OPERATIONS SHEET

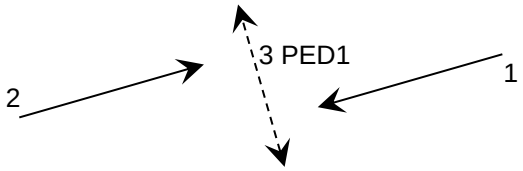
Location: Cashew Rd PC Near Bukit Panjang Pri School Int. No: 14264

Prepared by: Chen Eng Heng Date: 19 / 08 / 2022 Signal ID: 342

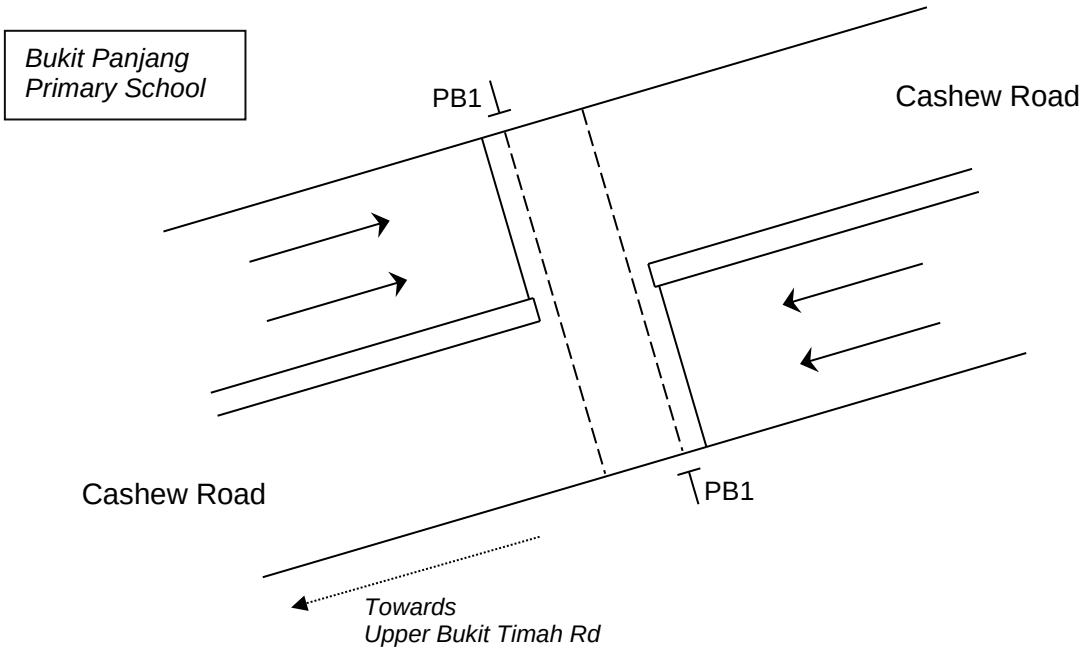
Checked by: Clayton Lim

Approved by: Simon Ho

1) Relocate PC
2) Change Walking Speed from 1.0 to 0.8m/sec



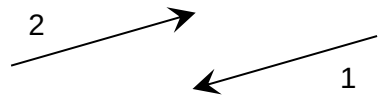
***SG4 – Audio Tactile**



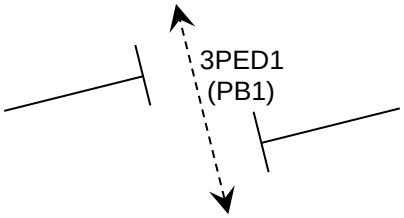
PHASING DIAGRAM

Location: Cashew Rd PC Near Bukit Panjang Pri School Int. No: 14264

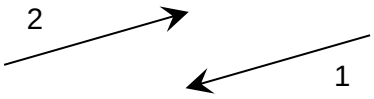
A



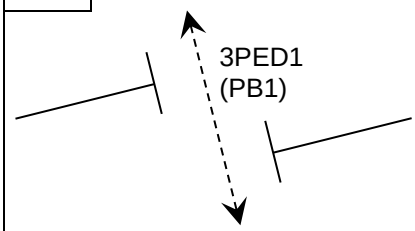
B



C



D



NOTES:-

- IF PHASE CHANGE SWITCH IS EQUAL OR MORE THAN TSM15, CONTROLLER IS TO SEND OUT MSS15 FLAG
- A PHASE IS PLACED ON PERMANENT DEMAND IN ALL MODES.
- PED 1 IS INTRODUCED WHEN PUSH BUTTON **PB1** IS ACTIVATED
- IN POLICE CONTROL MODE, RUN A AND B PHASE ONLY.
- IN MASTERLINK MODE, IF Y- FLAG IS ON PED 1 IS AUTO CALLED.
- IN FLEXILINK MODE, IF Y+ FLAG IS ON PED 1 IS AUTO CALLED.
- DURING PED1'S WALK, CLEAR PUSH BUTTON 14'S DEMAND.
- SG4 AUDIO TACTILE IS CONTROLLED BY Z+ FLAG

DETECTOR FUNCTION

Location: Cashew Rd PC Near Bukit Panjang Pri School Int. No: 14264

DETECTOR /PUSH BUTTON NO	CALL PHASE	LOCKING	NON LOCKING	SET VIG ON PHASE	EXTEND PHASE	SPECIAL	DETECTOR ALARMS			PLAN REFERENCE
							FAULT SIMULATION			
							CALL & EXTEND	CALL ONLY	DISABLE	
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15						PHASE CHANGE SWITCH			✓	
16						POLICE CONTROL SWITCH			✓	
PB1	B, D	✓				***PUSH BUTTON PED1***		✓		
PB2										
PB3										
PB4										
PB5										
PB6										
PB7										
PB8										

TICK IF DETECTOR FAILURE CAUSES AN ALARM ON DET. 16.

INTERGREEN, PEDESTRIAN TIMES AND SPECIAL FUNCTIONS

Location: Cashew Rd PC Near Bukit Panjang Pri School Int. No: 14264

PHASE	CLEARANCE MOVEMENT	CLEARANCE DISTANCE	INTERGREEN		
			AMBER	RED	TOTAL
A			3	3	6
B			3		3
C			3	3	6
D			3		3
E					
F					
G					

PED NO.	PHASE	WALK		CLEARANCE TIME	
		DISTANCE (m)	GREEN TIME	1	2
1	B/D	15m	6	19	
2					
3					
4					
5					
6					
7					

Pedestrian Walking Speed: **0.8** m/s

SPECIAL FACILITIES

SIGNAL GROUP	HOUR	MINUTE	SECOND	FUNCTION	REMARKS
SG 4	21	0	0	Audio Tactile Off	Controlled by Z+ Flag
	6	30	0	Audio Tactile On	

PRE-EMPTION

SIGNAL GROUP	PHASE	FUNCTION	REMARKS

CONTROLLER TIMESETTING

Location: Cashew Rd PC Near Bukit Panjang Pri School Int. No: 14264

	PHASE	A	B	C	D	
	INTERVAL	1	2	3	4	Range
RED/YELLOW	1					0 – 5
LATE START	2					0 – 20
MINIMUM GREEN	3	10	6	14	6	5 – 20
INCREMENT	4					0 – 5
MAX. V. I. G.	5					0 – 40
MAX. EXT. GREEN	6	32		0		0 – 150
EARLY CUT-OFF	7					0 – 20
AMBER	8	3	3	3	3	3 – 7
ALL RED	9	3		3		0 – 15
SPECIAL ALL RED	10					0 – 15
GAP 1	11					0 –10
GAP 2	12					0 –10
GAP 3	13					0 –10
GAP 4	14					0 –10
HEADWAY 1	15					0 – 5
HEADWAY 2	16					0 – 5
HEADWAY 3	17					0 – 5
HEADWAY 4	18					0 – 5
WASTE 1	19					0 – 50
WASTE 2	20					0 – 50
WASTE 3	21					0 – 50
WASTE 4	22					0 – 50
MAXIMUM 1	23					0 – 150
MAXIMUM 2	24					0 – 150
MAXIMUM 3	25					0 – 150
MAXIMUM 4	26					0 – 150

ALTERNATE TIME SETTING (RANGE 0-200)
('B' ENTER)

ALT. NO	TIME
11	22
12	
13	
14	
15	50 sec
16	

Maximum V. A. Cycle Time: _____

☑ In Flexilink Operation,

If Z− flag = C (255), A phase's Max Extension Green = TSM 11

☑ In Isolated Operation,
A phase = Max. Ext. Green

	PEDESTRIAN NO.	1	2	
	INTERVAL	17	18	Range
DELAY	1			0 – 20
WALK	2	6		0 – 40
CLEARANCE 1	3	19		0 – 40
CLEARANCE 2	4			0 – 10
PAC		7		

CO-ORDINATION DATA

Location: Cashew Rd PC Near Bukit Panjang Pri School Int. No: 14264

SPECIAL FUNCTIONS

SIGNAL	FUNCTION
Y− FLEXI	CONTINUOUS
Y− MASTER	AUTO CALL PUSH BUTTON PED 1
Y+ FLEXI	
Z− FLEXI	A PHASE ALTERNATE MAXIMUM EXTENSION GREEN (TSM11)
Z− MASTER	
Z+ FLEXI	SET SG4 AUDIO TACTILE ON
Z+ MASTER	
R− FLEXI	
R+ FLEXI	
Q− FLEXI	
Q+ FLEXI	
Z1 MASTER	
Z MASTER	
Z MASTER	
Z MASTER	

LOOK AHEADS AND RELEASES

Phase Sequence 1		
PHASE	LOOK AHEAD	RELEASE
A	NO	
B	NO	Auto
C	NO	
D	Yes to A	Auto
E		
F		
G		

Phase Sequence 2		
PHASE	LOOK AHEAD	RELEASE
A	NO	
B		
C		
D		
E		
F		
G		

The following phases can be inhibited in Flexilink by omitting the call pulses in the plan data _____

NO	PHASE SEQUENCE
1 (No)	A B C D
2 ( )	

GLIDE INTERSECTION DATA

Location: Cashew Rd PC Near Bukit Panjang Pri School Int. No: 14264

Note: The data shown on this page should be entered when the intersection is first placed on line. This data is not necessarily used for Master Link operation.

SLOT 19 = 4, 1, 1	E.g. x, y, z. x = No of Phases y = No of Split Plans z = No of PEDs
INT = 14264	
VC = 5	
CS =	
COM = Port 3 / 2	
PK =	
S# = 2	
LM = F	
RMN =	
DCL =	
VOLS =	
VP# =	
AT = 6	
BT = 3	
CT = 6	
DT = 3	
ET =	
FT =	
GT =	

Date:	Date:
PP1 = 0, 0 ^A	PP1 =
PP2 = 0, 0 ^A	PP2 =
PP3 = 0, 0 ^A	PP3 =
PP4 = 0, 0 ^A	PP4 =

Note: Always LM = F initially

Variation Parameter (VP)

VP1 =	VP8 =	VP15 =	VP22 =	VP29 =
VP2 =	VP9 =	VP16 =	VP23 =	VP30 =
VP3 =	VP10 =	VP17 =	VP24 =	VP31 =
VP4 =	VP11 =	VP18 =	VP25 =	VP32 =
VP5 =	VP12 =	VP19 =	VP26 =	VP33 =
VP6 =	VP13 =	VP20 =	VP27 =	VP34 =
VP7 =	VP14 =	VP21 =	VP28 =	VP35 =

W1 = 0		W4 =		
W1T = 22	P−	W4T =	P−	P+
W2 =		W5 =		
W2T =	P− P+	W5T =	P−	P+
W3 =		W6 =		
W3T =	P− P+	W6T =	P−	P+

SPLIT PLANS

	SF / FEATURES	1	2	3	4	SF / FEATURES	5	6	7	8
A	PD FG NG B	< 0 >B								
B	FS C	28# C								
C	PD FG NG D	20# D								
D	A	28# A								
E										
F										
G										

PLAN DATA

Location: Cashew Rd PC Near Bukit Panjang Pri School Int. No: 14264

PLAN

('E' ENTER)

		1	2	3	4	5	6	7	8	9	10
0	**CL**										
1	**A**										
2	**B**										
3	**C**										
4	**D**										
5	**E**										
6	**F**										
7	**G**										
8	**R−**										
9	**R+**										
10	**Y−**	C	C		C	C	C	C			
11	**Y+**										
12	**Z−**	N	N		N	C	N	N			
13	**Z+**	C	C		C	N	N	C			
14	**Q−**										
15	**Q+**										
16	**XSF (9-16)***										
17	**XSF (1-8)***										

* A digit hexadecimal number which signifies which XSF bits are used; e.g. AO signifies bits 14 & 16 are set.

NOTE: C = Continuous (255) N = Not Used (254)

PLAN SCHEDULE

('F' ENTER)

CODE	HOUR	MINUTE	PLAN
8	0	0	5
8	**6**	**30**	**1**
8	9	0	7
8	12	0	2
8	17	0	4
8	**21**	**0**	**6**
8	23	0	5
7	0	0	5
7	**6**	**30**	**1**
7	9	0	7

CODE	HOUR	MINUTE	PLAN
7	12	0	4
7	15	0	2
7	**21**	**0**	**6**
7	23	0	5
1	0	0	5
1	**6**	**30**	**7**
1	9	0	7
1	14	0	2
1	**21**	**0**	**6**
1	23	0	5

Pedestrian and Vehicle Signal Groups Interlock Table

Location: Cashew Rd PC Near Bukit Panjang Pri School Int. No: 14264

	Phase A	Phase B	Phase C	Phase D	Phase E	Phase F	Phase G
SG 1	SGAR	RED	SGAR	RED			
SG 2	SGAR	RED	SGAR	RED			
SG 3	DON'T	WALK	DON'T	WALK			
SG 4	AUDIO TACTILE						
SG 5							
SG 6							
SG 7							
SG 8							
SG 9							
SG 10							
SG 11							
SG 12							
SG 13							
SG 14							
SG 15							
SG 16							

Legend:

GAR	Green, Amber, Red
GEAR	Green, Amber, Red (With ECO)
RED	Red
SGRN	Special Green
SOFF	Special Off
WALK	PED Walk, Clearance 1 and Clearance 2
SWALK	Special PED Walk, Clearance 1 and Clearance 2
DON'T	PED Red

Appendix A

Signal Groups Conflict Matrix

Location: Cashew Rd PC Near Bukit Panjang Pri School Int. No: 14264

('C16' ENTER)

SG	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1			X													
2			X													
3	X	X														
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																