

TO	1. SENIOR ENGINEER, CONTROLLER APPLICATIONS 2. STEVE BELZ, PROGRAM DELIVERY	ACTION	DATE
FROM	NATHAN CORCORAN	DATE	22/02/21
SITE	MIDLAND HIGHWAY / HOWARD STREET	SITE NO.	6290
REGION	METRO NORTH WEST	MUNICIPALITY	GREATER BENDIGO

GENERAL

Works Program Job?	No	Project Number	BC122C
Classification	MINOR	Works Order Number	4A007273

EXISTING CONTROLLER DETAILS

Type	PSC 2003	Software Version & Release	V5 R82	Lanterns	QH
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CONTROLLER APPLICATIONS

Target Date for Draft Opsheet	26/02/2021
Target Date for completion of Program	19/03/2021

Prepare Interlocking

PERSONALITY CHECKSUMS

	Hex	Octal
Total	35	65
Times	15	25
Pers	20	40

Dispatched 29/03/21

Update Graphics, Site Notes Yes ☒ Site ID Revision updated to C

Description of changes Modified phasing, LED upgrade, changes to P1 and P2

PROGRAM DELIVERY - SIGNAL INSTALLATION

<input checked="" type="checkbox"/> Changes to signal hardware	<input type="checkbox"/> Changes to interlocking
<input type="checkbox"/> Additional detectors	<input type="checkbox"/> Changes to existing detector numbering
<input type="checkbox"/> Upgrade controller software to	
<input type="checkbox"/> Other changes	
<input checked="" type="checkbox"/> Place new operation specification in controller	

PRIOR NOTICE

A job must be entered into RAI Action database before this PROM change will be allowed.

<input checked="" type="checkbox"/> SCATS data changes - notify	NATHAN CORCORAN	Ext	1210
	OR	DARREN VAUGHAN	Ext 1210

before 3:00pm on the day before switch on.

SCATS Data Changes - Slot data, delete RAM

TRAFFIC MANAGEMENT CENTRE

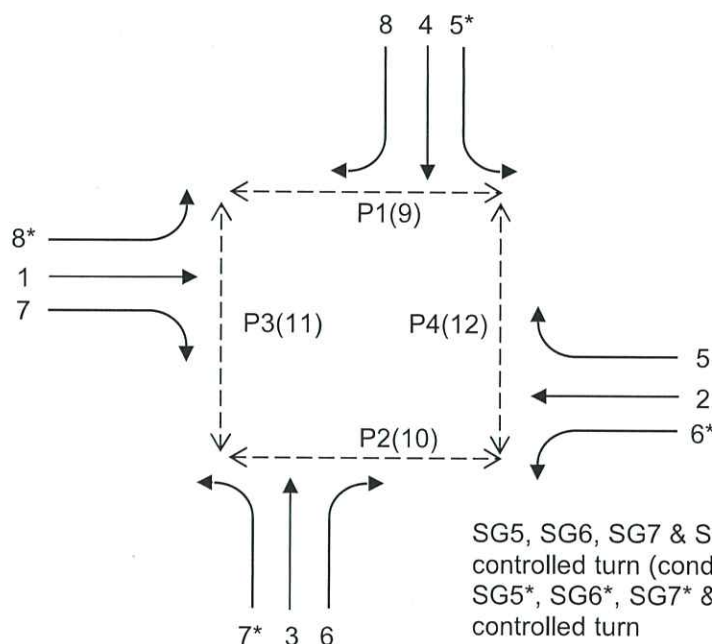
<input type="checkbox"/> Checksum update only
<input type="checkbox"/> Changes to trim or manual intervention features required
<input checked="" type="checkbox"/> Please notify NATHAN CORCORAN (x1210) on job completion.

DATE PROM INSTALLED

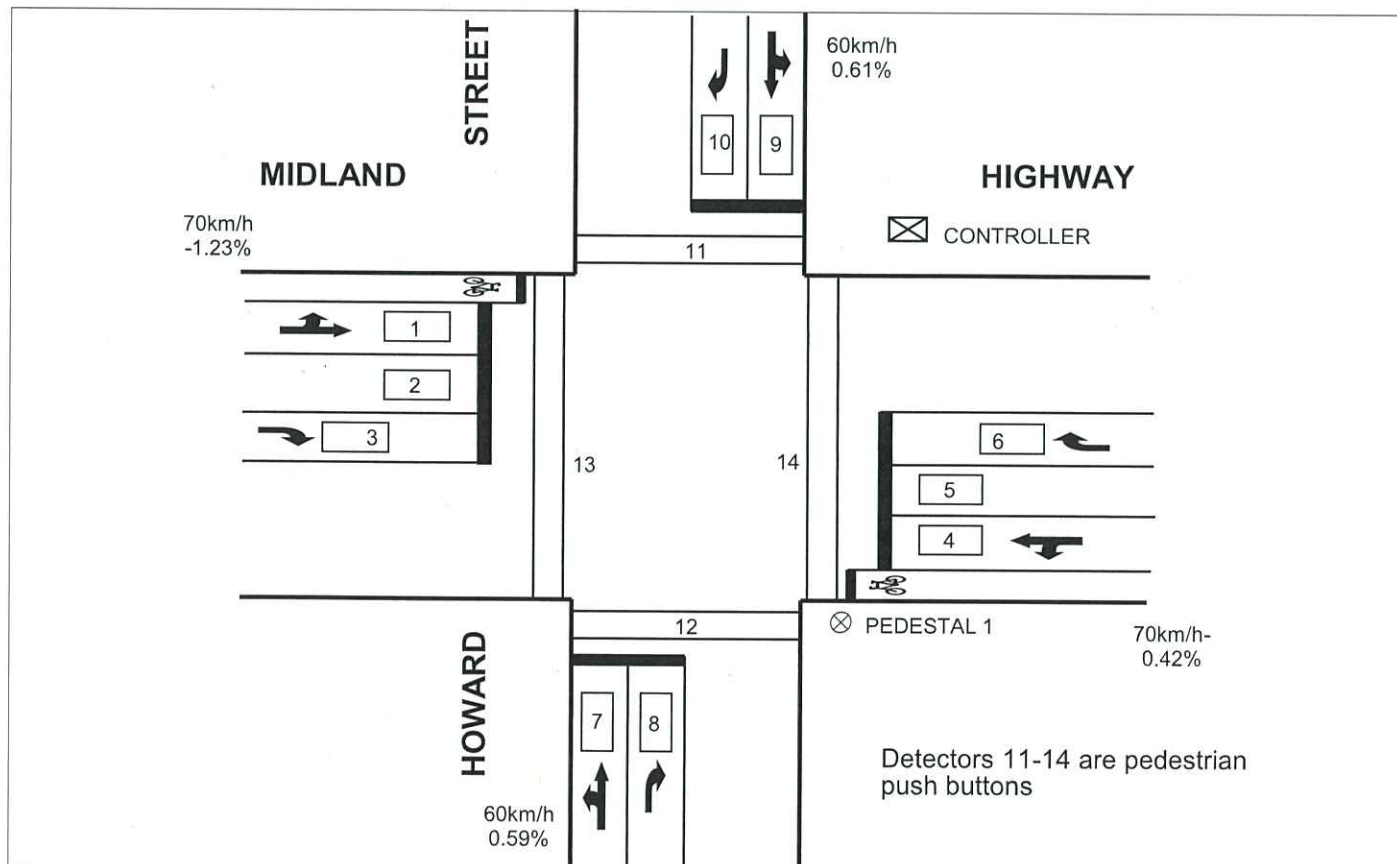
CONTROLLER OPERATION SPECIFICATION

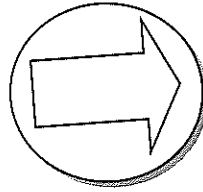
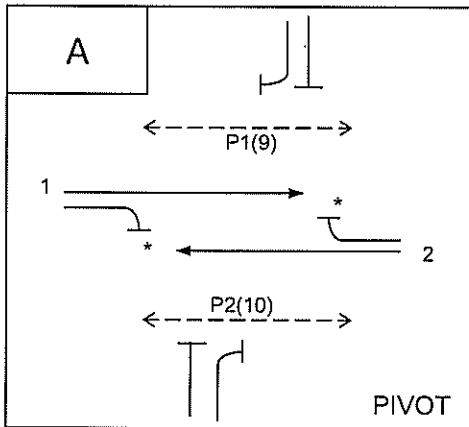
SITE NAME	MIDLAND HIGHWAY / HOWARD STREET		SITE NO.	6290
MUNICIPALITY	GREATER BENDIGO	DESIGNED BY	NATHAN CORCORAN	DATE 22/02/21
PLAN NO.	4A007273	DESIGN CHECKED		DATE 9/3/21
CONTROLLER TYPE	PSC 2003	PROM CHECKED		DATE 29/3/21

GROUP ALLOCATION



DETECTOR MAP

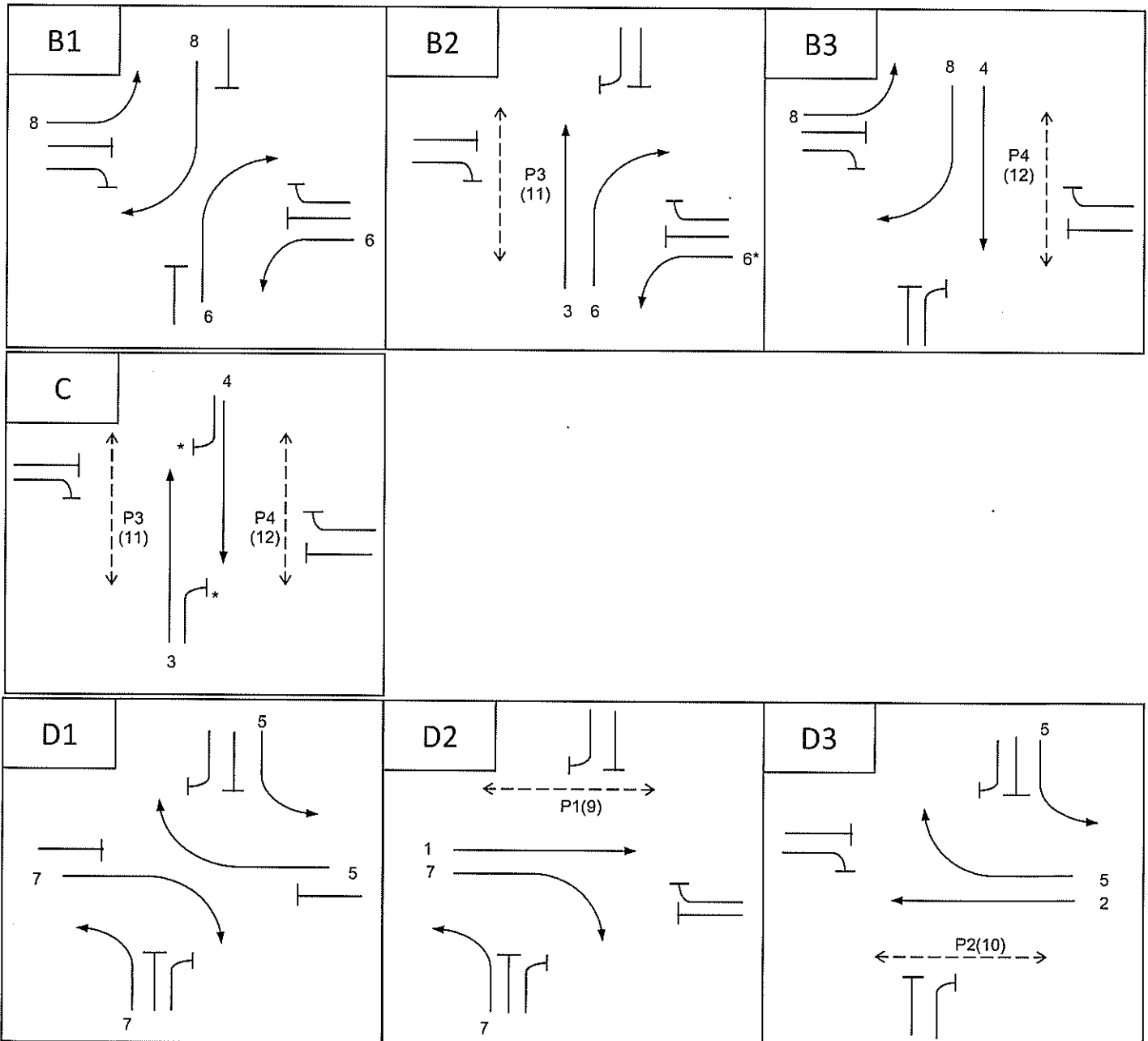


PHASING DIAGRAM

Refer General Notes

* Red arrows drop in AØ and CØ

PHASE	PROHIBITED PHASE CHANGES TO	REVERSION ON MAXIMUM	MAXIMUM V.I.G ON REVERSION
A	D		
C	B		

V.A. SEQUENCE ABCD

DESIGNED BY: NATHAN CORCORAN

DATE 22/02/21

Document ID: 20036930 6290bRNWOpSheet

SITE NAME

MIDLAND HIGHWAY / HOWARD STREET

SITE NO.

6290

DETECTOR FUNCTIONS

DETECTOR No.	Internal / External	Input Number	CALL PHASE	LOCKING CALL	NON-LOCKING CALL	SET VIG ON PHASE	EXTEND PHASE	SPECIAL FUNCTION			DETECTOR ALARMS					
								Detector Type	Description	Refer Special Notes	DA Category	Disable	DA on S/C only	Fault Simulation		
														Call & Extend	Call Only	Ignore Alarm
1	I	1	A	✓			A				0			✓		
2	I	2	A	✓			A				0			✓		
3	I	3	AD	A	D		AD			✓	0		✓	✓		
4	I	4	A	✓			A				0			✓		
5	I	5	A	✓			A				0			✓		
6	I	6	AD	A	D		AD			✓	0		✓	✓		
7	I	7	C	✓			C				0		✓	✓		
8	I	8	BC	C	B		BC			✓	0		✓	✓		
9	I	9	C	✓			C				0		✓	✓		
10	I	10	BC	C	B		BC			✓	0		✓	✓		
11	E	1	A		✓			P1		✓	6		✓			
12	E	2	A		✓			P2		✓	6		✓			
13	E	3	C		✓			P3		✓	6		✓			
14	E	4	C		✓			P4		✓	6		✓			
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																
25																
26																
27																
28																
29																
30																
31																
32																

DESIGNED BY: NATHAN CORCORAN

DATE 22/02/21

APPROACH DEFINITIONS

PHASE APPROACHES

Approach No	EXTENDING DETECTORS	APPROACH TIMER AND TIMESETTING DEFINITION*	SIGNAL GROUP	APPROACH EXPIRY (EXPAP)	Refer Special Notes
1	1, 2	A11	1		
2	4, 5	A22	2		
3	3	D11, A33	7, 1		
4	6	D22, A44	5, 2		
5	8	B11, C33	6, 3		
6	10	B22, C44	8, 4		
7	7	C11	3		
8	9	C22	4		
9					
10					
11					
12					
13					
14					
15					
16					

* There are 8 approach timers and 4 approach timesettings available per phase:

- Where there are 4 or fewer approaches per phase, allocate one timesetting to each timer.

For example: A11, A22, A33, B11, C11.

- Where there are more than 4 approaches per phase, two or more timers must have the same timesetting.

For example: A11, A21, A32, A43, A54, B11.

SPECIAL APPROACHES

Approach No	EXTENDING DETECTORS	APPROACH TIMESETTING	SIGNAL GROUP	DESCRIPTION	Refer Special Notes
1					
2					
3					
4					

GENERAL NOTES

SUMMARY OF XSF FLAGS

(Communications Operation of XSF flags is required)

- XSF5 – Selects special maximum for SG5 in DØ Special Purpose Timesetting no. 9 (All Modes)
- XSF6 – Selects special maximum for SG6 in BØ Special Purpose Timesetting no. 10 (All Modes)
- XSF7 – Selects special maximum for SG7 in DØ Special Purpose Timesetting no. 11 (All Modes)
- XSF8 – Selects special maximum for SG8 in BØ Special Purpose Timesetting no. 12 (All Modes)
- XSF11 – Auto introduction of P1 in DØ and AØ with SG1 (Master and Flexi)
- XSF12 – Auto introduction of P2 in DØ and AØ with SG2 (Master and Flexi)

GENERAL OPERATION

1. If in AØ clear demands for DØ.
2. If in CØ clear demands for BØ.

SIGNAL GROUP OPERATION

Signal Group 5

1. SG5 is controlled by Special Movement Timesetting no. 1 in DØ.
DØ All Red timesetting is substituted for Special Movement Timesetting no. 1.
2. XSF5 is used to set the maximum extension green time for SG5 in DØ.
This time is stored in Special Purpose Timesetting no. 9.
SG5 is forced off after this maximum extension green time.
3. SG5 operates green-yellow-red in DØ.
4. SG5 goes red with SG2 in AØ, and remains red through BØ, CØ and D2Ø.
5. SG5 closes down at the end of D1Ø or D3Ø green, remains red through AØ late start, then goes 'blank' at the start of AØ minimum green.

When P1 is demanded.

6. If going CØ → AØ or D2Ø → AØ, with a demand for P1, hold SG5 red for the duration of Timer 1 (Special Purpose Timesetting no. 21). Timer 1 starts timing at the start of P1 walk. When Timer 1 expires, SG5 red is switched off.
7. If going D1Ø → AØ or D3Ø → AØ, with a demand for P1, SG5 goes red at the start of D1Ø or D3Ø all red period, and is held red for the duration of Timer 1 (Special Purpose Timesetting no. 21). Timer 1 starts timing at the start of P1 Walk. When Timer 1 expires, SG5 red is switched off.
8. AØ ECO is used to guarantee SG5 minimum blank period. Timer 2 (Special Purpose Timesetting no. 22) starts timing at the start of SG5 blank period. When Timer 2 expires and Timer 6 has expired, expire AØ ECO.

Signal Group 6

1. SG6 is controlled by Special Movement Timesetting no. 2 in BØ.
BØ All Red timesetting is substituted for Special Movement Timesetting no. 2.
2. XSF6 is used to set the maximum extension green time for SG6 in BØ.
This time is stored in Special Purpose Timesetting no. 10.
SG6 is forced off after this maximum extension green time.
3. SG6 operates green-yellow-red in BØ.
4. SG6 goes red with SG3 in CØ, and remains red through B3Ø, DØ and AØ.
5. SG6 closes down at the end of B1Ø or B2Ø green, remains red through CØ late start, then goes 'blank' at the start of CØ minimum green.

SITE NAME: MIDLAND HIGHWAY / HOWARD STREET

When P4 is demanded.

6. If going AØ → CØ, B3Ø → CØ, with a demand for P4, hold SG6 red for the duration of Timer 3 (Special Purpose Timesetting no. 23). Timer 3 starts timing at the start of P4 walk. When Timer 3 expires, SG6 red is switched off.
7. If going B1Ø → CØ or B2Ø → CØ, with a demand for P4, SG6 goes red at the start of B1Ø or B2Ø all red period, and is held red for the duration of Timer 3 (Special Purpose Timesetting no. 23). Timer 3 starts timing at the start of P4 Walk. When Timer 3 expires, SG6 red is switched off.
8. CØ ECO is used to guarantee SG6 minimum blank period. Timer 4 (Special Purpose Timesetting no. 24) starts timing at the start of SG6 blank period. When Timer 4 expires and Timer 8 has expired, expire CØ ECO.

Signal Group 7

1. SG7 is controlled by Special Movement Timesetting no. 3 in DØ.
DØ All Red timesetting is substituted for Special Movement Timesetting no. 3.
2. XSF7 is used to set the maximum extension green time for SG7 in DØ.
This time is stored in Special Purpose Timesetting no. 11.
SG7 is forced off after this maximum extension green time.
3. SG7 operates green-yellow-red in DØ.
4. SG7 goes red with SG1 in AØ, and remains red through BØ, CØ and D3Ø.
5. SG7 closes down at the end of D1Ø or D2Ø green, remains red through AØ late start, then goes 'blank' at the start of AØ minimum green.

When P2 is demanded.

6. If going CØ → AØ or D3Ø → AØ, with a demand for P2, hold SG7 red for the duration of Timer 5 (Special Purpose Timesetting no. 25). Timer 5 starts timing at the start of P2 walk. When Timer 5 expires, SG7 red is switched off.
7. If going D1Ø → AØ or D2Ø → AØ, with a demand for P2, SG7 goes red at the start of D1Ø or D2Ø all red period, and is held red for the duration of Timer 5 (Special Purpose Timesetting no. 25). Timer 5 starts timing at the start of P2 Walk. When Timer 5 expires, SG7 red is switched off.
8. AØ ECO is used to guarantee SG7 minimum blank period. Timer 6 (Special Purpose Timesetting no. 26) starts timing at the start of SG7 blank period. When Timer 6 expires and Timer 2 has expired, expire AØ ECO.

Signal Group 8

1. SG8 is controlled by Special Movement Timesetting no. 4 in BØ.
BØ All Red timesetting is substituted for Special Movement Timesetting no. 4.
2. XSF8 is used to set the maximum extension green time for SG8 in BØ.
This time is stored in Special Purpose Timesetting no. 12.
SG8 is forced off after this maximum extension green time.
3. SG8 operates green-yellow-red in BØ.
4. SG8 goes red with SG4 in CØ, and remains red through DØ, AØ and B2Ø.
5. SG8 closes down at the end of B1Ø or B3Ø green, remains red through CØ late start, then goes 'blank' at the start of CØ minimum green.

When P3 is demanded.

6. If going AØ → CØ, B2Ø → CØ, with a demand for P3, hold SG8 red for the duration of Timer 7 (Special Purpose Timesetting no. 27). Timer 7 starts timing at the start of P3 walk. When Timer 7 expires, SG8 red is switched off.
7. If going B1Ø → CØ or B3Ø → CØ, with a demand for P3, SG8 goes red at the start of B1Ø or B3Ø all red period, and is held red for the duration of Timer 7 (Special Purpose Timesetting no. 27). Timer 7 starts timing at the start of P3 Walk. When Timer 7 expires, SG8 red is switched off.
8. CØ ECO is used to guarantee SG8 minimum blank period. Timer 8 (Special Purpose Timesetting no. 28) starts timing at the start of SG8 blank period. When Timer 8 expires and Timer 4 has expired, expire CØ ECO.

SITE NAME: MIDLAND HIGHWAY / HOWARD STREET

PEDESTRIAN GROUP OPERATION

Pedestrian 1

P1 calls AØ.

P1 is hidden in DØ.

P1 call CØ if the controller is resting in AØ.

P1 can introduce at anytime in D2Ø and during AØ late start and can overlap D2Ø → AØ.

When XSF11 (Master and Flexi) is set, P1 auto introduces in DØ and AØ with SG1.

Pedestrian 2

P2 calls AØ.

P2 is hidden in DØ.

P2 calls CØ if the controller is resting in AØ.

P2 can introduce at anytime in D3Ø and during AØ late start and can overlap D3Ø → AØ.

When XSF12 (Master and Flexi) is set, P2 auto introduces in DØ and AØ with SG2.

Pedestrian 3

P3 calls CØ.

P3 can introduce at anytime in B2Ø and during CØ late start and can overlap B2Ø → CØ.

Pedestrian 4

P4 calls CØ.

P4 can introduce at anytime in B3Ø and during CØ late start and can overlap B3Ø → CØ.

DETECTOR OPERATION

General

Clear vehicle demands during associated phase green and yellow.

Detector 3

Detector 3 places non-locking calls for DØ when presence timer expires.

Clear demands for DØ from detector 3 during SG7 green and yellow.

Detector 6

Detector 6 places non-locking calls for DØ when presence timer expires

Clear demands for DØ from detector 6 during SG5 green and yellow.

Detector 8

Detector 8 places a non-locking call for BØ when its presence timer expires.

Clear demands for BØ from detector 8 during SG6 green and yellow.

Detector 10

Detector 10 places a non-locking call for BØ when its presence timer expires.

Clear demands for BØ from detector 10 during SG8 green and yellow.

DESIGN OF INTERGREEN AND PEDESTRIAN TIMES**INTERGREEN TIMES**

PHASE	CLEARANCE DETAILS			LEGAL SPEED	DESIGN SPEED		INTERGREEN		
	GROUP TRANSITION	DISTANCE	GRADE (%)*		YELLOW	RED	YELLOW	RED	TOTAL
A	2 → P3	28.5	-1.23	70	70	70	4.5	1.5	6.0
B	8 → P3	29.0	0.59	60	45	45	3.0	2.5	5.5
C	4 → P2	40.0	0.59	60	60	60	4.0	2.5	6.5
D	7 → P2	27.0	-1.23	70	45	45	3.0	2.5	5.5
E	→								
F	→								
G	→								

*Positive grade indicates an uphill approach & negative grade indicates a downhill approach. Specify negative grade values with a "-" prefix

PHASE SPECIAL ALL REDS AND SPECIAL MOVEMENT ALL REDS

FROM PHASE	TO PHASE	CLEARANCE DETAILS		DESIGN SPEED	ALL RED	PHASE or S.M. No**
		GROUP TRANSITION	DISTANCE			
		→				
		→				
		→				
		→				
		→				
		→				

** Specify where the timesetting is stored (the phase special all red or the special movement time setting number)

PEDESTRIAN TIMES

PEDESTRIAN TIMES									
PED	PHASE(S)	WALK			CLEARANCE				MINIMUM SOLID DON'T WALK
		DISTANCE (m)	TIME		DISTANCE (m)	TIME			
			GRAPH	ADOPTED		GRAPH	CL1	CL2	
P1	A D	16.0	8	8	16.0	11	11.0		6.0
P2	A D	12.0	8	8	12.0	8	8.0		6.0
P3	C B	20.5	8	10	20.5	14	14.0		6.5
P4	C B	23.5	8	10	23.5	16	16.0		6.5

CONTROLLER TIMESETTINGS - 1

PHASE TIMESETTINGS

Front Panel Command: Phase No.Timesetting No (e.g. 3.2 accesses C phase late start)

DESCRIPTION	Timesetting No	PHASE						
		A (1)	B (2)	C (3)	D (4)	E (5)	F (6)	G (7)
RED / YELLOW	1	-	-	-	-	-	-	-
LATE START	2	2		2				
MINIMUM GREEN	3	8	6	6	6			
INCREMENT	4							
MAXIMUM INITIAL GREEN*	5							
MAXIMUM EXTENSION GREEN	6	30	10	15	10			
EARLY CUT OFF	7	4.0		4.0				
YELLOW	8	4.5	3.0	4.0	3.0			
ALL RED	9	1.5	2.5	2.5	2.5			
SPECIAL ALL RED	10							
GAP 1	11	2.5	2.5	3.0	2.5			
GAP 2	12	2.5	2.5	3.0	2.5			
GAP 3	13	2.5		2.5				
GAP 4	14	2.5		2.5				
HEADWAY 1	15	0.6	1.2	1.2	1.2			
HEADWAY 2	16	0.6	1.2	1.2	1.2			
HEADWAY 3	17	1.2		1.2				
HEADWAY 4	18	1.2		1.2				
WASTE 1	19	7	7	7	7			
WASTE 2	20	7	7	7	7			
WASTE 3	21	7		7				
WASTE 4	22	7		7				

* Maximum Initial Green = Minimum Green + V.I.G.

PEDESTRIAN TIMESETTINGS

Front Panel Command: Pedestrian No.Timesetting No (e.g. 18.2 accesses P2 walk)

DESCRIPTION	Timesetting No	PEDESTRIAN							
		P1 (17)	P2 (18)	P3 (19)	P4 (20)	P5 (21)	P6 (22)	P7 (23)	P8 (24)
DELAY	1	-	-	-	-	-	-	-	-
WALK*	2	8.0	8.0	10.0	10.0				
CLEARANCE 1	3	11.0	8.0	14.0	16.0				
CLEARANCE 2	4								

* Minimum walk time - used in Isolated and Flexilink operation

For walk times in Masterlink operation, refer to slot data.

CONTROLLER TIMESETTINGS - 2

SPECIAL MOVEMENT TIMESETTINGS Front Panel Command: B.Timesetting No (e.g. B.5 accesses Special Movement Timesetting No 5)

Timesetting No	Timesetting (Range: 0-5)	FUNCTION
1	2.5	SG5 ALL RED (SUBSTITUTE DØ ALL RED)
2	2.5	SG6 ALL RED (SUBSTITUTE BØ ALL RED)
3	2.5	SG7 ALL RED (SUBSTITUTE DØ ALL RED)
4	2.5	SG8 ALL RED (SUBSTITUTE BØ ALL RED)
5		
6		
7		
8		

SPECIAL PURPOSE TIMESETTINGS Front Panel Command: B.Timesetting No (e.g. B.19 accesses Special Movement Timesetting No 19)

Timesetting No	Timesetting (Range: 0-200)	FUNCTION
9	5	SG5 MAXIMUM EXTENSION GREEN IN DØ (XSF5)
10	5	SG6 MAXIMUM EXTENSION GREEN IN BØ (XSF6)
11	5	SG7 MAXIMUM EXTENSION GREEN IN DØ (XSF7)
12	5	SG8 MAXIMUM EXTENSION GREEN IN BØ (XSF8)
13		
14		
15		
16		
17		
18	0	LIMIT GREEN WATCHDOG TIMER
19	0	SPECIAL FACILITY CONTROLS ALARM TIMER
20	10	ALL RED START UP INTERVAL
21	8	Timer 1: Duration for holding SG5 red in AØ
22	4	Timer 2: Minimum blank period for SG5
23	8	Timer 3: Duration for holding SG6 red in CØ
24	4	Timer 4: Minimum blank period for SG6
25	8	Timer 5: Duration for holding SG7 red in AØ
26	4	Timer 6: Minimum blank period for SG7
27	8	Timer 7: Duration for holding SG8 red in CØ
28	4	Timer 8: Minimum blank period for SG8
29		
30		
31		
32		
33		
34		
35		
36		
37		
38		
39		
40		

CONTROLLER TIMESETTINGS - 3

PRESENCE TIMESETTINGS

Front Panel Command: D.Detector No (e.g. D.7 accesses presence time for detector 7)

DETECTOR No	TIMESETTING (Range: 0-10)
1	
2	
3	2.0
4	
5	
6	2.0
7	
8	2.0
9	
10	2.0
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	

NOTE: Set presence time to zero if the detector is not a presence detector

DAILY EVENT TIMESETTINGS

FUNCTION	TIMESETTING
Daily start time (Hours)	
Daily start time (Minutes)	
Daily finish time (Hours)	
Daily finish time (Minutes)	

FLEXILINK OPERATION**PHASE SEQUENCES**

No	PHASE SEQUENCE
1 (No Y+)	ABCD
2 (Y+)	

NOTES:

1. All phases must be specified in the phase sequence
2. Only specify phase sequence 2 if it is different from phase sequence 1.

LOOK AHEADS & RELEASES

PHASE SEQUENCE 1		
PHASE	LOOK AHEAD*	RELEASE
A	No	R-
B	Yes (to C)	Auto
C	No	R+
D	Yes (to A)	Auto
E		
F		
G		

PHASE SEQUENCE 2		
PHASE	LOOK AHEAD*	RELEASE
A		
B		
C		
D		
E		
F		
G		

* Specify the phases to which look ahead is permitted, e.g. Yes (to E, F, G, A)

INHIBIT PHASES

The following phases can be inhibited in flexilink by setting the call pulse one step before the call pulse of the next phase in sequence

B, D**PULSE STEP LENGTH**

☐ One Second ☒ Two Second

MASTERLINK & FLEXILINK SPECIAL FLAGS

FLAG	FUNCTION
Y- Flexi	The site will operate in flexilink mode if the signal is continuously sent (C) or is used as an offset (e.g. 25)
Y- Master	
Y+ Flexi	
Z- Flexi	
Z- Master	
Z+ Flexi	
Z+ Master	
R- Flexi	AØ RELEASE PULSE
R+ Flexi	CØ RELEASE PULSE
Q- Flexi	
Q+ Flexi	

SCATS INTERSECTION DATA

The data shown on this page is typical data that can be used for testing controller operations.

This data is not necessarily applicable when the site is switched on in the field.

TYPICAL SLOT DATA

SLOT <i>n</i>	=	4	,	4	,	4
		(phases)		(split plans)		(walks)
INT	=	6290				
VC	=	5				
CS	=					
COM	=	NET				
PK	=	!				
S#	=					
LM	=					
RMN	=	0				
DCL	=	0				
AT	=	6				
BT	=	6				
CT	=	7				
DT	=	6				
ET	=					
FT	=					
GT	=					
W1	=	12		W1 T	=	17
W2	=	12		W2 T	=	14
W3	=	8C		W3 T	=	21
W4	=	8C		W4 T	=	23
W5	=			W5 T	=	
W6	=			W6 T	=	
W7	=			W7 T	=	
W8	=			W8 T	=	
PP1	=	0,0A				
PP2	=	0,0A				
PP3	=	0,0A				
PP4	=	0,0A				

TYPICAL SPLIT PLAN DATA

PHASE SEQUENCE 1		PHASE SEQUENCE 2		PHASE SEQUENCE 3	
A	= 0PDB	A	=	A	=
B	= 15C	B	=	B	=
C	= 30D	C	=	C	=
D	= 20A	D	=	D	=

TYPICAL VARIATION PARAMETERS

VP1	=		VP22	=		VP43	=	
VP2	=		VP23	=		VP44	=	
VP3	=		VP24	=		VP45	=	
VP4	=		VP25	=		VP46	=	
VP5	=		VP26	=		VP47	=	
VP6	=		VP27	=		VP48	=	
VP7	=		VP28	=		VP49	=	
VP8	=		VP29	=		VP50	=	
VP9	=		VP30	=		VP51	=	
VP10	=		VP31	=		VP52	=	
VP11	=		VP32	=		VP53	=	
VP12	=		VP33	=		VP54	=	
VP13	=		VP34	=		VP55	=	
VP14	=		VP35	=		VP56	=	
VP15	=		VP36	=		VP57	=	
VP16	=		VP37	=		VP58	=	
VP17	=		VP38	=		VP59	=	
VP18	=		VP39	=		VP60	=	
VP19	=		VP40	=		VP61	=	
VP20	=		VP41	=		VP62	=	
VP21	=		VP42	=				

GROUP CONFLICT TABLE

PED NO	PED NO					m	m	m	m	P1	P2	P3	P4													
	GROUP NO	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
	1			X	X	X	X		X			X	X													
	2			X	X		X	X	X			X	X													
	3	X	X			X		X	X	X	X															
	4	X	X			X	X	X		X	X															
m	5	X		X	X		X		X	X			X													
m	6	X	X		X	X		X			X		X													
m	7		X	X	X		X		X		X	X														
m	8	X	X	X		X		X		X		X														
P1	9			X	X	X			X																	
P2	10			X	X		X	X																		
P3	11	X	X					X	X																	
P4	12	X	X			X	X																			
	13																									
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CHECKED: Paul Barugahare DATE: 1/03/21DESIGNED BY: NATHAN CORCORANDATE 22/02/21