MATERIALAB CONSULTANTS LIMITED

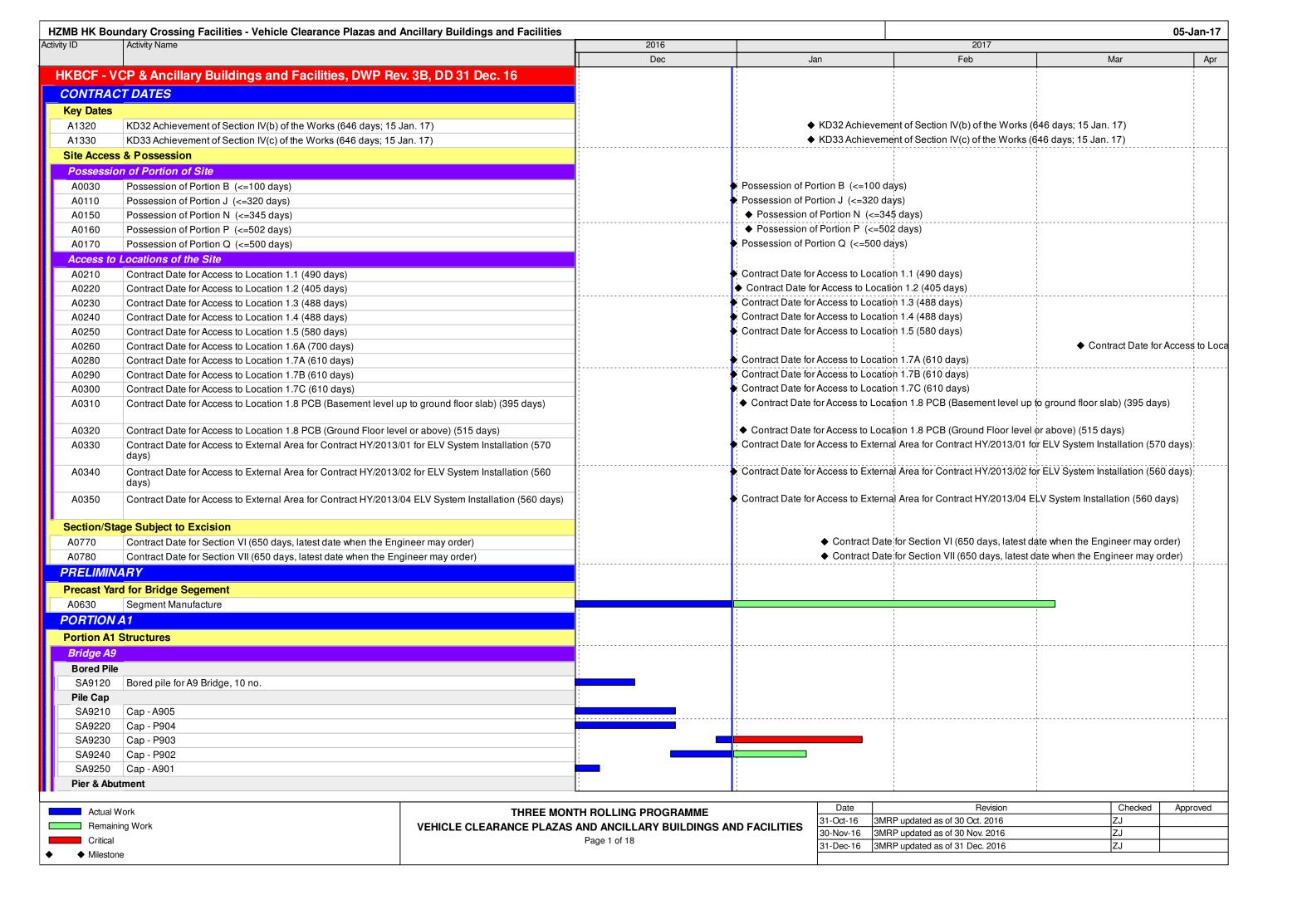
Room 723 & 725, 7/F, Block B, Profit Industrial Building, 1-15 Kwai Fung Crescent, Kwai Fong, : (852)-24508238 : (852)-24508032 Tel Fax Hong Kong. Email : mcl@fugro.com

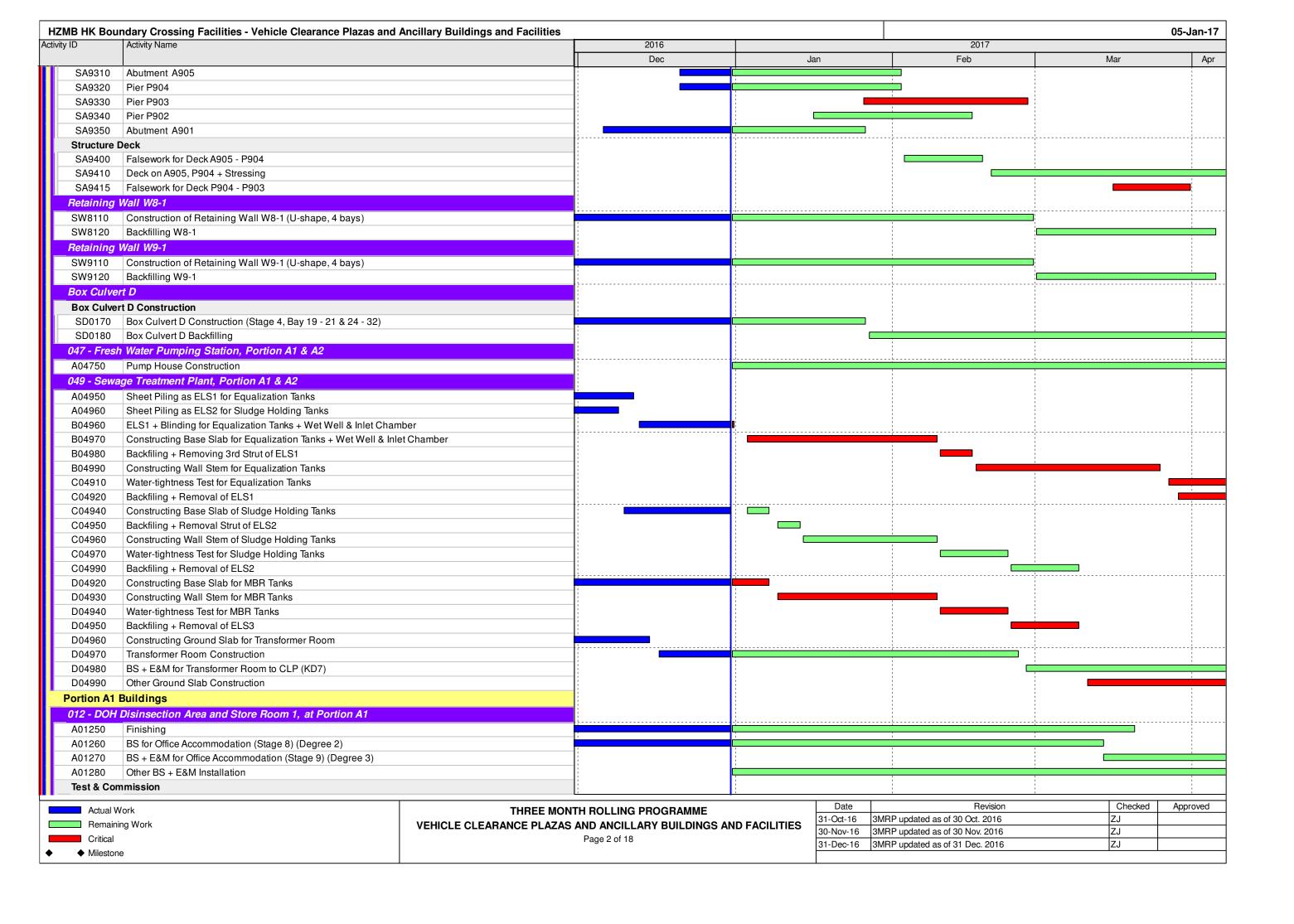


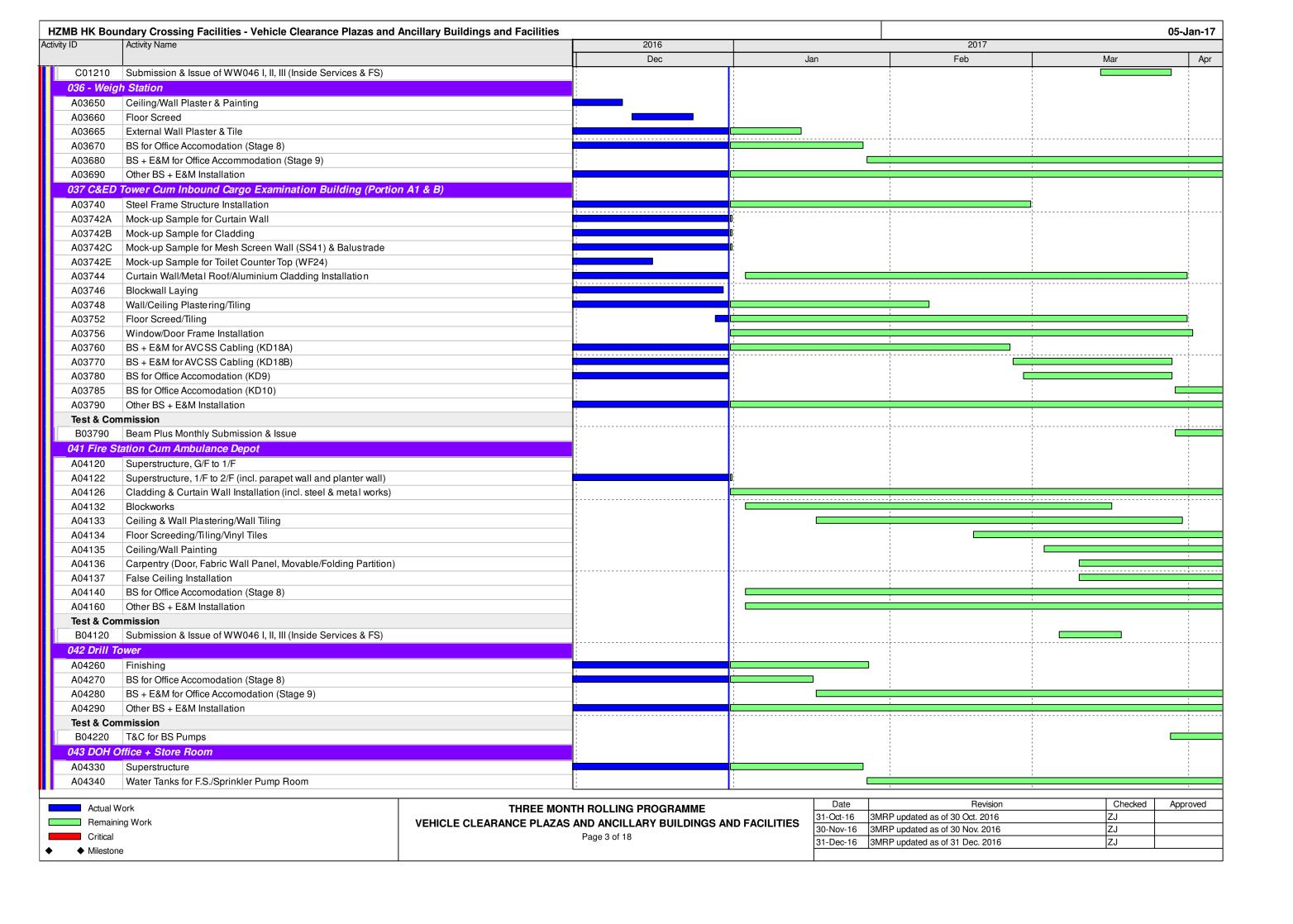
Report No.: 0165/15/ED/0662

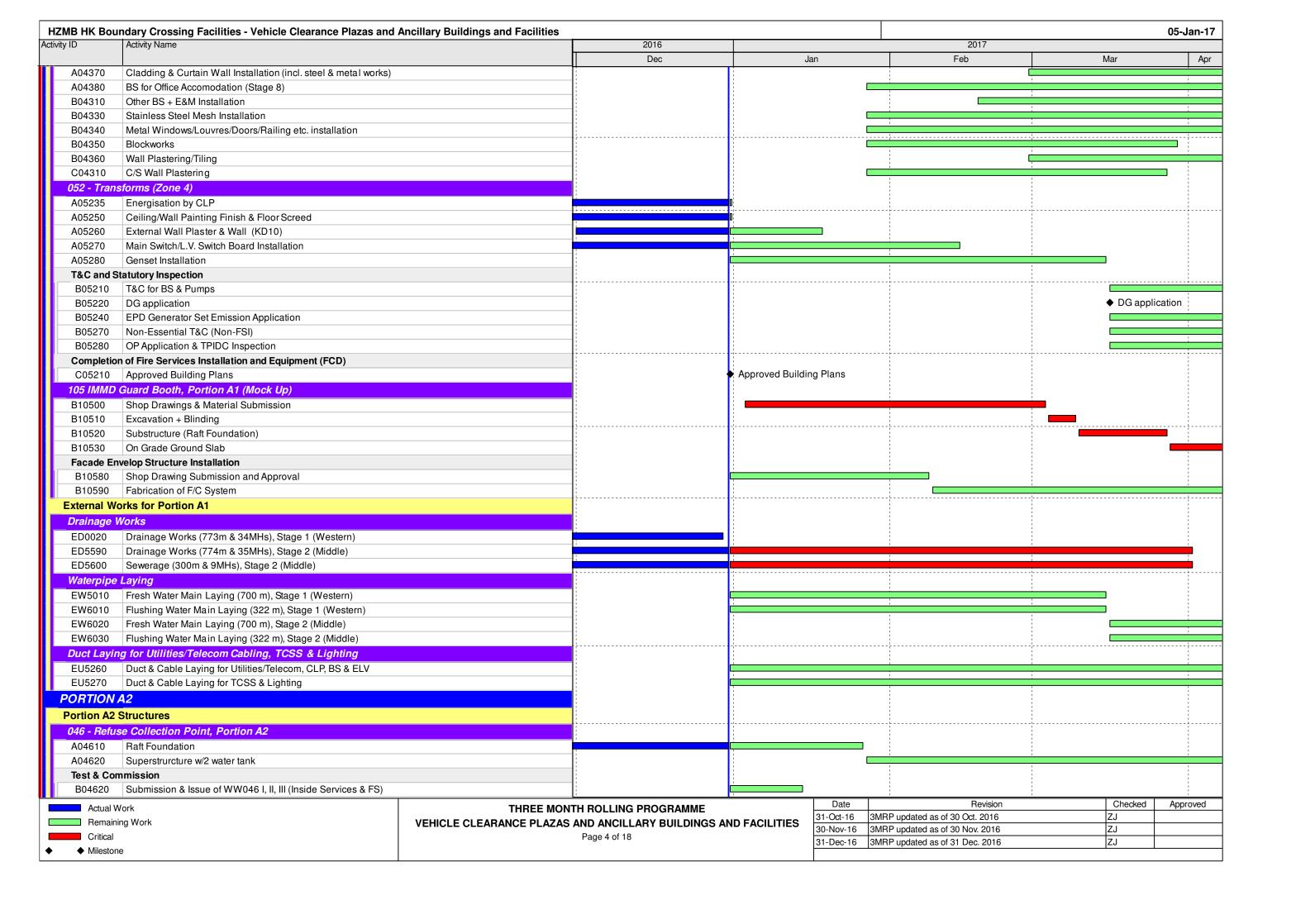
Appendix C

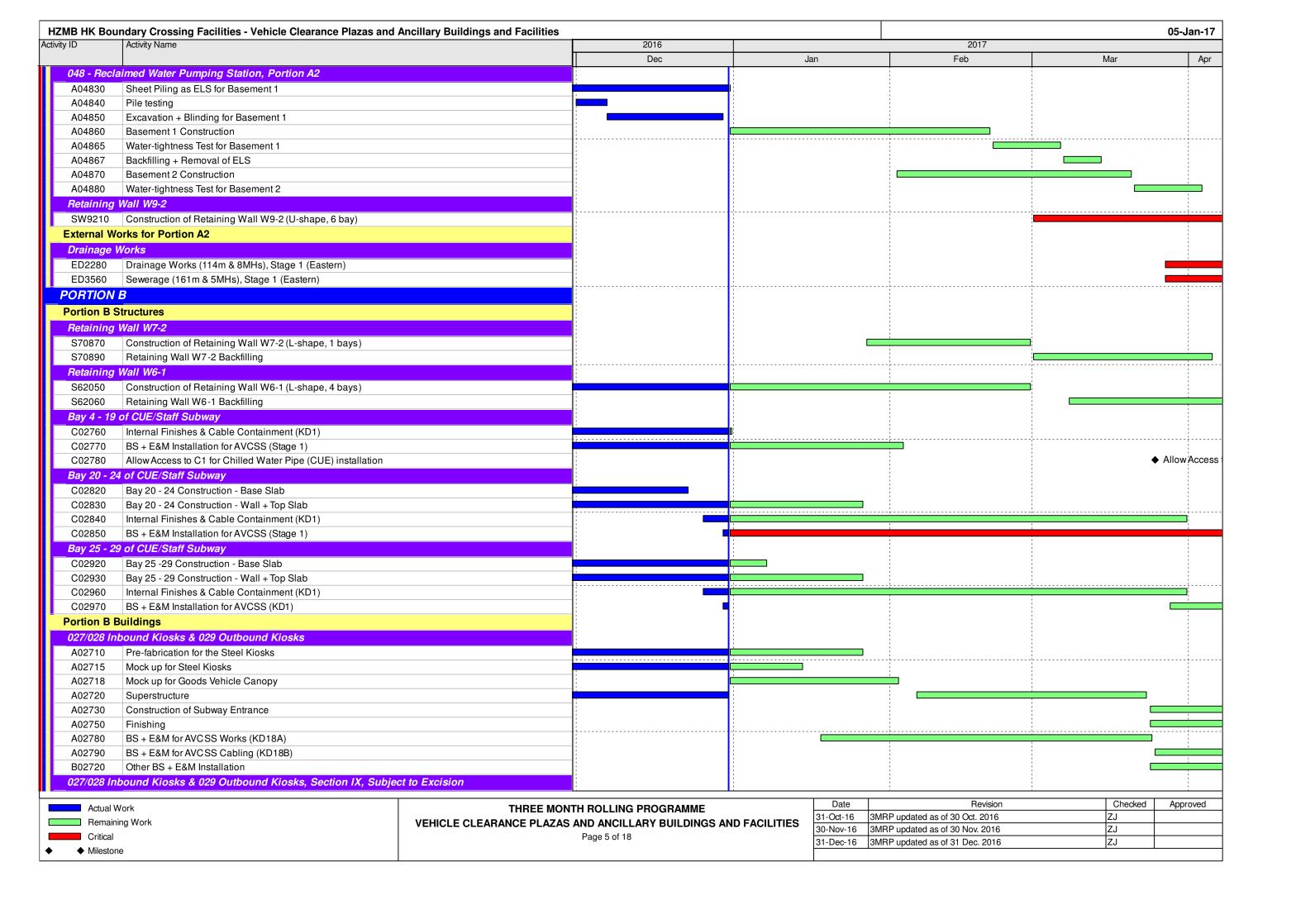
Construction Programme

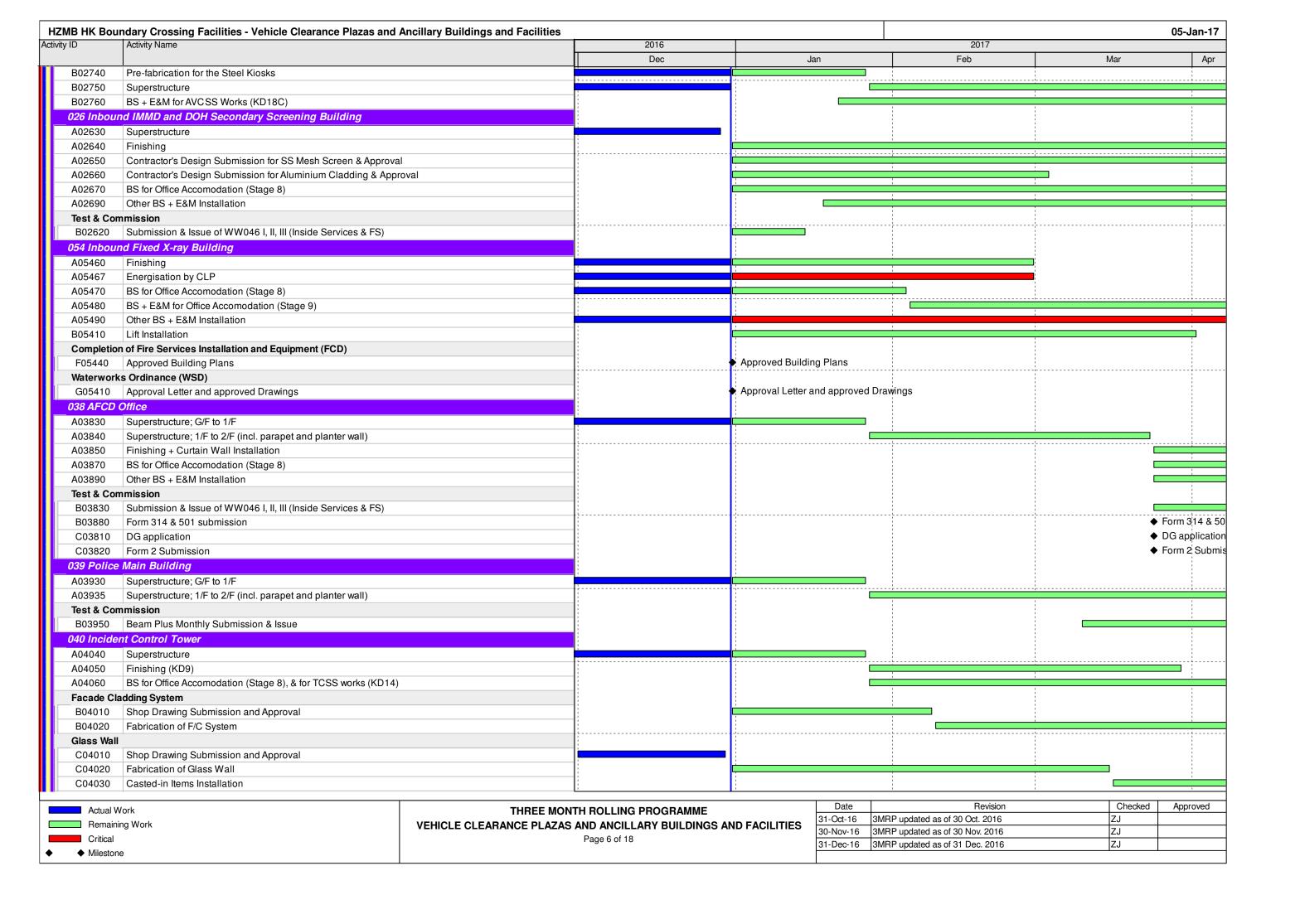


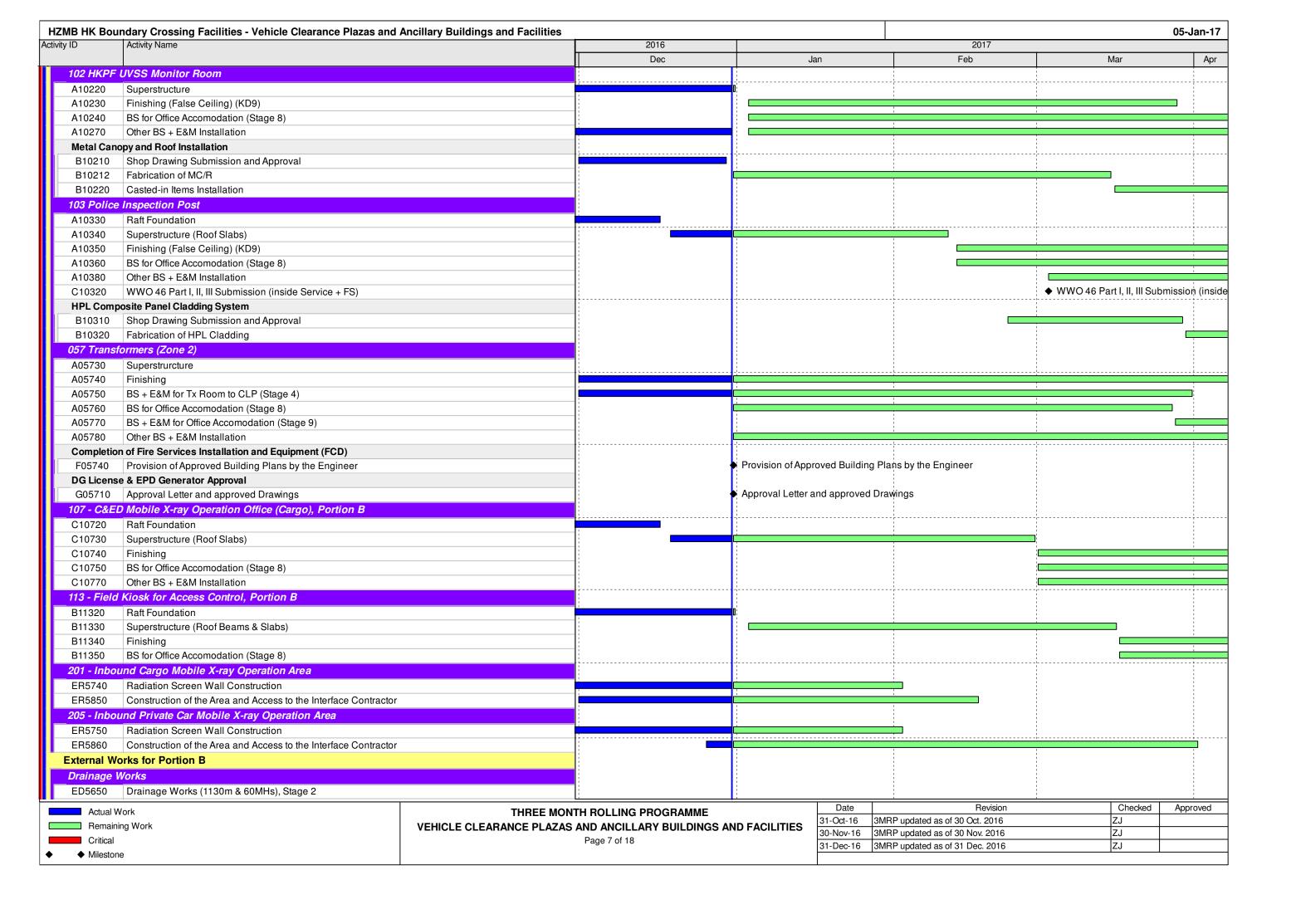


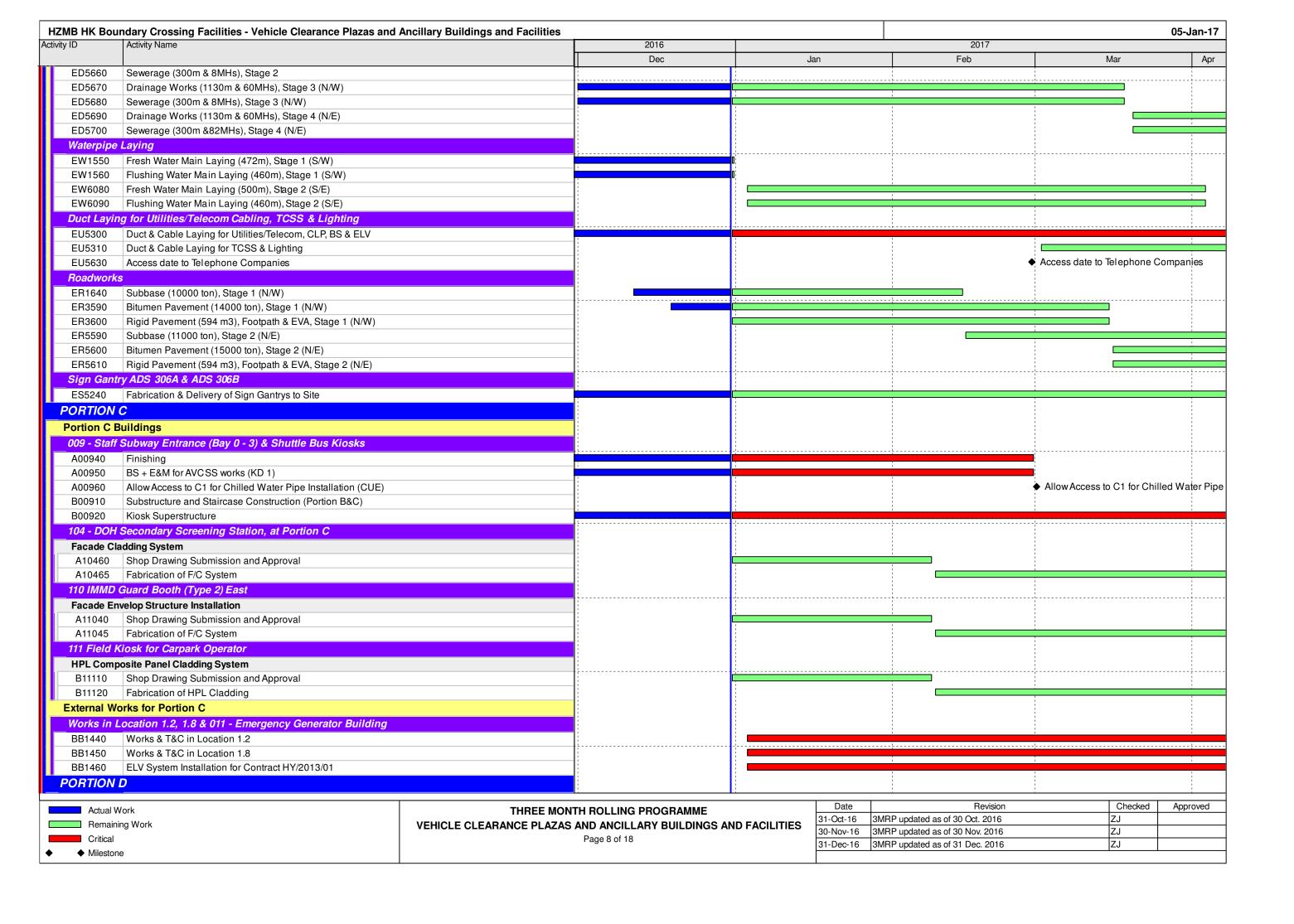


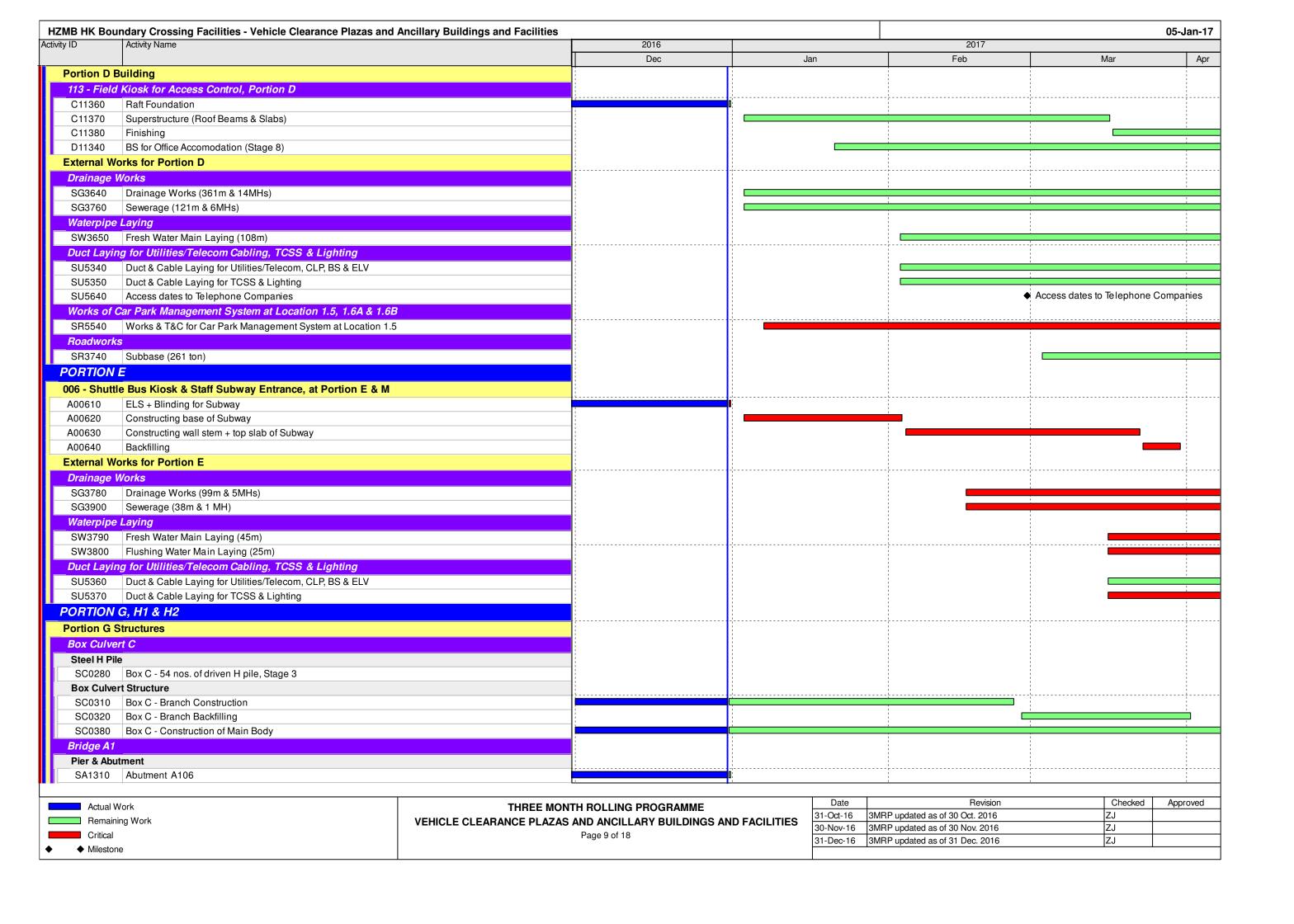


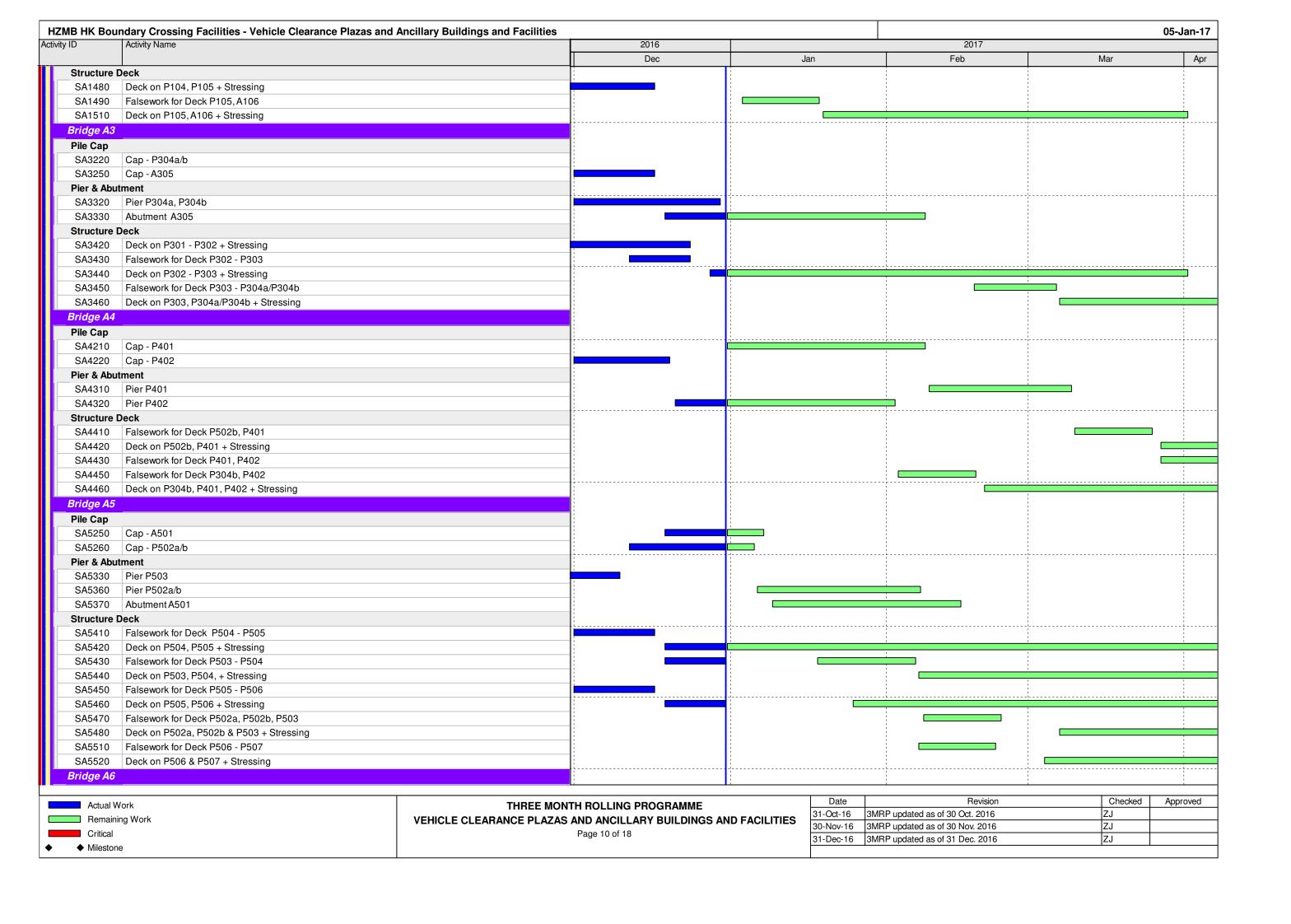


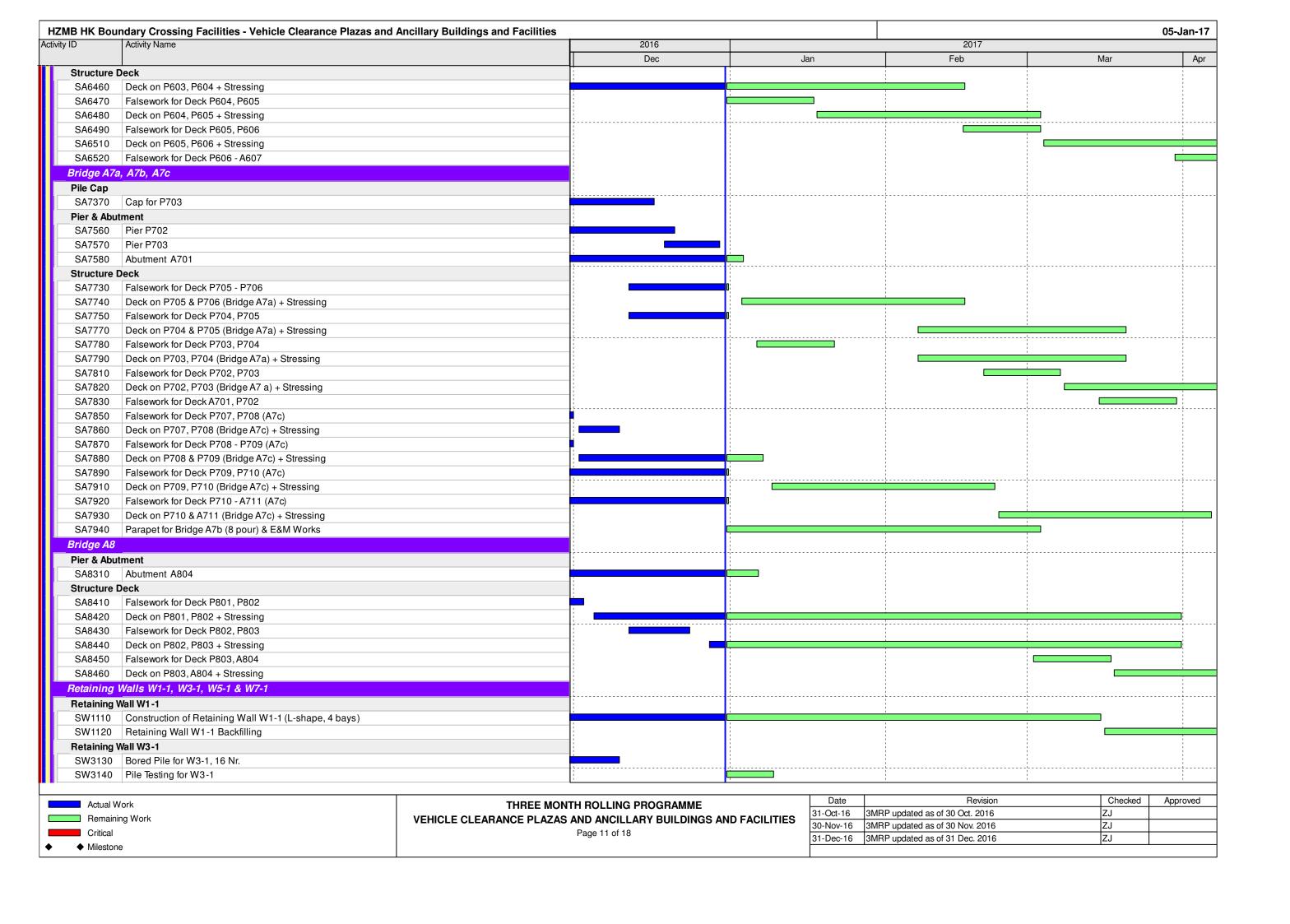


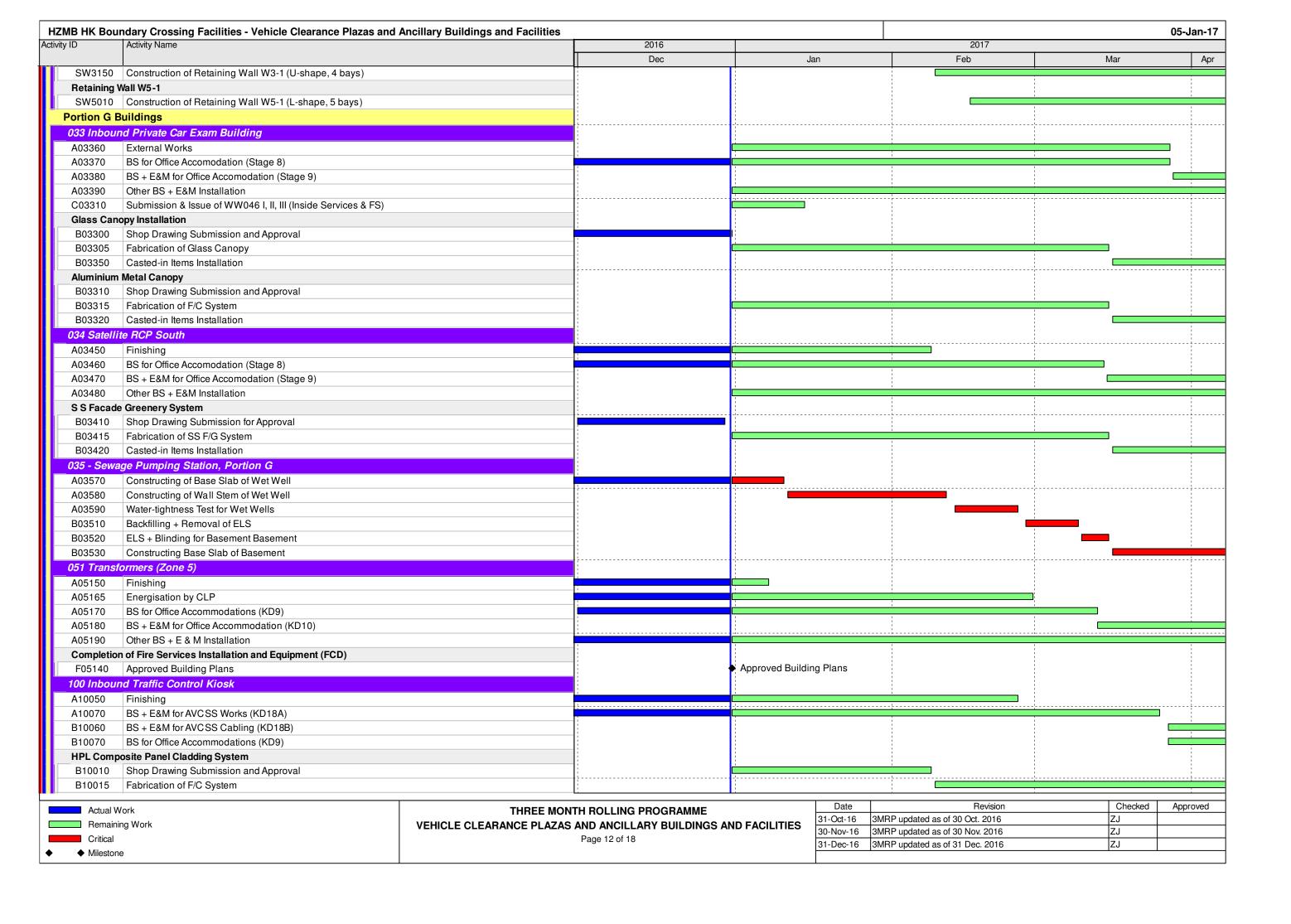


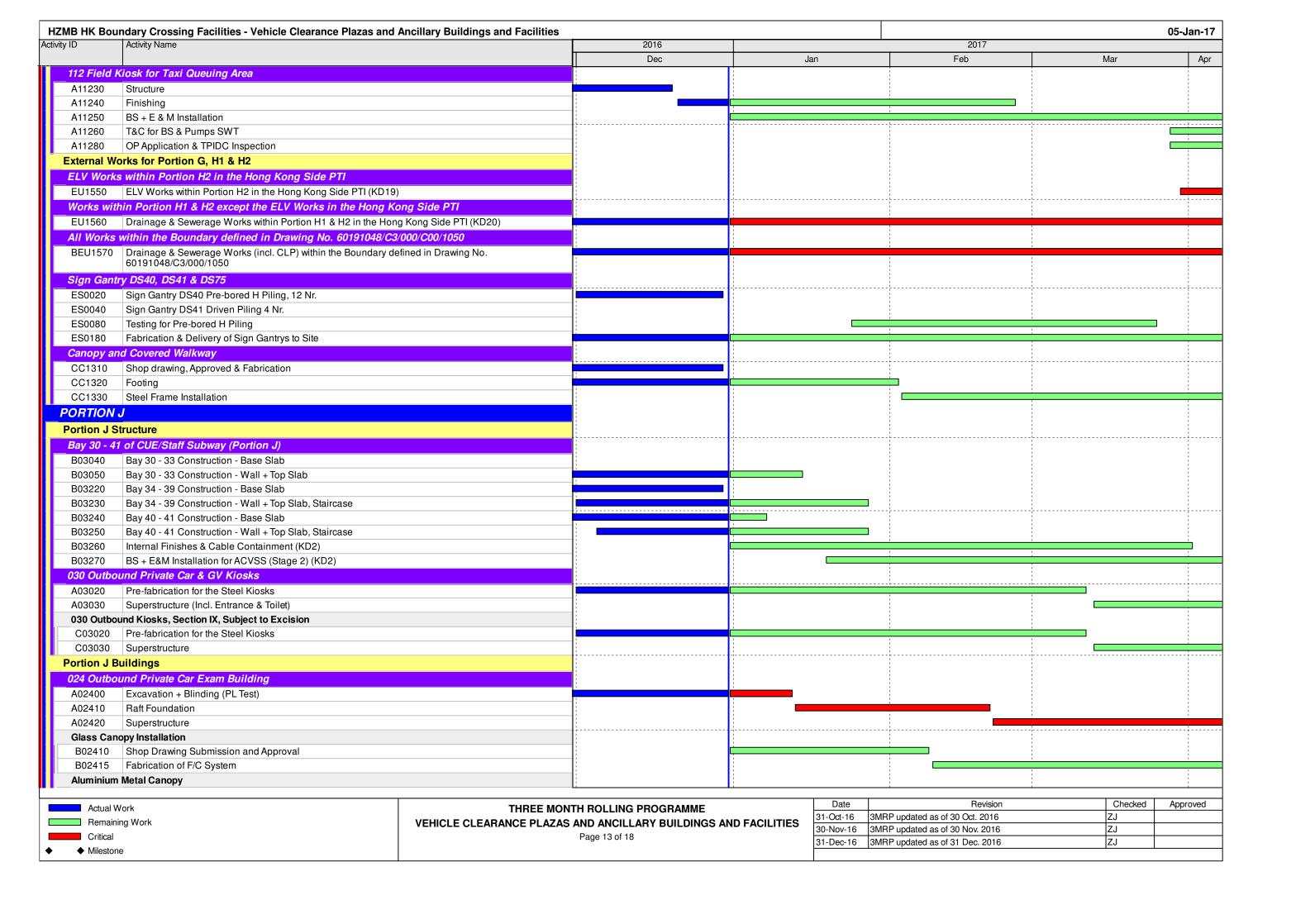


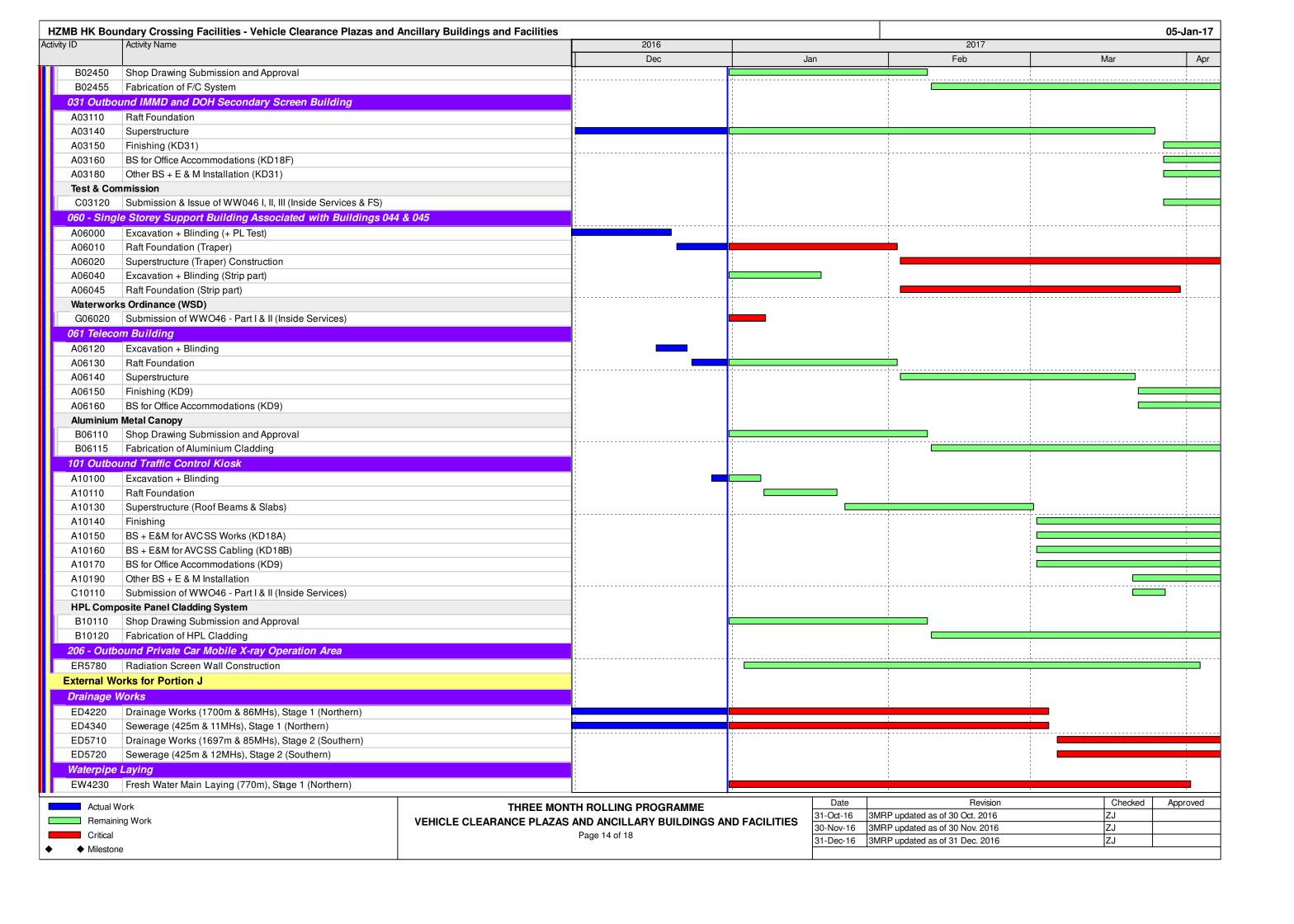


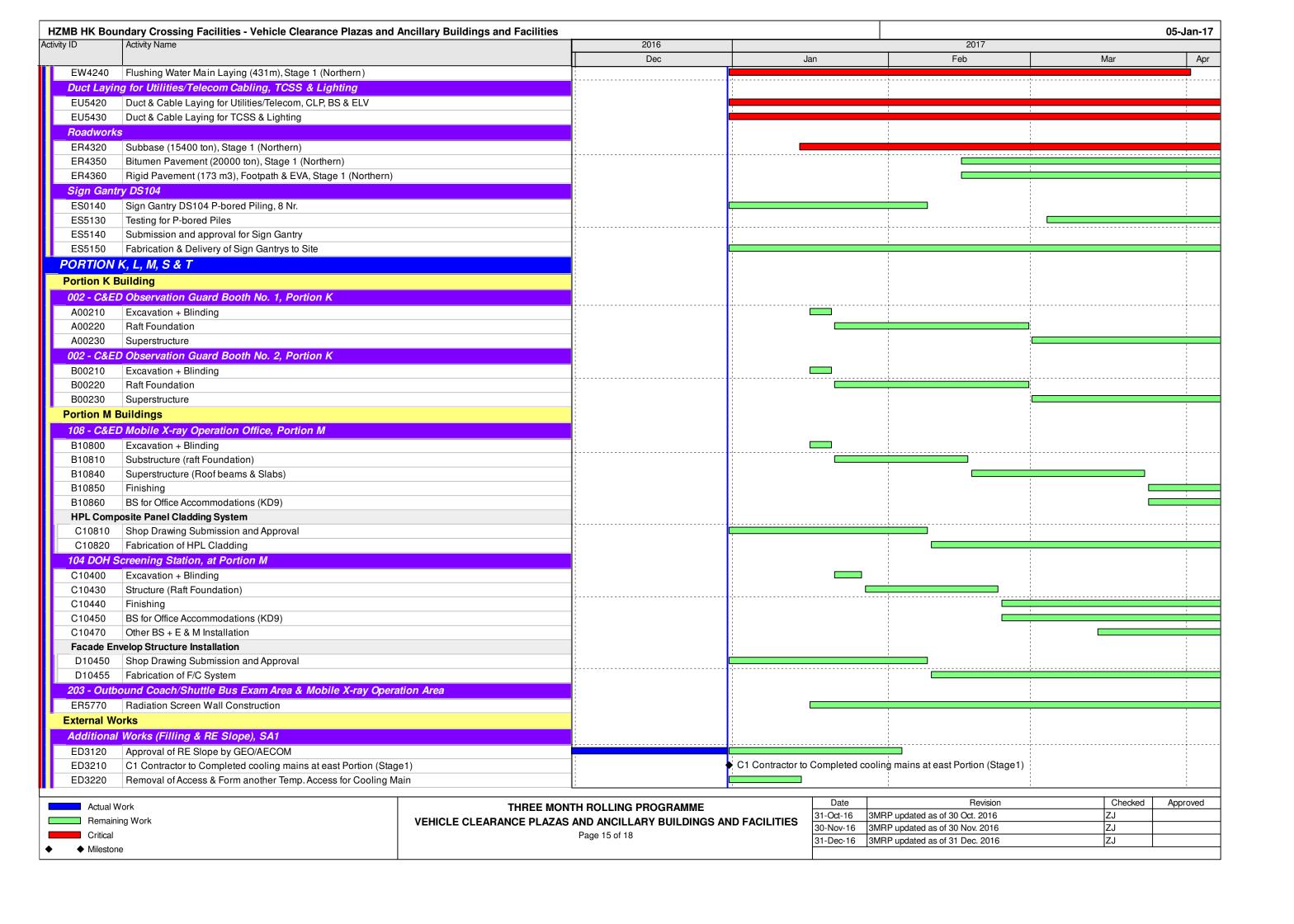


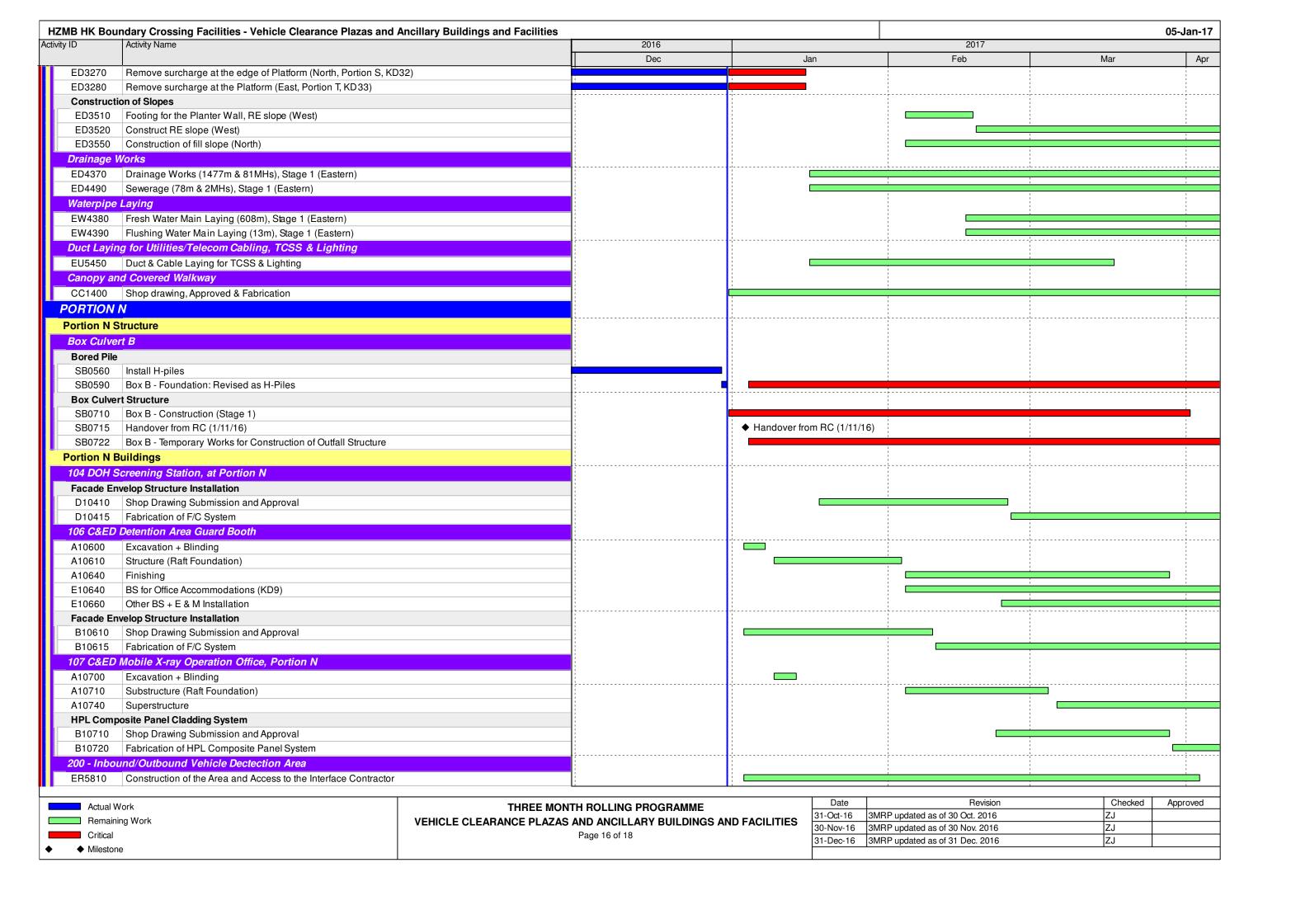


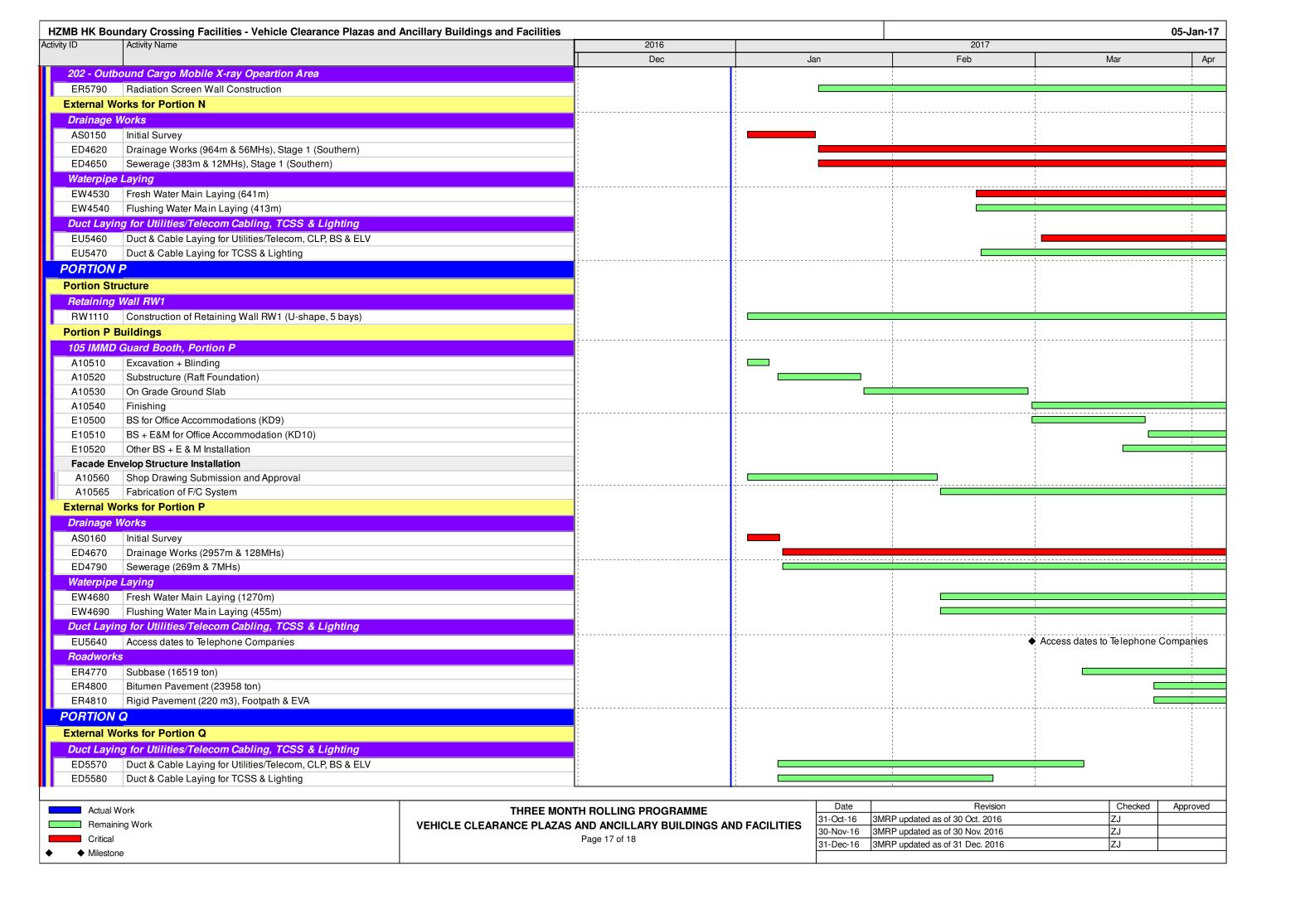












ivity ID	Activity Name	2016	2017				
		Dec	Jan	Feb	Mar	Ap	
EU1490	ELV System Installation for Contract HY/2013/04						
Roadwork	ks						
AS0170	Initial Survey			į į		1	
Landscap	e Works					1 1 1	
A5170	Design and Procurement for Irrigation System						

Actual Work

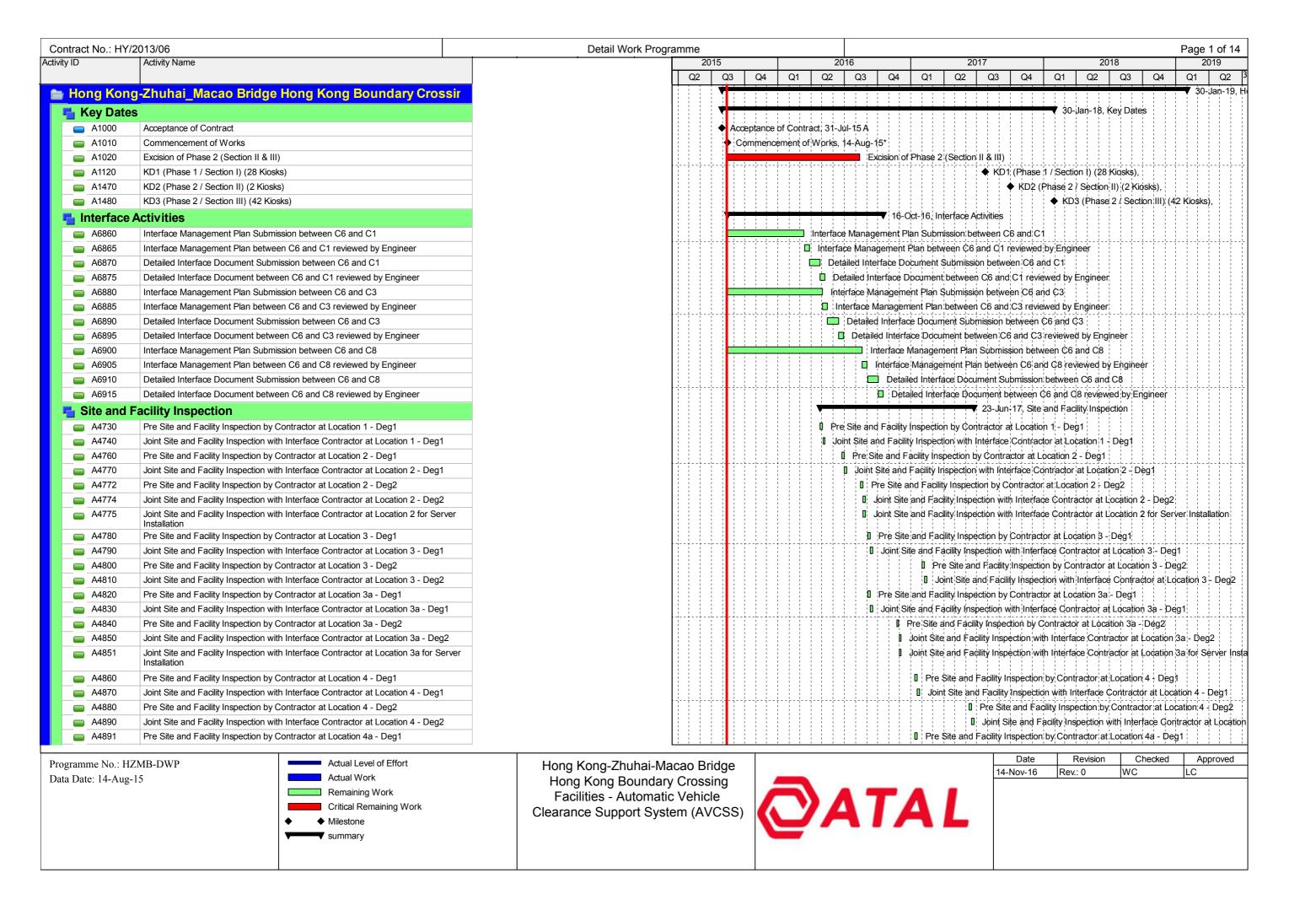
Remaining Work

Critical

Milestone

THREE MONTH ROLLING PROGRAMME
VEHICLE CLEARANCE PLAZAS AND ANCILLARY BUILDINGS AND FACILITIES
Page 18 of 18

Date	Revision	Checked	Approved
31-Oct-16	3MRP updated as of 30 Oct. 2016	ZJ	
30-Nov-16	3MRP updated as of 30 Nov. 2016	ZJ	
31-Dec-16	3MRP updated as of 31 Dec. 2016	ZJ	



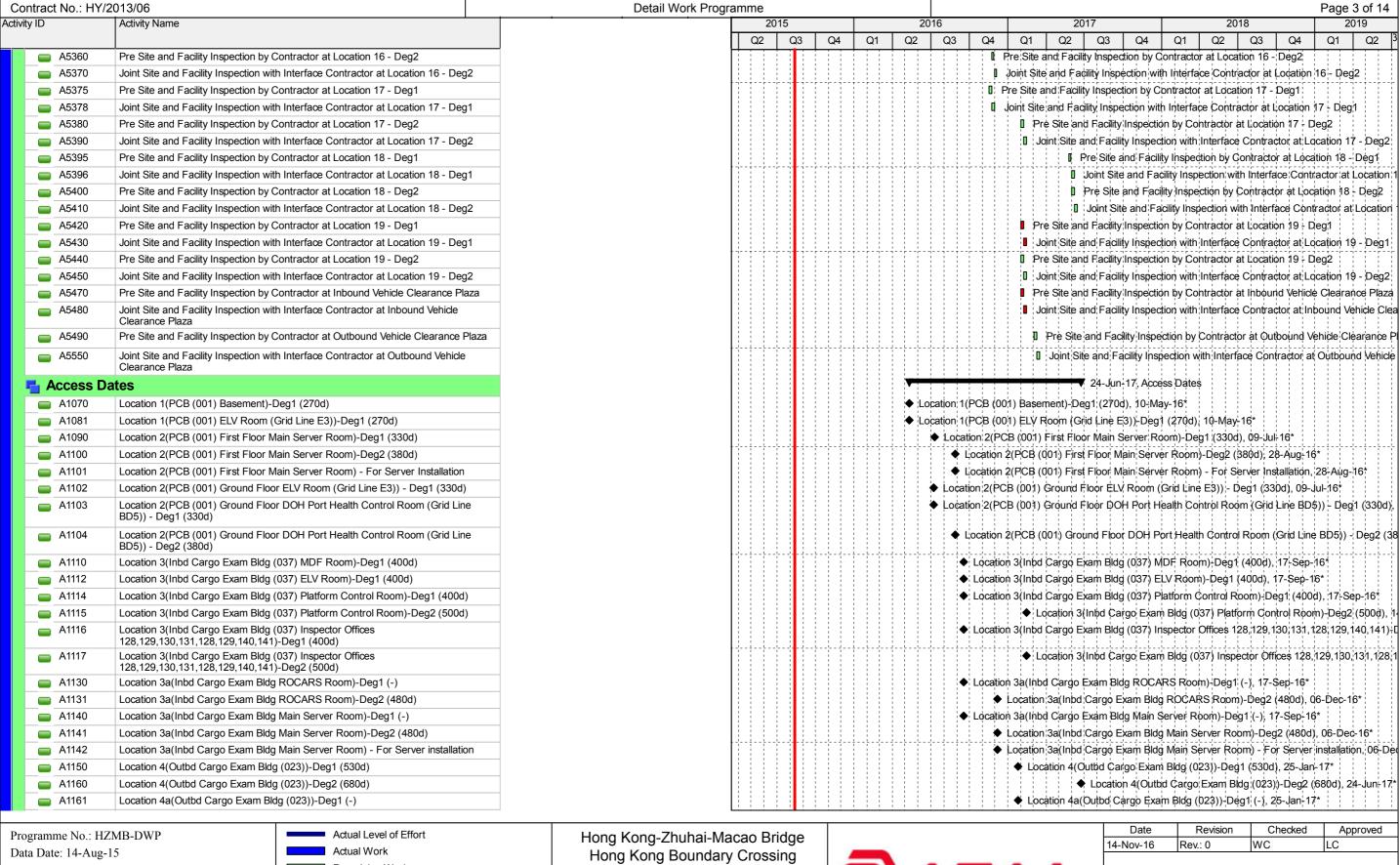
Contract No.: HY/	2013/06	Detail Work Programme									Pag	ge 2 of 14
Activity ID	Activity Name	20	15			2016		2017		2018		2019
		Q2	Q3	Q4	Q1	Q2 Q3 Q4	Q1 Q2	Q3	Q4 Q1	Q2 Q3	Q4 Q1	Q2 3
A4892	Joint Site and Facility Inspection with Interface Contractor at Location 4a - Deg1						I Joint Site a	nd Facility Ins	spection with In	iterface Contracto	or at Location 4	a - Deg1
A4900	Pre Site and Facility Inspection by Contractor at Location 4a - Deg2						Pr	e Site and Fa	cility Inspection	n by Contractor at	t Location 4a -	Deg2
A 4910	Joint Site and Facility Inspection with Interface Contractor at Location 4a - Deg2						i i i i j	oint Site and I	Facility Inspecti	ion with Interface	Contractor at L	_ocation 4a -
A 4920	Pre Site and Facility Inspection by Contractor at Location 5 - Deg1					Pre Site and Fa	acility Inspection	by Contractor	at Location 5	- Deg1		
■ A4930	Joint Site and Facility Inspection with Interface Contractor at Location 5 - Deg1					[] Join't Site and	Facility Inspection	n with Interfac	e Contractor a	at Location 5 - De	g1	
A 4940	Pre Site and Facility Inspection by Contractor at Location 5 - Deg2					J I Pr	re Site and Facili	ty Inspection I	by Contractor	at Location 5 - De	g2	
A 4950	Joint Site and Facility Inspection with Interface Contractor at Location 5 - Deg2					J	loint Site and Fac	cility Inspection	n with Interface	e Contractor at Lo	cation 5 - Deg	,2
A 4960	Pre Site and Facility Inspection by Contractor at Location 6 - Deg1					1 Pre Site	and Facility Ins	pection by Co	ntractor at Loc	ation 6 - Deg1	T	
A 4970	Joint Site and Facility Inspection with Interface Contractor at Location 6 - Deg1					□ Joint S	ite and Facility In	spection with	Interface Con	tractor at Location	ո 6 - Deg1	
A4980	Pre Site and Facility Inspection by Contractor at Location 6 - Deg2					G Pre	e Site and Facilit	y Inspection b	y Contractor a	t Location 6 - Dec	92	
■ A4990	Joint Site and Facility Inspection with Interface Contractor at Location 6 - Deg2		- 1			jo	oint Site and Faci	lity Inspection	with Interface	Contractor at Loc	ation 6 - Deg2	!
■ A5000	Pre Site and Facility Inspection by Contractor at Location 7 - Deg1					Pre Site and Facility	Inspection by C	ontractor at L	ocation 7 - De	g1		
A 5010	Joint Site and Facility Inspection with Interface Contractor at Location 7 - Deg1					Joint Site and Facili	ity Inspection with	n Interface Co	ontractor at Lo	cation 7 - Deg1	T	
■ A5020	Pre Site and Facility Inspection by Contractor at Location 8 - Deg1					☐ Pre S	Site and Facility I	nspection by	Contractor at I	ocation 8 - Deg1		
■ A5030	Joint Site and Facility Inspection with Interface Contractor at Location 8 - Deg1					□ Join	t Site and Facility	/ Inspection w	ith Interface C	ontractor at Local	tion 8 - Deg1	
■ A5040	Pre Site and Facility Inspection by Contractor at Location 8 - Deg2						i i i i i i i i i i i i i i i i i i i	Pre Site and F	acility Inspection	on by Contractor	at Location 8 -	Deg2
■ A5050	Joint Site and Facility Inspection with Interface Contractor at Location 8 - Deg2							Joint Site and	Facility Inspec	tion with Interface	Contractor at	Location 8 -
■ A5060	Pre Site and Facility Inspection by Contractor at Location 9 - Deg1			1-1-1-			Pre Site and	Facility Inspe	ction by Contra	actor at Location 9	9 - Deg1	
■ A5070	Joint Site and Facility Inspection with Interface Contractor at Location 9 - Deg1						I Joint Site an	nd Facility Insp	ection with Int	erface Contractor	at Location 9	- Deg1
■ A5080	Pre Site and Facility Inspection by Contractor at Location 9 - Deg2							Pre Site and	Facility Inspec	tion by Contracto	r at Location 9	- Deg2
■ A5090	Joint Site and Facility Inspection with Interface Contractor at Location 9 - Deg2						i i i i i i	Joint Site an	nd Facility Inspe	ection with Interfac	ce Contractor	at Location 9
■ A5100	Pre Site and Facility Inspection by Contractor at Location 10 - Deg1					C C	Pre Site and Fac	cility Inspection	n by Contracto	r at Location 10 -	Deg1	
A 5110	Joint Site and Facility Inspection with Interface Contractor at Location 10 - Deg1				† <u>-</u>		Joint Site and F	acility Inspecti	ion with Interfa	ice Contractor at I	Location 10 - D	Jeg1
A 5120	Pre Site and Facility Inspection by Contractor at Location 10 - Deg2						Pre Site a	and Facility Ins	spection by Co	ntractor at Location	on 10 - Deg2	
A5130	Joint Site and Facility Inspection with Interface Contractor at Location 10 - Deg2						1 1 1 1 1 1	1 1 1 1		Interface Contrac		10 - Deg2
A5140	Pre Site and Facility Inspection by Contractor at Location 11 - Deg1					1 Pre Site	and Facility Ins	pection by Co	ntractor at Loc	ation 11 - Deg1		
A5150	Joint Site and Facility Inspection with Interface Contractor at Location 11 - Deg1							1 1 1 1 1		tractor at Location	11 - Deg1	
A5160	Pre Site and Facility Inspection by Contractor at Location 11 - Deg2			::i		· i i· i i i i i i i i			i i ii i i	r at Location 11 -	i i i i i i	
A5170	Joint Site and Facility Inspection with Interface Contractor at Location 11 - Deg2							17 1 1 1	1 [1 1 1 1	ce Contractor at I	1 1 1 1 1 1	eg2
A5180	Pre Site and Facility Inspection by Contractor at Location 12 - Deg1						e and Facility Ins	1 1 1 1				· · · · · ·
■ A5190	Joint Site and Facility Inspection with Interface Contractor at Location 12 - Deg1								: : : : :	tractor at Location	12 - Dea1	
■ A5200	Pre Site and Facility Inspection by Contractor at Location 12 - Deg2							1 1 1 1		r at Location 12 -		
A5210	Joint Site and Facility Inspection with Interface Contractor at Location 12 - Deg2	2								ice Contractor at I		Ded2
■ A5220	Pre Site and Facility Inspection by Contractor at Location 13 - Deg1							1 1 1 1		r at Location 13 -		-
A5230	Joint Site and Facility Inspection with Interface Contractor at Location 13 - Deg1						1 1 1 1 1 1	i i i i		ce Contractor at I		ed1
■ A5240	Pre Site and Facility Inspection by Contractor at Location 13 - Deg2							1 1 1 1		ntractor at Location	: : : : : :	- 9
■ A5250	Joint Site and Facility Inspection with Interface Contractor at Location 13 - Deg2							1 1 1 1		Interface Contrac		i 13 - Deg2
A5260	Pre Site and Facility Inspection by Contractor at Location 14 - Deg1						- i i i i ii-	- + +	i r ii r i	by Contractor at L	i i i i i i	ii i i i-
■ A5270	Joint Site and Facility Inspection with Interface Contractor at Location 14 - Deg1							1 1 1 1		n with Interface Co	! ! ! ! ! !	1 71 1 1 1 1
A5300	Pre Site and Facility Inspection by Contractor at Location 15 - Deg1					1 Pre Site	and Facility Ins	- i - i - i - i -				
A5310	Joint Site and Facility Inspection with Interface Contractor at Location 15 - Deg1	 							: : : : :	tractor at Location	15 - Dea1	
A5320	Pre Site and Facility Inspection by Contractor at Location 15 - Deg2						1 1 1 1 1 1	1 1 1 1		r at Location 15 -		
A5330	Joint Site and Facility Inspection with Interface Contractor at Location 15 - Deg2	,		 		. i i i i i i i i <u>i</u> - :	- 6 - 56 - 65 - 66 - 52		i	ice Contractor at I	i i i i i i)ed2
A5330	Pre Site and Facility Inspection by Contractor at Location 16 - Deg1	-					e and Facility Ins	1 1 1 1 1				~9 <u>~</u>
A5350	Joint Site and Facility Inspection with Interface Contractor at Location 16 - Deg1							1 1 1 1		tractor at Location	16 - Dea1	
7,3330	Some Site and I domey inspection with interface contractor at Location 10 - Deg		i 1	<u> </u>	<u>: </u>	i i i i i i i i i i i i i i i i i i i	TO GITTE ACHILY !	المالية المالية	THE TACK COLL	a apior at Equation	pog!	-
Duo anari N. III	7MD DWD	Hammid 70 Link Di							Date F	Revision CI	hecked /	Approved
Programme No.: HZ		Hong Kong-Zhuhai-Macao Bri	•					14-No			LC	
Data Date: 14-Aug-	-15 Actual Work	Hong Kong Boundary Crossi	ına	4					-	·	-	

Data Date: 14-Aug-15

Remaining Work Critical Remaining Work summary



Date	Revision	Checked	Approved
14-Nov-16	Rev.: 0	WC	LC



Actual Work

Remaining Work

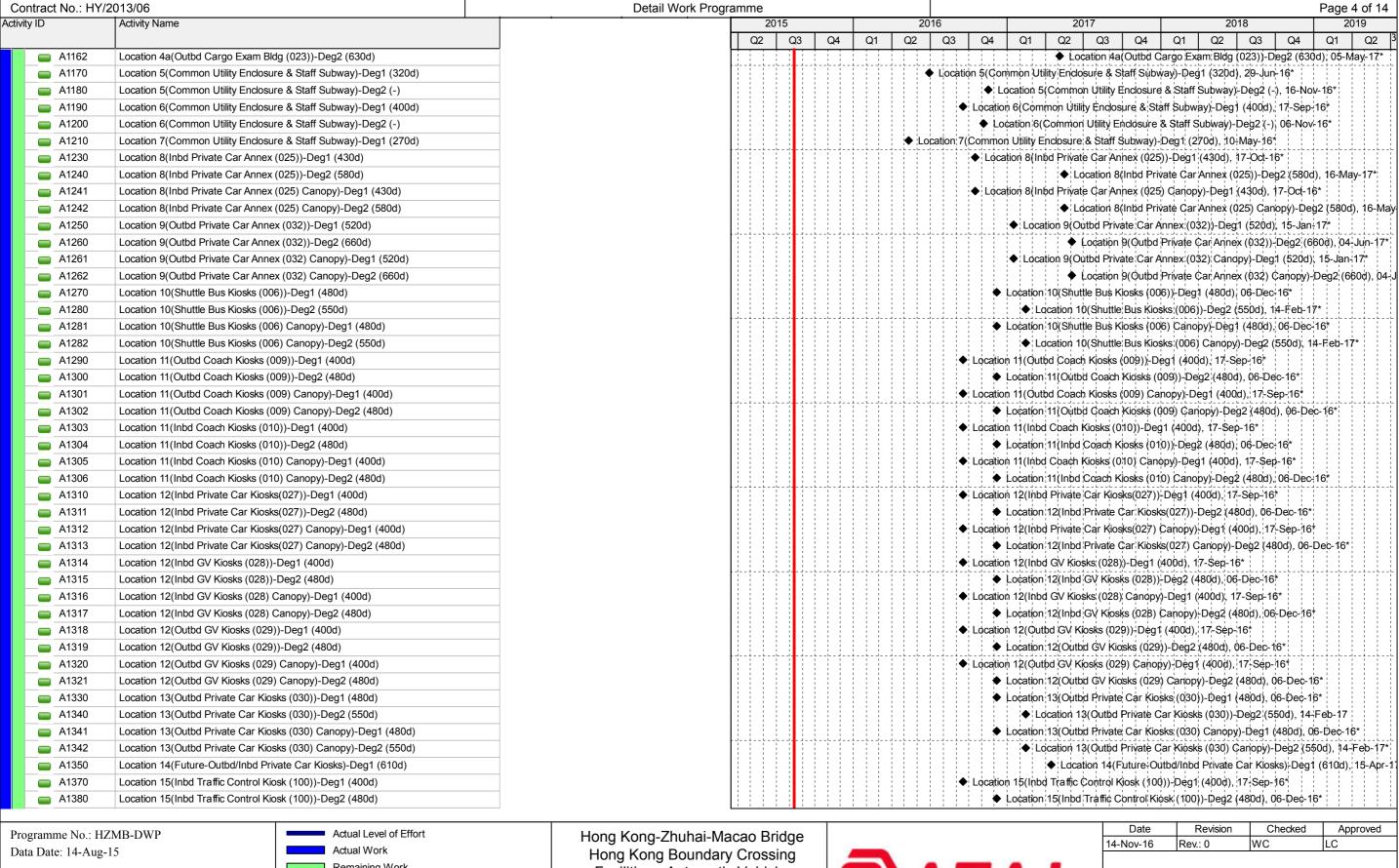
Critical Remaining Work

Milestone

summary

Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities - Automatic Vehicle Clearance Support System (AVCSS)

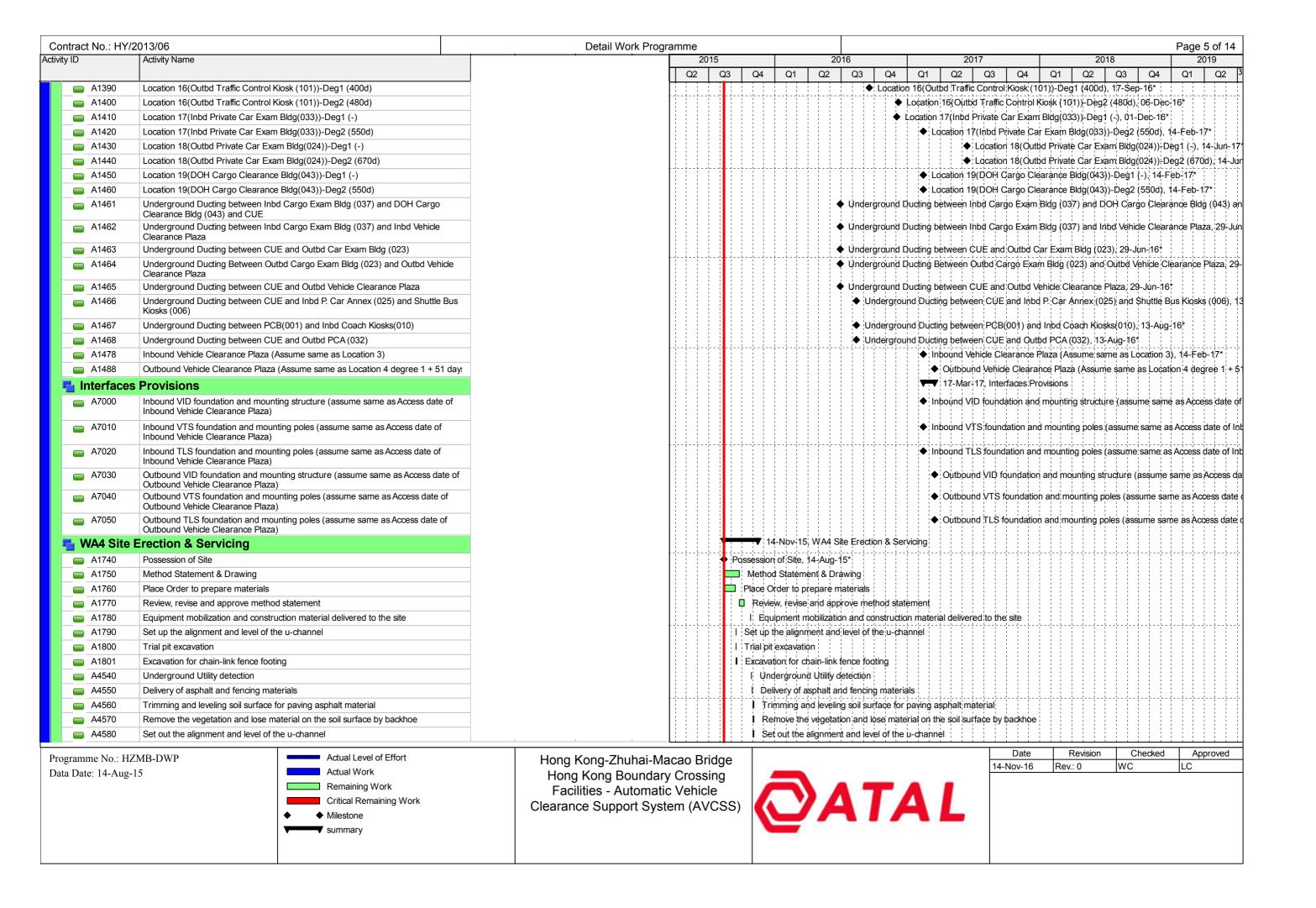


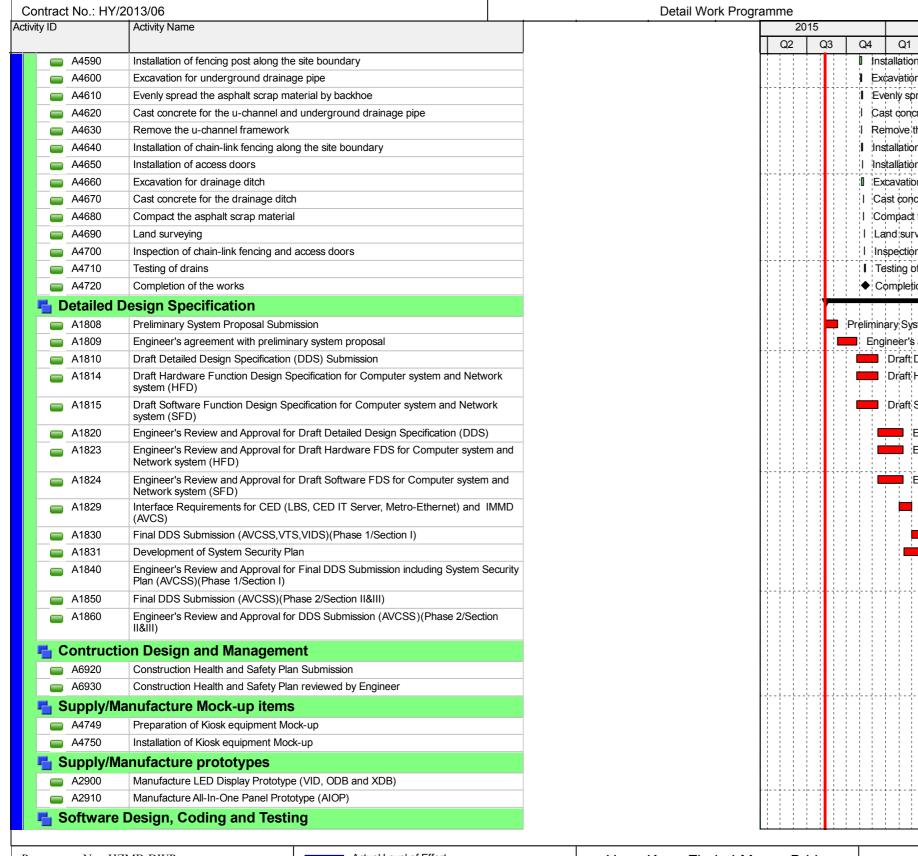


Remaining Work Critical Remaining Work ◆ Milestone summary

Facilities - Automatic Vehicle Clearance Support System (AVCSS)







Q2 Q3 Q4 Q2 Q3 Q1 Q2 Q3 Q1 Q2 Installation of fencing post along the site boundary I Excavation for underground drainage pipe I Evenly spread the asphalt scrap material by backhoe Cast concrete for the u-channel and underground drainage pipe Remove the u-channel framework Installation of chain-link fencing along the site boundary Installation of access doors Excavation for drainage ditch I Cast concrete for the drainage ditch I Compact the asphalt scrap material I Land surveying I Inspection of chain-link fencing and access doors I Testing of drains Completion of the works, 14-Nov-15 ■ 12-Aug-16, Detailed Design Specification Preliminary System Proposal Submission Engineer's agreement with preliminary system proposal Draft Detailed Design Specification (DDS) Submission Draft Hardware Function Design Specification for Computer system and Network system (HFD) Draft Software Function Design Specification for Computer system and Network system (SFD) Engineer's Review and Approval for Draft Detailed Design Specification (DDS) Engineer's Review and Approval for Draft Handware FDS for Computer system and Network system (HFD) Engineer's Review and Approval for Draft Software FDS for Computer system and Network system (SFD): Interface Requirements for CED (LBS, CED IT Server, Metro-Ethernet) and IMMD (AVC\$) Final DD\$ Submission (AVCSS,VT\$,VID\$)(Phase 1/Section I) Development of System Security Plan Engineer's Review and Approval for Final DDS Submission including System Security Plan (AVCSS) (Phase Final DD\$ Submission (AVCSS)(Phase 2/Section II&III) Engineer's Review and Approval for DDS Submission (AVCSS)(Phase 2/Section [I&II]) 05-Jul-16, Contruction Design and Management Construction Health and Safety Plan Submission Construction Health and Safety Plan reviewed by Engineer 20-Jul-16, Supply/Manufacture Mock-up items Preparation of Kiosk equipment Mock-up Installation of Kiosk equipment Mock-up ▼ 28-Jun-16, Supply/Manufacture prototypes Manufacture LED Display Prototype (VID, ODB and XDB) Manufacture All-In-One Panel Prototype (AIOP) 22-May-17, Software Design, Coding and Testing

2017

2016

Programme No.: HZMB-DWP Data Date: 14-Aug-15

Actual Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone
summary

Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities - Automatic Vehicle Clearance Support System (AVCSS)

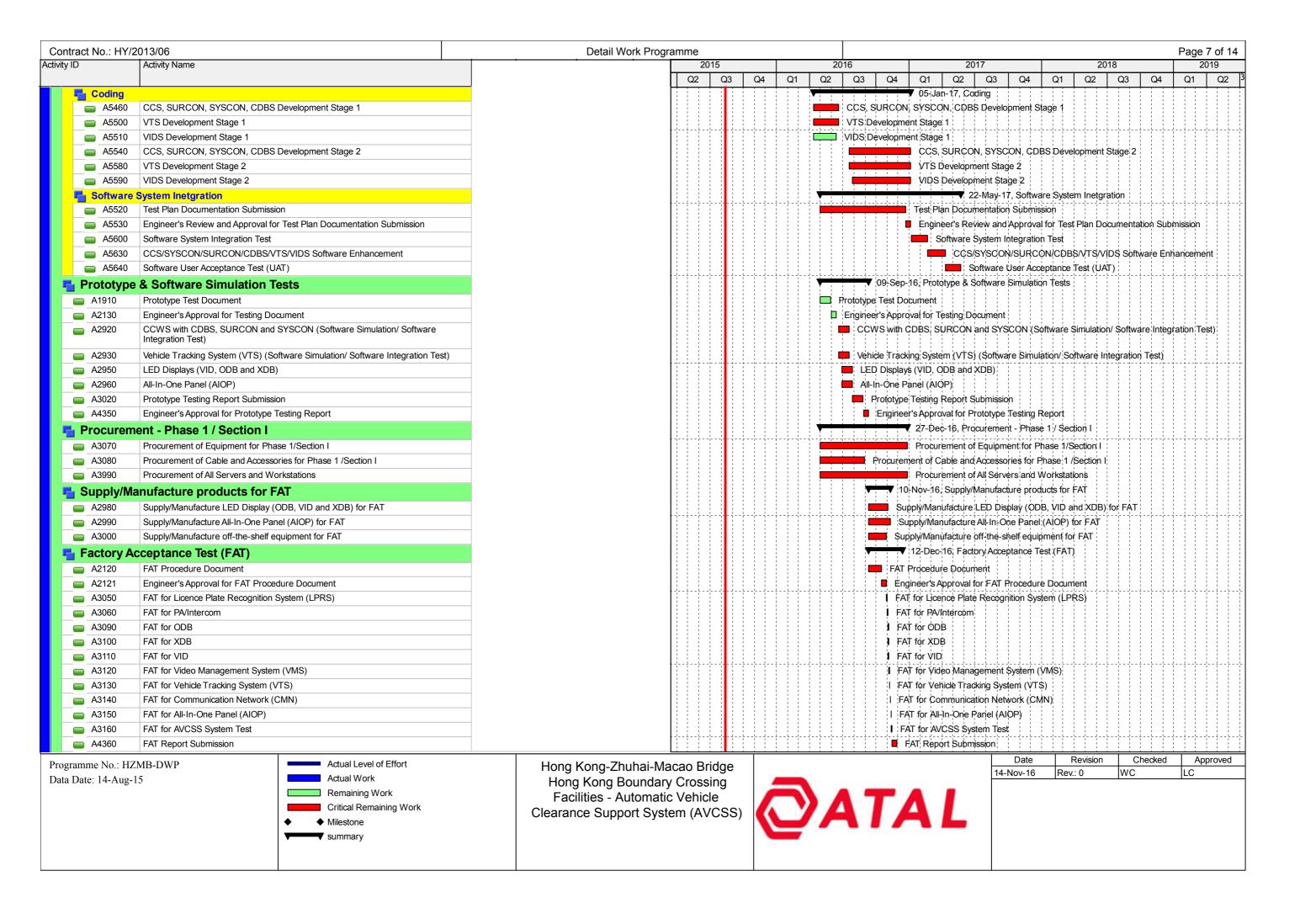


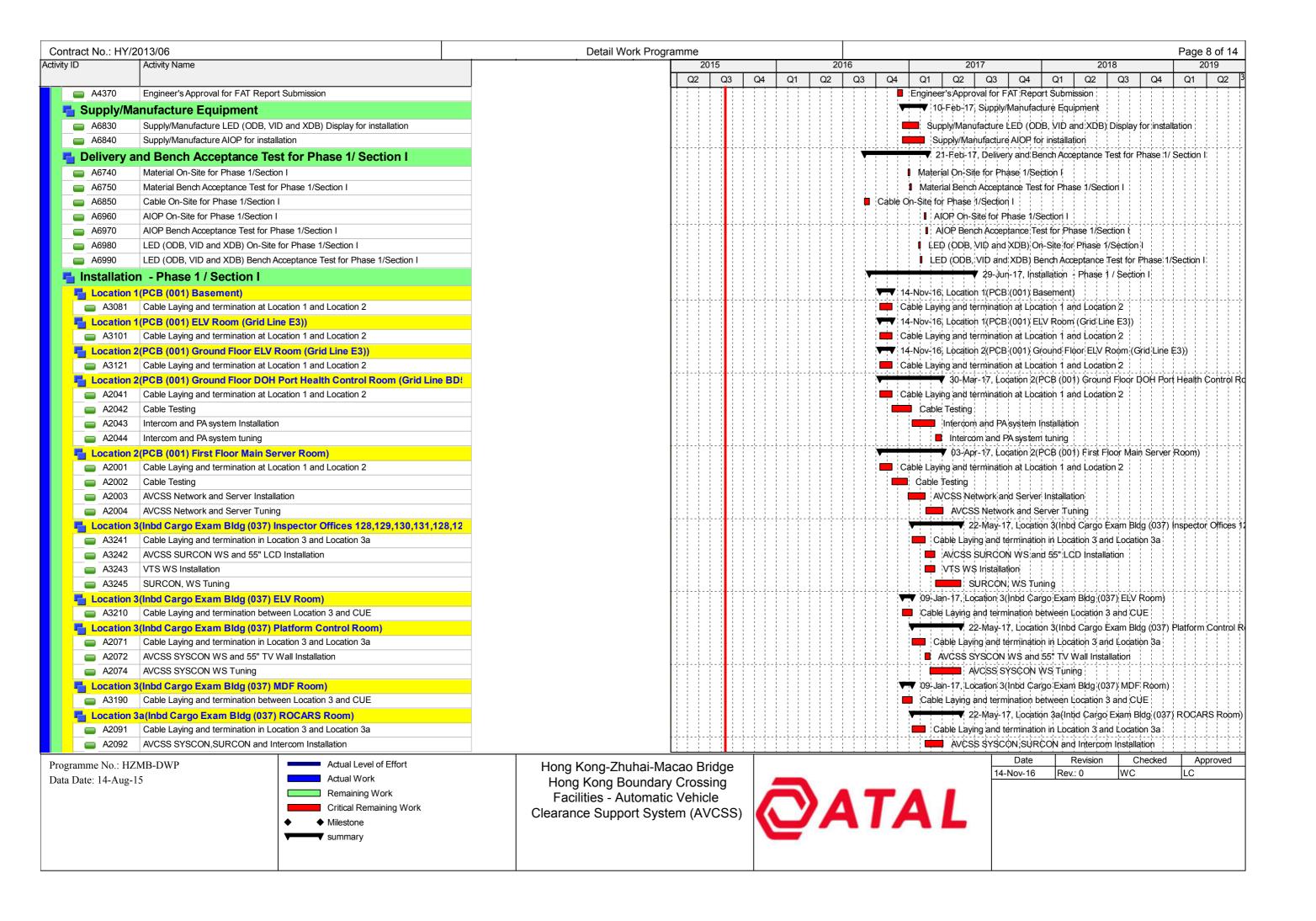
Date	Revision	Checked	Approved
14-Nov-16	Rev.: 0	wc	LC

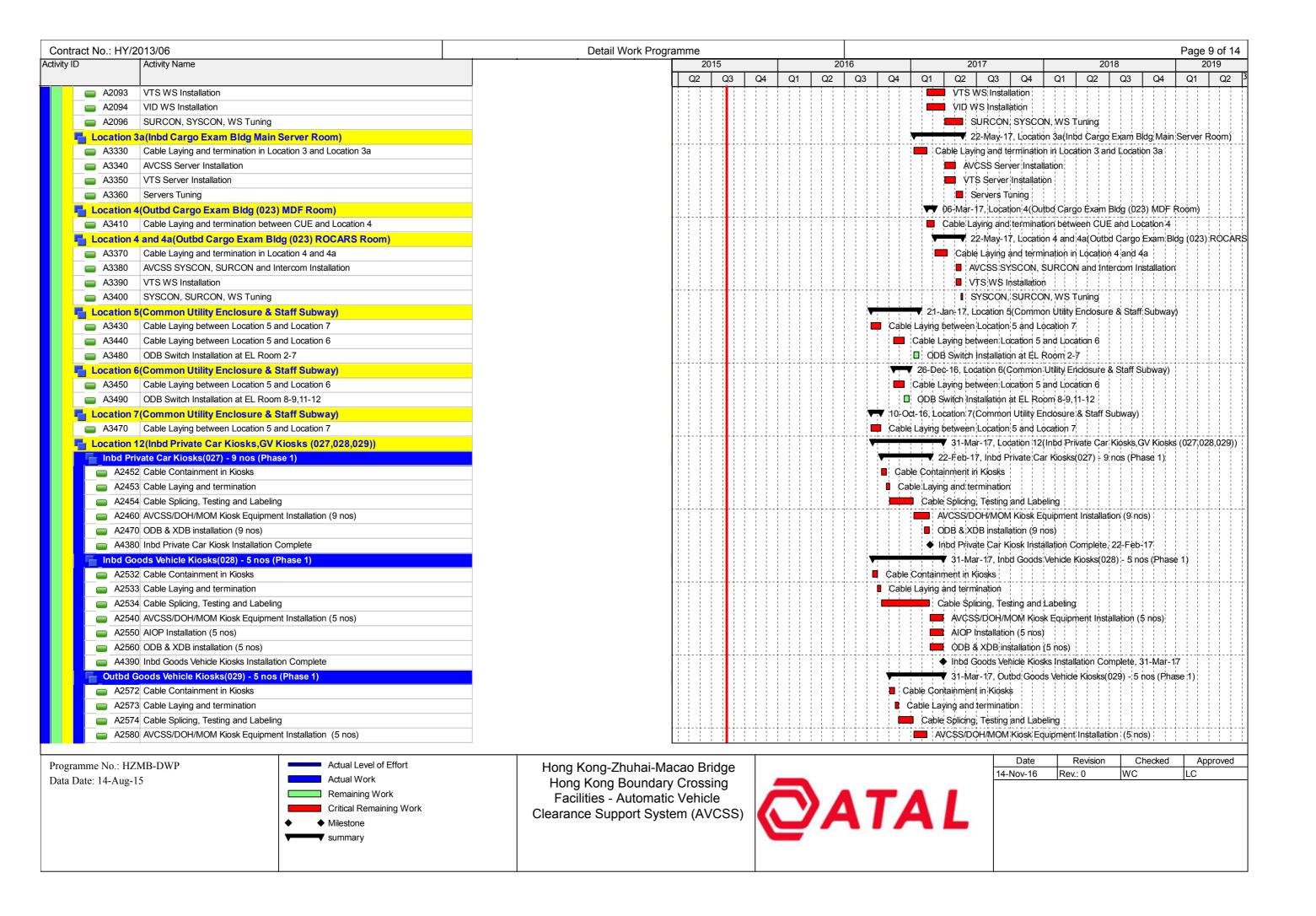
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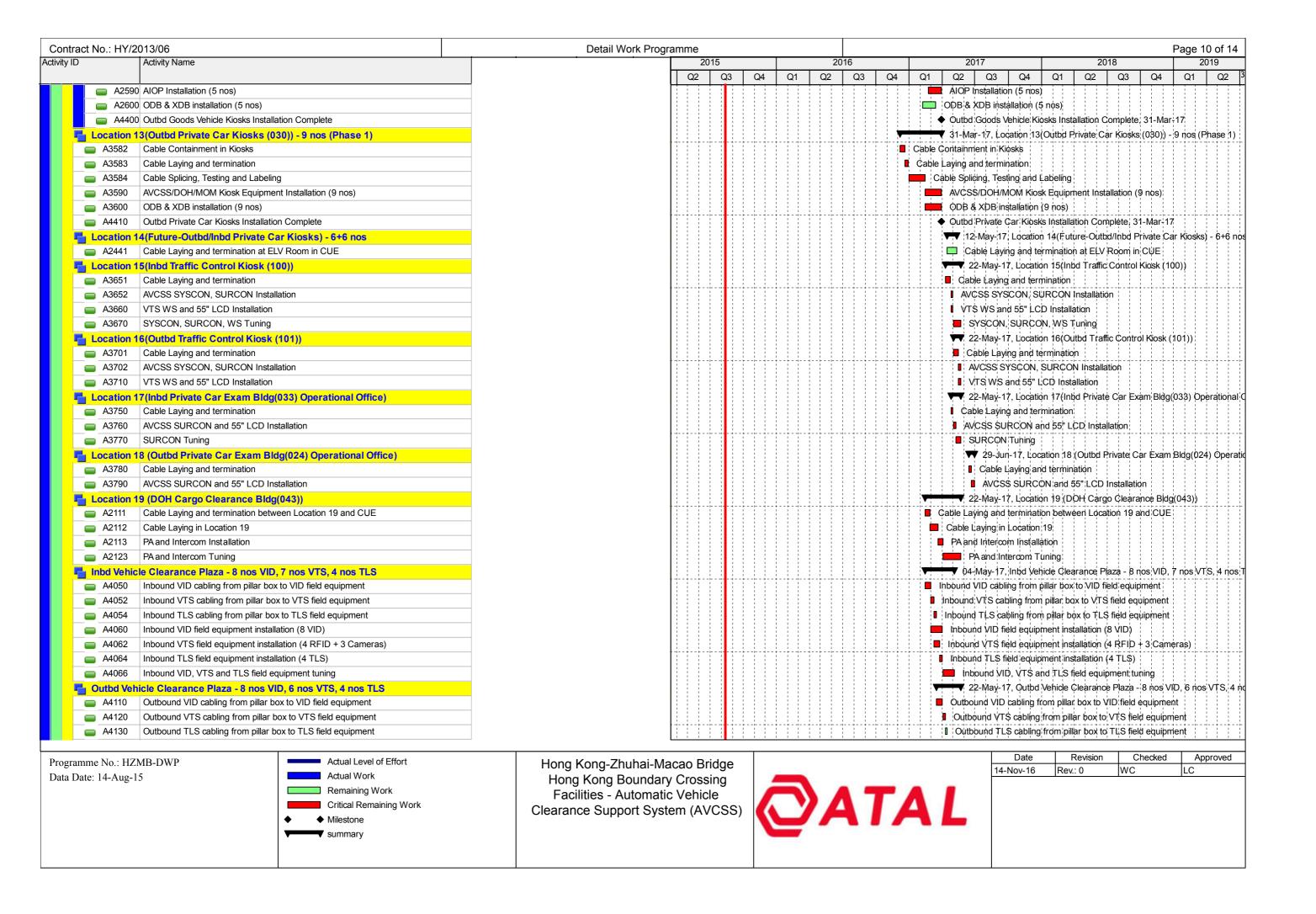
2019

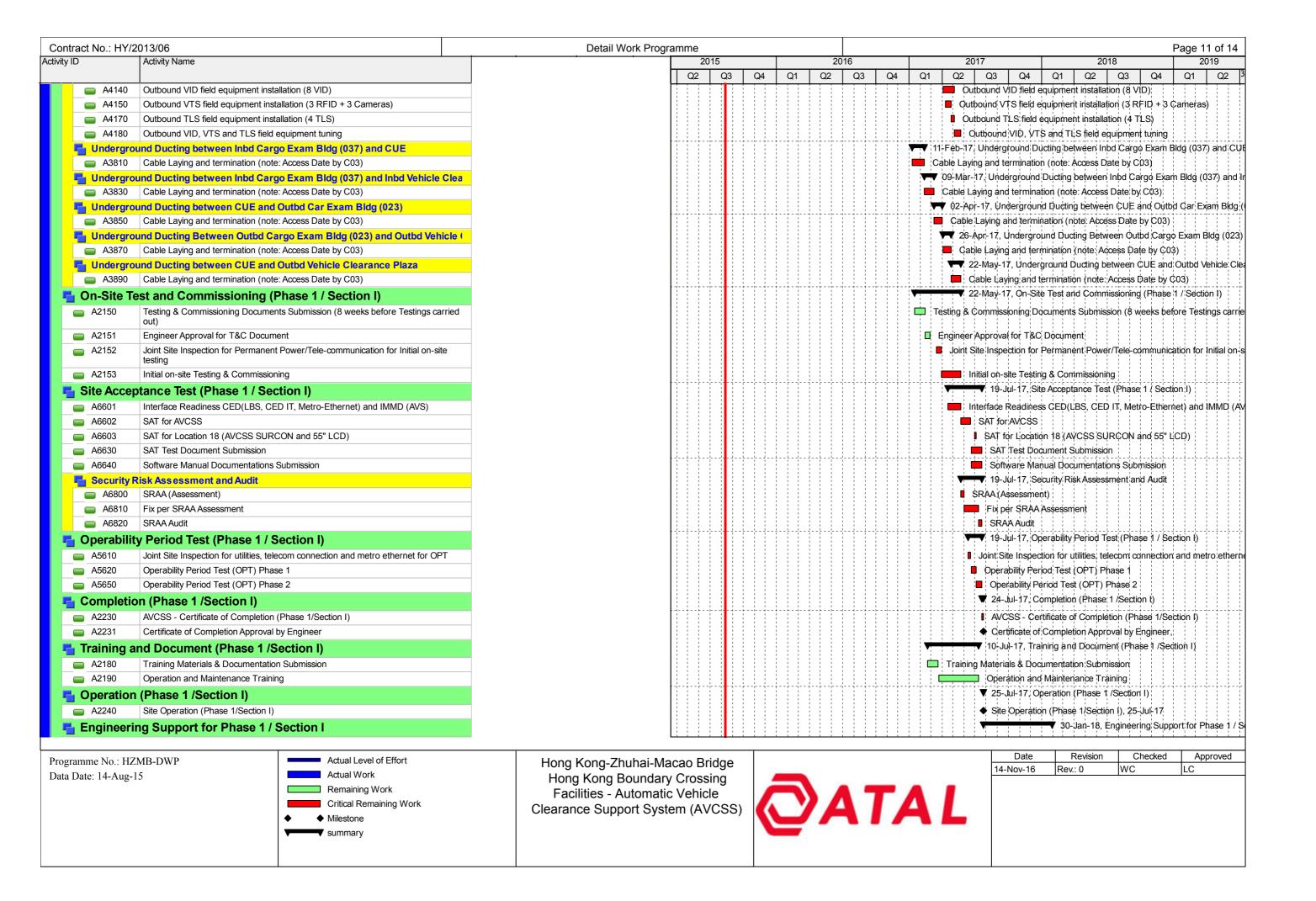
2018

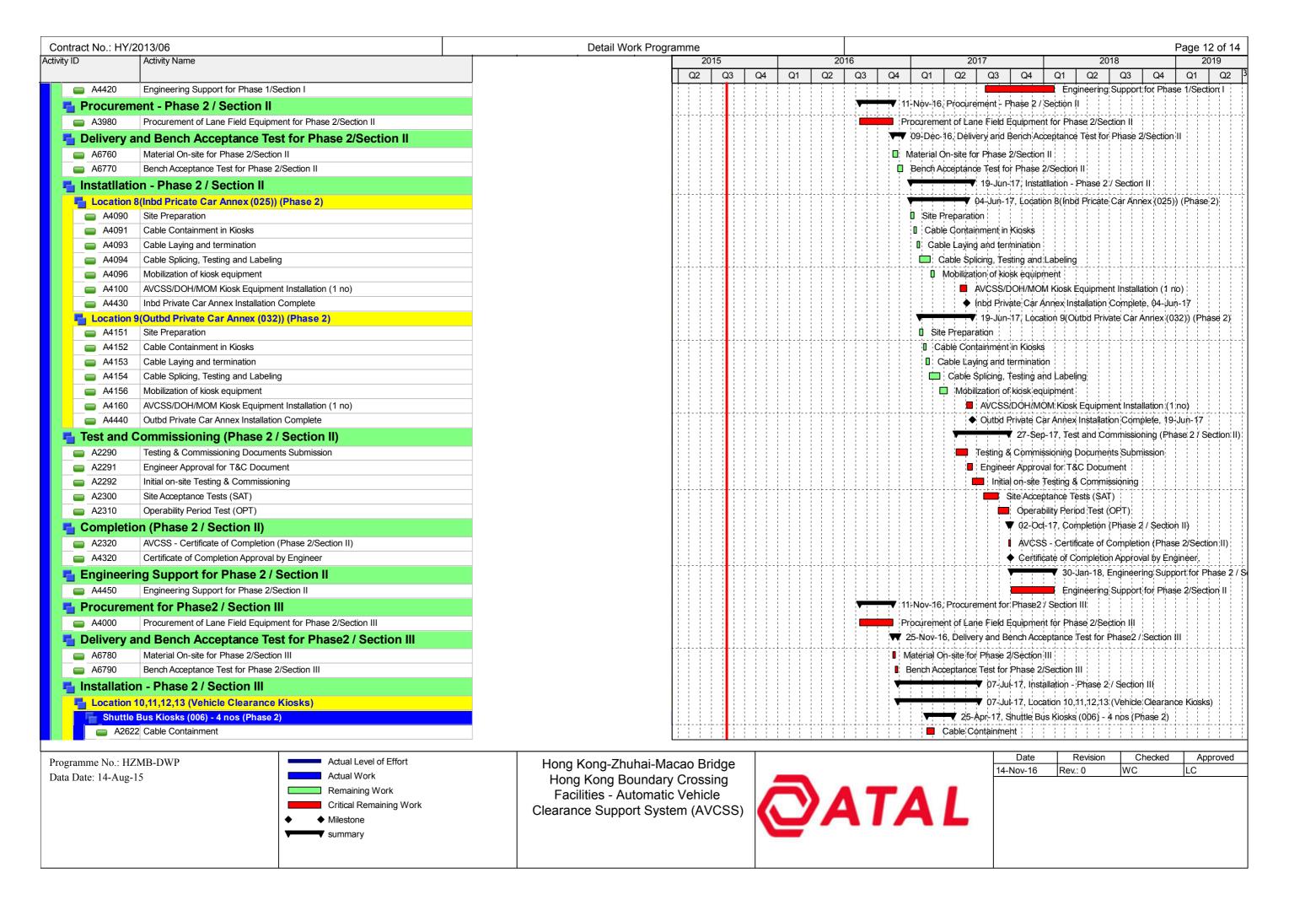


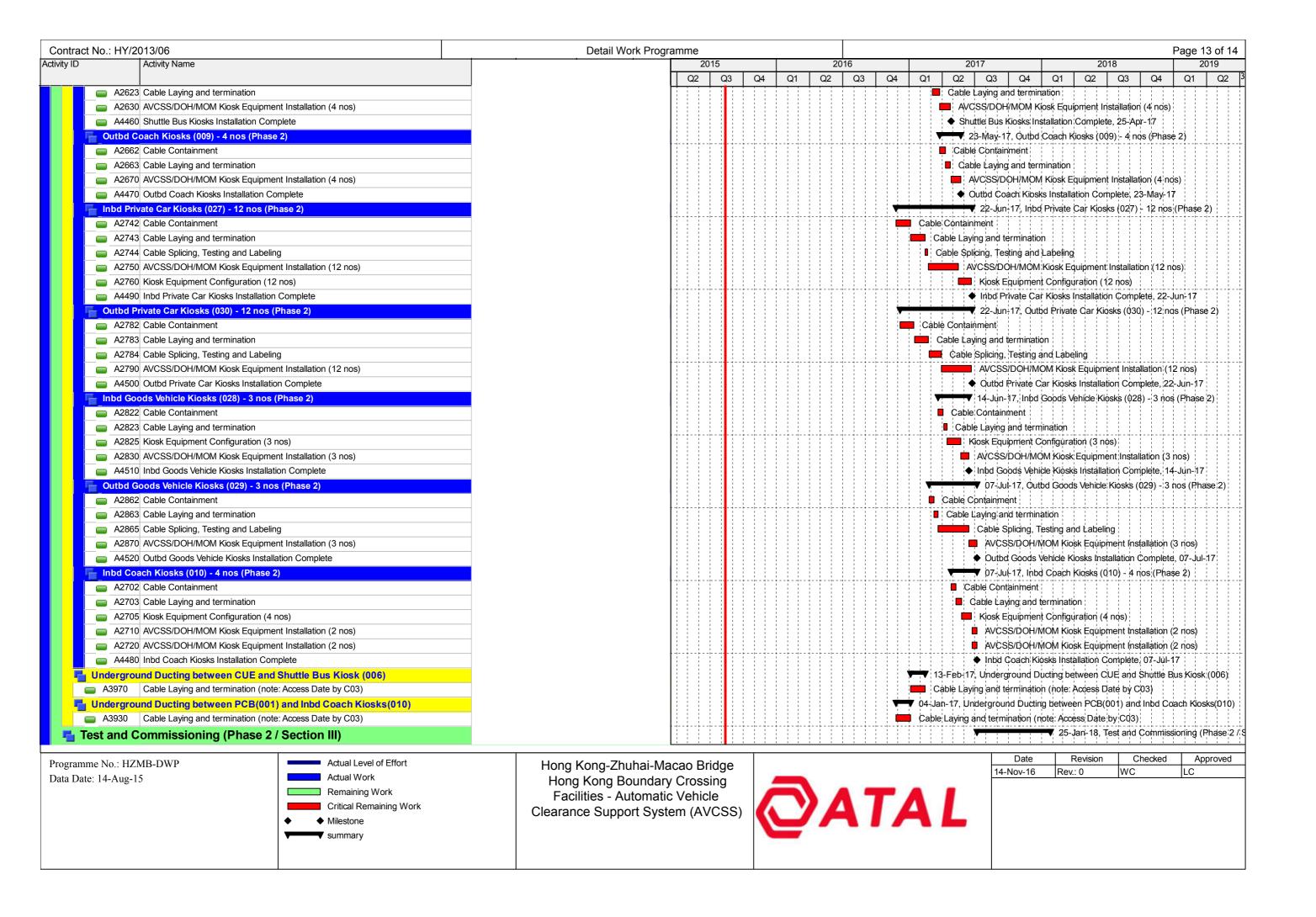


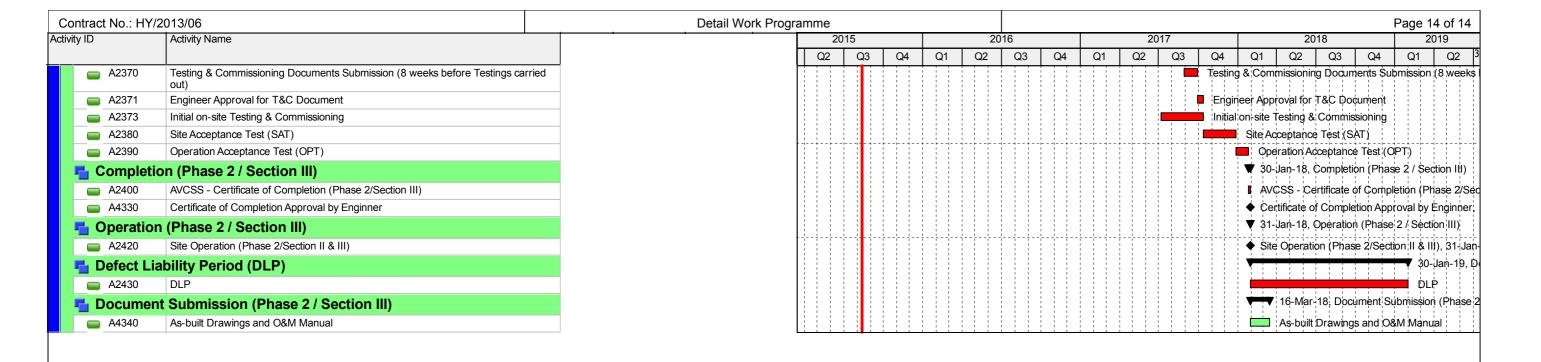












Programme No.: HZMB-DWP Data Date: 14-Aug-15

Actual Level of Effort

Actual Work

Remaining Work

Critical Remaining Work

Milestone

summary

Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities - Automatic Vehicle Clearance Support System (AVCSS)



Date	Revision	Checked	Approved
14-Nov-16	Rev.: 0	wc	LC