



**GENERAL SPECIFICATION FORM**

Customer: **East West Rail Alliance**

Area Specifications & Customer Drawings: **133735\_2A-EWR-OXD-CC\_A1-DR-CH-002101**

Intersection / General Description: **A1 Compound Access**

Controller (tick one): New   Serial number:

Specification Section:

Quotation number (Customer):

Quotation number (Company):

Company Order Number:

Intersection Number:  Issue: **1**

Equipment Installation by: **CONTRACTOR**

Slot Cutting by: **CONTRACTOR**

Civils Works by: **CONTRACTOR**

Comms Circuit Type and Number:

Customers Engineer: **Mike Flynn**

Telephone number: **0121 4835237**

E-mail: **mike.flynn@atkinsglobal.com**

Electrical Supply: **230** V **50** Hz

Equipment type (tick one): **ELV**

Lamp Dimming (tick one): **28v**

Total Average Power  Watts

Total Peak Current (including Red / Amber):  Amps

Power Feed Requirement. 30 Amp Fuse Rating minimum:

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Form Issue **ONE**

Originators Initials **MJF**

Date **18 November 2019**

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**CONFIGURATION NOTES**

THIS IS AN ELV INSTALLATION

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PRIMARY METHOD OF CONTROL IS MOVA WITH VA FALLBACK

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STAGE DEMANDS:

STAGE 1 CALLED BY PHASE A OR PHASE B

STAGE 2 IS DEMAND DEPENDANT, CALLED BY PHASE C

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MOVA LOOP BIN3 IS TO OPERATE AS A UD LOOP

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Note: This form may be used to provide any general information useful to others, such as any new facilities in this issue of the specification.

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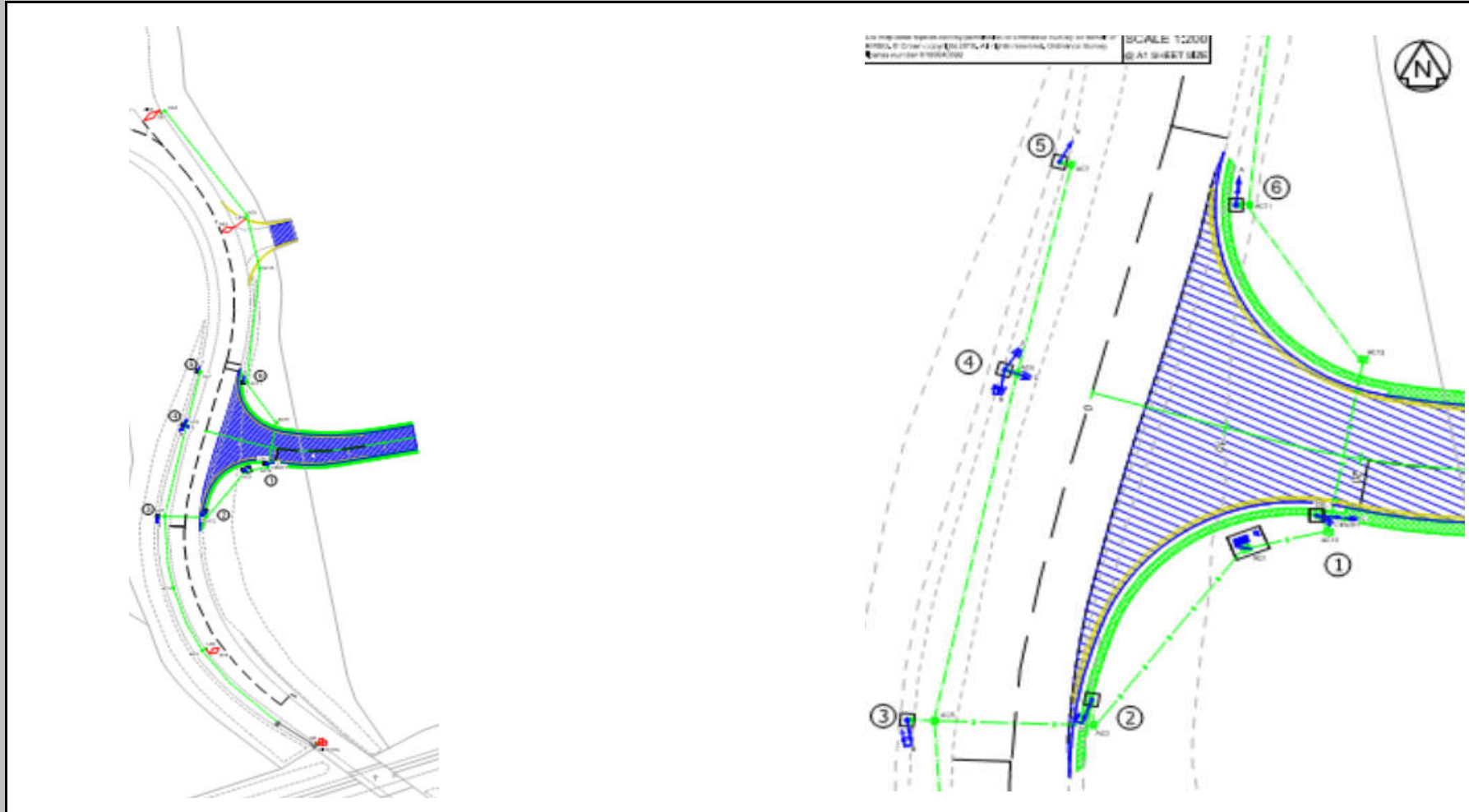
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### SITE LAYOUT



Note: This form may be used to provide a layout drawing of the junction.

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**BASIC SITE DATA**

Stream	0	Stage	0	Stream	0	Stage	1	Stream	0	Stage	2	Stream		Stage	
<p>ALL RED STAGE DUMMY PHASE D</p>															
Stream		Stage		Stream		Stage		Stream		Stage		Stream		Stage	

- Notes:
- 1 - Use additional sheet(s) for more than 8 stages
  - 2 - Add Stream and Stage numbers as appropriate
  - 3 - All Red stages should be shown as required
  - 4 - Reversion stage in absence of demands/extensions

	Stream	0	Stream		Stream		Stream	
All Red Stage		0						
Start Up Stage		1						
Reversion Stage		1						

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**PHASE INTER-GREEN TIMINGS**

		To Phase																																
		A	B	C	D																													
From Phase	A			8	3																													
	B			8	3																													
	C	5	5		3																													
	D	2	2	2																														

**Minimum Inter-green limit**  
 Enter required global value in seconds.  
 Where not specified, this will default to 5 seconds. For specific limit values between individual phases use Form IX

Seconds

**Starting Inter-green**  
 Start up time MUST NOT include the Amber period.

Seconds

Comments

Notes: #1 Phase Inter-green times  
 Enter Inter-green times in seconds between conflicting phases

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**PHASE INTER-GREEN LIMIT VALUES**

		To Phase															
		A	B	C	D												
From Phase	A			7													
	B			7													
	C	5	5														
	D																

Comments

Notes: #1 Phase Inter-green limit values  
 Enter Inter-green limit values in seconds between conflicting phases, if the default value on Form VIII is not adequate.

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**PROHIBITED / ALTERNATIVE STAGE MOVEMENTS**

Mode	Tick if no restriction
Urban Traffic Control - UTC	<input checked="" type="checkbox"/>
Cableless Linking - CLF	<input type="checkbox"/>
Vehicle Actuated - VA	<input checked="" type="checkbox"/>
Hurry Call - HC	<input type="checkbox"/>
Manual - Man	<input checked="" type="checkbox"/>
Part-Time - PT	<input type="checkbox"/>
Priority - PR	<input type="checkbox"/>
MOVA	<input checked="" type="checkbox"/>

		To Stage (Insert numbers)							
From Stage (insert numbers)		<input checked="" type="checkbox"/>							
			<input checked="" type="checkbox"/>						
				<input checked="" type="checkbox"/>					
					<input checked="" type="checkbox"/>				
						<input checked="" type="checkbox"/>			
							<input checked="" type="checkbox"/>		
								<input checked="" type="checkbox"/>	
									<input checked="" type="checkbox"/>
Mode(s):		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

		To Stage (Insert numbers)							
From Stage (insert numbers)		<input checked="" type="checkbox"/>							
			<input checked="" type="checkbox"/>						
				<input checked="" type="checkbox"/>					
					<input checked="" type="checkbox"/>				
						<input checked="" type="checkbox"/>			
							<input checked="" type="checkbox"/>		
								<input checked="" type="checkbox"/>	
									<input checked="" type="checkbox"/>
Mode(s):		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

		To Stage (Insert numbers)							
From Stage (insert numbers)		<input checked="" type="checkbox"/>							
			<input checked="" type="checkbox"/>						
				<input checked="" type="checkbox"/>					
					<input checked="" type="checkbox"/>				
						<input checked="" type="checkbox"/>			
							<input checked="" type="checkbox"/>		
								<input checked="" type="checkbox"/>	
									<input checked="" type="checkbox"/>
Mode(s):		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

		To Stage (Insert numbers)							
From Stage (insert numbers)		<input checked="" type="checkbox"/>							
			<input checked="" type="checkbox"/>						
				<input checked="" type="checkbox"/>					
					<input checked="" type="checkbox"/>				
						<input checked="" type="checkbox"/>			
							<input checked="" type="checkbox"/>		
								<input checked="" type="checkbox"/>	
									<input checked="" type="checkbox"/>
Mode(s):		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

		To Stage (Insert numbers)							
From Stage (insert numbers)		<input checked="" type="checkbox"/>							
			<input checked="" type="checkbox"/>						
				<input checked="" type="checkbox"/>					
					<input checked="" type="checkbox"/>				
						<input checked="" type="checkbox"/>			
							<input checked="" type="checkbox"/>		
								<input checked="" type="checkbox"/>	
									<input checked="" type="checkbox"/>
Mode(s):		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments:

Notes: #1 Prohibited / Alternative Stage Movements  
 Select appropriate mode and enter:  
 A - Allowed, P - Prohibited, N - Alternative move via stage "N" (e.g. 3)

Note: This form may be used to provide stage movement information for upto eight stages. Use alternative forms for more than eight stages.

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**METHOD OF CONTROL PRIORITY**

**Method of Control Priority**

	Part Time - PT
	Emergency - EM
	Hurry Call - HC
1	Selected Manual Control - MAN
3	Urban Traffic Control - UTC
4	MOVA
2	Selected FXT, VA or CLF
	Cableless Linking - CLF
	Priority - PR
5	<b>Either</b> - Vehicle Actuated - VA *
	<b>OR</b> - Fixed Time - FXT *

Assign priority number to each Method of Control. **1** = Top Priority, **2** = Second Priority etc. **X** = Not used.

Unless indicated - Priority will be assigned from top downwards.

\* Select **either** VA or FXT for normal operation, not both.

Facility Switch Availability	
Facility switch position	Facility not operative
Manual - Man	<input type="checkbox"/>
Fixed Time - FXT	<input type="checkbox"/>
Vehicle Actuated - VA	<input type="checkbox"/>

This may be achieved by appropriate arrangement of Method of Control Priority.

Under manual Control, Demand Dependent Filter Green Arrow to appear (tick one):		
Always <input type="checkbox"/>	Never <input type="checkbox"/>	If demanded <input type="checkbox"/>

Comments

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**URBAN TRAFFIC CONTROL**

Bit Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Control Bit	F1	F2	D2	TS							SO			MO		TO
Demand Dependent	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reply Bit	G1	G2	SD2	CC	DF	CF	LF1	LF2	LF3	LO	RR	ML	MF	MR		CRB
Secret Sign																
Secret Sign with Security																

Bit Number	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Control Bit																
Demand Dependent	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reply Bit																
Secret Sign																
Secret Sign with Security																

D number	Insert phases demanded				Insert phases extended				Relationship of demand bits and phases
D X									
D									
D									
D									
D									
D									
D									

F number	Demand Dependent Forces, Insert Demands to be considered				Relationship of force bits and demands	DR number	Insert phases or stages for reply				Relationship of stage demand replies and phases / stages
F 2	C					DR					
F						DR					
F						DR					
F						DR					
F						DR					
F						DR					
F						DR					

Comments

O.T.U. Manufacturer and Type

Operation Standard (tick one):  
 MCE0105/0106

UTC initiated by (tick one):  
 Force Bits Present

Number of bits (tick one):

RTC Synchronisation Time

Hour	Minute	Second
'00	'00	'00

CC Synchronisation Reply

Seconds	
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**UTC REPLY BIT FUNCTIONALITY**

Tick as appropriate:	G1 / G2	MC	RR	DF	CF	LF1	LF2	LF3	LO	SO			
Manual mode selected and operative	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Manual mode selected	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No lamp power and/or signals off	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Controller fault	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Detector fault	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
VA or FT selected	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Green / Amber Lamp	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1st Red Lamp failure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2nd red Lamp Failure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Solar Override	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Notes: 1 - Tick appropriate boxes to indicate required reply bit functionality. 2 - Use additional columns and rows to detail non-standard combinations.

Comments

Note: This form may be used to specify the required functionality of UTC reply bits.

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**MANUAL SELECTION**

Manual Selection		
Button No.	Stage(s) Called	Name
ALL RED		All Red Stage(s)
1	1	Bicester Road both ways
2	2	A1 Compound Exit

Visual Indicators	
Output No.	Function

Comments

Site reference

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