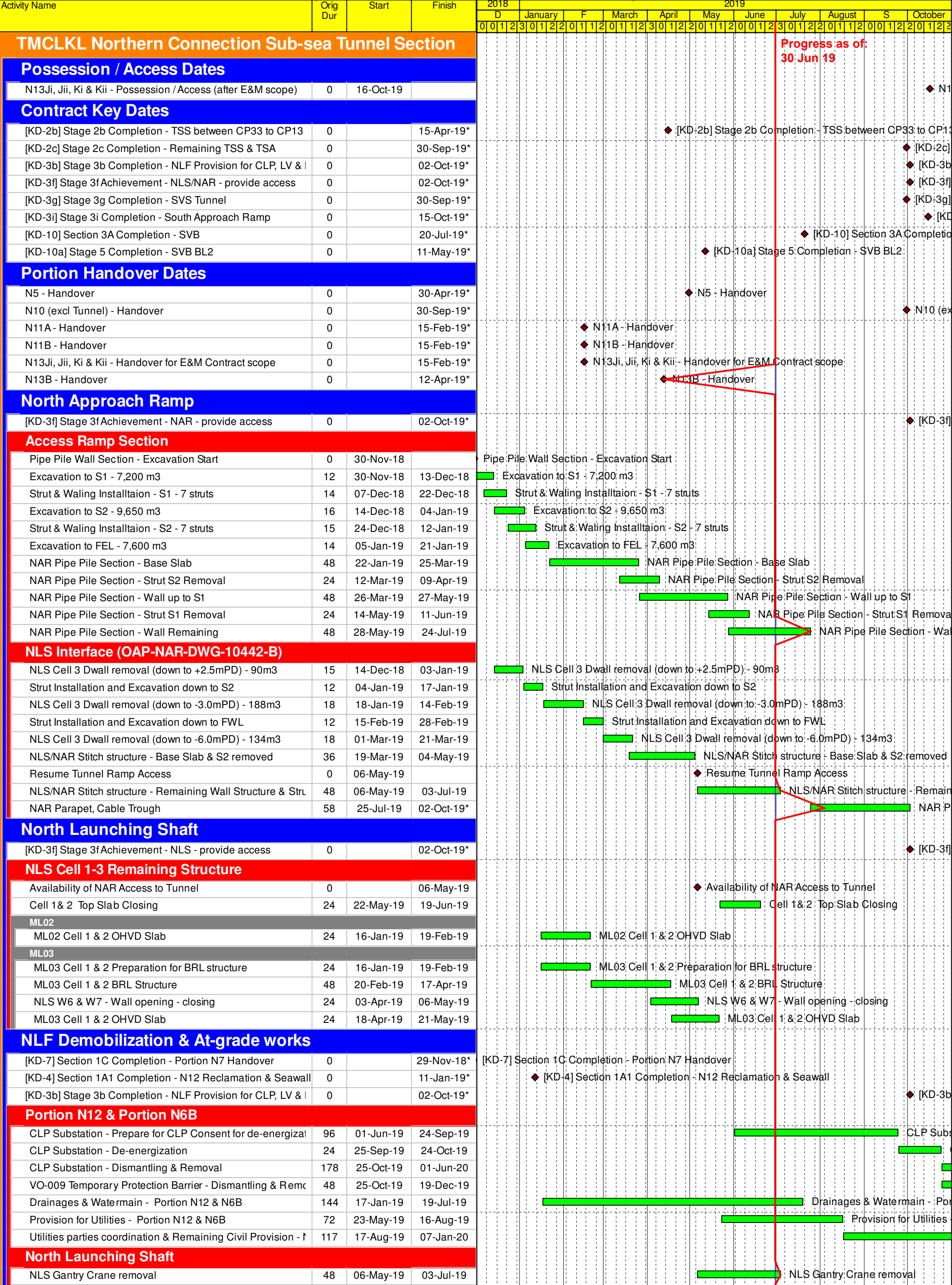
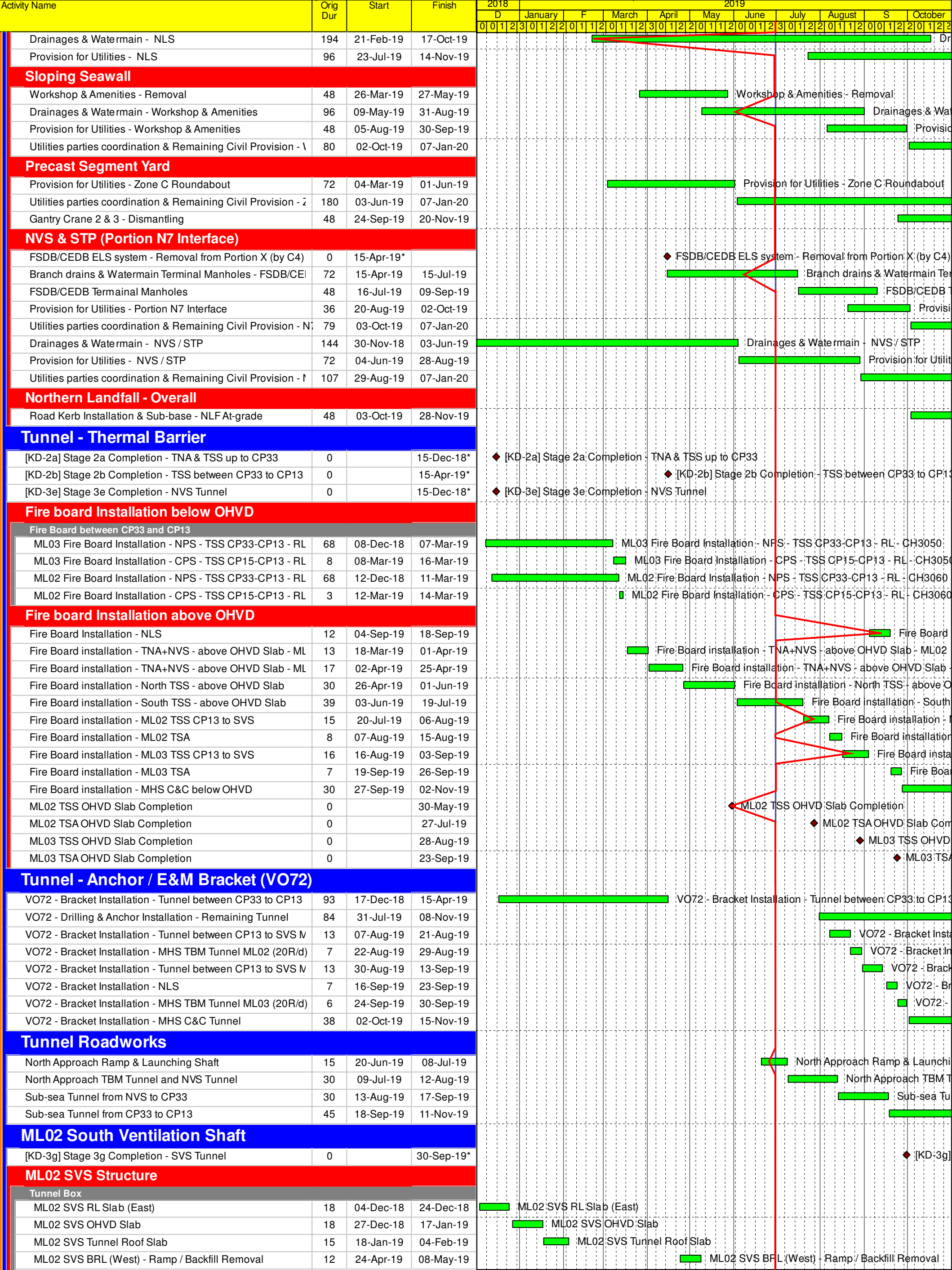


Appendix B

Construction Programme





Activity Name	Orig Dur	Start	Finish	2018												2019																														
				D			January			F			March			April			May			June			July			August			S			October												
				0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3											
ML02 SVS BRL walls (West)				33	09-May-19	18-Jun-19	ML02 SVS BRL walls (West)																																							
ML02 SVS RL Slab (West)				15	19-Jun-19	06-Jul-19	ML02 SVS RL Slab (West)																																							
ML02 SVS West wall remaining after CP7				18	02-Sep-19	23-Sep-19	ML02 SVS West wall remaining after CP7																																							
ML02 SVS Tunnel - Prepare for E&M Contractor Access				6	24-Sep-19	30-Sep-19	ML02 SVS Tunnel - Prepare for E&M Contractor Access																																							
Above Tunnel Vent Duct																																														
ML02 SVS Tunnel Roof Wall (-28.70 to -21.90)				30	12-Feb-19	18-Mar-19	ML02 SVS Tunnel Roof Wall (-28.70 to -21.90)																																							
ML02 SVS Above Tunnel Roof Wall & Slab (-21.90 to -18.7				36	19-Mar-19	04-May-19	ML02 SVS Above Tunnel Roof Wall & Slab (-21.90 to -18.7																																							
ML02 SVS Below BL2 Wall & Slab + Backfill (-18.70 to -6.9				60	06-May-19	17-Jul-19	ML02 SVS Below BL2 Wall & Slab + Backfill (-18.70 to -6.9																																							
ML02 SVS Dwall opening for Duct connection to SVB S1				24	18-Jul-19	14-Aug-19	ML02 SVS Dwall opening for Duct connection to SVB S1																																							
ML02 SVS BL2 Wall & Slab (-6.95 to -0.45)				27	15-Aug-19	16-Sep-19	ML02 SVS BL2 Wall & Slab (-6.95 to -0.45)																																							
ML02 SVS Dwall opening for Duct connection to SVB S2				27	24-Sep-19	26-Oct-19	ML02 SVS Dwall opening for Duct connection to SVB S2																																							
ML02 SVS BL1 Wall & Slab (-0.45 to +1.80)				30	28-Oct-19	30-Nov-19	ML02 SVS BL1 Wall & Slab (-0.45 to +1.80)																																							
ML02 SVS Tunnel Roof to BBL2 W/P & Backfill (-21.90 to -				60	06-May-19	17-Jul-19	ML02 SVS Tunnel Roof to BBL2 W/P & Backfill (-21.90 to -																																							
ML02 SVS BL2 W/P & Backfill (-8.00 to -0.65)				21	29-Aug-19	23-Sep-19	ML02 SVS BL2 W/P & Backfill (-8.00 to -0.65)																																							
CP7 South Ventilation Shaft																																														
ML02 SVS																																														
ML02 SVS Access Ramp for CP7				6	12-Feb-19	18-Feb-19	ML02 SVS Access Ramp for CP7																																							
ML02 SVS CP7 Dwall opening + Excavation (Bottom)				24	19-Feb-19	18-Mar-19	ML02 SVS CP7 Dwall opening + Excavation (Bottom)																																							
ML02 SVS CP7 Invert Slab, Wall & Middle Slab				15	19-Mar-19	04-Apr-19	ML02 SVS CP7 Invert Slab, Wall & Middle Slab																																							
ML02 SVS CP7 Temp Strut				6	06-Apr-19	12-Apr-19	ML02 SVS CP7 Temp Strut																																							
ML02 SVS CP7 Bottom section backfilling				6	13-Apr-19	23-Apr-19	ML02 SVS CP7 Bottom section backfilling																																							
ML02 SVS CP7 Upper Excavation & modify arches				24	08-Jul-19	03-Aug-19	ML02 SVS CP7 Upper Excavation & modify arches																																							
ML02 SVS CP7 Top section - Structure				24	05-Aug-19	31-Aug-19	ML02 SVS CP7 Top section - Structure																																							
ML03 South Ventilation Shaft																																														
ML03 SVS Structure																																														
Tunnel Box																																														
ML03 SVS RL Wall				30	19-Dec-18	25-Jan-19	ML03 SVS RL Wall																																							
ML03 SVS OHVD Slab				18	26-Jan-19	22-Feb-19	ML03 SVS OHVD Slab																																							
ML03 SVS ARL Wall				21	23-Feb-19	19-Mar-19	ML03 SVS ARL Wall																																							
ML03 SVS Tunnel Roof Slab				15	20-Mar-19	06-Apr-19	ML03 SVS Tunnel Roof Slab																																							
Above Tunnel Vent Duct																																														
ML03 SVS Tunnel Roof Wall (-28.70 to -21.90)				30	08-Apr-19	17-May-19	ML03 SVS Tunnel Roof Wall (-28.70 to -21.90)																																							
ML03 SVS Above Tunnel Roof Wall & Slab				36	18-May-19	29-Jun-19	ML03 SVS Above Tunnel Roof Wall & Slab																																							
ML03 SVS Below BL2 Wall & Slab (-18.70 to -6.95)				50	02-Jul-19	28-Aug-19	ML03 SVS Below BL2 Wall & Slab (-18.70 to -6.95)																																							
ML03 SVS Dwall opening for Duct connection to SVB				18	29-Aug-19	19-Sep-19	ML03 SVS Dwall opening for Duct connection to SVB																																							
ML03 SVS BL2 Duct Connection to SVB				30	20-Sep-19	26-Oct-19	ML03 SVS BL2 Duct Connection to SVB																																							
ML03 SVS Tunnel Roof to BBL2 W/P & Backfill(-21.90 to -				45	16-Jul-19	05-Sep-19	ML03 SVS Tunnel Roof to BBL2 W/P & Backfill(-21.90 to -																																							
ML03 SVS BL2 W/P & Backfill (-8.00 to -0.65)				24	05-Oct-19	02-Nov-19	ML03 SVS BL2 W/P & Backfill (-8.00 to -0.65)																																							
South Ventilation Building																																														
Structure																																														
SVB - S2 Strut Removal				12	14-Dec-18	29-Dec-18	SVB - S2 Strut Removal																																							
SVB - BL1 External Wall - Stage 1				24	21-Dec-18	21-Jan-19	SVB - BL1 External Wall - Stage 1																																							
SVB - W/P & Backfilling for S1 removal				18	08-Jan-19	28-Jan-19	SVB - W/P & Backfilling for S1 removal																																							
SVB - S1 Strut Removal				12	29-Jan-19	18-Feb-19	SVB - S1 Strut Removal																																							
SVB - BL1 External Wall - Stage 2 & Precast + GL Slab				24	12-Feb-19	11-Mar-19	SVB - BL1 External Wall - Stage 2 & Precast + GL Slab																																							
SVB - GL Wall + 1F Slab				24	12-Mar-19	09-Apr-19	SVB - GL Wall + 1F Slab																																							
SVB - 1F Wall + 2F Slab				24	26-Mar-19	26-Apr-19	SVB - 1F Wall + 2F Slab																																							
SVB - 2F Wall + RF Slab				24	10-Apr-19	11-May-19	SVB - 2F Wall + RF Slab																																							
ABWF																																														
SVB - BL2 ABWF				40	21-Dec-18	15-Feb-19	SVB - BL2 ABWF																																							
SVB - BL1 ABWF				24	26-Mar-19	26-Apr-19	SVB - BL1 ABWF																																							
SVB - GF ABWF				24	27-Apr-19	27-May-19	SVB - GF ABWF																																							
SVB - 1F ABWF				24	14-May-19	11-Jun-19	SVB - 1F ABWF																																							
SVB - 2F ABWF				24	28-May-19	25-Jun-19	SVB - 2F ABWF																																							
SVB - Remaining ABWF				21	26-Jun-19	20-Jul-19	SVB - Remaining ABWF																																							
SVB - Roof Structure				60	22-Jul-19	30-Sep-19	SVB - Roof Structure																																							
SVB - Provide Access for BL2 Lower Plenum Rooms				0		15-Feb-19	SVB - Provide Access for BL2 Lower Plenum Rooms																																							
SVB - Provide Access for BL1 Upper Attenuator Rooms				0		26-Apr-19	SVB - Provide Access for BL1 Upper Attenuator Rooms																																							
SVB - Provide Access for GF				0		27-May-19	SVB - Provide Access for GF																																							
SVB - Provide Access for 1F				0		11-Jun-19	SVB - Provide Access for 1F																																							
SVB - Provide Access for Upper Plenum Rooms				0		25-Jun-19	SVB - Provide Access for Upper Plenum Rooms																																							
KD-10a - SVB Structure Completion & Provide Access to BL2				0		11-May-19*	KD-10a - SVB Structure Completion & Provide Access to BL2																																							
KD-10 - SVB Completion & Provide Access				0		20-Jul-19*	KD-10 - SVB Completion & Provide Access																																							
Portion N10 - Handover				0		30-Sep-19*	Portion N10 - Handover																																							
South Approach TBM Tunnel																																														
[KD-2c] Stage 2c Completion - Remaining TSS & TSA				0		26-Sep-19*	[KD-2c] Stage 2c Completion - Remaining TSS & TSA																																							
S881 TBM																																														
S881 TBM Final Break-out				14	26-Mar-19	08-Apr-19	S881 TBM Final Break-out																																							
S881 Cutterhead / Main Shield / Main Drive - Cut & remove				36	09-Apr-19	25-May-19	S881 Cutterhead / Main Shield / Main Drive - Cut & remove																																							
Cell 1 ML02 - Shifting way for Gantry 1 & 2 Removal				12	27-May-19	10-Jun-19	Cell 1 ML02 - Shifting way for Gantry 1 & 2 Removal																																							

