Construction	Micro Fibre Mesh and Roofbolts							1	1 1								
er for Spoil geotechnic	Chamber Construction Site Preparation	Membrane for Spoil geotechnic 24 movements				2 2	2	2 2	2 2	2	2 2 2	2	2					+
n TBM	TBM Construction	Overhead crane							10									
	TBM Construction	TBM Construction								40 40	30							
ction items	TBM Construction Tunnel Shotcrete	TBM Construction Cement								21 21	. 21 35 35 35 35 35 35 25 35 35 35 35 35 35 35 35	35 25 3	35	10				
	Tunnel Shotcrete Tunnel Shotcrete	Silica							2 2	2 2	2 4 4 4 4 4 4 4	4 4 4	4					+
	Tunnel Shotcrete	Coarse Aggregate 10 - 2.5mm							18 18	18 18	2 4 4 4 4 4 4 1 18 31 31 31 31 31 31	31 31 3	1 31					
	Tunnel Shotcrete	Fine Aggregate (Coarse Sand)							63 63	63 63	63 106 106 106 106 106 106 0 0 0 0 0 0 0 0 0	107 106 10	6 106					
	Tunnel Shotcrete Tunnel Shotcrete	Micro Fibre Tuppel Shotcrete							0 0	0 0	0 0 0 0 0 0	0 0 0	0 2					
quipment	Tunnel Shotcrete Grout for Tunnel	Tunnel Shotcrete Grout for Tunnel							2		5 5 5 5 5 5 5	5 5	4					
	Additional Support	Additional Support									5 5 5 5 5 5 5 11 12 12 12 12 12 12 12 2 2 2 4 2	12 12						
	Construction power	Construction power									2 2 2 4 2	4 2 2	2					
	66kv Cable	66kv Cable									2	2 2	2 2 2 1					
ve and equipment ve and equipment	Motors and Drive Loop etc	Motors and Drive Loop etc									29 29 29 29 29 29 29 29 4 4 4 4 4 4 4 4		12					
nsets and Vehicles	tankers	diesel		5 10	10 12 2	20 20 20	24 24	24 24 26 26	26 26 26	26 26	29 29 29 29 29 29 29	29 29 20	5 3 3 3 3					
truction	Tunnel Construction	Oil and Sundries	2	2 2	2 4	4 4 4	4 4	4 4 4 4	4 4 4	4 4	4 4 4 4 4 4	4 4 4	4 2 4 4 4	4				
	Tunnel Construction	Tunnel Construction									2 2 2 2 2 2	2 2 2	2 2					
	Tunnel Construction Tunnel Construction	Tunnel Construction Tunnel Construction									16 12 12 12 12 12	12 12 0	12 44 40 40					
istruction	Tunnel Construction Ventilation	Tunnel Construction Ventilation									2 2 2 2 2 2	2 2 8	12 44 40 40					
	Tunnel Construction	Tunnel Construction									2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 2	2 2					
	Tunnel Construction	Tunnel Construction		4														
Forklifts	Tunnel Construction	Tunnel Construction		4							2 2			4				
	Tunnel Construction	Tunnel Construction Tunnel Construction		4	2		2				2 2			4				
							1 4 1				4 2							
rtment Plant ors of Air Pipes	Tunnel Construction Tunnel Construction	Tunnel Construction											6					
	Tunnel Construction Tunnel Construction Tunnel Construction Tunnel Construction Tankers on and off site total										68 88 109 129 149 170 190 4 266 502 492 515 538 566 591		6	340 340 340	340 340 340 340	340 340 342		

Key

Bulk aggregates*
Concerete aggregates
Diesel
Shotcrete aggregates

Wilton MTS - HGV Schedule

	- HOV Schedule		Monthly (two-way) HGV movements
System	Sub-system	Item	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58
tal	Portal area platform	Platform	120 120 120 120 120 120 120 120
I	Shaft area platform (terrace)	Site Prep	
	Shaft area platform (terrace)	Site Clearance	
·	Infrastructure	Containerised pre-fabricated structures	
al	Infrastructure	Containerised pre-fabricated structures	
al .	Change House/ Ablution Facilities during Sinking only (M&M and Mineral Shaft)	Containerized pre-fabricated structures	
al	Change House/ Ablution Facilities during Sinking only (M&M and Mineral Shaft)	Containerized pre-fabricated structures	
al	Temporary store for cement and sinking store requirements (M&M and Mineral Shaft)	Pre- fabricated arrives as "Meccano" set on site	
al .	Temporary store for cement and sinking store requirements (M&M and Mineral Shaft)	Pre- fabricated arrives as "Meccano" set on site	
al	Temporary fuel farm storage areas for fuel, oil and lubricants (M&M and Mineral Shaft)	Pre- fabricated arrives as "Meccano" set on site	
al	Temporary fuel farm storage areas for fuel, oil and lubricants (M&M and Mineral Shaft)	Pre- fabricated arrives as "Meccano" set on site	
al .	Temporary sinking maintenance workshop (M&M and Mineral Shaft)	Pre- fabricated arrives as "Meccano" set on site	
ı	Temporary sinking maintenance workshop (M&M and Mineral Shaft)	Pre- fabricated arrives as "Meccano" set on site	
I	Site Earthworks Equipment	1 x Dozers,1 x Tracked Excavators, 1 x Articulated Dumpers, 1 x Crushers	
1	Site Earthworks Equipment (M&M and Mineral Shaft)	1 x driven Compactor, 1 x small Excavator, 1 x small Compactor	
al .	MR.M Shaft water cettling arrangement (temporary)		
al	M&M Shaft water settling arrangement (temporary) Portal	Excavate, Concrete, Rebar, steel rails, Drizzet oil trap and recirculation pumps with Control Panels ARUP London DFS numbers	750 750 750 750 750 150 112 12 12
1			700 700 730 730
	Settling (Attenuation) Pond	Excavate, Compact and line with HDPE Lining	
l .	Vent fans -2	Fans complete with motors and switchgear Effluent disposal	
al .	Effluent disposal	Effluent disposal	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
ing	Cap lamp room Waste Rock (Spoils)	Cap lamps, cap lamp chargers, repair bench, rescue packs and gas monitoring equip	
ing	Roofbolts	Trucks to transport spoils. Grader and compactor for spoils pile/s	
nei :jk Ballast	Tracjk Ballast	Supports Tracik Ballast	16 16 17 16 16 17 17 17 17 17 17 17 17
gk Ballast ast 66FU	Ballast 66FU	Tracjk Ballast Ballast 66FU	16 16 17 16 18 17 17 17 17 17 17 17 17 17 17 17 17 17
			115 115 116 116 115 116 115 115 116 115 115
O Track	LOCO Track	LOCO Track	6 5 5 6 5 5 6 5 5
nel	LOCOs	LOCOs	
nel	Rolling Stock	Rolling Stock	
nel	Power Supply	Supply Cable TBM	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
nel	Conveyor Structure	Conveyor Structure	6 6 6 6 6 6 6 6 4 4 4 3 3
nel	Conveyor Belt Temp	Conveyor Belt Temp	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
nel	Conveyor Belt Permanent	Conveyor Belt Permanent	8 8 8 8
nel	Conveyor Belt Drive Temp	Conveyor Belt Drive Temp	12 12 12 18 18
nel	Permanent Building	Strycture	20 20
И	Construction	Construction	22 22 22 22 22
Л	Construction	Construction	10
tcrete	Shotcrete	Supports	
tcrete equipment	Shotcrete equipment	Supports	
nel	Grout for Tunnel	Grout for Tunnel	
inel	Additional Support	Additional Support	
inel	TBM Cable	TBM Cable	
nel	66kv Cable	66kv Cable	
tors and Drive	Main Belt Drive and equipment	Motors and Drive	
p etc	Main Belt Drive and equipment	Loop etc	
struction	Diesel	Construction	8 8 8 8 8 12 12 12 12 12 12 12 12 12 12 12 12 12
struction	Oil and Sundries	Oil and Sundries	2 2 2 2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
struction	Tunnel	Roof Bolts	
struction	Construction	Mesh	
struction	Construction	Ventilation Pipes	12 12 12 10 10 12 12 10 10 12 19 50 50 31
struction	Construction	VentilationBooster fans	2 2 2 2 2 2 14
struction	Construction	Pumping Column	
truction	Surface Portal	Materials Handling Equipment Portal	
struction	Construction	Substation Building Permanent will be used as Temp supply to TBM	
struction	Construction	Substation Foundations	28
struction	Construction	Substation Equipment for Main drive	
struction	Construction	Substation Equipment for TBM	
truction	Construction	Transformers	
el	Concrete Sections for Lined Section	Concrete Sections for Lined Section	799 797 797 797 797 797 797 797 797 797
Movement	Spoil	Spoil	10 10 20 20 20 20 20 20 20 20 40 40
truction	Cranes	Cranes	1 10 10 10 10 10 10 10 10 10 10 10 10 10
truction	Forklifts	Forklifts	7
struction	Water Treatment Plant	Water Treatment Plant	
struction		Compressors	
	Compressors Compressors		
struction	Compressed Air Pipes Safe Havens	Compressed Air Pipes	
every 2 km		Safe Havens	6 6
struction	Piling Rig	Piling Rig	2 2 2
	Piling Rig	Piling Rig	nts 120 120 120 120 120 120 120 120 120 120
struction		Monthly (two-way) HGV moveme	

Wilton MHF - HGV Schedule

																						Me	nthly (tw	ro-way) i	HGV mov	ements																					4
ystem	1	2	3	4 5	6	7	8	9	10	11 1	2 13	14	15 :	16 17	18	19	20	21 22	23	24	25 2	6 27	28	29	30 31	32	33	34 3	5 36	37	38 3	9 40	41	42 4	3 44	45	46 47	7 48	49	50	51 52	2 53	54	55 56	5 57	58	
te Set up											10																																				Γ
ite Set up											16	36	38	.0																																	Г
Site Set up											400)																																			I
ite Set up												84	92	4																																	
ite Set up												4	76	20																																	
Site Set up												4	4	2																																	
lite Set up												330	690 6	30 15)																																
Piling 2800 pile														48	160																																
Construct Pile caps Ground Beams													1	10 11	700	720	540	20 370)																												
rect Steelwork roofing and cladding																	20	34 34	34	34	34 2	8																									
Construct Ground Floor Slabs																				480	480 47	74 330	270	60																							
iling for Other Structures 620															240	240	120																														
ail Maintenance and Storage Sheds																		52	124	124																											
Drying Screening coating and granulation																					80 36	68 368	368	356	300																						
itage 1 Classification																						28	36	42	40 18	3																					
tage 2 Classification																							10	32	30 30	16																					I
Finished Product Screening																									56 60																						
Main Offices																						16	50	58	58 58	58	58	38																			
urface Water Culvert												84	76																																		
Foul Water Drainage and Klargester													8 4	12 44	- 6																																I
unnel Drain															38	42	20																														I
ite Storm Drainage																	26	44 42	44	44	44 4	0 46	40	30																							
ther Services																					44 4	0 46	40	46	44 40																						1
ccess roads																									26	592	540	566 7	8																		
ar Park																												158 20	04 10																		1
and scape and Finishes																												424 5																			
Ion Specific											198	212	242 2	12 22	226	212	322	26 21	2 226	226	302 19	98 226	264	242	226 212	2 242	212	226 2	26 212	14																	1
Monthly (two-way) HGV movem	ents										624	754	1226 10	050 101	0 1370	1214	1048 1	024 710) 428	908 1	068 11	84 106	1078	866	754 444	4 968	852	1412 10	58 748	14																	

Harbour Facilities - HGV Schedule

Phase 1

						N	/lonthl	y (two-	way) H	GV mo	vement	S						
Activity	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	Total
MARINE SIDE PHASE 1																		
Mobilisation			20	20														40
Installation of Piles from Floating Plant						127	127	127										381
Construction of the Concrete Deck - Precast concrete						200	200	200	200	200								1000
Construction of the Concrete Deck - Reinforcement						16	16	16	16	16								80
Construction of the Concrete Deck - Insitu concrete							167	167	167	167	167	167						1002
Installation of Fixtures and Fittings										13	13	13						39
Installations of Mechanical & Electrical Services													13	13	13	13		52
Installation of Handling Plant on the Quay													13	13	13	13	13	65
SHORE SIDE PHASE 1																		
Raise and Improve Ground					80													80
Install Piles						40												40
Construct Surge Bin / Foundations							80	80										160
Installation of Materials Handling Equipment													4	4	4	4	4	20
Fit Out									10									10
Order and deliver Materials Handling Equipment (Abnormal Load)										2	2	2						6
CONVEYOR BELT SYSTEM																		
Piled Foundations	114	114	114	114	114													570
Pile Caps		116	116	116	116	116	116											696
Transfer Tower Foundations			70	70														140
Conveyor structural steel					290	290	290	290	290	290	290							2030
Monthly (two-way) HGV movements	114	230	320	320	600	789	996	880	683	688	472	182	30	30	30	30	17	6411

Phase 2

					N	/lonthly	y (two-	way) H	GV mov	vement	:S					
Activity	1*	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
MARINE SIDE PHASE 2																
Mobilisation	20	20														40
Installation of Piles from Floating Plant				105	105	105										315
Construction of the Concrete Deck - Precast concrete				200	200	200	200									800
Construction of the Concrete Deck - Reinforcement				16	16	16	16									64
Construction of the Concrete Deck - Insitu concrete						200	200	200	200							800
Installation of Fixtures and Fittings							9	9	9							27
Installations of Mechanical & Electrical Services										9	9	9				27
Installation of Handling Plant on the Quay										9	9	9				27
SHORE SIDE PHASE 2																
Raise and Improve Ground			80													80
Install Piles				40												40
Construct Surge Bin / Foundations					80	80										160
Installation of Materials Handling Equipment											4	4	4	4	4	20
Fit Out							10									10
Order and deliver Materials Handling Equipment (Abnormal Load)								2	2	2						6
Monthly (two-way) HGV movements	20	20	80	361	401	601	435	211	211	20	22	22	4	4	4	2416
		•		•				*Relati	ve to st	art of r	hase 2	Harbo	ur cons	tructio	n in ve	ar 2022