

		ACTION	DATE
TO	1. SENIOR ENGINEER, CONTROLLER APPLICATIONS 2. RON TRAYNOR, REGIONAL PROJECTS		
FROM	DARREN MCMORRAN	DATE	14/10/19
SITE	MORWELL-TRARALGON ROAD / MCDONALD STREET / COMMERCIAL ROAD	SITE NO.	6660
REGION	EASTERN	MUNICIPALITY	LATROBE

GENERAL

Works Program Job?	Yes	Project Number	43TS6660
Classification	STANDARD	Works Order Number	4A006646

EXISTING CONTROLLER DETAILS

Type	Eclipse	Software Version & Release	V5R20	Lanterns	LED
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CONTROLLER APPLICATIONS

Target Date for Draft Opsheet	ASAP
Target Date for completion of Program	ASAP

Prepare Interlocking	
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PERSONALITY CHECKSUMS

	Hex	Octal
Total	9A	232
Times	49	111
Pers	D3	323

Dispatched 26/11/19

Update Graphics, Site Notes	Yes	<input type="checkbox"/> Site ID Revision updated to
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Description of changes	Addition of pedestrian group / detector. Changes highlighted.
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REGIONAL PROJECTS - SIGNAL INSTALLATION

<input checked="" type="checkbox"/> Changes to signal hardware	<input type="checkbox"/> Changes to interlocking
<input checked="" type="checkbox"/> Additional detectors	<input type="checkbox"/> Changes to existing detector numbering
(OTHER)	
<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	DARREN MCMORRAN	Ext	8717
	OR	CHRIS EER	Ext
	before 3:00pm on the day before switch on.		

SCATS Data Changes -

TRAFFIC MANAGEMENT CENTRE

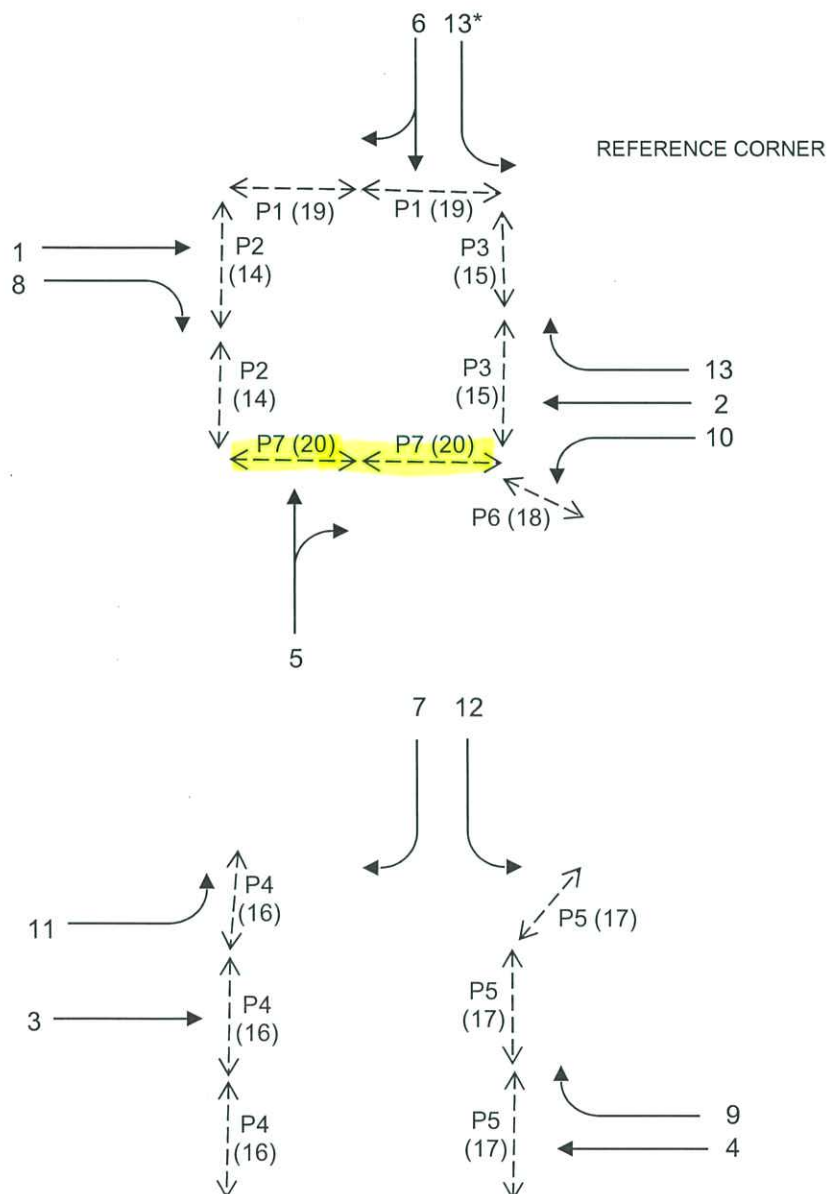
<input type="checkbox"/> Checksum update only
<input type="checkbox"/> Changes to trim or manual intervention features required
<input checked="" type="checkbox"/> Please notify DARREN MCMORRAN (x8717) on job completion.

DATE PROM INSTALLED

CONTROLLER OPERATION SPECIFICATION

SITE NAME	MORWELL-TRARALGON ROAD / MCDONALD STREET / COMMERCIAL ROAD			SITE NO.	6660
MUNICIPALITY	LATROBE	DESIGNED BY	DARREN MCMORRAN	DATE	14/10/19
PLAN NO.	764805B & 764806	DESIGN CHECKED	<i>Chris Per</i>	DATE	25/10/2019
CONTROLLER TYPE	Eclipse	PROM CHECKED	<i>[Signature]</i>	DATE	20/11/19

GROUP ALLOCATION



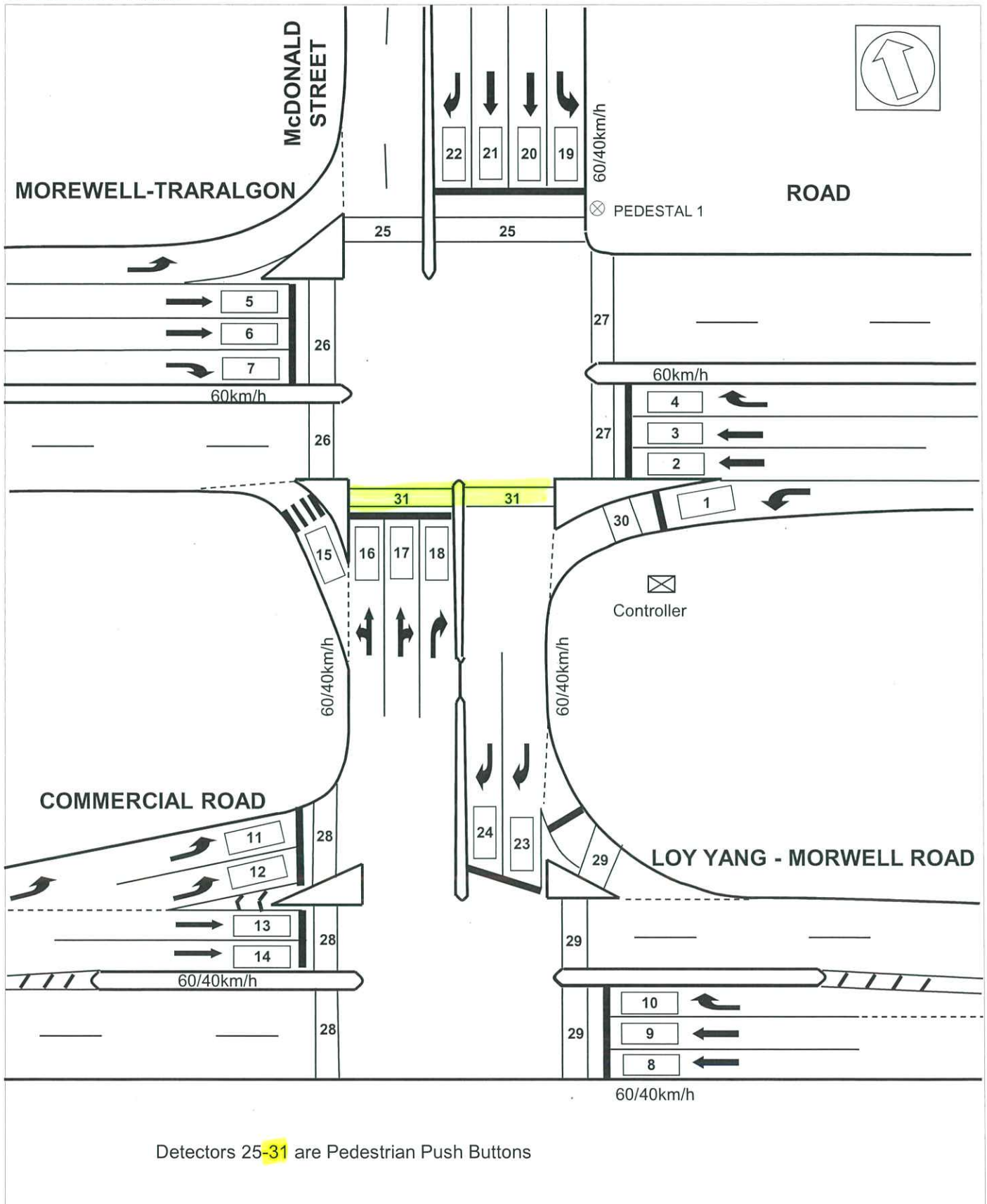
Note:

SG5 & SG6 are 4-aspect [3-aspect circles & 1-aspect (G) right turn] displays
 SG8, SG9 & SG13 are 3-aspect (R/Y/G) fully controlled right turns
 SG10 & SG12 are 2-aspect (R/Y) partially controlled left turns
 SG11 is a 3-aspect (R/Y/G) fully controlled left turn
 SG13* is a 2-aspect (Y/G) partially controlled left turn

CONTROLLER OPERATION SPECIFICATION

SITE NAME **MORWELL-TRARALGON ROAD / McDONALD STREET / COMMERCIAL ROAD** SITE NO. **6660**

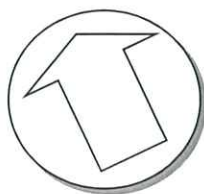
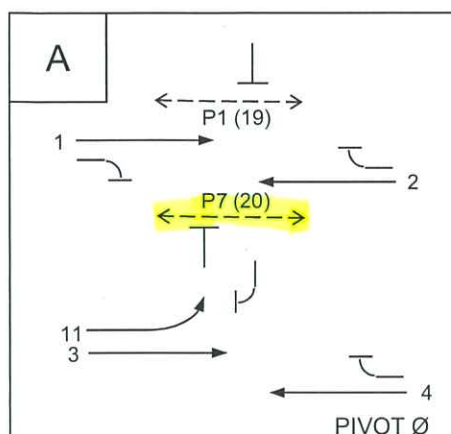
DETECTOR MAP



DESIGNED BY: DARREN MCMORRAN

DATE 14/10/19

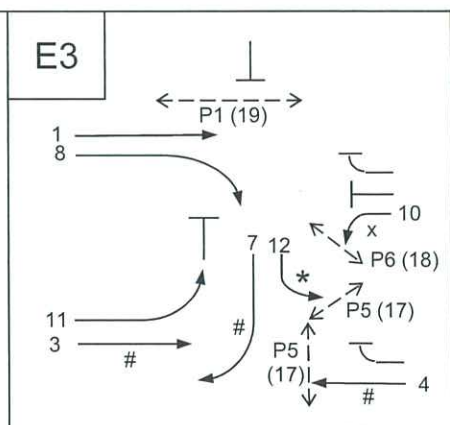
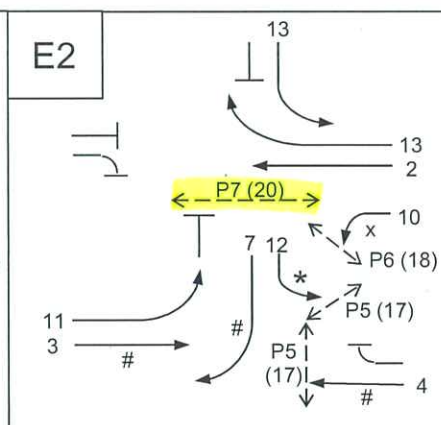
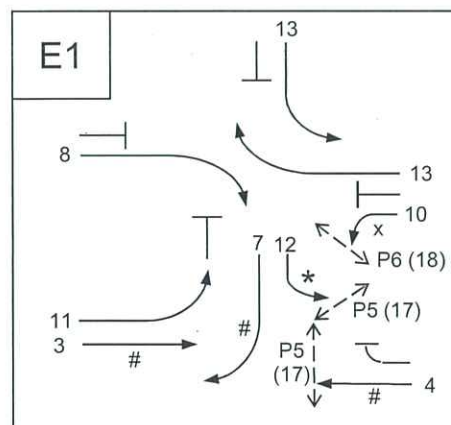
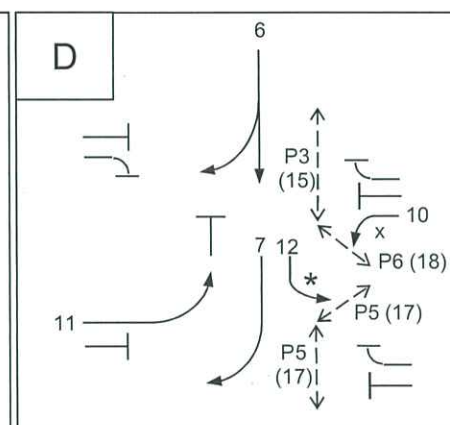
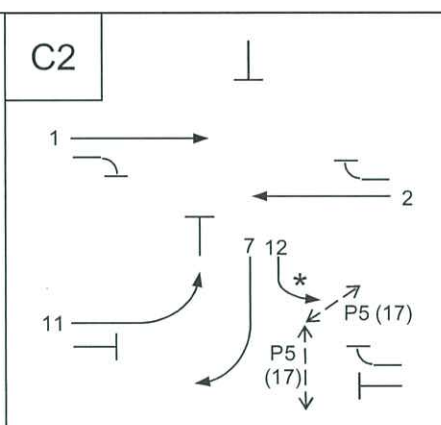
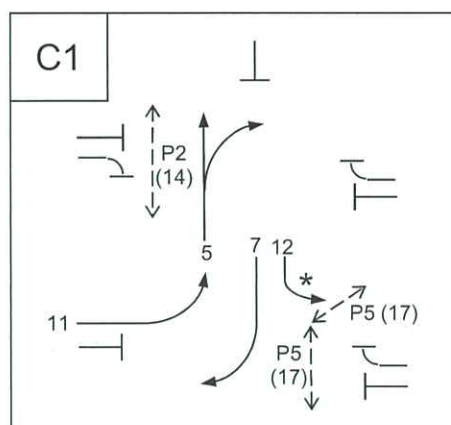
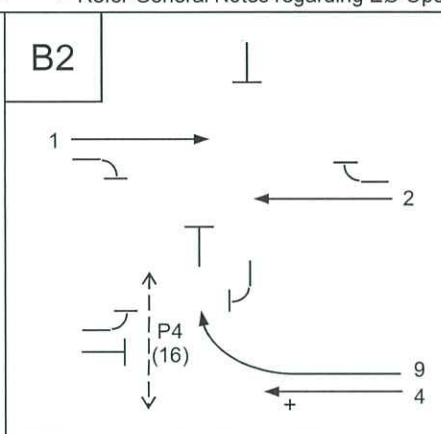
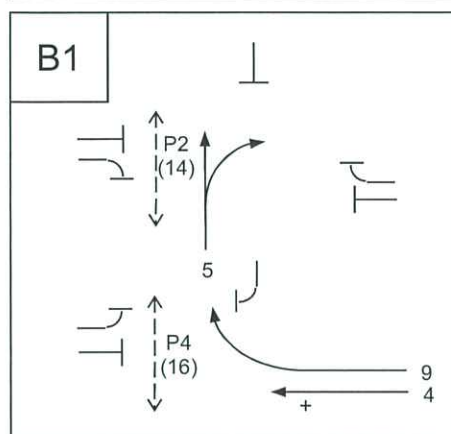
PHASING DIAGRAM



Refer General Notes

- + SG4 is conditional on P4 demand in BØ
- x SG10 is conditional on P6 demand
- * SG12 is conditional on P5 demand
- # Refer General Notes regarding EØ Operation

PHASE	PROHIBITED PHASE CHANGES TO	REVERSION ON MAXIMUM	MAXIMUM V.I.G ON REVERSION



V.A. SEQUENCE ABCDE

DESIGNED BY: DARREN MCMORRAN

DATE 14/10/19

Document ID: 17030625 6660_05_DM OpSheet

SITE NAME

MORWELL-TRARALGON ROAD / MCDONALD STREET / COMMERCIAL ROAD

SITE NO. 6660

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	Refer Special Notes
1	I	1	-				-		Count Loop		0		✓			✓	
2	I	2	A	✓			A				0			✓			
3	I	3	A	✓			A				0			✓			
4	I	4	E	✓			E				0			✓			
5	I	5	A	✓			A				0			✓			
6	I	6	A	✓			A				0			✓			
7	I	7	E	✓			E				0			✓			
8	I	8	A	✓			A				0			✓			
9	I	9	A	✓			A				0			✓			
10	I	10	B	✓			B				0			✓			
11	I	11	A	✓			-				0				✓		
12	I	12	A	✓			-				0				✓		
13	I	13	A	✓			A				0			✓			
14	I	14	A	✓			A				0			✓			
15	I	15	-				B1,C1		Count Loop	✓	0		✓			✓	
16	I	16	B1,C1	✓			B1,C1			✓	0			✓			
17	I	17	B1,C1	✓			B1,C1			✓	0			✓			
18	I	18	B1,C1	✓			B1,C1			✓	0			✓			
19	I	19	D	✓			D				0			✓			
20	I	20	D	✓			D				0			✓			
21	I	21	D	✓			D				0			✓			
22	I	22	D	✓			D				0			✓			
23	I	23	C,D,E	✓			C,D,E			✓	0			✓			
24	I	24	C,D,E	✓			C,D,E			✓	0			✓			
25	E	1	A		✓			P1		✓	6		✓				
26	E	2	C		✓			P2		✓	6		✓				
27	E	3	D		✓			P3		✓	6		✓				
28	E	4	B		✓			P4		✓	6		✓				
29	E	5	C		✓			P5		✓	6		✓				
30	E	6	E		✓			P6		✓	6		✓				
31	E	7	A		✓			P7		✓	6		✓				
32																	

DESIGNED BY: DARREN MCMORRAN

DATE 14/10/19

APPROACH DEFINITIONS

PHASE APPROACHES

Approach No	EXTENDING DETECTORS	APPROACH TIMER AND TIMESETTING DEFINITION*	SIGNAL GROUP	APPROACH EXPIRY (EXPAP)	Refer Special Notes
1	2,3	A11	2		
2	5,6	A22	1		
3	8,9	A33	4		
4	13,14	A44	3		
5	10	B11	9		
6	16,17,18	B22,C11	5	BØ→CØ	
7	15	B33,C33	5	BØ→CØ	✓
8	23,24	C22,D22,E33	7	CØ→DØ→EØ	
9	20,21,22	D11	6		
10	19	D33	6	DØ→EØ	
11	4	E11	13		
12	7	E22	8		
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)

- XSF1** - Allows late introduction of P1 in AØ (*Masterlink only*).
- XSF2** - For auto introduction of P1 at the start of SG1.
- XSF3** - Inhibit 40 km/h red time substitutions in AØ, BØ, CØ & DØ during school holidays.
- XSF4** - Allows late introduction of P7 in AØ (*Masterlink only*).
- XSF5** - For auto introduction of P7 at the start of SG2.
- XSF8** - Selects special maximum for SG8 in EØ via Special Purpose Timesetting No. 9.
- XSF13** - Selects special maximum for SG13 in EØ via Special Purpose Timesetting No. 10.
- XSF15** - Allows detector 15 to extend BØ & CØ.

GENERAL OPERATION

- **REVⁿ** - First scan after start-up demands B1Ø, DØ & EØ.
- Clear vehicle demands during associated phase green and yellow.
- Cancel Call for C1Ø placed by Detector 16, 17 & 18 during SG5 green and yellow i.e. during B1Ø.
- Use AØ yellow for EØ yellow if transitioning from E2Ø or E3Ø to phases other than AØ.

SIGNAL GROUP OPERATION

Signal Group 4

- SG4 is conditional on P4 demand in BØ.
- SG4 closes down at the start of AØ Yellow when going to BØ when there is a P4 demand.
- SG4 remains green in BØ if there is no demand for P4.

Signal Group 8

- SG8 is controlled by Special Movement Timer No. 1 within EØ. EØ Special All Red timesetting is substituted for Special Movement Time No.1.
- XSF8 is used to set special maximum time for SG8 in EØ. This time is accessible in Special Purpose Timesetting No. 9. SG8 will be forced off after a period equal to the minimum green of the group (EØ minimum) plus this special maximum.

Signal Group 10

- SG10 is a 2-aspect Red/Yellow display.
- SG10 is conditional on P6 demand.
- SG10 closes down at the start of AØ or BØ or CØ yellow when going to DØ when there is P6 demand.
- SG10 closes down at the start of DØ yellow when going to EØ when there is P6 demand.

Signal Group 12

- SG12 is a 2-aspect Red/Yellow display.
- SG12 is conditional on P5 demand.
- SG12 closes down at the start of AØ or BØ yellow when going to CØ.
- SG12 closes down at the start of CØ yellow when going to DØ.
- SG12 closes down with the yellow of the phase in which closes down.

Signal Group 13

- SG13 is controlled by Special Movement Timer No.2 within EØ. EØ All Red timesetting is substituted for Special Movement Time No. 2.
- XSF13 is used to set special maximum time for SG13 in EØ. This time is accessible in Special Purpose Timesetting No. 10. SG13 will be forced off after a period equal to the minimum green of the group (EØ minimum) plus this special maximum.

PEDESTRIAN GROUP OPERATION

Pedestrian 1

- P1 demands AØ.
- P1 can introduce anytime in E3Ø & at the start of AØ and can overlap E3Ø → AØ.
- P1 can introduce anytime in AØ when XSF1 is set (*Masterlink only*).
- P1 auto introduces at the start of SG1 when XSF2 is set (*all modes*).

Pedestrian 2

- P2 demands C1Ø.
- P2 only introduces when SG5 introduces.
- P2 can overlap B1Ø → C1Ø.

Pedestrian 3

- P3 demands DØ.
- P3 can introduce at the start of DØ.

Pedestrian 4

- P4 demands BØ.
- P4 can introduce at the start of BØ.

Pedestrian 5

- P5 demands CØ.
- P5 can introduce in at the start of CØ or at the start of DØ.
- P5 can overlap CØ → DØ, CØ → EØ and DØ → EØ.
- EØ Yellow timesetting is used for the solid DONT WALK period of P5. This period operates after the P5 flashing clearance before re-introducing SG12.

Pedestrian 6

- P6 is a non-SCATS (hidden) pedestrian.
- P6 demands EØ.
- P6 can introduce in DØ and EØ.
- P6 can overlap DØ → EØ.
- EØ Yellow timesetting is used for the solid DONT WALK period of P6. This period operates after the P6 flashing clearance before re-introducing SG10.

Pedestrian 7

- P7 demands AØ.
- P7 can introduce anytime in E2Ø & at the start of AØ and can overlap E2Ø → AØ.
- P7 can introduce anytime in AØ when XSF4 is set (*Masterlink only*).
- P7 auto introduces at the start of SG2 when XSF5 is set (*all modes*).

PHASE OPERATION

The following table defines the detector activations required to call the nominated phase. The table also defines the priority order of demands i.e. the Demand Phase with the highest priority will be demanded.

Current Operating Phase	Priority Order of Demands	Demand on Detectors			Demand Phase
If operating in AØ	(1)	10 (and/or P4)	and	16, 17 & 18 (and/or P2)	B1Ø
	(2)	10 (and/or P4)	and	Not 16, 17 & 18 (or P2)	B2Ø
	(3)	16, 17 & 18 (and/or P2)	and	Not 10	C1Ø
	(4)	23 & 24 (and/or P5)	and	Not 19, 20, 21 & 22 (or P3)	C2Ø
	(5)	23 & 24 (and/or P5)	and	19, 20, 21 & 22 (and/or P3)	DØ
	(6)	7	and/or	4	EØ with SG3 & SG4
If operating in B1Ø	(1)	23 & 24 (and/or P5)	and	Not 19, 20, 21 & 22 (or P3)	C1Ø
	(2)	23 & 24 (and/or P5)	and	19, 20, 21 & 22 (and/or P3)	DØ
	(3)	7	and/or	4	EØ with SG3 & SG4
If operating in B2Ø	(1)	16, 17 & 18 (and/or P2)			C1Ø
	(2)	23 & 24 (and/or P5)	and	Not 19, 20, 21 & 22 (or P3)	C2Ø
	(3)	23 & 24 (and/or P5)	and	19, 20, 21 & 22 (and/or P3)	DØ
	(4)	7	and/or	4	EØ with SG3 & SG4
If operating in C1Ø	(1)	23 & 24 (and/or P5)	and	Not 19, 20, 21 & 22 (or P3)	Remain in C1Ø and extend C1Ø
	(2)	23 & 24 (and/or P5)	and	19, 20, 21 & 22 (and/or P3)	DØ
	(3)	7	and/or	4	EØ with SG7 (and P5 if demanded)
	If detectors 23 & 24 (and/or P5) are extending C1Ø (refer to Priority 1 above) and then there is a demand on detectors 19, 20, 21 & 22 (and/or P3), then EXPAP from C1Ø to DØ (i.e. if SG5 gaps or wastes and detectors 23 & 24 are still extending then EXPAP to DØ)				

Current Operating Phase	Priority Order of Demands	Demand on Detectors			Demand Phase
If operating in C2Ø	(1)	23 & 24 (and/or P5)	and	Not 19, 20, 21 & 22 (or P3)	Remain in C2Ø and Extend C2Ø
	(2)	23 & 24 (and/or P5)	and	19, 20, 21 & 22 (and/or P3)	DØ
	(3)	7	and/or	4	EØ with SG7 (and P5 if demanded)
	If detectors 23 & 24 (and/or P5) are extending C2Ø (refer Priority 1 above) and then there is a demand on detectors 19, 20, 21 & 22 (and/or P3), then immediately EXPAP from C2Ø to DØ (as there are no other detectors extending C2Ø)				
If operating in DØ	(1)	23 & 24 (and/or P5)	and	19, 20, 21 & 22 (and/or P3)	Remain in DØ and Extend DØ
	(2)	7	and/or	4	EØ with SG7 (and P5 if demanded)
	If detectors 19, 20, 21 & 22 (and P3) stop extending DØ (i.e. SG6 gaps out) then immediately EXPAP from DØ to EØ as SG7 will still be extended by detectors 23 & 24 in EØ.				

B Phase to C Phase Operation

- Transitions between BØ sub-phases are not permitted
- Transitions between CØ sub-phases are not permitted

If going from BØ to CØ then the following transitions are permitted:

- B1Ø to C1Ø
- B2Ø to C1Ø
- B2Ø to C2Ø

If going from BØ to CØ then the following transitions are **not** permitted:

- B1Ø to C2Ø

OPERATION OF INTERGREEN TIMES DUE TO PART TIME SCHOOL SPEED ZONE

A 40km/h speed limit applies to Commercial Road, Loy Yang-Morwell Road and McDonald Street between 08:00 and 09:30, and 14:30 and 16:00 on school days.

The speed limit outside this period is 60km/h (00:00 to 08:00, 09:30 to 14:30 and 16:00 to 24:00) Monday to Friday, and all day Saturday and Sunday.

If Monday -> Friday and time is > 08:00 and < 09:30;

If Monday -> Friday and time is > 14:30 and < 16:00;

substitute :-

- AØ special all red for AØ all red;
- BØ special all red for BØ all red;
- CØ special all red for CØ all red;
- DØ special all red for DØ all red;
- Use EØ all red to substitute Special Movement No. 1

XSF3 can be used to inhibit the above red time substitutions during school holidays.

DESIGN OF INTERGREEN AND PEDESTRIAN TIMES

INTERGREEN TIMES

PHASE	CLEARANCE DETAILS		LEGAL SPEED	DESIGN SPEED		INTERGREEN		
	GROUP TRANSITION	DISTANCE		YELLOW	RED	YELLOW	RED	TOTAL
A	2 → P2	34.0	60	60	60	4.0	2.0	6.0
B	9 → 11	32.5	60	60	45	4.0	2.5	6.5
C	5 → P3	36.0	60	60	45	4.0	3.0	7.0
D	6 → P7	36.5	60	60	60	4.0	2.5	6.5
E	13 → P1	34.0	60	45	45	3.0	3.0	6.0
F	→							
G	→							

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			
E1	E3	13 → P1	34.0	45	3.0	SM2
E1	E2	8 → P7	30.0	45	2.5	SM1
A	B1	4 → P4	31.5	40	3.0	AØ special red
B1	E	5 → P1	35.0	60	2.0	Use BØ red
B1, C1	E	5 → P1	35.0	40	3.5	BØ special red
B1, C1	D	5 → P3	36.0	40	3.5	CØ special red
B1, C1	D	5 → P3	36.0	45	3.0	Use CØ special red
D	E	6 → P7	36.5	40	3.5	DØ special red

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

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 E	16.2	8	16	23.2	15	14.0	1.0	5.0
P2	B1 C1	15.0	8	13	20.5	14	13.0	1.0	5.5
P3	D	14.6	14	14	11.8	8	7.0	1.0	5.5
P4	B	22.8	21	16	9.4	6	5.0	1.0	5.5
P5	C D E	21.4	20	16	9.4	6	5.0	1.0	6.0
P6	D E	5.5	7	6	5.5	4	4.0	0.0	6.5
P7	A E	12.5	8	12	19.0	13	12.0	1.0	5.0

DESIGNED BY: DARREN MCMORRAN

DATE 14/10/19

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	-	-	-	-	-		
MINIMUM GREEN	3	10	10	8	10	6		
INCREMENT	4	-	-	-	-	-		
MAXIMUM INITIAL GREEN*	5	-	-	-	-	-		
MAXIMUM EXTENSION GREEN	6	30	10	8	8	15		
EARLY CUT OFF	7							
YELLOW	8	4.0	4.0	4.0	4.0	3.0		
ALL RED	9	2.0	2.5	3.0	2.5	3.0		
SPECIAL ALL RED	10	3.0	3.5	3.5	3.5	2.5		
GAP 1	11	2.5	2.5	2.5	2.5	2.5		
GAP 2	12	2.5	2.5	2.5	2.5	2.5		
GAP 3	13	2.5	2.5	2.5	2.5	3.5		
GAP 4	14	2.5	-	-	-	-		
HEADWAY 1	15	0.6	1.2	0.4	0.4	1.2		
HEADWAY 2	16	0.6	0.4	0.6	0.6	1.2		
HEADWAY 3	17	0.6	1.2	1.2	1.2	0.6		
HEADWAY 4	18	0.6	-	-	-	-		
WASTE 1	19	7	7	7	7	7		
WASTE 2	20	7	12	7	7	7		
WASTE 3	21	7	7	7	7	7		
WASTE 4	22	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	16.0	13.0	14.0	16.0	16.0	6.0	12.0	
CLEARANCE 1	3	14.0	13.0	7.0	5.0	5.0	4.0	12.0	
CLEARANCE 2	4	1.0	1.0	1.0	1.0	1.0		1.0	

* 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	SG8 ALL RED (SUBSTITUTE EØ SPECIAL ALL RED)
2	3.0	SG13 ALL RED (SUBSTITUTE EØ ALL RED)
3		
4		
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	4	SG8 MAXIMUM EXTENSION GREEN IN EØ (XSF8)
10	4	SG13 MAXIMUM EXTENSION GREEN IN EØ (XSF13)
11		
12		
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		
22		
23		
24		
25		
26		
27		
28		
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	
4	
5	
6	
7	
8	
9	
10	
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+)	ABCDE
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,D,E,A)	R+
C	Yes (to D,E,A)	Auto
D	Yes (to E,A)	Q-
E	Yes (to A)	Auto
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

None

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	BØ RELEASE PULSE
Q- Flexi	DØ RELEASE PULSE
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>	=	5	,	4	,	7
		(phases)		(split plans)		(walks)
INT	=	6660				
VC	=	5				
CS	=					
COM	=	NET				
PK	=	!				
S#	=					
LM	=					
RMN	=	0				
DCL	=	0				
AT	=	6				
BT	=	7				
CT	=	7				
DT	=	7				
ET	=	6				
FT	=					
GT	=					
W1	=	0A	W1 T	=	20	
W2	=	2C*	W2 T	=	20	
W3	=	14	W3 T	=	14	
W4	=	16	W4 T	=	12	
W5	=	2DE*	W5 T	=	12	
W6	=		W6 T	=		
W7	=	0A	W7 T	=	18	
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 =	0PDFGNGB	A =		A =	
B =	20FGC	B =		B =	
C =	15TGD	C =		C =	
D =	15TGE	D =		D =	
E =	20TGA	E =		E =	

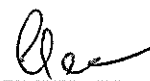
TYPICAL VARIATION PARAMETERS

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 P2 P3 P4 P5 P6 P1 P7												
	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									
	2					X	X		X						X	X									
	3							X		X							X	X							
	4							X									X	X							
	5	X	X				X		X					X		X				X	X				
	6	X	X			X			X					X	X					X	X				
	7			X	X					X							X								
	8		X			X	X								X						X				
	9			X				X				X						X							
	10																		X						
	11								X								X								
	12																	X							
m	13	X				X	X									X				X					
P2	14	X	X				X		X																
P3	15	X	X			X								X											
P4	16			X	X			X				X													
P5	17			X	X					X			X												
P6	18										X														
P1	19					X	X							X											
P7	20					X	X		X																
	21																								
	22																								
	23																								
	24																								

CHECKED:



DATE:

15/10/19

INT=6660

26/11/2019

```

PAGE
*** MAPPING TABLES
*** Input translation map
IMAP EQU *
SECT1 EQU *
      FDB INT1+1      ( SLIP LANE LOOPS 1 )
      FDB INT2+2      ( A PHASE 2 )
      FDB INT3+3      ( A PHASE 3 )
      FDB INT4+4      ( E APP2 )
      FDB INT5+5      ( A PHASE 5 )
      FDB INT6+6      ( A PHASE 6 )
      FDB INT7+7      ( E APP1 )
      FDB INT8+8      ( A PHASE 8 )
      FDB INT9+9      ( A PHASE 9 )
      FDB INT10+10     ( B APP1 )
      FDB INT11+11     ( SLIP LANE LOOPS 11 )
      FDB INT12+12     ( SLIP LANE LOOPS 12 )
      FDB INT13+13     ( A PHASE 13 )
      FDB INT14+14     ( A PHASE 14 )
      FDB INT15+15     ( SLIP LANE LOOPS 15 )
      FDB INT16+16     ( B APP2 C APP1 16 )
      FDB INT17+17     ( B APP2 C APP1 17 )
      FDB INT18+18     ( B APP2 C APP1 18 )
      FDB INT19+19     ( D APP1 19 )
      FDB INT20+20     ( D APP1 20 )
      FDB INT21+21     ( D APP1 21 )
      FDB INT22+22     ( D APP1 22 )
      FDB INT23+23     ( C/D APP2 - E APP3 23 )
      FDB INT24+24     ( C/D APP2 - E APP3 24 )
      FDB EXT1+P1      ( P1 P.B. )
      FDB EXT2+P2      ( P2 P.B. )
      FDB EXT3+P3      ( P3 P.B. )
      FDB EXT4+P4      ( P4 P.B. )
      FDB EXT5+P5      ( P5 P.B. )
      FDB EXT6+P6      ( P6 P.B. )
      FDB EXT7+P7      ( P7 P.B. )
      FDB END

SECT2 EQU *
      FDB END
```