RSA Ref No : **2022/AP/1686**

RSA Stage : **1**

RSA Auditors : **Highway Associates**

Response By: **AXIS**

Paragraph No. in RSA Report	Brief Description of Issue	Problem Accepted (Yes/No)	Recommended Measure Accepted (Yes/No)	Alternative Measure / Design Team Response
3.1.1	An ICD of 30 metres is insufficient for the 50mph speed limit in force, and in particular, a compact roundabouts is not appropriate in this instance per paragraph 2.3.1 of DMRB CD116	No	No	As noted in the DMRB CD116 checklist, the speed limit of Holyhead Road will be reduced to 40mph in this location. A compact roundabout is therefore appropriate in this instance, per paragraph 2.3.3 of CD116: *"For roads with a posted speed limit of 40mph or below, either a compact or a normal roundabout may be provided."*
3.1.2	The over-run area may be used by car type vehicles which could promote higher approach and circulating speeds	Yes	Yes	The proposed overrunnable area will feature a raised change in surface to make it unattractive to cars. This is indicated in **Drawing No. 3046-01-D01A**
3.1.3	The swept path analysis appears to show that two-way HGV traffic close to the site entry / exit arm would be constrained.	No	No	Upon review of **Drawing No. 3046-01-ATR01**, it is not considered that the HGV manoeuvres at the site access arm are constrained. It appears that this belief has been informed by the line width of the drawing. We have therefore revised this, as illustrated on **Drawing No. 3046-01-ATR01A**. The geometries of the site access arm are controlled by the requirements set out in DMRB CD123 and cannot be significantly altered without causing departures from standard. It is nonetheless not considered that any amendments to junction geometry are necessary.
3.2.1	Cycle facilities have not been proposed at the roundabout	Partially	Partially	There is an existing foot / cycle route to the north of the proposed roundabout on the western side of Holyhead Road. The proposed development includes amendments to the alignment of Holyhead Road to allow for the proposed roundabout. As part of this realignment, the existing foot / cycleway will be retained. In order to reaffirm that the existing foot / cycleway will be retained, additional signage will be provided to TSRGD Diagram 957. This is shown on **Drawing No. 3046-01-D01A**. Cyclists crossing the roundabout can be accommodated on the proposed dropped kerb crossing points per **Drawing No. 3046-01-D01A**. It is expected that the main desire line will be along the existing foot / cycleway to the north of the roundabout to the (substandard) cycleway to the south of the roundabout. Crossing facilities are nonetheless proposed on all arms of the roundabout. The cycleway to the south of the proposed roundabout is of a poor standard, being approximately 1m in width. The proposal includes amendments to the cycleway to provide this at a width of 2m. The proposed roundabout and associated infrastructure improvements therefore represents a net improvement to the cycling environment at this location.

APPENDIX 7 – LANDSCAPE MASTERPLAN

Q:\3001-3050\3046-01 Kronospan - Northern Infrastructure\Dwgs\CAD\Access Road\FINAL Planning dwgs & ES Figures\Planning Drawings\Planning Drawings 3a and 4a-d Illustrative Landscape Masterplan and Cross Sections.dwg

•	Revision History	• Date
A	Section line 03-03' amended. Key updated	23.11.22
B	RED LINE CHANGE	30-11-22

Key:

- Proposed Development
- Existing Vegetation to be retained
- Woodland recently planted as part of Kronospan Landscape Strategy
- Woodland planting required as part of NE Warehouse planning consent
- Proposed New Woodland Planting
- Proposed Specimen Tree Planting
- Proposed New Hedgerow Planting
- Proposed Wildflower Grassland
- Proposed New Wetland
- Proposed Permeable Paving
- Proposed Bund
- Detailed design to include measures to protect limekiln from construction damage
- Proposed Acoustic Screen (5m) - typically close board timber fence
- Proposed Acoustic Screen (3m) - typically close board timber fence
- Proposed Security Fencing
- Section Lines (refer to Figures 4.4a-d for the sections)

Chester Office:
Well House Barns
Bretton
Chester
CH4 0DH

South Manchester Office:
Camellia House
76 Water Lane
Wilmslow
SK9 5BB

0844 8700 007 - www.axisped.co.uk

axis

client: KRONOSPAN

project: KRONOSPAN NORTH ACCESS ROAD

drawing title: PROPOSED DEVELOPMENT - ILLUSTRATIVE LANDSCAPE MASTERPLAN

date: DECEMBER 2022 | drawn by: AM | checked: BC

drawing number: Planning Drawing 3a | status: FOR PLANNING

scale(s): 1:2500@A3 | rev: B

planning environment design

APPENDIX 8 – TEMPRO GROWTH FACTORS

TEMPRO Growth Factor 2022 - 2026

Weekday AM Peak Period (0700 - 0959)

Dataset Version:	72
Result Type:	Trip ends by time period
Base Year:	2022
Future Year:	2026
Trip Purpose Group:	All purposes
Time Period:	Weekday AM peak period (0700 - 0959)
Trip End Type:	Origin/Destination
Alternative Assumptions Applied:	No

Level	Area	Local Growth Figure
W02000096	Wrexham 019	1.039

Weekday PM Peak Period (1600 - 1859)

Dataset Version:	72
Result Type:	Trip ends by time period
Base Year:	2022
Future Year:	2026
Trip Purpose Group:	All purposes
Time Period:	Weekday PM peak period (1600 - 1859)
Trip End Type:	Origin/Destination
Alternative Assumptions Applied:	No

Level	Area	Local Growth Figure
W02000096	Wrexham 019	1.040

Average Weekday

Dataset Version:	72
Result Type:	Trip ends by time period
Base Year:	2022
Future Year:	2026
Trip Purpose Group:	All purposes
Time Period:	Average Weekday
Trip End Type:	Origin/Destination
Alternative Assumptions Applied:	No

Level	Area	Local Growth Figure
W02000096	Wrexham 019	1.041

TEMPRO Growth Factor 2022 - 2031

Weekday AM Peak Period (0700 - 0959)

Dataset Version:	72
Result Type:	Trip ends by time period
Base Year:	2022
Future Year:	2031
Trip Purpose Group:	All purposes
Time Period:	Weekday AM peak period (0700 - 0959)
Trip End Type:	Origin/Destination
Alternative Assumptions Applied:	No

Level	Area	l Growth Figure
W02000096	Wrexham 019	1.086

Weekday PM Peak Period (1600 - 1859)

Dataset Version:	72
Result Type:	Trip ends by time period
Base Year:	2022
Future Year:	2031
Trip Purpose Group:	All purposes
Time Period:	Weekday PM peak period (1600 - 1859)
Trip End Type:	Origin/Destination
Alternative Assumptions Applied:	No

Level	Area	l Growth Figure
W02000096	Wrexham 019	1.087

Average Weekday

Dataset Version:	72
Result Type:	Trip ends by time period
Base Year:	2022
Future Year:	2031
Trip Purpose Group:	All purposes
Time Period:	Average Weekday
Trip End Type:	Origin/Destination
Alternative Assumptions Applied:	No

Level	Area	l Growth Figure
W02000096	Wrexham 019	1.089

APPENDIX 9 – TRAFFIC FLOW FIGURES

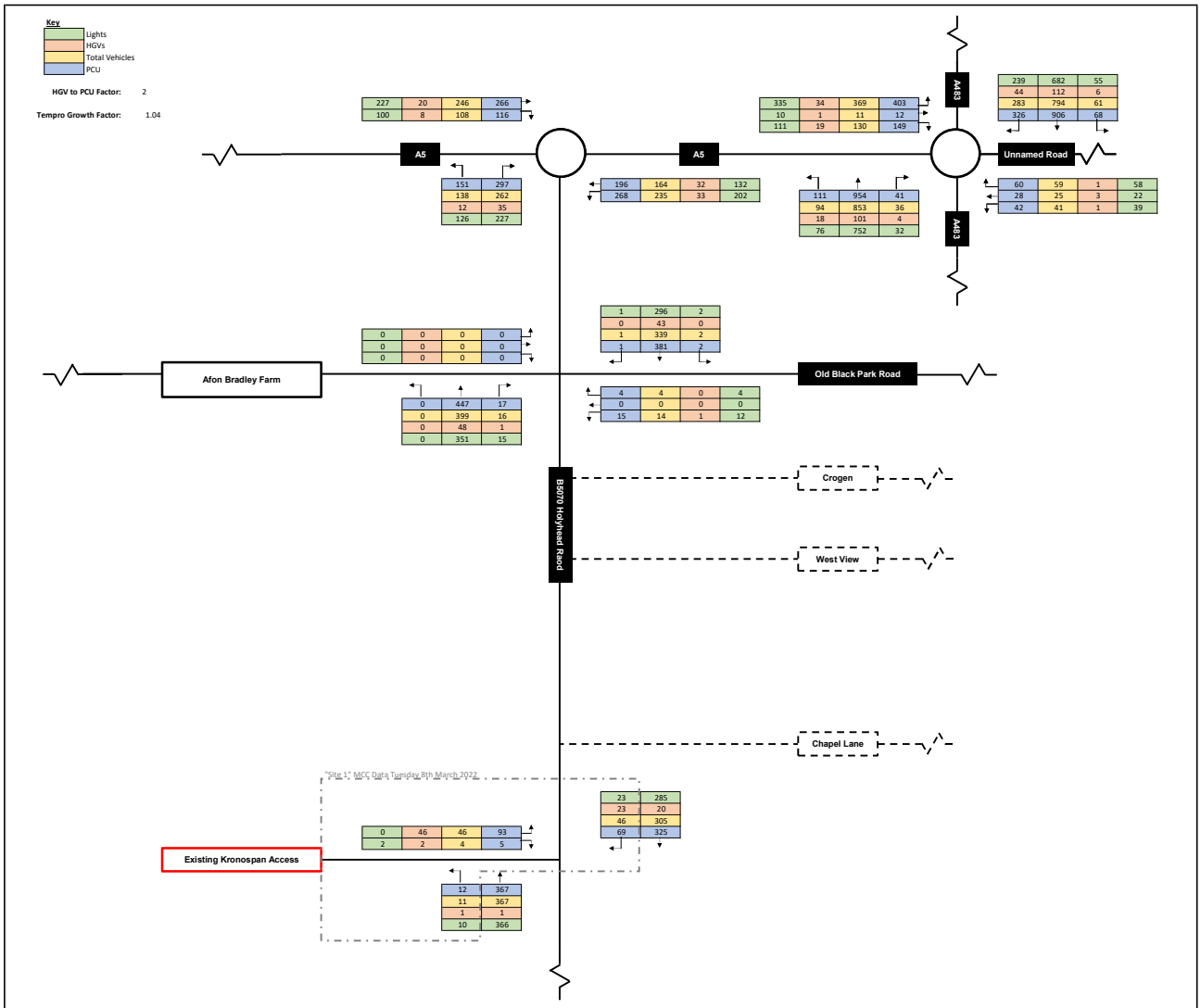


Figure: 3
Project Name: Kronospan Northern Infrastructure
Project Number: 3162-01
Description: 2026 Factored Baseline
Period: AM (8:00am - 9:00am)

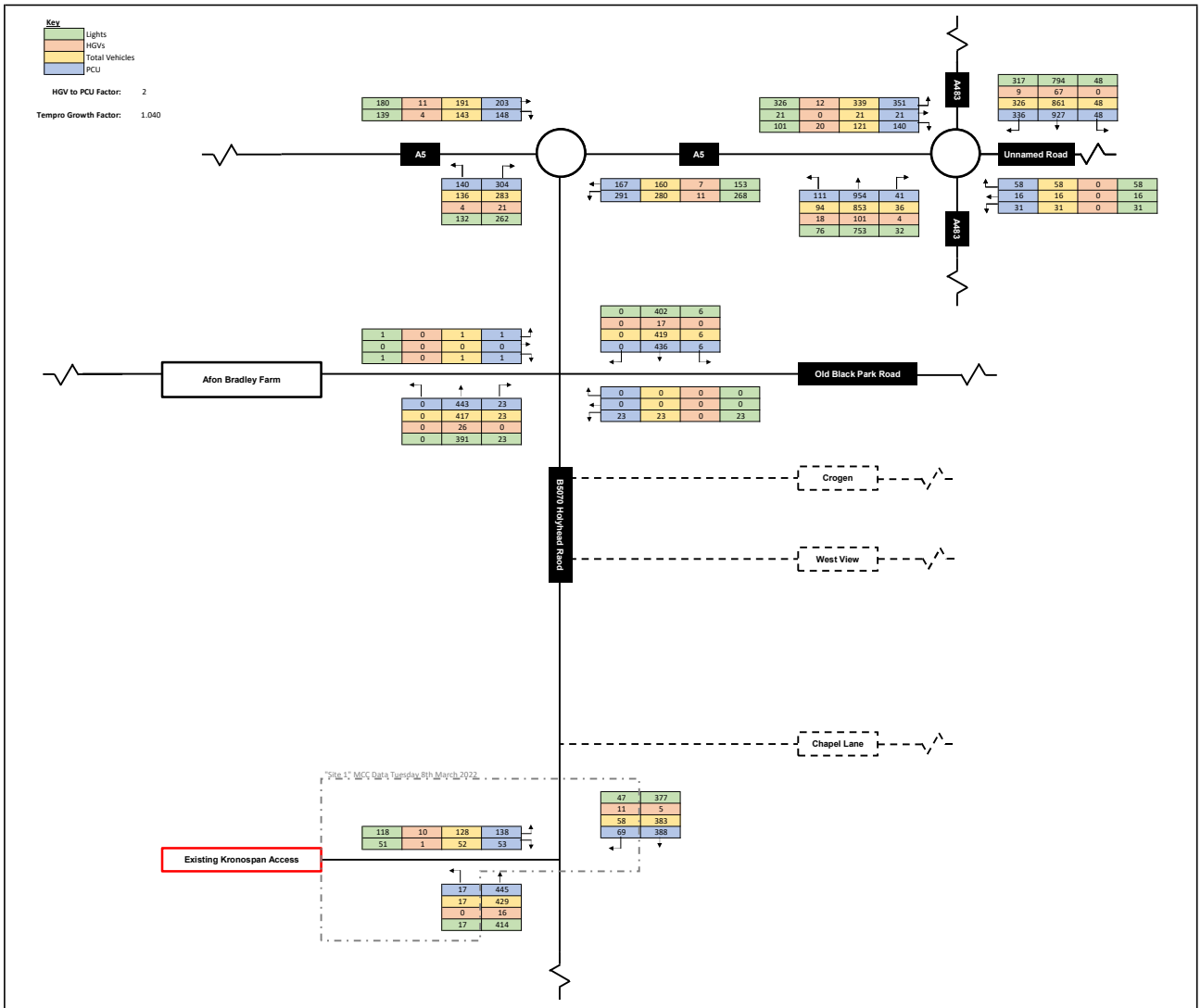


Figure: 4
Project Name: Kronospan Northern Infrastructure
Project Number: 3162-01
Description: 2026 Factored Baseline
Period: PM (5:00pm - 6:00pm)

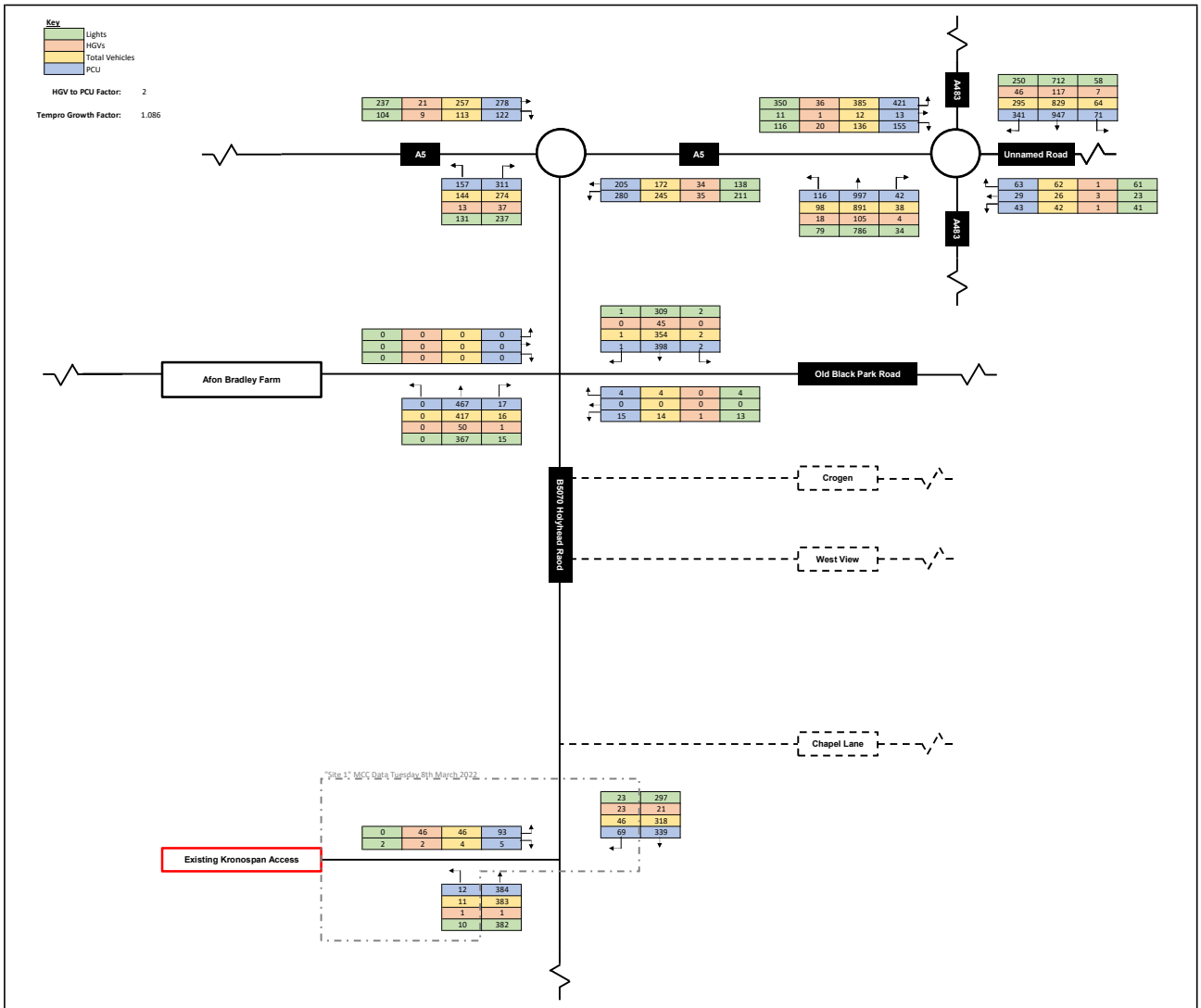


Figure: 5
Project Name: Kronospan Northern Infrastructure
Project Number: 3162-01
Description: 2031 Factored Baseline
Period: AM (8:00am - 9:00am)

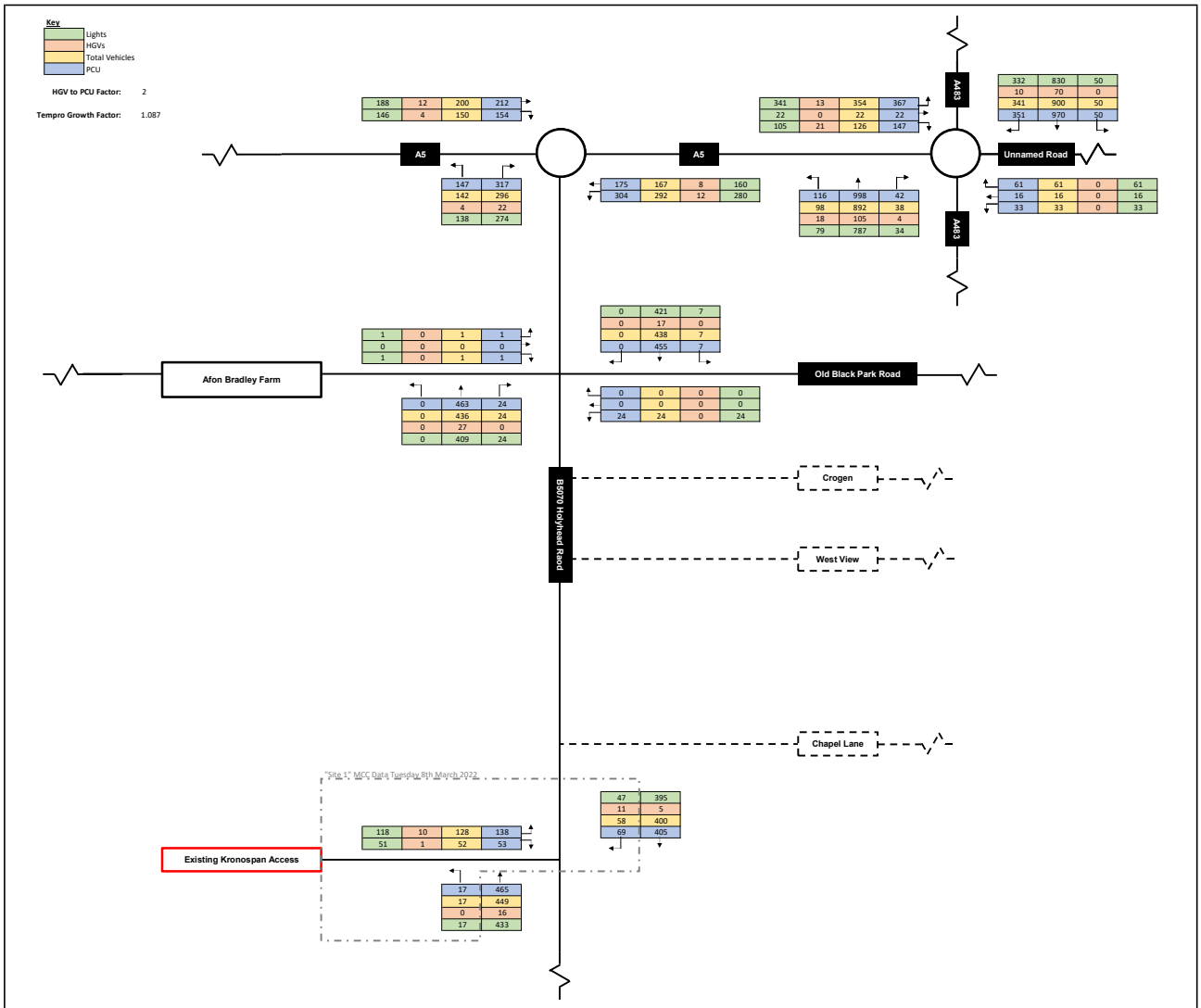


Figure: 6
Project Name: Kronospan Northern Infrastructure
Project Number: 3162-01
Description: 2026 Factored Baseline
Period: PM (5:00pm - 6:00pm)

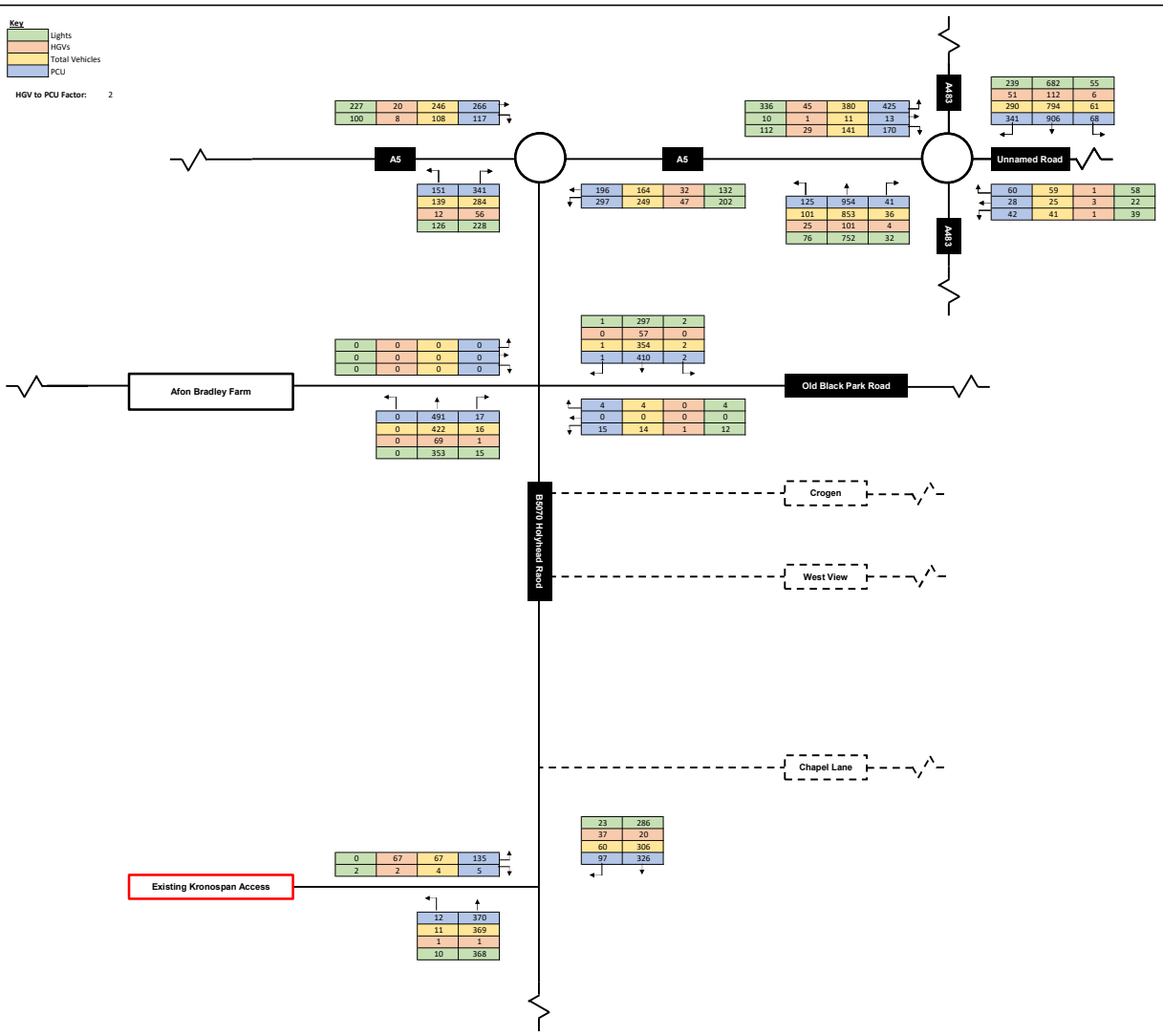


Figure: 7
Project Name: Kronospan Northern Infrastructure
Project Number: 3162-01
Description: 2026 'Do Nothing' Without Development Scenario
Period: AM (8:00am - 9:00am)

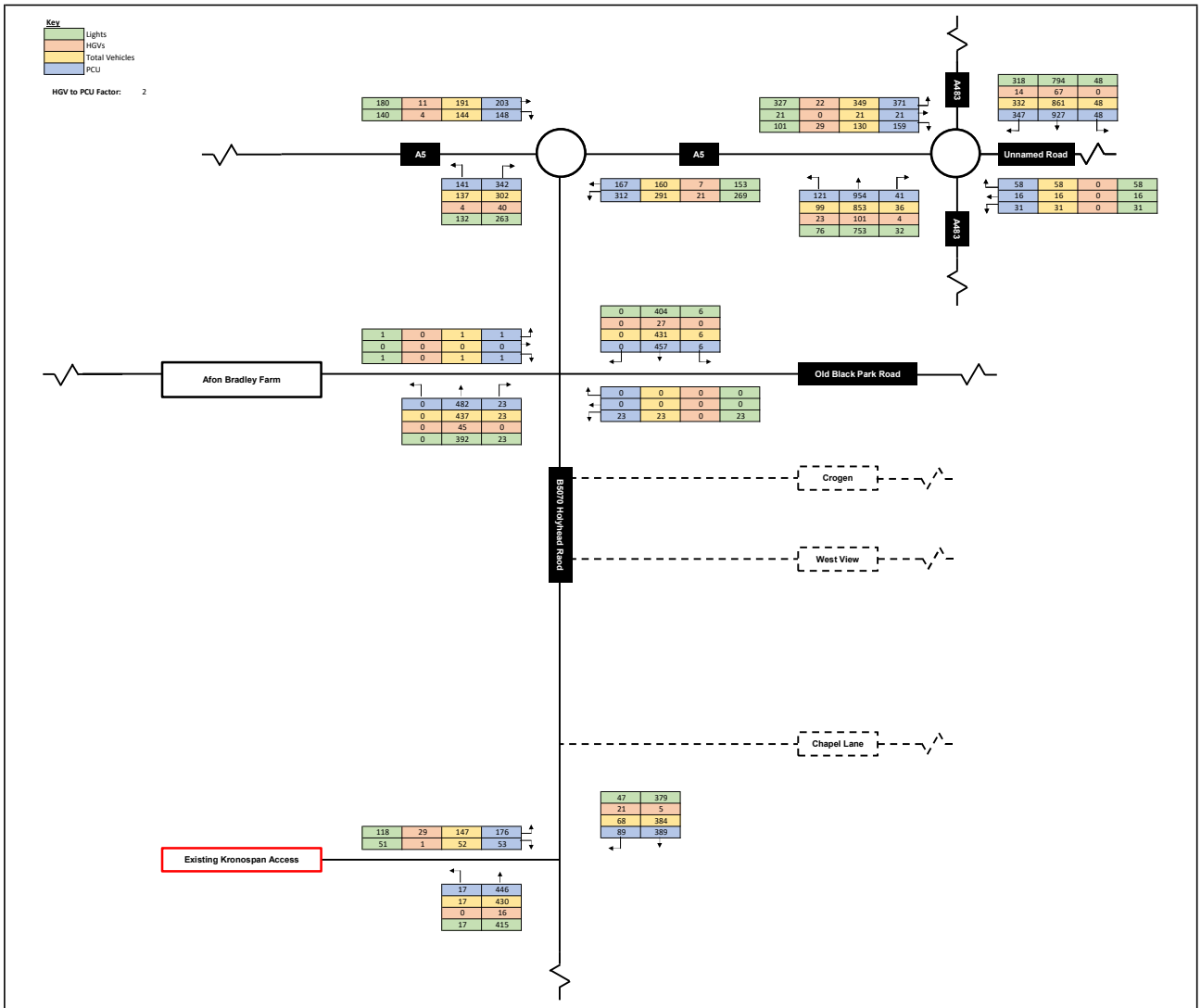
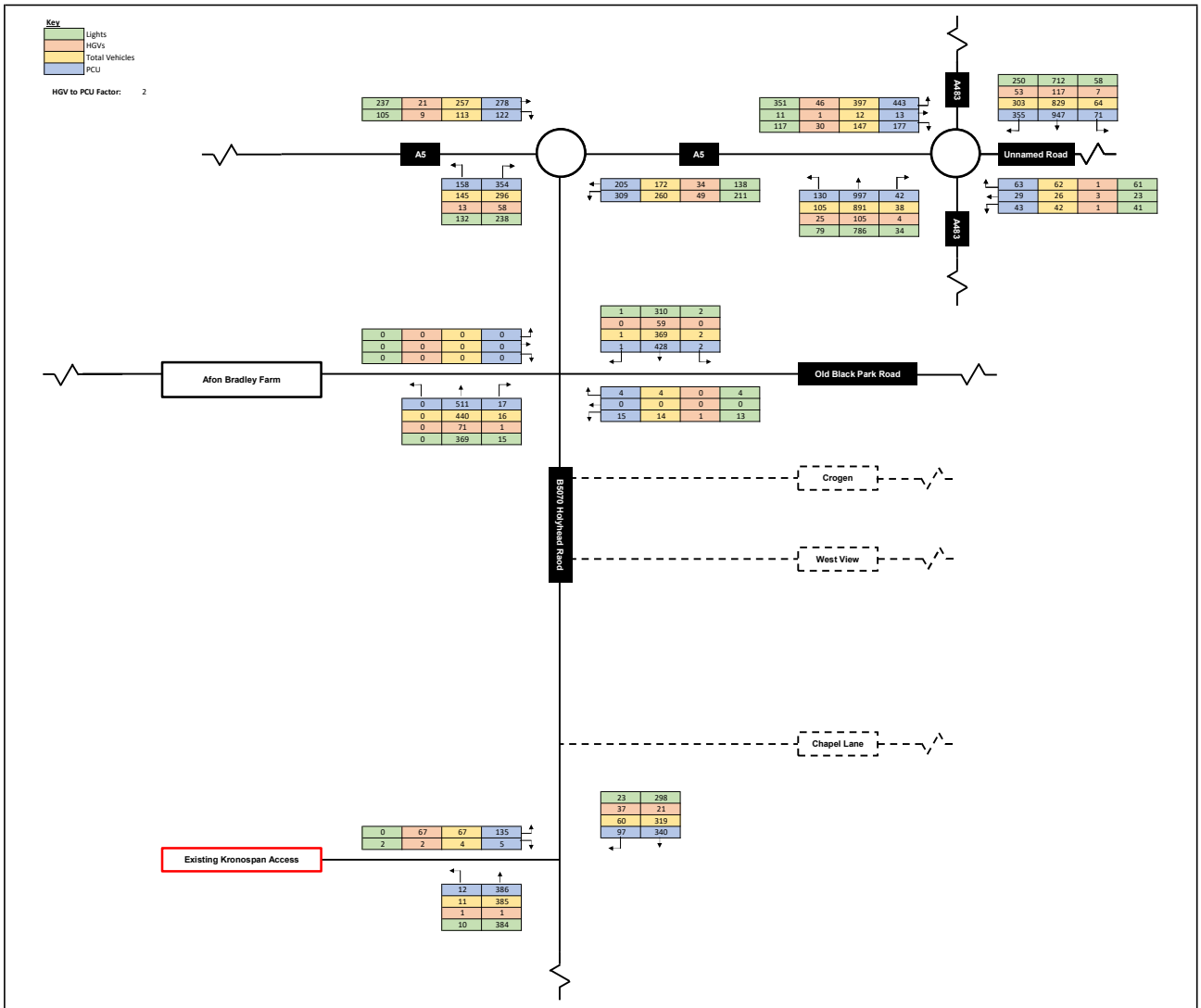


Figure: 8
Project Name: Kronospan Northern Infrastructure
Project Number: 3162-01
Description: 2026 'Do Nothing' Without Development Scenario
Period: PM (5:00pm - 6:00pm)



axis

Figure: 9
Project Name: Kronospan Northern Infrastructure
Project Number: 3162-01
Description: 2031 'Do Nothing' Without Development Scenario
Period: AM (8:00am - 9:00am)

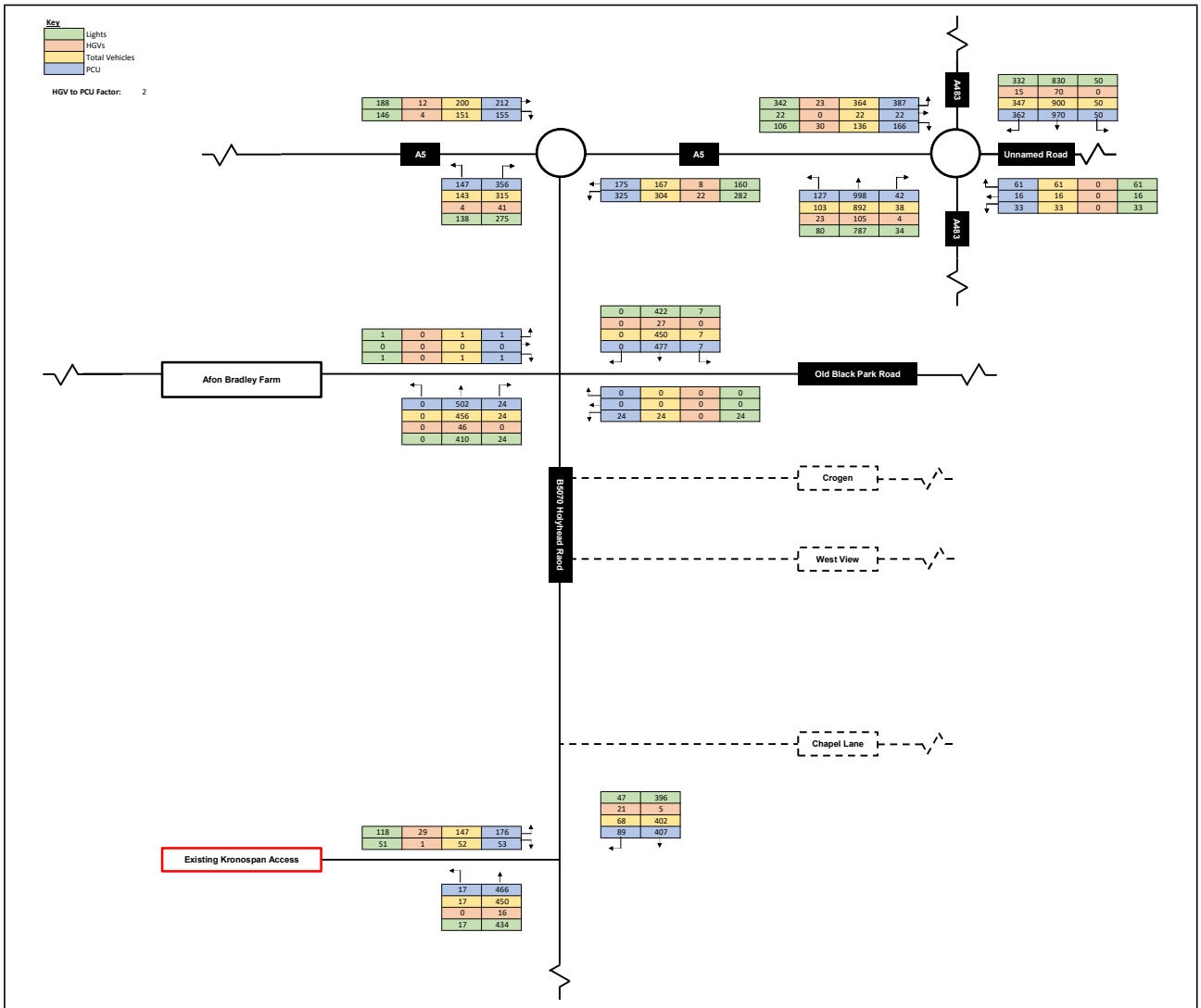


Figure: 10
Project Name: Kronospan Northern Infrastructure
Project Number: 3162-01
Description: 2031 'Do Nothing' Without Development Scenario
Period: PM (5:00pm - 6:00pm)

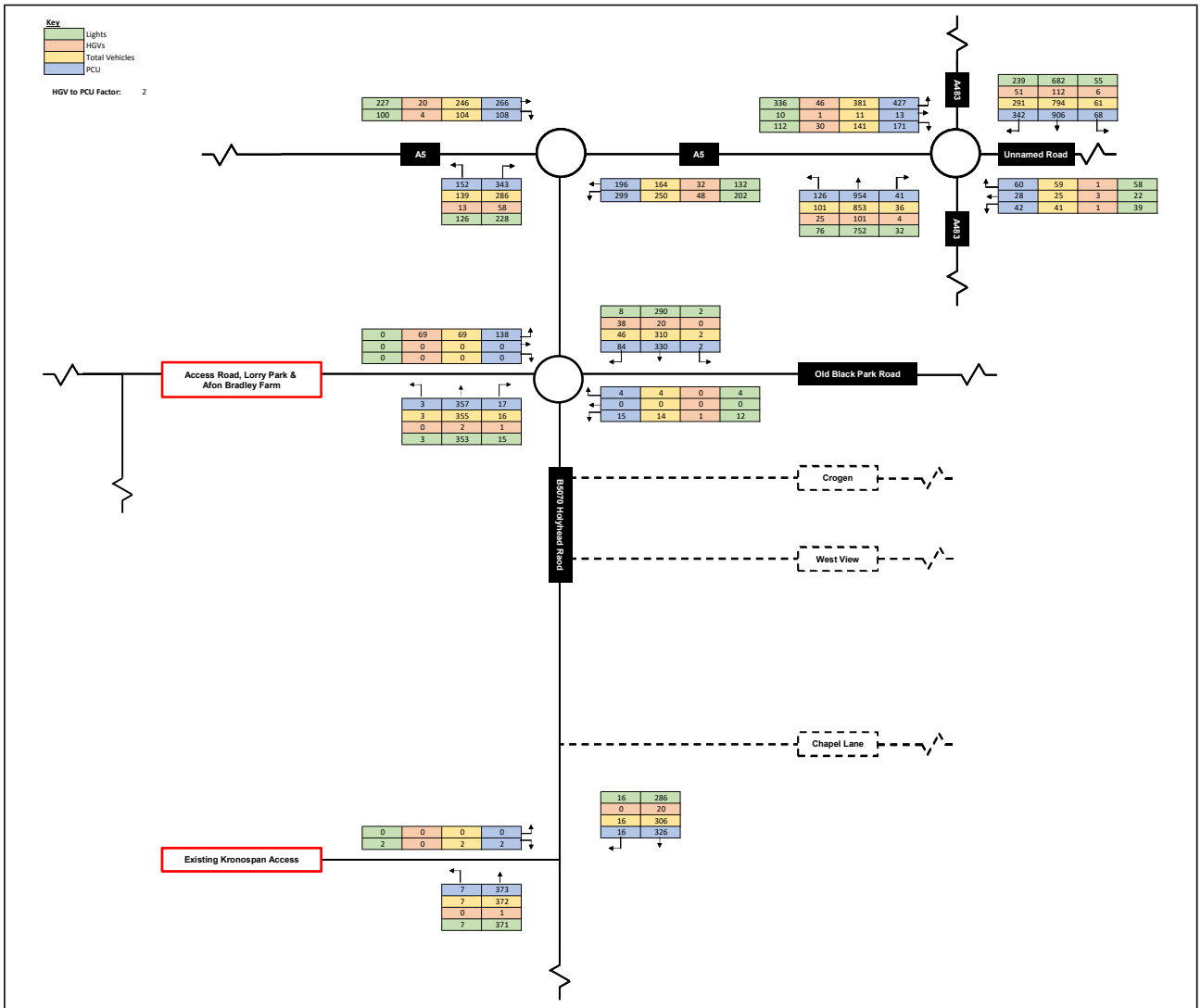


Figure: 11
Project Name: Sandown Quarry
Project Number: 3162-01
Description: 2026 'Do Something' With Development Scenario
Period: AM (8:00am - 9:00am)

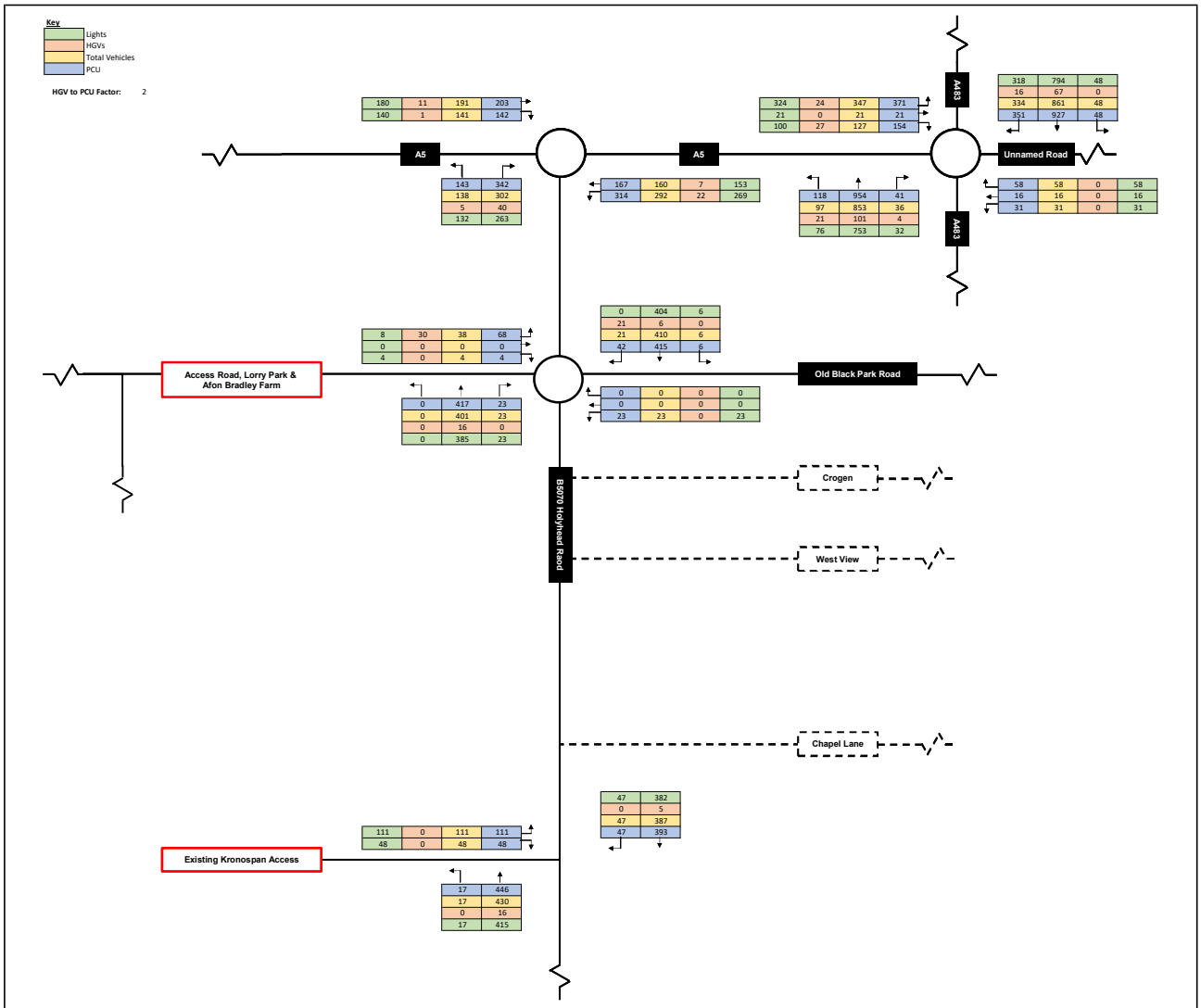


Figure:	12		
Project Name:	Sandown Quarry		
Project Number:	3162-01		
Description:	2026 'Do Something' With Development Scenario		
Period:	PM (5:00pm - 6:00pm)		

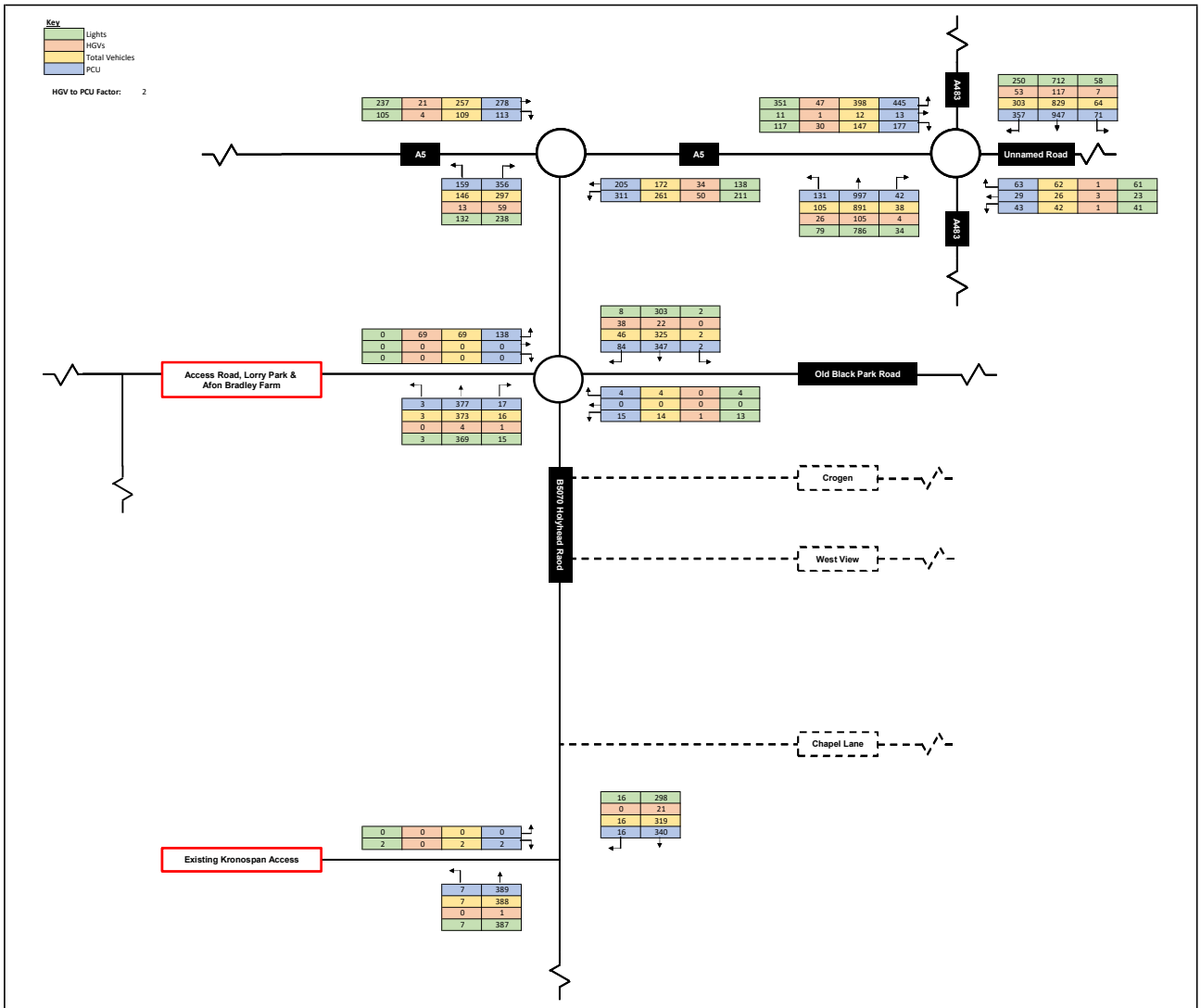


Figure:	13		
Project Name:	Sandown Quarry		
Project Number:	3162-01		
Description:	2026 'Do Something' With Development Scenario		
Period:	AM (8:00am - 9:00am)		

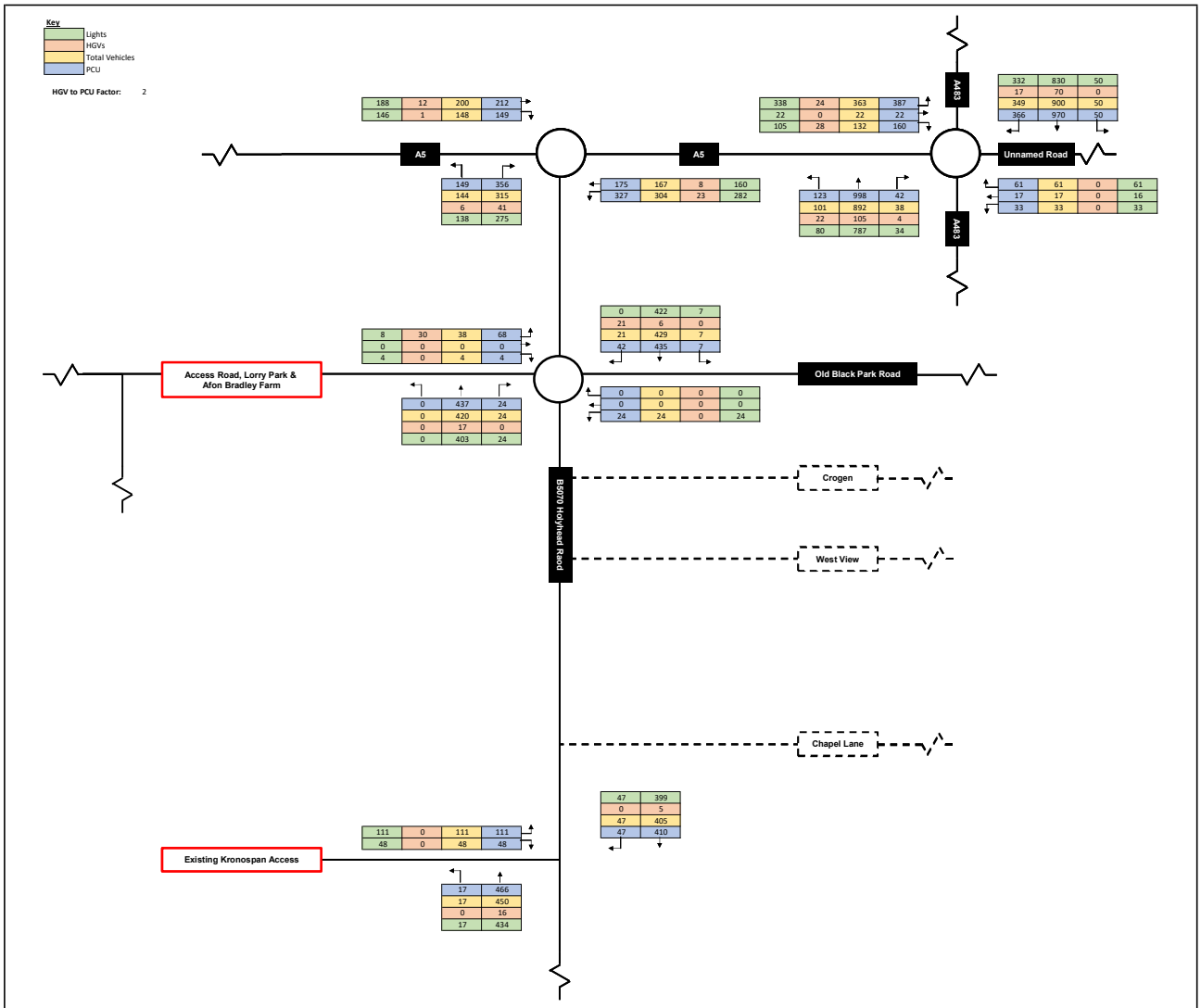


Figure: 14
Project Name: Sandown Quarry
Project Number: 3162-01
Description: 2026 'Do Something' With Development Scenario
Period: PM (5:00pm - 6:00pm)

APPENDIX 10 – MODELLING RESULTS

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.1.7462

Filename: Proposed Roundabout.j9
Path: Q:\3001-3050\3046-01 Kronospan - Northern Infrastructure\Documents\Transport\Traffic Models
Report generation date: 09/08/2022 13:10:28

Summary of junction performance

	AM						PM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
	2026 'Do Something'											
Arm 1	D1	0.6	4.84	0.38	A	140 % [Arm 1]	D2	0.7	5.24	0.43	A	114 % [Arm 1]
Arm 2		0.0	4.36	0.02	A			0.0	4.53	0.03	A	
Arm 3		0.5	4.41	0.34	A			0.6	4.65	0.38	A	
Arm 4		0.2	4.19	0.15	A			0.1	4.02	0.08	A	
	2031 'Do Something'											
Arm 1	D3	0.7	4.96	0.40	A	131 % [Arm 1]	D4	0.8	5.43	0.45	A	105 % [Arm 1]
Arm 2		0.0	4.42	0.03	A			0.0	4.61	0.03	A	
Arm 3		0.5	4.54	0.36	A			0.7	4.79	0.40	A	
Arm 4		0.2	4.25	0.15	A			0.1	4.08	0.08	A	

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	
Location	
Site number	
Date	23/06/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AXISPED\Traffic
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	Delay	0.85	36.00	20.00

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2031 'Do Something'	PM	ONE HOUR	16:45	18:15	15	✓

2031 'Do Something', PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	5.03	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	105	Arm 1

Arms

Arms

Arm	Name	Description
1	B5070 (N)	
2	Old Black Park Road	
3	B5070 (S)	
4	Proposed Access Road	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	3.50	4.60	5.0	20.0	33.2	40.0	
2	3.30	4.40	2.0	20.0	33.2	40.0	
3	3.10	4.60	30.0	20.0	33.2	40.0	
4	3.65	4.60	5.0	20.0	33.2	40.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.544	1213
2	0.518	1082
3	0.559	1285
4	0.550	1240

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	484	100.000
2		ONE HOUR	✓	24	100.000
3		ONE HOUR	✓	461	100.000
4		ONE HOUR	✓	72	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	7	435	42
	2	0	0	24	0
	3	437	24	0	0
	4	68	0	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.45	5.43	0.8	A	444	666
2	0.03	4.61	0.0	A	22	33
3	0.40	4.79	0.7	A	423	635
4	0.08	4.08	0.1	A	66	99

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	364	91	21	1201	0.303	363	379	0.0	0.4	4.285	A
2	18	5	360	895	0.020	18	23	0.0	0.0	4.103	A
3	347	87	31	1267	0.274	346	347	0.0	0.4	3.899	A
4	54	14	346	1050	0.052	54	31	0.0	0.1	3.613	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	435	109	25	1199	0.363	435	454	0.4	0.6	4.707	A
2	22	5	432	858	0.025	22	28	0.0	0.0	4.302	A
3	414	104	38	1264	0.328	414	416	0.4	0.5	4.234	A
4	65	16	414	1013	0.064	65	38	0.1	0.1	3.796	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	533	133	31	1196	0.446	532	555	0.6	0.8	5.415	A
2	26	7	529	808	0.033	26	34	0.0	0.0	4.605	A
3	508	127	46	1259	0.403	507	509	0.5	0.7	4.780	A
4	79	20	507	962	0.082	79	46	0.1	0.1	4.079	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	533	133	31	1196	0.446	533	556	0.8	0.8	5.430	A
2	26	7	530	808	0.033	26	34	0.0	0.0	4.607	A
3	508	127	46	1259	0.403	508	510	0.7	0.7	4.789	A
4	79	20	508	961	0.082	79	46	0.1	0.1	4.081	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	435	109	25	1199	0.363	436	455	0.8	0.6	4.724	A
2	22	5	433	857	0.025	22	28	0.0	0.0	4.308	A
3	414	104	38	1264	0.328	415	417	0.7	0.5	4.245	A
4	65	16	415	1012	0.064	65	38	0.1	0.1	3.799	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	364	91	21	1201	0.303	365	381	0.6	0.4	4.309	A
2	18	5	363	894	0.020	18	23	0.0	0.0	4.109	A
3	347	87	32	1267	0.274	348	349	0.5	0.4	3.915	A
4	54	14	348	1049	0.052	54	32	0.1	0.1	3.620	A

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.6.541 [19821,26/11/2015]

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk

Filename: Chapel Lane - B5070 staggered crossroad.arc8
Path: Q:\3001-3050\3046-01 Kronospan - Northern Infrastructure\Documents\Transport\Traffic Models
Report generation date: 09/08/2022 12:52:00

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2026 'Do Nothing'							
Stream B-C	0.32	7.60	0.24	A	0.52	9.44	0.34	A
Stream B-A	0.01	9.20	0.01	A	0.19	11.88	0.16	B
Stream C-AB	0.47	5.58	0.22	A	0.51	5.39	0.23	A
Stream C-A	-	-	-	-	-	-	-	-
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
	A1 - 2026 'Do Nothing' + Construction Traffic							
Stream B-C	0.32	7.60	0.24	A	0.52	9.44	0.34	A
Stream B-A	0.01	9.20	0.01	A	0.19	11.92	0.16	B
Stream C-AB	0.47	5.58	0.22	A	0.52	5.37	0.23	A
Stream C-A	-	-	-	-	-	-	-	-
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
	A1 - 2026 'Do Something'							
Stream B-C	0.00	0.00	0.00	A	0.27	7.85	0.21	A
Stream B-A	0.00	0.00	0.00	A	0.16	10.81	0.14	B
Stream C-AB	0.05	4.69	0.04	A	0.27	4.80	0.12	A
Stream C-A	-	-	-	-	-	-	-	-
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
	A1 - 2031 'Do Nothing'							
Stream B-C	0.32	7.67	0.24	A	0.53	9.58	0.34	A
Stream B-A	0.01	9.35	0.01	A	0.20	12.21	0.17	B
Stream C-AB	0.48	5.56	0.23	A	0.54	5.38	0.23	A
Stream C-A	-	-	-	-	-	-	-	-
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
	A1 - 2031 'Do Something'							
Stream B-C	0.00	0.00	0.00	A	0.28	7.95	0.21	A
Stream B-A	0.00	0.00	0.00	A	0.16	11.07	0.14	B
Stream C-AB	0.05	4.67	0.04	A	0.28	4.78	0.12	A
Stream C-A	-	-	-	-	-	-	-	-
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-

Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle.

"D1 - 2026 'Do Nothing', AM " model duration: 07:45 - 09:15
"D2 - 2026 'Do Nothing', PM" model duration: 16:45 - 18:15
"D3 - 2031 'Do Nothing', AM" model duration: 07:45 - 09:15
"D4 - 2031 'Do Nothing', PM" model duration: 16:45 - 18:15
"D5 - 2026 'Do Nothing' + Construction Traffic, AM" model duration: 07:45 - 09:15
"D6 - 2026 'Do Nothing' + Construction Traffic, PM" model duration: 16:45 - 18:15
"D7 - 2026 'Do Something', AM" model duration: 07:45 - 09:15
"D8 - 2026 'Do Something', PM" model duration: 16:45 - 18:15
"D9 - 2031 'Do Something', AM" model duration: 07:45 - 09:15
"D10 - 2031 'Do Something', PM" model duration: 16:45 - 18:15

Run using Junctions 8.0.6.541 at 09/08/2022 12:51:54

File summary

Title	(untitled)
Location	
Site Number	
Date	21/08/2017
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	Traffic
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	Veh	PCU	perHour	s	-Min	perMin

(Default Analysis Set) - 2026 'Do Nothing', AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationsh
2026 'Do Nothing', AM	2026 'Do Nothing'	AM		ONE HOUR	07:45	09:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	Existing Kronospan Southern Access	T-Junction	Two-way	A,B,C		6.56	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	B5070 (S)		Major
B	B	Existing Site Access		Minor
C	C	B5070 (N)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	10.00		0.00		2.20	250.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	8.20	3.75	3.50	3.50	✓	1.00	50	70

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	586.667	0.088	0.223	0.140	0.319
1	B-C	744.914	0.094	0.238	-	-
1	C-B	718.741	0.230	0.230	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	382.00	100.000
B	ONE HOUR	✓	140.00	100.000
C	ONE HOUR	✓	423.00	100.000

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	12.000	370.000
	B	5.000	0.000	135.000
	C	326.000	97.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.03	0.97
	B	0.04	0.00	0.96
	C	0.77	0.23	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.044
	B	1.000	1.000	1.029
	C	1.051	1.028	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	4.4
	B	0.0	0.0	2.9
	C	5.1	2.8	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.24	7.60	0.32	A	127.42	191.13	22.34	7.01	0.25	22.34	7.01
B-A	0.01	9.20	0.01	A	4.59	6.88	0.98	8.50	0.01	0.98	8.50
C-AB	0.22	5.58	0.47	A	148.12	222.17	30.48	8.23	0.34	30.48	8.23
C-A	-	-	-	-	257.80	386.70	-	-	-	-	-
A-B	-	-	-	-	11.01	16.52	-	-	-	-	-
A-C	-	-	-	-	354.32	531.48	-	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	104.54	26.13	103.79	0.00	673.38	0.155	0.00	0.19	6.493	A
B-A	3.76	0.94	3.73	0.00	459.16	0.008	0.00	0.01	7.904	A
C-AB	109.46	27.36	108.54	0.00	814.23	0.134	0.00	0.23	5.278	A
C-A	223.57	55.89	223.57	0.00	-	-	-	-	-	-
A-B	9.03	2.26	9.03	0.00	-	-	-	-	-	-
A-C	290.70	72.67	290.70	0.00	-	-	-	-	-	-

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	124.83	31.21	124.63	0.00	659.42	0.189	0.19	0.24	6.924	A
B-A	4.49	1.12	4.49	0.00	433.23	0.010	0.01	0.01	8.396	A
C-AB	141.48	35.37	141.15	0.00	834.90	0.169	0.23	0.31	5.379	A
C-A	256.19	64.05	256.19	0.00	-	-	-	-	-	-
A-B	10.79	2.70	10.79	0.00	-	-	-	-	-	-
A-C	347.12	86.78	347.12	0.00	-	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	152.88	38.22	152.56	0.00	640.07	0.239	0.24	0.32	7.590	A
B-A	5.51	1.38	5.49	0.00	396.88	0.014	0.01	0.01	9.198	A
C-AB	192.98	48.25	192.38	0.00	864.17	0.223	0.31	0.46	5.561	A
C-A	294.07	73.52	294.07	0.00	-	-	-	-	-	-
A-B	13.21	3.30	13.21	0.00	-	-	-	-	-	-
A-C	425.14	106.28	425.14	0.00	-	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	152.88	38.22	152.88	0.00	640.07	0.239	0.32	0.32	7.599	A
B-A	5.51	1.38	5.50	0.00	396.71	0.014	0.01	0.01	9.201	A
C-AB	193.19	48.30	193.17	0.00	864.38	0.224	0.46	0.47	5.578	A
C-A	293.86	73.46	293.86	0.00	-	-	-	-	-	-
A-B	13.21	3.30	13.21	0.00	-	-	-	-	-	-
A-C	425.14	106.28	425.14	0.00	-	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	124.83	31.21	125.14	0.00	659.41	0.189	0.32	0.24	6.934	A
B-A	4.49	1.12	4.51	0.00	432.98	0.010	0.01	0.01	8.403	A
C-AB	141.74	35.44	142.32	0.00	835.23	0.170	0.47	0.32	5.401	A
C-A	255.93	63.98	255.93	0.00	-	-	-	-	-	-
A-B	10.79	2.70	10.79	0.00	-	-	-	-	-	-
A-C	347.12	86.78	347.12	0.00	-	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	104.54	26.13	104.75	0.00	673.36	0.155	0.24	0.19	6.513	A
B-A	3.76	0.94	3.77	0.00	458.79	0.008	0.01	0.01	7.913	A
C-AB	109.84	27.46	110.19	0.00	814.53	0.135	0.32	0.24	5.302	A
C-A	223.19	55.80	223.19	0.00	-	-	-	-	-	-
A-B	9.03	2.26	9.03	0.00	-	-	-	-	-	-
A-C	290.70	72.67	290.70	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (07:45-08:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	2.72	0.18	6.493	A	A
B-A	0.12	0.01	7.904	A	A
C-AB	3.41	0.23	5.278	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	3.49	0.23	6.924	A	A
B-A	0.15	0.01	8.396	A	A
C-AB	4.72	0.31	5.379	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	4.67	0.31	7.590	A	A
B-A	0.20	0.01	9.198	A	A
C-AB	6.96	0.46	5.561	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	4.81	0.32	7.599	A	A
B-A	0.21	0.01	9.201	A	A
C-AB	7.04	0.47	5.578	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:45-09:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	3.73	0.25	6.934	A	A
B-A	0.16	0.01	8.403	A	A
C-AB	4.83	0.32	5.401	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:00-09:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	2.92	0.19	6.513	A	A
B-A	0.13	0.01	7.913	A	A
C-AB	3.53	0.24	5.302	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

(Default Analysis Set) - 2026 'Do Nothing', PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationsh
2026 'Do Nothing', PM	2026 'Do Nothing'	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	Existing Kronospan Southern Access	T-Junction	Two-way	A,B,C		8.09	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	B5070 (S)		Major
B	B	Existing Site Access		Minor
C	C	B5070 (N)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	10.00		0.00		2.20	250.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	8.20	3.75	3.50	3.50	✓	1.00	50	70

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	586.667	0.088	0.223	0.140	0.319
1	B-C	744.914	0.094	0.238	-	-
1	C-B	718.741	0.230	0.230	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	463.00	100.000
B	ONE HOUR	✓	229.00	100.000
C	ONE HOUR	✓	478.00	100.000

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	17.000	446.000
	B	53.000	0.000	176.000
	C	389.000	89.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.04	0.96
	B	0.23	0.00	0.77
	C	0.81	0.19	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.044
	B	1.000	1.000	1.029
	C	1.051	1.028	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.0	0.0	4.4
	B	0.0	0.0	2.9
	C	5.1	2.8	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.34	9.44	0.52	A	166.11	249.17	34.40	8.28	0.38	34.40	8.28
B-A	0.16	11.88	0.19	B	48.63	72.95	12.59	10.35	0.14	12.59	10.35
C-AB	0.23	5.39	0.51	A	151.15	226.72	32.80	8.68	0.36	32.80	8.68
C-A	-	-	-	-	307.99	461.99	-	-	-	-	-
A-B	-	-	-	-	15.60	23.40	-	-	-	-	-
A-C	-	-	-	-	427.10	640.65	-	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	136.29	34.07	135.20	0.00	644.21	0.212	0.00	0.27	7.260	A
B-A	39.90	9.98	39.50	0.00	438.31	0.091	0.00	0.10	9.017	A
C-AB	108.47	27.12	107.51	0.00	833.57	0.130	0.00	0.24	5.135	A
C-A	268.23	67.06	268.23	0.00	-	-	-	-	-	-
A-B	12.80	3.20	12.80	0.00	-	-	-	-	-	-
A-C	350.41	87.60	350.41	0.00	-	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	162.74	40.69	162.40	0.00	622.93	0.261	0.27	0.36	8.035	A
B-A	47.65	11.91	47.52	0.00	406.96	0.117	0.10	0.13	10.012	B
C-AB	142.55	35.64	142.18	0.00	858.74	0.166	0.24	0.33	5.215	A
C-A	307.26	76.81	307.26	0.00	-	-	-	-	-	-
A-B	15.28	3.82	15.28	0.00	-	-	-	-	-	-
A-C	418.42	104.61	418.42	0.00	-	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	199.32	49.83	198.70	0.00	591.89	0.337	0.36	0.51	9.402	A
B-A	58.35	14.59	58.12	0.00	361.72	0.161	0.13	0.19	11.839	B
C-AB	201.87	50.47	201.16	0.00	897.03	0.225	0.33	0.51	5.380	A
C-A	349.03	87.26	349.03	0.00	-	-	-	-	-	-
A-B	18.72	4.68	18.72	0.00	-	-	-	-	-	-
A-C	512.46	128.12	512.46	0.00	-	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	199.32	49.83	199.30	0.00	591.72	0.337	0.51	0.52	9.435	A
B-A	58.35	14.59	58.35	0.00	361.45	0.161	0.19	0.19	11.876	B
C-AB	202.16	50.54	202.14	0.00	897.34	0.225	0.51	0.51	5.394	A
C-A	348.75	87.19	348.75	0.00	-	-	-	-	-	-
A-B	18.72	4.68	18.72	0.00	-	-	-	-	-	-
A-C	512.46	128.12	512.46	0.00	-	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	162.74	40.69	163.34	0.00	622.73	0.261	0.52	0.37	8.070	A
B-A	47.65	11.91	47.87	0.00	406.60	0.117	0.19	0.13	10.043	B
C-AB	142.88	35.72	143.57	0.00	859.18	0.166	0.51	0.34	5.240	A
C-A	306.93	76.73	306.93	0.00	-	-	-	-	-	-
A-B	15.28	3.82	15.28	0.00	-	-	-	-	-	-
A-C	418.42	104.61	418.42	0.00	-	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	136.29	34.07	136.64	0.00	643.96	0.212	0.37	0.28	7.303	A
B-A	39.90	9.98	40.03	0.00	437.85	0.091	0.13	0.10	9.053	A
C-AB	108.94	27.23	109.32	0.00	833.94	0.131	0.34	0.25	5.159	A
C-A	267.76	66.94	267.76	0.00	-	-	-	-	-	-
A-B	12.80	3.20	12.80	0.00	-	-	-	-	-	-
A-C	350.41	87.60	350.41	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	3.95	0.26	7.260	A	A
B-A	1.43	0.10	9.017	A	A
C-AB	3.54	0.24	5.135	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	5.25	0.35	8.035	A	A
B-A	1.91	0.13	10.012	B	B
C-AB	5.00	0.33	5.215	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	7.46	0.50	9.402	A	A
B-A	2.75	0.18	11.839	B	B
C-AB	7.68	0.51	5.380	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	7.75	0.52	9.435	A	A
B-A	2.86	0.19	11.876	B	B
C-AB	7.78	0.52	5.394	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	5.69	0.38	8.070	A	A
B-A	2.08	0.14	10.043	B	B
C-AB	5.13	0.34	5.240	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:00-18:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	4.29	0.29	7.303	A	A
B-A	1.56	0.10	9.053	A	A
C-AB	3.68	0.25	5.159	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

(Default Analysis Set) - 2031 'Do Nothing', AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationsh
2031 'Do Nothing', AM	2031 'Do Nothing'	AM		ONE HOUR	07:45	09:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	Existing Kronospan Southern Access	T-Junction	Two-way	A,B,C		6.57	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	B5070 (S)		Major
B	B	Existing Site Access		Minor
C	C	B5070 (N)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	10.00		0.00		2.20	250.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	8.20	3.75	3.50	3.50	✓	1.00	50	70

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	586.667	0.088	0.223	0.140	0.319
1	B-C	744.914	0.094	0.238	-	-
1	C-B	718.741	0.230	0.230	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	398.00	100.000
B	ONE HOUR	✓	140.00	100.000
C	ONE HOUR	✓	437.00	100.000

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	12.000	386.000
	B	5.000	0.000	135.000
	C	340.000	97.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.03	0.97
	B	0.04	0.00	0.96
	C	0.78	0.22	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.044
	B	1.000	1.000	1.029
	C	1.051	1.028	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	4.4
	B	0.0	0.0	2.9
	C	5.1	2.8	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.24	7.67	0.32	A	127.42	191.13	22.50	7.06	0.25	22.50	7.06
B-A	0.01	9.35	0.01	A	4.59	6.88	0.99	8.62	0.01	0.99	8.62
C-AB	0.23	5.56	0.48	A	151.37	227.05	31.55	8.34	0.35	31.55	8.34
C-A	-	-	-	-	268.05	402.08	-	-	-	-	-
A-B	-	-	-	-	11.01	16.52	-	-	-	-	-
A-C	-	-	-	-	369.64	554.46	-	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	104.54	26.13	103.79	0.00	670.37	0.156	0.00	0.19	6.527	A
B-A	3.76	0.94	3.73	0.00	454.79	0.008	0.00	0.01	7.981	A
C-AB	111.32	27.83	110.37	0.00	818.77	0.136	0.00	0.24	5.259	A
C-A	232.79	58.20	232.79	0.00	-	-	-	-	-	-
A-B	9.03	2.26	9.03	0.00	-	-	-	-	-	-
A-C	303.27	75.82	303.27	0.00	-	-	-	-	-	-

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	124.83	31.21	124.62	0.00	655.82	0.190	0.19	0.24	6.965	A
B-A	4.49	1.12	4.49	0.00	428.01	0.011	0.01	0.01	8.500	A
C-AB	144.40	36.10	144.05	0.00	840.49	0.172	0.24	0.32	5.357	A
C-A	266.50	66.62	266.50	0.00	-	-	-	-	-	-
A-B	10.79	2.70	10.79	0.00	-	-	-	-	-	-
A-C	362.13	90.53	362.13	0.00	-	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	152.88	38.22	152.55	0.00	635.67	0.241	0.24	0.32	7.659	A
B-A	5.51	1.38	5.49	0.00	390.47	0.014	0.01	0.01	9.351	A
C-AB	197.93	49.48	197.30	0.00	871.21	0.227	0.32	0.48	5.546	A
C-A	305.32	76.33	305.32	0.00	-	-	-	-	-	-
A-B	13.21	3.30	13.21	0.00	-	-	-	-	-	-
A-C	443.52	110.88	443.52	0.00	-	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	152.88	38.22	152.88	0.00	635.66	0.241	0.32	0.32	7.668	A
B-A	5.51	1.38	5.50	0.00	390.30	0.014	0.01	0.01	9.355	A
C-AB	198.16	49.54	198.14	0.00	871.44	0.227	0.48	0.48	5.563	A
C-A	305.09	76.27	305.09	0.00	-	-	-	-	-	-
A-B	13.21	3.30	13.21	0.00	-	-	-	-	-	-
A-C	443.52	110.88	443.52	0.00	-	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	124.83	31.21	125.15	0.00	655.81	0.190	0.32	0.24	6.981	A
B-A	4.49	1.12	4.51	0.00	427.75	0.011	0.01	0.01	8.507	A
C-AB	144.68	36.17	145.29	0.00	840.84	0.172	0.48	0.33	5.383	A
C-A	266.22	66.55	266.22	0.00	-	-	-	-	-	-
A-B	10.79	2.70	10.79	0.00	-	-	-	-	-	-
A-C	362.13	90.53	362.13	0.00	-	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	104.54	26.13	104.75	0.00	670.36	0.156	0.24	0.19	6.550	A
B-A	3.76	0.94	3.77	0.00	454.41	0.008	0.01	0.01	7.988	A
C-AB	111.73	27.93	112.09	0.00	819.10	0.136	0.33	0.24	5.282	A
C-A	232.38	58.10	232.38	0.00	-	-	-	-	-	-
A-B	9.03	2.26	9.03	0.00	-	-	-	-	-	-
A-C	303.27	75.82	303.27	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (07:45-08:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	2.74	0.18	6.527	A	A
B-A	0.12	0.01	7.981	A	A
C-AB	3.50	0.23	5.259	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	3.52	0.23	6.965	A	A
B-A	0.15	0.01	8.500	A	A
C-AB	4.87	0.32	5.357	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	4.71	0.31	7.659	A	A
B-A	0.21	0.01	9.351	A	A
C-AB	7.24	0.48	5.546	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	4.85	0.32	7.668	A	A
B-A	0.21	0.01	9.355	A	A
C-AB	7.32	0.49	5.563	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:45-09:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	3.75	0.25	6.981	A	A
B-A	0.16	0.01	8.507	A	A
C-AB	4.99	0.33	5.383	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:00-09:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	2.94	0.20	6.550	A	A
B-A	0.13	0.01	7.988	A	A
C-AB	3.63	0.24	5.282	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

(Default Analysis Set) - 2031 'Do Nothing', PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationsh
2031 'Do Nothing', PM	2031 'Do Nothing'	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	Existing Kronospan Southern Access	T-Junction	Two-way	A,B,C		8.16	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	B5070 (S)		Major
B	B	Existing Site Access		Minor
C	C	B5070 (N)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	10.00		0.00		2.20	250.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	8.20	3.75	3.50	3.50	✓	1.00	50	70

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	586.667	0.088	0.223	0.140	0.319
1	B-C	744.914	0.094	0.238	-	-
1	C-B	718.741	0.230	0.230	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	483.00	100.000
B	ONE HOUR	✓	229.00	100.000
C	ONE HOUR	✓	496.00	100.000

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	17.000	466.000
	B	53.000	0.000	176.000
	C	407.000	89.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.04	0.96
	B	0.23	0.00	0.77
	C	0.82	0.18	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.044
	B	1.000	1.000	1.029
	C	1.051	1.028	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	4.4
	B	0.0	0.0	2.9
	C	5.1	2.8	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.34	9.58	0.53	A	166.11	249.17	34.81	8.38	0.39	34.81	8.38
B-A	0.17	12.21	0.20	B	48.63	72.95	12.85	10.57	0.14	12.86	10.57
C-AB	0.23	5.38	0.54	A	155.62	233.42	34.30	8.82	0.38	34.30	8.82
C-A	-	-	-	-	320.88	481.32	-	-	-	-	-
A-B	-	-	-	-	15.60	23.40	-	-	-	-	-
A-C	-	-	-	-	446.25	669.38	-	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	136.29	34.07	135.19	0.00	640.34	0.213	0.00	0.28	7.313	A
B-A	39.90	9.98	39.50	0.00	432.78	0.092	0.00	0.10	9.144	A
C-AB	110.87	27.72	109.88	0.00	839.66	0.132	0.00	0.25	5.111	A
C-A	280.07	70.02	280.07	0.00	-	-	-	-	-	-
A-B	12.80	3.20	12.80	0.00	-	-	-	-	-	-
A-C	366.12	91.53	366.12	0.00	-	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	162.74	40.69	162.39	0.00	618.22	0.263	0.28	0.36	8.116	A
B-A	47.65	11.91	47.51	0.00	400.33	0.119	0.10	0.13	10.204	B
C-AB	146.38	36.60	145.99	0.00	866.22	0.169	0.25	0.34	5.188	A
C-A	320.44	80.11	320.44	0.00	-	-	-	-	-	-
A-B	15.28	3.82	15.28	0.00	-	-	-	-	-	-
A-C	437.19	109.30	437.19	0.00	-	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	199.32	49.83	198.68	0.00	585.87	0.340	0.36	0.52	9.546	A
B-A	58.35	14.59	58.11	0.00	353.54	0.165	0.13	0.19	12.175	B
C-AB	209.02	52.25	208.25	0.00	906.88	0.230	0.34	0.54	5.360	A
C-A	362.72	90.68	362.72	0.00	-	-	-	-	-	-
A-B	18.72	4.68	18.72	0.00	-	-	-	-	-	-
A-C	535.44	133.86	535.44	0.00	-	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	199.32	49.83	199.30	0.00	585.70	0.340	0.52	0.53	9.582	A
B-A	58.35	14.59	58.35	0.00	353.26	0.165	0.19	0.20	12.206	B
C-AB	209.33	52.33	209.31	0.00	907.21	0.231	0.54	0.54	5.376	A
C-A	362.41	90.60	362.41	0.00	-	-	-	-	-	-
A-B	18.72	4.68	18.72	0.00	-	-	-	-	-	-
A-C	535.44	133.86	535.44	0.00	-	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	162.74	40.69	163.36	0.00	618.00	0.263	0.53	0.37	8.156	A
B-A	47.65	11.91	47.88	0.00	399.95	0.119	0.20	0.14	10.233	B
C-AB	146.74	36.69	147.48	0.00	866.70	0.169	0.54	0.36	5.216	A
C-A	320.08	80.02	320.08	0.00	-	-	-	-	-	-
A-B	15.28	3.82	15.28	0.00	-	-	-	-	-	-
A-C	437.19	109.30	437.19	0.00	-	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	136.29	34.07	136.65	0.00	640.08	0.213	0.37	0.28	7.359	A
B-A	39.90	9.98	40.04	0.00	432.31	0.092	0.14	0.10	9.180	A
C-AB	111.37	27.84	111.78	0.00	840.06	0.133	0.36	0.25	5.137	A
C-A	279.57	69.89	279.57	0.00	-	-	-	-	-	-
A-B	12.80	3.20	12.80	0.00	-	-	-	-	-	-
A-C	366.12	91.53	366.12	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	3.98	0.27	7.313	A	A
B-A	1.45	0.10	9.144	A	A
C-AB	3.66	0.24	5.111	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	5.31	0.35	8.116	A	A
B-A	1.95	0.13	10.204	B	B
C-AB	5.20	0.35	5.188	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	7.57	0.50	9.546	A	A
B-A	2.82	0.19	12.175	B	B
C-AB	8.08	0.54	5.360	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	7.87	0.52	9.582	A	A
B-A	2.93	0.20	12.206	B	B
C-AB	8.19	0.55	5.376	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	5.76	0.38	8.156	A	A
B-A	2.12	0.14	10.233	B	B
C-AB	5.35	0.36	5.216	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:00-18:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	4.33	0.29	7.359	A	A
B-A	1.58	0.11	9.180	A	A
C-AB	3.81	0.25	5.137	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

(Default Analysis Set) - 2026 'Do Nothing' + Construction Traffic, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	R
2026 'Do Nothing' + Construction Traffic, AM	2026 'Do Nothing' + Construction Traffic	AM		ONE HOUR	07:45	09:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	Existing Kronospan Southern Access	T-Junction	Two-way	A,B,C		6.56	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	B5070 (S)		Major
B	B	Existing Site Access		Minor
C	C	B5070 (N)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	10.00		0.00		2.20	250.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	8.20	3.75	3.50	3.50	✓	1.00	50	70

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	586.667	0.088	0.223	0.140	0.319
1	B-C	744.914	0.094	0.238	-	-
1	C-B	718.741	0.230	0.230	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	382.00	100.000
B	ONE HOUR	✓	140.00	100.000
C	ONE HOUR	✓	423.00	100.000

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	12.000	370.000
	B	5.000	0.000	135.000
	C	326.000	97.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.03	0.97
	B	0.04	0.00	0.96
	C	0.77	0.23	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.044
	B	1.000	1.000	1.029
	C	1.051	1.028	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.0	0.0	4.4
	B	0.0	0.0	2.9
	C	5.1	2.8	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.24	7.60	0.32	A	127.42	191.13	22.34	7.01	0.25	22.34	7.01
B-A	0.01	9.20	0.01	A	4.59	6.88	0.98	8.50	0.01	0.98	8.50
C-AB	0.22	5.58	0.47	A	148.12	222.17	30.48	8.23	0.34	30.48	8.23
C-A	-	-	-	-	257.80	386.70	-	-	-	-	-
A-B	-	-	-	-	11.01	16.52	-	-	-	-	-
A-C	-	-	-	-	354.32	531.48	-	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	104.54	26.13	103.79	0.00	673.38	0.155	0.00	0.19	6.493	A
B-A	3.76	0.94	3.73	0.00	459.16	0.008	0.00	0.01	7.904	A
C-AB	109.46	27.36	108.54	0.00	814.23	0.134	0.00	0.23	5.278	A
C-A	223.57	55.89	223.57	0.00	-	-	-	-	-	-
A-B	9.03	2.26	9.03	0.00	-	-	-	-	-	-
A-C	290.70	72.67	290.70	0.00	-	-	-	-	-	-

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	124.83	31.21	124.63	0.00	659.42	0.189	0.19	0.24	6.924	A
B-A	4.49	1.12	4.49	0.00	433.23	0.010	0.01	0.01	8.396	A
C-AB	141.48	35.37	141.15	0.00	834.90	0.169	0.23	0.31	5.379	A
C-A	256.19	64.05	256.19	0.00	-	-	-	-	-	-
A-B	10.79	2.70	10.79	0.00	-	-	-	-	-	-
A-C	347.12	86.78	347.12	0.00	-	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	152.88	38.22	152.56	0.00	640.07	0.239	0.24	0.32	7.590	A
B-A	5.51	1.38	5.49	0.00	396.88	0.014	0.01	0.01	9.198	A
C-AB	192.98	48.25	192.38	0.00	864.17	0.223	0.31	0.46	5.561	A
C-A	294.07	73.52	294.07	0.00	-	-	-	-	-	-
A-B	13.21	3.30	13.21	0.00	-	-	-	-	-	-
A-C	425.14	106.28	425.14	0.00	-	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	152.88	38.22	152.88	0.00	640.07	0.239	0.32	0.32	7.599	A
B-A	5.51	1.38	5.50	0.00	396.71	0.014	0.01	0.01	9.201	A
C-AB	193.19	48.30	193.17	0.00	864.38	0.224	0.46	0.47	5.578	A
C-A	293.86	73.46	293.86	0.00	-	-	-	-	-	-
A-B	13.21	3.30	13.21	0.00	-	-	-	-	-	-
A-C	425.14	106.28	425.14	0.00	-	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	124.83	31.21	125.14	0.00	659.41	0.189	0.32	0.24	6.934	A
B-A	4.49	1.12	4.51	0.00	432.98	0.010	0.01	0.01	8.403	A
C-AB	141.74	35.44	142.32	0.00	835.23	0.170	0.47	0.32	5.401	A
C-A	255.93	63.98	255.93	0.00	-	-	-	-	-	-
A-B	10.79	2.70	10.79	0.00	-	-	-	-	-	-
A-C	347.12	86.78	347.12	0.00	-	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	104.54	26.13	104.75	0.00	673.36	0.155	0.24	0.19	6.513	A
B-A	3.76	0.94	3.77	0.00	458.79	0.008	0.01	0.01	7.913	A
C-AB	109.84	27.46	110.19	0.00	814.53	0.135	0.32	0.24	5.302	A
C-A	223.19	55.80	223.19	0.00	-	-	-	-	-	-
A-B	9.03	2.26	9.03	0.00	-	-	-	-	-	-
A-C	290.70	72.67	290.70	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (07:45-08:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	2.72	0.18	6.493	A	A
B-A	0.12	0.01	7.904	A	A
C-AB	3.41	0.23	5.278	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	3.49	0.23	6.924	A	A
B-A	0.15	0.01	8.396	A	A
C-AB	4.72	0.31	5.379	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	4.67	0.31	7.590	A	A
B-A	0.20	0.01	9.198	A	A
C-AB	6.96	0.46	5.561	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	4.81	0.32	7.599	A	A
B-A	0.21	0.01	9.201	A	A
C-AB	7.04	0.47	5.578	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:45-09:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	3.73	0.25	6.934	A	A
B-A	0.16	0.01	8.403	A	A
C-AB	4.83	0.32	5.401	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:00-09:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	2.92	0.19	6.513	A	A
B-A	0.13	0.01	7.913	A	A
C-AB	3.53	0.24	5.302	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

(Default Analysis Set) - 2026 'Do Nothing' + Construction Traffic, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	R
2026 'Do Nothing' + Construction Traffic, PM	2026 'Do Nothing' + Construction Traffic	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	Existing Kronospan Southern Access	T-Junction	Two-way	A,B,C		8.08	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	B5070 (S)		Major
B	B	Existing Site Access		Minor
C	C	B5070 (N)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	10.00		0.00		2.20	250.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	8.20	3.75	3.50	3.50	✓	1.00	50	70

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	586.667	0.088	0.223	0.140	0.319
1	B-C	744.914	0.094	0.238	-	-
1	C-B	718.741	0.230	0.230	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	463.00	100.000
B	ONE HOUR	✓	229.00	100.000
C	ONE HOUR	✓	485.00	100.000

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	17.000	446.000
	B	53.000	0.000	176.000
	C	396.000	89.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.04	0.96
	B	0.23	0.00	0.77
	C	0.82	0.18	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.044
	B	1.000	1.000	1.029
	C	1.051	1.028	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	4.4
	B	0.0	0.0	2.9
	C	5.1	2.8	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.34	9.44	0.52	A	166.11	249.17	34.41	8.28	0.38	34.41	8.29
B-A	0.16	11.92	0.19	B	48.63	72.95	12.62	10.38	0.14	12.62	10.38
C-AB	0.23	5.37	0.52	A	152.66	228.99	33.22	8.70	0.37	33.22	8.70
C-A	-	-	-	-	313.23	469.85	-	-	-	-	-
A-B	-	-	-	-	15.60	23.40	-	-	-	-	-
A-C	-	-	-	-	427.10	640.65	-	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	136.29	34.07	135.19	0.00	644.18	0.212	0.00	0.27	7.261	A
B-A	39.90	9.98	39.50	0.00	437.53	0.091	0.00	0.10	9.034	A
C-AB	109.30	27.33	108.34	0.00	837.10	0.131	0.00	0.24	5.117	A
C-A	272.93	68.23	272.93	0.00	-	-	-	-	-	-
A-B	12.80	3.20	12.80	0.00	-	-	-	-	-	-
A-C	350.41	87.60	350.41	0.00	-	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	162.74	40.69	162.40	0.00	622.88	0.261	0.27	0.36	8.035	A
B-A	47.65	11.91	47.52	0.00	406.04	0.117	0.10	0.13	10.038	B
C-AB	143.86	35.97	143.48	0.00	862.98	0.167	0.24	0.34	5.194	A
C-A	312.57	78.14	312.57	0.00	-	-	-	-	-	-
A-B	15.28	3.82	15.28	0.00	-	-	-	-	-	-
A-C	418.42	104.61	418.42	0.00	-	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	199.32	49.83	198.70	0.00	591.78	0.337	0.36	0.51	9.404	A
B-A	58.35	14.59	58.12	0.00	360.62	0.162	0.13	0.19	11.890	B
C-AB	204.26	51.06	203.53	0.00	902.38	0.226	0.34	0.52	5.356	A
C-A	354.75	88.69	354.75	0.00	-	-	-	-	-	-
A-B	18.72	4.68	18.72	0.00	-	-	-	-	-	-
A-C	512.46	128.12	512.46	0.00	-	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	199.32	49.83	199.30	0.00	591.62	0.337	0.51	0.52	9.438	A
B-A	58.35	14.59	58.35	0.00	360.34	0.162	0.19	0.19	11.920	B
C-AB	204.55	51.14	204.53	0.00	902.69	0.227	0.52	0.52	5.374	A
C-A	354.46	88.61	354.46	0.00	-	-	-	-	-	-
A-B	18.72	4.68	18.72	0.00	-	-	-	-	-	-
A-C	512.46	128.12	512.46	0.00	-	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	162.74	40.69	163.34	0.00	622.68	0.261	0.52	0.37	8.073	A
B-A	47.65	11.91	47.87	0.00	405.68	0.117	0.19	0.13	10.069	B
C-AB	144.20	36.05	144.90	0.00	863.42	0.167	0.52	0.35	5.217	A
C-A	312.23	78.06	312.23	0.00	-	-	-	-	-	-
A-B	15.28	3.82	15.28	0.00	-	-	-	-	-	-
A-C	418.42	104.61	418.42	0.00	-	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	136.29	34.07	136.64	0.00	643.93	0.212	0.37	0.28	7.306	A
B-A	39.90	9.98	40.03	0.00	437.07	0.091	0.13	0.10	9.071	A
C-AB	109.78	27.45	110.17	0.00	837.48	0.131	0.35	0.25	5.141	A
C-A	272.45	68.11	272.45	0.00	-	-	-	-	-	-
A-B	12.80	3.20	12.80	0.00	-	-	-	-	-	-
A-C	350.41	87.60	350.41	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	3.95	0.26	7.261	A	A
B-A	1.43	0.10	9.034	A	A
C-AB	3.57	0.24	5.117	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	5.25	0.35	8.035	A	A
B-A	1.92	0.13	10.038	B	B
C-AB	5.06	0.34	5.194	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	7.46	0.50	9.404	A	A
B-A	2.76	0.18	11.890	B	B
C-AB	7.79	0.52	5.356	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	7.75	0.52	9.438	A	A
B-A	2.87	0.19	11.920	B	B
C-AB	7.89	0.53	5.374	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	5.69	0.38	8.073	A	A
B-A	2.09	0.14	10.069	B	B
C-AB	5.20	0.35	5.217	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:00-18:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	4.29	0.29	7.306	A	A
B-A	1.56	0.10	9.071	A	A
C-AB	3.71	0.25	5.141	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

(Default Analysis Set) - 2026 'Do Something', AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relat
2026 'Do Something', AM	2026 'Do Something'	AM		ONE HOUR	07:45	09:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	Existing Kronospan Southern Access	T-Junction	Two-way	A,B,C		4.69	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	B5070 (S)		Major
B	B	Existing Site Access		Minor
C	C	B5070 (N)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	10.00		0.00		2.20	250.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	8.20	3.75	3.50	3.50	✓	1.00	50	70

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	579.789	0.087	0.220	0.139	0.315
1	C-B	718.741	0.230	0.230	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	380.00	100.000
B	ONE HOUR	✓	2.00	100.000
C	ONE HOUR	✓	342.00	100.000

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	7.000	373.000
	B	2.000	0.000	0.000
	C	326.000	16.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.02	0.98
	B	1.00	0.00	0.00
	C	0.95	0.05	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.044
	B	1.000	1.000	1.029
	C	1.051	1.028	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	4.4
	B	0.0	0.0	2.9
	C	5.1	2.8	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B-A	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C-AB	0.04	4.69	0.05	A	23.59	35.39	3.42	5.79	0.04	3.42	5.79
C-A	-	-	-	-	305.93	458.90	-	-	-	-	-
A-B	-	-	-	-	6.42	9.64	-	-	-	-	-
A-C	-	-	-	-	357.19	535.79	-	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	0.00	698.78	0.000	0.00	0.00	0.000	A
B-A	0.00	0.00	0.00	0.00	475.04	0.000	0.00	0.00	0.000	A
C-AB	17.68	4.42	17.57	0.00	812.01	0.022	0.00	0.03	4.688	A
C-A	252.68	63.17	252.68	0.00	-	-	-	-	-	-
A-B	5.27	1.32	5.27	0.00	-	-	-	-	-	-
A-C	293.06	73.26	293.06	0.00	-	-	-	-	-	-

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	0.00	684.63	0.000	0.00	0.00	0.000	A
B-A	0.00	0.00	0.00	0.00	454.68	0.000	0.00	0.00	0.000	A
C-AB	22.63	5.66	22.60	0.00	831.03	0.027	0.03	0.04	4.609	A
C-A	300.20	75.05	300.20	0.00	-	-	-	-	-	-
A-B	6.29	1.57	6.29	0.00	-	-	-	-	-	-
A-C	349.94	87.48	349.94	0.00	-	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	0.00	665.07	0.000	0.00	0.00	0.000	A
B-A	0.00	0.00	0.00	0.00	426.56	0.000	0.00	0.00	0.000	A
C-AB	30.43	7.61	30.37	0.00	857.40	0.035	0.04	0.05	4.511	A
C-A	364.96	91.24	364.96	0.00	-	-	-	-	-	-
A-B	7.71	1.93	7.71	0.00	-	-	-	-	-	-
A-C	428.58	107.15	428.58	0.00	-	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	0.00	665.07	0.000	0.00	0.00	0.000	A
B-A	0.00	0.00	0.00	0.00	426.55	0.000	0.00	0.00	0.000	A
C-AB	30.44	7.61	30.44	0.00	857.42	0.036	0.05	0.05	4.514	A
C-A	364.94	91.24	364.94	0.00	-	-	-	-	-	-
A-B	7.71	1.93	7.71	0.00	-	-	-	-	-	-
A-C	428.58	107.15	428.58	0.00	-	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	0.00	684.63	0.000	0.00	0.00	0.000	A
B-A	0.00	0.00	0.00	0.00	454.66	0.000	0.00	0.00	0.000	A
C-AB	22.66	5.66	22.71	0.00	831.06	0.027	0.05	0.04	4.618	A
C-A	300.18	75.04	300.18	0.00	-	-	-	-	-	-
A-B	6.29	1.57	6.29	0.00	-	-	-	-	-	-
A-C	349.94	87.48	349.94	0.00	-	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	0.00	698.78	0.000	0.00	0.00	0.000	A
B-A	0.00	0.00	0.00	0.00	475.00	0.000	0.00	0.00	0.000	A
C-AB	17.72	4.43	17.75	0.00	812.04	0.022	0.04	0.03	4.692	A
C-A	252.64	63.16	252.64	0.00	-	-	-	-	-	-
A-B	5.27	1.32	5.27	0.00	-	-	-	-	-	-
A-C	293.06	73.26	293.06	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (07:45-08:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.00	0.00	0.000	A	A
B-A	0.00	0.00	0.000	A	A
C-AB	0.41	0.03	4.688	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.00	0.00	0.000	A	A
B-A	0.00	0.00	0.000	A	A
C-AB	0.54	0.04	4.609	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.00	0.00	0.000	A	A
B-A	0.00	0.00	0.000	A	A
C-AB	0.75	0.05	4.511	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.00	0.00	0.000	A	A
B-A	0.00	0.00	0.000	A	A
C-AB	0.76	0.05	4.514	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:45-09:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.00	0.00	0.000	A	A
B-A	0.00	0.00	0.000	A	A
C-AB	0.55	0.04	4.618	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:00-09:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.00	0.00	0.000	A	A
B-A	0.00	0.00	0.000	A	A
C-AB	0.42	0.03	4.692	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

(Default Analysis Set) - 2026 'Do Something', PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relat
2026 'Do Something', PM	2026 'Do Something'	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	Existing Kronospan Southern Access	T-Junction	Two-way	A,B,C		7.36	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	B5070 (S)		Major
B	B	Existing Site Access		Minor
C	C	B5070 (N)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	10.00		0.00		2.20	250.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	8.20	3.75	3.50	3.50	✓	1.00	50	70

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	586.667	0.088	0.223	0.140	0.319
1	B-C	744.914	0.094	0.238	-	-
1	C-B	718.741	0.230	0.230	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	463.00	100.000
B	ONE HOUR	✓	159.00	100.000
C	ONE HOUR	✓	440.00	100.000

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	17.000	446.000
	B	48.000	0.000	111.000
	C	393.000	47.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.04	0.96
	B	0.30	0.00	0.70
	C	0.89	0.11	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.044
	B	1.000	1.000	1.029
	C	1.051	1.028	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.0	0.0	4.4
	B	0.0	0.0	2.9
	C	5.1	2.8	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.21	7.85	0.27	A	104.77	157.15	18.82	7.19	0.21	18.82	7.19
B-A	0.14	10.81	0.16	B	44.05	66.07	10.64	9.66	0.12	10.64	9.66
C-AB	0.12	4.80	0.27	A	79.43	119.15	17.09	8.61	0.19	17.09	8.61
C-A	-	-	-	-	343.95	515.92	-	-	-	-	-
A-B	-	-	-	-	15.60	23.40	-	-	-	-	-
A-C	-	-	-	-	427.10	640.65	-	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	85.95	21.49	85.33	0.00	646.42	0.133	0.00	0.16	6.593	A
B-A	36.14	9.03	35.79	0.00	451.07	0.080	0.00	0.09	8.662	A
C-AB	55.83	13.96	55.36	0.00	831.45	0.067	0.00	0.12	4.805	A
C-A	291.53	72.88	291.53	0.00	-	-	-	-	-	-
A-B	12.80	3.20	12.80	0.00	-	-	-	-	-	-
A-C	350.41	87.60	350.41	0.00	-	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	102.64	25.66	102.46	0.00	626.19	0.164	0.16	0.20	7.068	A
B-A	43.15	10.79	43.05	0.00	423.99	0.102	0.09	0.11	9.448	A
C-AB	75.66	18.92	75.43	0.00	861.04	0.088	0.12	0.18	4.754	A
C-A	339.12	84.78	339.12	0.00	-	-	-	-	-	-
A-B	15.28	3.82	15.28	0.00	-	-	-	-	-	-
A-C	418.42	104.61	418.42	0.00	-	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	125.71	31.43	125.42	0.00	597.34	0.210	0.20	0.27	7.841	A
B-A	52.85	13.21	52.67	0.00	386.05	0.137	0.11	0.16	10.793	B
C-AB	105.68	26.42	105.33	0.00	897.15	0.118	0.18	0.27	4.726	A
C-A	402.32	100.58	402.32	0.00	-	-	-	-	-	-
A-B	18.72	4.68	18.72	0.00	-	-	-	-	-	-
A-C	512.46	128.12	512.46	0.00	-	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	125.71	31.43	125.70	0.00	597.24	0.210	0.27	0.27	7.852	A
B-A	52.85	13.21	52.84	0.00	385.95	0.137	0.16	0.16	10.806	B
C-AB	105.82	26.45	105.81	0.00	897.30	0.118	0.27	0.27	4.732	A
C-A	402.19	100.55	402.19	0.00	-	-	-	-	-	-
A-B	18.72	4.68	18.72	0.00	-	-	-	-	-	-
A-C	512.46	128.12	512.46	0.00	-	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	102.64	25.66	102.91	0.00	626.06	0.164	0.27	0.20	7.083	A
B-A	43.15	10.79	43.32	0.00	423.83	0.102	0.16	0.11	9.466	A
C-AB	75.84	18.96	76.18	0.00	861.28	0.088	0.27	0.18	4.768	A
C-A	338.95	84.74	338.95	0.00	-	-	-	-	-	-
A-B	15.28	3.82	15.28	0.00	-	-	-	-	-	-
A-C	418.42	104.61	418.42	0.00	-	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	85.95	21.49	86.13	0.00	646.23	0.133	0.20	0.16	6.612	A
B-A	36.14	9.03	36.24	0.00	450.86	0.080	0.11	0.09	8.684	A
C-AB	57.78	14.45	58.00	0.00	835.78	0.069	0.18	0.13	4.803	A
C-A	289.58	72.40	289.58	0.00	-	-	-	-	-	-
A-B	12.80	3.20	12.80	0.00	-	-	-	-	-	-
A-C	350.41	87.60	350.41	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	2.27	0.15	6.593	A	A
B-A	1.24	0.08	8.662	A	A
C-AB	1.75	0.12	4.805	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	2.93	0.20	7.068	A	A
B-A	1.64	0.11	9.448	A	A
C-AB	2.66	0.18	4.754	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	3.97	0.26	7.841	A	A
B-A	2.28	0.15	10.793	B	B
C-AB	4.00	0.27	4.726	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	4.08	0.27	7.852	A	A
B-A	2.36	0.16	10.806	B	B
C-AB	4.05	0.27	4.732	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	3.13	0.21	7.083	A	A
B-A	1.77	0.12	9.466	A	A
C-AB	2.73	0.18	4.768	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:00-18:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	2.44	0.16	6.612	A	A
B-A	1.35	0.09	8.684	A	A
C-AB	1.90	0.13	4.803	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

(Default Analysis Set) - 2031 'Do Something', AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relat
2031 'Do Something', AM	2031 'Do Something'	AM		ONE HOUR	07:45	09:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	Existing Kronospan Southern Access	T-Junction	Two-way	A,B,C		4.67	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	B5070 (S)		Major
B	B	Existing Site Access		Minor
C	C	B5070 (N)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	10.00		0.00		2.20	250.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	8.20	3.75	3.50	3.50	✓	1.00	50	70

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	579.789	0.087	0.220	0.139	0.315
1	B-C	771.666	0.098	0.247	-	-
1	C-B	718.741	0.230	0.230	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	396.00	100.000
B	ONE HOUR	✓	2.00	100.000
C	ONE HOUR	✓	356.00	100.000

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	7.000	389.000
	B	2.000	0.000	0.000
	C	340.000	16.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.02	0.98
	B	1.00	0.00	0.00
	C	0.96	0.04	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.044
	B	1.000	1.000	1.029
	C	1.051	1.028	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	4.4
	B	0.0	0.0	2.9
	C	5.1	2.8	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B-A	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C-AB	0.04	4.67	0.05	A	24.04	36.06	3.47	5.77	0.04	3.47	5.77
C-A	-	-	-	-	318.99	478.48	-	-	-	-	-
A-B	-	-	-	-	6.42	9.64	-	-	-	-	-
A-C	-	-	-	-	372.52	558.77	-	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	0.00	695.68	0.000	0.00	0.00	0.000	A
B-A	0.00	0.00	0.00	0.00	470.73	0.000	0.00	0.00	0.000	A
C-AB	17.95	4.49	17.84	0.00	816.25	0.022	0.00	0.03	4.666	A
C-A	263.49	65.87	263.49	0.00	-	-	-	-	-	-
A-B	5.27	1.32	5.27	0.00	-	-	-	-	-	-
A-C	305.63	76.41	305.63	0.00	-	-	-	-	-	-

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	0.00	680.93	0.000	0.00	0.00	0.000	A
B-A	0.00	0.00	0.00	0.00	449.53	0.000	0.00	0.00	0.000	A
C-AB	23.04	5.76	23.01	0.00	836.12	0.028	0.03	0.04	4.584	A
C-A	313.02	78.25	313.02	0.00	-	-	-	-	-	-
A-B	6.29	1.57	6.29	0.00	-	-	-	-	-	-
A-C	364.95	91.24	364.95	0.00	-	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	0.00	660.53	0.000	0.00	0.00	0.000	A
B-A	0.00	0.00	0.00	0.00	420.26	0.000	0.00	0.00	0.000	A
C-AB	31.09	7.77	31.03	0.00	863.63	0.036	0.04	0.05	4.482	A
C-A	380.50	95.12	380.50	0.00	-	-	-	-	-	-
A-B	7.71	1.93	7.71	0.00	-	-	-	-	-	-
A-C	446.97	111.74	446.97	0.00	-	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	0.00	660.53	0.000	0.00	0.00	0.000	A
B-A	0.00	0.00	0.00	0.00	420.25	0.000	0.00	0.00	0.000	A
C-AB	31.11	7.78	31.11	0.00	863.65	0.036	0.05	0.05	4.485	A
C-A	380.48	95.12	380.48	0.00	-	-	-	-	-	-
A-B	7.71	1.93	7.71	0.00	-	-	-	-	-	-
A-C	446.97	111.74	446.97	0.00	-	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	0.00	680.93	0.000	0.00	0.00	0.000	A
B-A	0.00	0.00	0.00	0.00	449.51	0.000	0.00	0.00	0.000	A
C-AB	23.07	5.77	23.12	0.00	836.15	0.028	0.05	0.04	4.593	A
C-A	313.00	78.25	313.00	0.00	-	-	-	-	-	-
A-B	6.29	1.57	6.29	0.00	-	-	-	-	-	-
A-C	364.95	91.24	364.95	0.00	-	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	0.00	695.68	0.000	0.00	0.00	0.000	A
B-A	0.00	0.00	0.00	0.00	470.69	0.000	0.00	0.00	0.000	A
C-AB	17.99	4.50	18.02	0.00	816.29	0.022	0.04	0.03	4.670	A
C-A	263.45	65.86	263.45	0.00	-	-	-	-	-	-
A-B	5.27	1.32	5.27	0.00	-	-	-	-	-	-
A-C	305.63	76.41	305.63	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (07:45-08:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.00	0.00	0.000	A	A
B-A	0.00	0.00	0.000	A	A
C-AB	0.41	0.03	4.666	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.00	0.00	0.000	A	A
B-A	0.00	0.00	0.000	A	A
C-AB	0.55	0.04	4.584	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.00	0.00	0.000	A	A
B-A	0.00	0.00	0.000	A	A
C-AB	0.77	0.05	4.482	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.00	0.00	0.000	A	A
B-A	0.00	0.00	0.000	A	A
C-AB	0.77	0.05	4.485	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:45-09:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.00	0.00	0.000	A	A
B-A	0.00	0.00	0.000	A	A
C-AB	0.55	0.04	4.593	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:00-09:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.00	0.00	0.000	A	A
B-A	0.00	0.00	0.000	A	A
C-AB	0.42	0.03	4.670	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

(Default Analysis Set) - 2031 'Do Something', PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relat
2031 'Do Something', PM	2031 'Do Something'	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	Existing Kronospan Southern Access	T-Junction	Two-way	A,B,C		7.42	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	B5070 (S)		Major
B	B	Existing Site Access		Minor
C	C	B5070 (N)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	10.00		0.00		2.20	250.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	8.20	3.75	3.50	3.50	✓	1.00	50	70

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	586.667	0.088	0.223	0.140	0.319
1	B-C	744.914	0.094	0.238	-	-
1	C-B	718.741	0.230	0.230	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	483.00	100.000
B	ONE HOUR	✓	159.00	100.000
C	ONE HOUR	✓	457.00	100.000

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	17.000	466.000
	B	48.000	0.000	111.000
	C	410.000	47.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.04	0.96
	B	0.30	0.00	0.70
	C	0.90	0.10	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.044
	B	1.000	1.000	1.029
	C	1.051	1.028	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	4.4
	B	0.0	0.0	2.9
	C	5.1	2.8	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.21	7.95	0.28	A	104.77	157.15	19.00	7.26	0.21	19.01	7.26
B-A	0.14	11.07	0.16	B	44.05	66.07	10.85	9.85	0.12	10.85	9.85
C-AB	0.12	4.78	0.28	A	81.88	122.83	17.78	8.68	0.20	17.78	8.68
C-A	-	-	-	-	357.90	536.84	-	-	-	-	-
A-B	-	-	-	-	15.60	23.40	-	-	-	-	-
A-C	-	-	-	-	446.25	669.38	-	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	85.95	21.49	85.32	0.00	642.58	0.134	0.00	0.16	6.638	A
B-A	36.14	9.03	35.79	0.00	445.67	0.081	0.00	0.09	8.776	A
C-AB	58.74	14.68	58.24	0.00	841.18	0.070	0.00	0.13	4.764	A
C-A	302.08	75.52	302.08	0.00	-	-	-	-	-	-
A-B	12.80	3.20	12.80	0.00	-	-	-	-	-	-
A-C	366.12	91.53	366.12	0.00	-	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	102.64	25.66	102.46	0.00	621.54	0.165	0.16	0.20	7.132	A
B-A	43.15	10.79	43.04	0.00	417.53	0.103	0.09	0.11	9.611	A
C-AB	77.59	19.40	77.37	0.00	867.91	0.089	0.13	0.18	4.725	A
C-A	353.26	88.31	353.26	0.00	-	-	-	-	-	-
A-B	15.28	3.82	15.28	0.00	-	-	-	-	-	-
A-C	437.19	109.30	437.19	0.00	-	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	125.71	31.43	125.41	0.00	591.50	0.213	0.20	0.27	7.939	A
B-A	52.85	13.21	52.66	0.00	378.12	0.140	0.11	0.16	11.057	B
C-AB	109.02	27.26	108.63	0.00	905.79	0.120	0.18	0.28	4.695	A
C-A	418.66	104.66	418.66	0.00	-	-	-	-	-	-
A-B	18.72	4.68	18.72	0.00	-	-	-	-	-	-
A-C	535.44	133.86	535.44	0.00	-	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	125.71	31.43	125.70	0.00	591.40	0.213	0.27	0.28	7.951	A
B-A	52.85	13.21	52.84	0.00	378.01	0.140	0.16	0.16	11.070	B
C-AB	109.17	27.29	109.16	0.00	905.95	0.121	0.28	0.28	4.704	A
C-A	418.51	104.63	418.51	0.00	-	-	-	-	-	-
A-B	18.72	4.68	18.72	0.00	-	-	-	-	-	-
A-C	535.44	133.86	535.44	0.00	-	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	102.64	25.66	102.92	0.00	621.40	0.165	0.28	0.21	7.144	A
B-A	43.15	10.79	43.33	0.00	417.37	0.103	0.16	0.12	9.628	A
C-AB	77.78	19.45	78.16	0.00	868.16	0.090	0.28	0.19	4.740	A
C-A	353.07	88.27	353.07	0.00	-	-	-	-	-	-
A-B	15.28	3.82	15.28	0.00	-	-	-	-	-	-
A-C	437.19	109.30	437.19	0.00	-	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	85.95	21.49	86.13	0.00	642.38	0.134	0.21	0.16	6.660	A
B-A	36.14	9.03	36.25	0.00	445.45	0.081	0.12	0.09	8.799	A
C-AB	59.00	14.75	59.23	0.00	841.39	0.070	0.19	0.13	4.780	A
C-A	301.81	75.45	301.81	0.00	-	-	-	-	-	-
A-B	12.80	3.20	12.80	0.00	-	-	-	-	-	-
A-C	366.12	91.53	366.12	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	2.29	0.15	6.638	A	A
B-A	1.26	0.08	8.776	A	A
C-AB	1.85	0.12	4.764	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	2.96	0.20	7.132	A	A
B-A	1.67	0.11	9.611	A	A
C-AB	2.73	0.18	4.725	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	4.01	0.27	7.939	A	A
B-A	2.33	0.16	11.057	B	B
C-AB	4.20	0.28	4.695	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	4.13	0.28	7.951	A	A
B-A	2.41	0.16	11.070	B	B
C-AB	4.25	0.28	4.704	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	3.16	0.21	7.144	A	A
B-A	1.80	0.12	9.628	A	A
C-AB	2.81	0.19	4.740	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:00-18:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	2.46	0.16	6.660	A	A
B-A	1.37	0.09	8.799	A	A
C-AB	1.94	0.13	4.780	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

APPENDIX 11 – MITIGATION MEASURES

APPENDIX 8 – MITIGATION MEASURES

Driver Monitoring: Driver Information Leaflet

Kronospan Lorry Park

Routing / travelling to and from site

Can we remind you all when travelling to and from site that all vehicles must turn left at the roundabout to head north towards the A5 / A483 strategic route.

Do not pass through Chirk town centre, this is a residential area with primary schools, a hospital, church, library, care home and pedestrian crossings.

This route is unsuitable for HGV's since local residents use the road and are at times transporting children to and from school and children also regularly walk in this area to and from school.

If at any time you need to use the shops, this should be done on foot and not by using your vehicle, as this does at times cause traffic obstructions / issues for local residents. The town centre is an approximately 10 minute walk from the site.

Thank you for your co-operation.

Litter

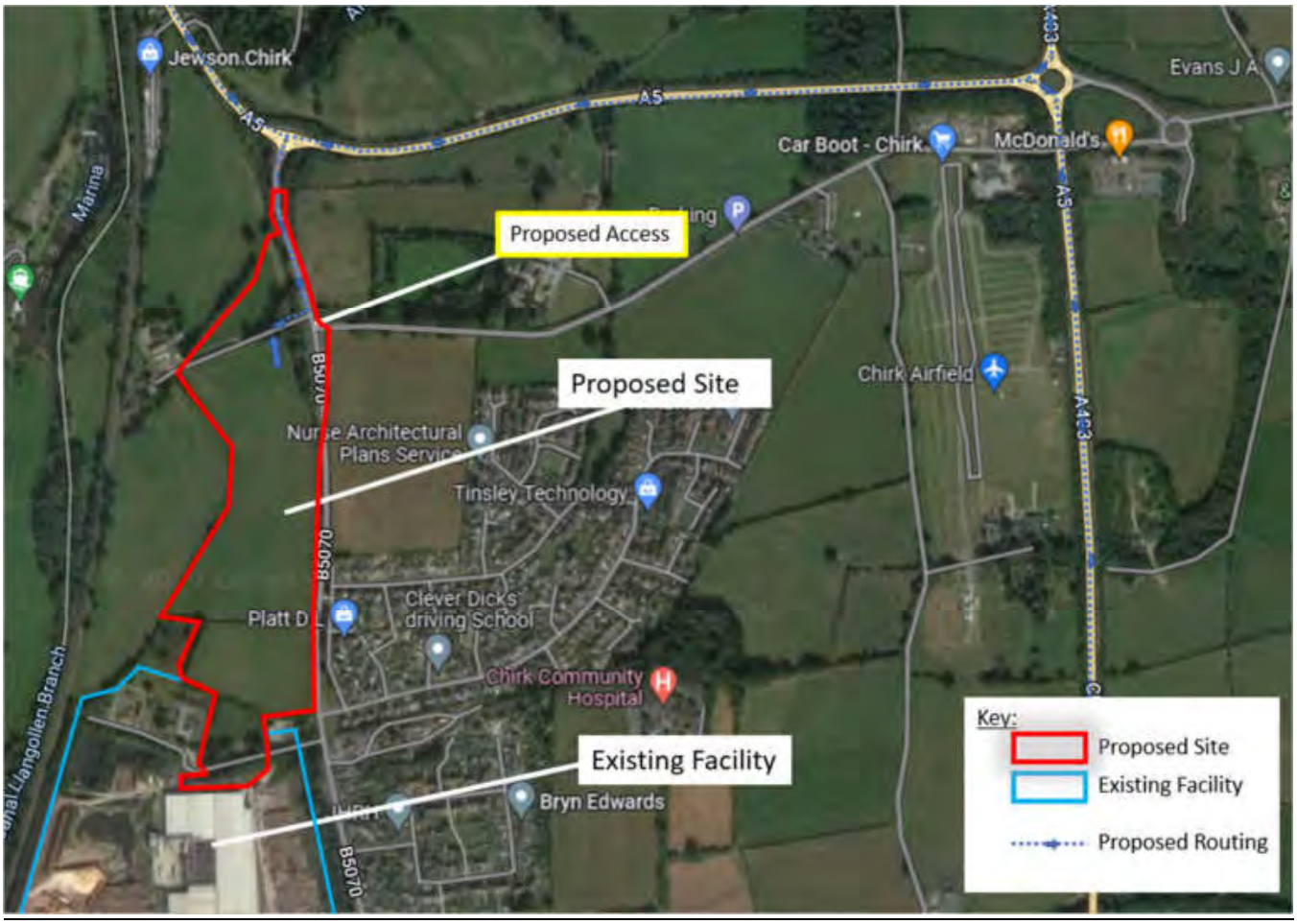
Please do not drop waste / food wrappings / debris in Chirk Town Centre or along Holyhead Road, please use the waste disposal facilities provided within the Lorry Park

It is a particular eyesore for locals and a potential environmental hazard that we can all prevent.

Site Manager: _____

Date: _____

Map illustrating the location of the new access and routing strategy



Driver – Site Rules

The following site rules must be adhered to at all times by drivers using Kronospan Lorry Park:

- Smoking is only permitted in the designated area – Ask a member of staff for details.
- No ear plugs or music devices such as iPods are to be used whilst on site.
- The use of mobile phones is not permitted when moving (including hands-free); park in a safe area and turn off engine before making or answering.
- Please adhere the site speed limit of 10mph.
- Drinking and the taking of controlled substances is strictly forbidden.
- Children and unauthorised passengers or animals are not permitted. We do allow passengers for training purposes, ask weighbridge staff for the process to follow should the need arise.
- Wait at the STOP sign until the weighbridge is clear. Follow all directional, information signs and instructions given by site staff. If in doubt – ASK.
- Beacons / hazard lights are to be working, hard hat, safety boots; high viz clothing & seat belts must be worn. Shorts are not permitted.
- In poor weather conditions use dipped headlights.
- Drivers MUST ensure where the vehicle is likely to be left unattended for any reason that the keys are removed from the vehicle and kept on their person at all times.
- When queuing, stay in your vehicle at all times, leave a safe distance behind others and to allow safe passing of your vehicle, wait for instructions from Kronospan staff.
- Be courteous to other site users - NO overtaking.
- Keep reversing to a minimum, check for obstructions and pedestrians before starting and do not pass behind any other vehicle.
- When parking do so within a marked bay and on Kronospan land (not along the access road or on the roundabout) or blocking traffic routes or pedestrian walkways.
- After discharging your load please return to the lorry park.
- Any accidents, incident or near misses MUST be reported to site prior to leaving. Near misses can be written on plain paper and posted in the box by the side door to the main office building.
- Please be courteous to local traffic and respect the residents leaving near the site. Failure to comply with these rules may result in exclusion from site.

Driver Site Rules Knowledge Assessment. New Driver Questionnaire.

Welcome to Kronospan, Chirk. Your safety on site is our paramount concern. You have been issued with a copy of the site rules. Please take the time to complete the following multiple-choice questionnaire and return to the weighbridge. If you are unsure about any aspect of the site rules and procedures, please ask a member of staff who will happily assist you.

Please circle the correct answer – All answers are within the site rules document that has been issued to you.

Name: _____ Company: _____

1. What is the Site speed limit ?

a. 15mph b. 25mph c. 30mph d. 10mph

2. What PPE must be worn on site at all times when you are out of your vehicle?

a. High Viz b. Hard Hat c. Safety Boots d. All listed in answers a – b – c.

3. When must you report any accidents or incidents including damage?

a. At the time it happens, prior to leaving site.
b. Any time as long as it is the same day.
c. On your next visit.
d. Within 48 hours.

4. The use of mobile phones is permitted when…..

a. You are driving if using hands-free.
b. You have parked in a safe area (in the lorry park) with the engine turned off.
c. Any time as long as you are careful.
d. You are driving in any area other than the lorry park.

5. If you break down on site you should?

a. Get out and try and resolve the problem without notifying site staff.
b. Wait for a colleague to come and assist you.
c. Contact a site operative by sounding your horn or flashing your lights.
d. Phone a fitter or breakdown company telling them where you are.

6. After discharging your load where must you go and what must you do?

a. Go to a safe area (lorry park) to close doors and check vehicle.
b. Drive to the weighbridge weigh out then check vehicle once you have left site.
c. Ask Site Operative to check your vehicle for you.

7. Smoking is only permitted in Designated Areas?

a. True b. False

8. Shorts are permitted to be worn in hot weather ?

a. True b. False

Thank you for taking the time to complete the knowledge assessment.

Driver Signature:_____ Date of Completion:_____

Knowledge Assessment Score:

Checked on behalf of Kronospan by:_____Signed:_____