

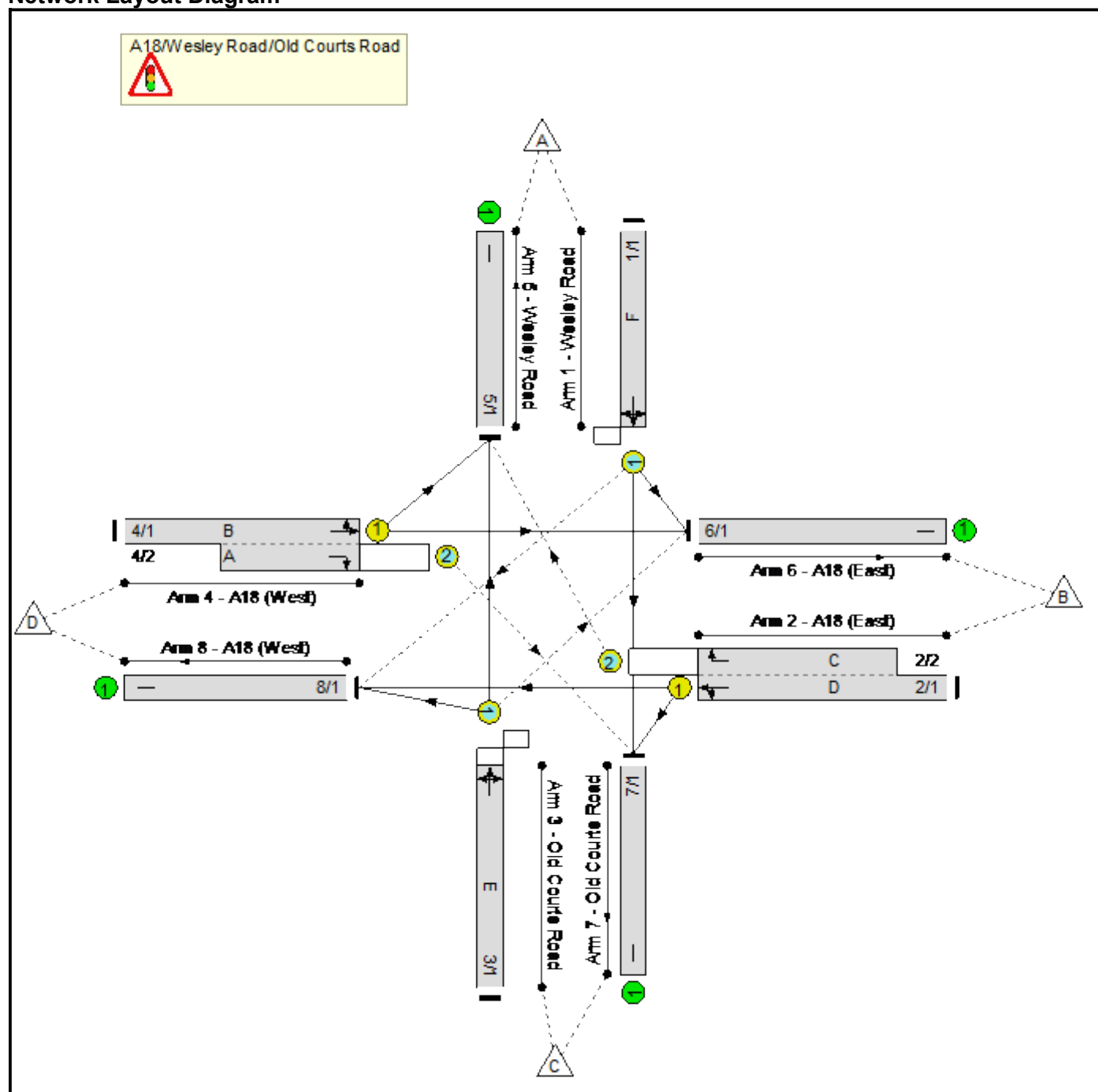
Appendix I – Barnard Ave/Wesley Rd Modelling

LTP LinSig Output

User and Project Details

Project:	Brigg Link Road
Title:	A18/Wesley Road/Old Courts Road Signalised Junction
Location:	Brigg, North Lincolnshire
Additional detail:	
File name:	A18 Wesley Road Old Courts Road Signalised Junction (115 dwellings) 2021.lsg3x
Author:	MR
Company:	LTP
Address:	

Network Layout Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7
E	Traffic		7	7
F	Traffic		7	7
G	Pedestrian		6	6
H	Pedestrian		6	6
I	Pedestrian		6	6
J	Pedestrian		6	6
K	Dummy		3	3
L	Dummy		3	3
M	Dummy		3	3
N	Dummy		3	3

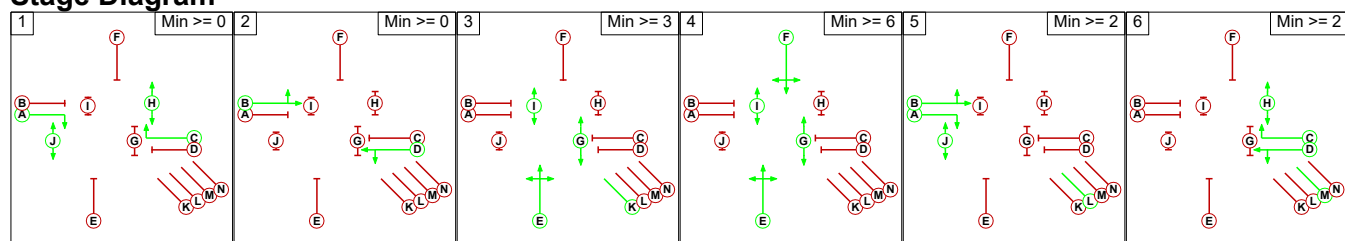
Phase Intergreens Matrix

[illegible]

Phases in Stage

Stage No.	Phases in Stage
1	A C H J
2	B D
3	E G I K
4	F G I
5	A B J L
6	C D H M

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

		To Stage						
From Stage		1	2	3	4	5	6	
	1			5	5	5	6	6
	2	11		6	6	10	11	
	3	10	6		5	8	10	
	4	10	6	5		10	11	
	5	11	5	5	6		11	
	6	10	6	6	6	10		

Give-Way Lane Input Data

Junction: A18/Wesley Road/Old Courts Road											
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
1/1 (Wesley Road)	8/1 (Right)	1439	0	3/1	1.09	To 5/1 (Ahead) To 8/1 (Left)	1.00	1.00	0.50	1	2.00
2/2 (A18 (East))	5/1 (Right)	1439	0	4/1	1.09	All	4.00	-	0.50	4	2.00
3/1 (Old Courts Road)	6/1 (Right)	1439	0	1/1	1.09	To 6/1 (Left) To 7/1 (Ahead)	2.00	1.00	0.50	2	2.00
4/2 (A18 (West))	7/1 (Right)	1439	0	2/1	1.09	All	4.00	-	0.50	4	2.00

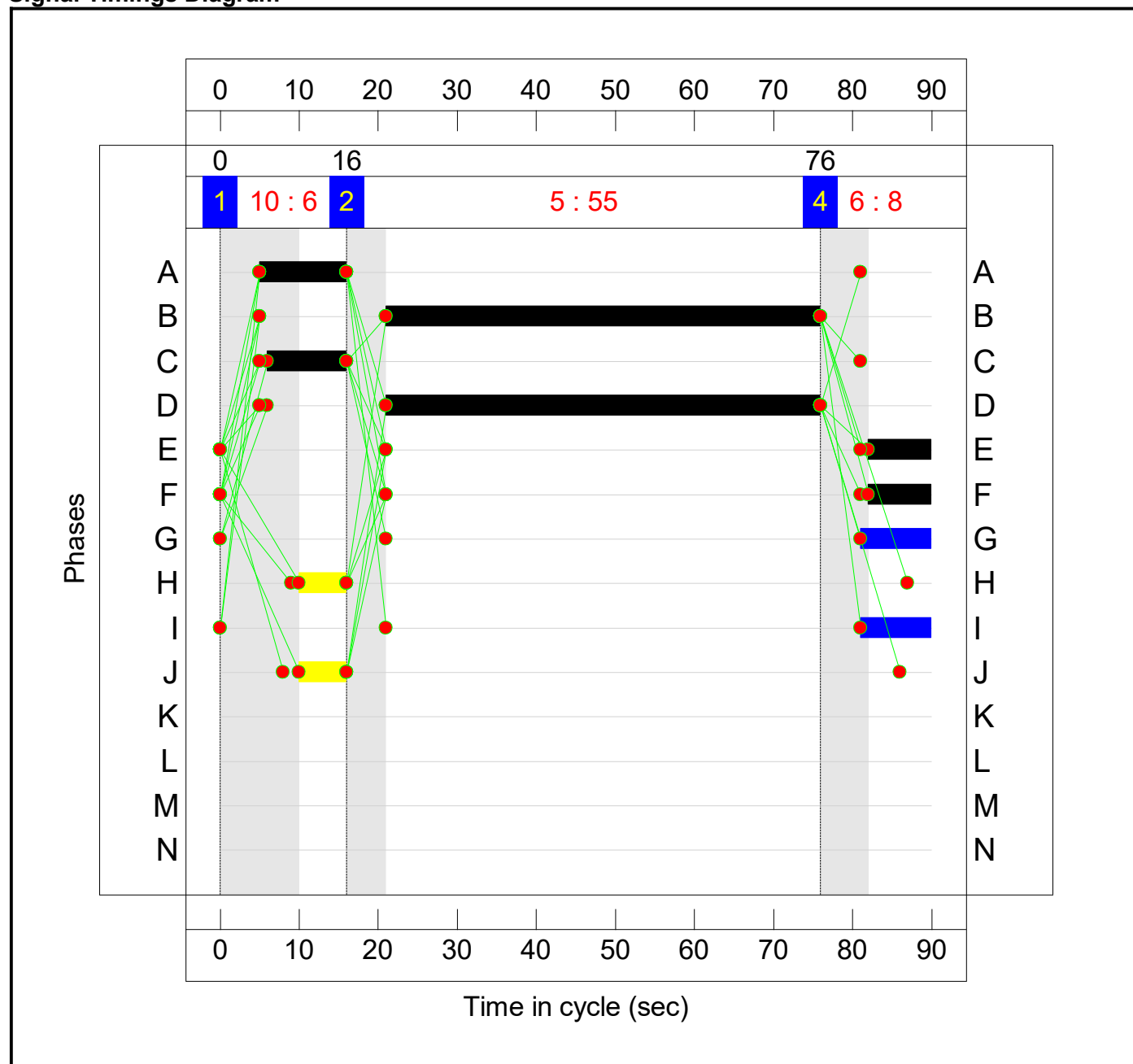
Lane Input Data

Junction: A18/Wesley Road/Old Courts Road												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (Wesley Road)	O	F	2	3	22.0	Geom	-	3.00	0.00	Y	Arm 6 Left	9.00
											Arm 7 Ahead	Inf
											Arm 8 Right	15.00
2/1 (A18 (East))	U	D	2	3	50.0	Geom	-	3.00	0.00	Y	Arm 7 Left	12.00
											Arm 8 Ahead	Inf
2/2 (A18 (East))	O	C	2	3	20.0	Geom	-	3.00	0.00	N	Arm 5 Right	15.00
3/1 (Old Courts Road)	O	E	2	3	17.0	Geom	-	3.50	0.00	Y	Arm 5 Ahead	Inf
											Arm 6 Right	15.00
											Arm 8 Left	10.00
4/1 (A18 (West))	U	B	2	3	18.0	Geom	-	2.50	0.00	Y	Arm 5 Left	9.00
											Arm 6 Ahead	Inf
4/2 (A18 (West))	O	A	2	3	8.0	Geom	-	2.50	0.00	N	Arm 7 Right	15.00
5/1 (Wesley Road)	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (A18 (East))	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1 (Old Courts Road)	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1 (A18 (West))	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2016 Base'	08:15	09:15	01:00	
2: '2038 Design Year'	08:15	09:15	01:00	
3: '2038 Design Year (115 dwellings)'	08:15	09:15	01:00	

Scenario 1: '2016 Base' (FG1: '2016 Base', Plan 1: 'Network Control Plan 1')
Signal Timings Diagram



Traffic Flows, Desired

Desired Flow :

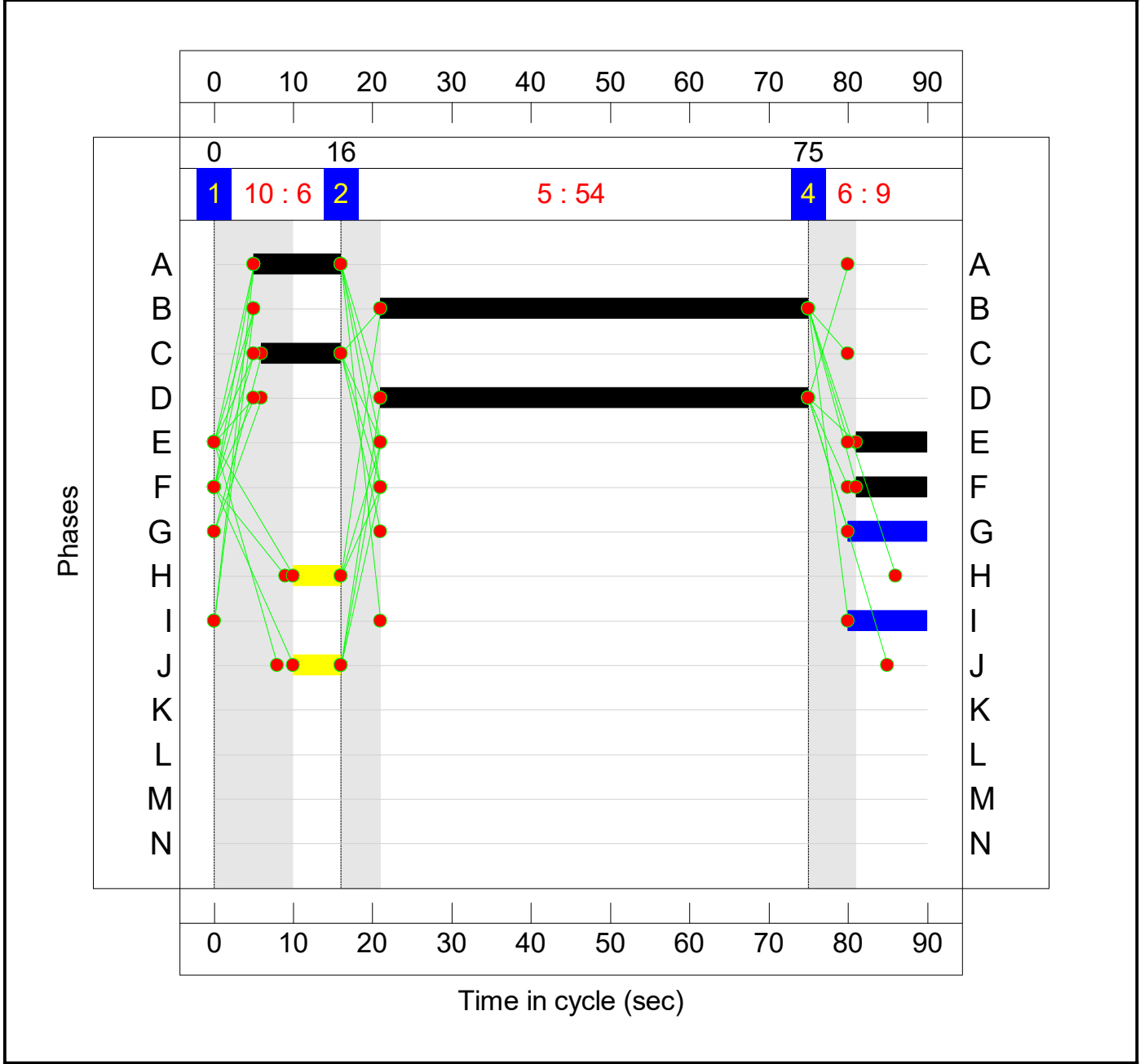
	Destination					
		A	B	C	D	Tot.
Origin	A	0	4	14	88	106
	B	73	0	63	762	898
	C	4	13	0	23	40
	D	109	634	89	0	832
	Tot.	186	651	166	873	1876

Lane Saturation Flows

Junction: A18/Wesley Road/Old Courts Road								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Wesley Road)	3.00	0.00	Y	Arm 6 Left	9.00	3.8 %	1758	1758
				Arm 7 Ahead	Inf	13.2 %		
				Arm 8 Right	15.00	83.0 %		
2/1 (A18 (East))	3.00	0.00	Y	Arm 7 Left	12.00	7.6 %	1897	1897
				Arm 8 Ahead	Inf	92.4 %		
2/2 (A18 (East))	3.00	0.00	N	Arm 5 Right	15.00	100.0 %	1868	1868
3/1 (Old Courts Road)	3.50	0.00	Y	Arm 5 Ahead	Inf	10.0 %	1756	1756
				Arm 6 Right	15.00	32.5 %		
				Arm 8 Left	10.00	57.5 %		
4/1 (A18 (West))	2.50	0.00	Y	Arm 5 Left	9.00	14.7 %	1820	1820
				Arm 6 Ahead	Inf	85.3 %		
4/2 (A18 (West))	2.50	0.00	N	Arm 7 Right	15.00	100.0 %	1823	1823
5/1 (Wesley Road Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (A18 (East) Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Old Courts Road Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (A18 (West) Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2038 Design Year' (FG2: '2038 Design Year', Plan 1: 'Network Control Plan 1')

Signal Timings Diagram



Traffic Flows, Desired

Desired Flow :

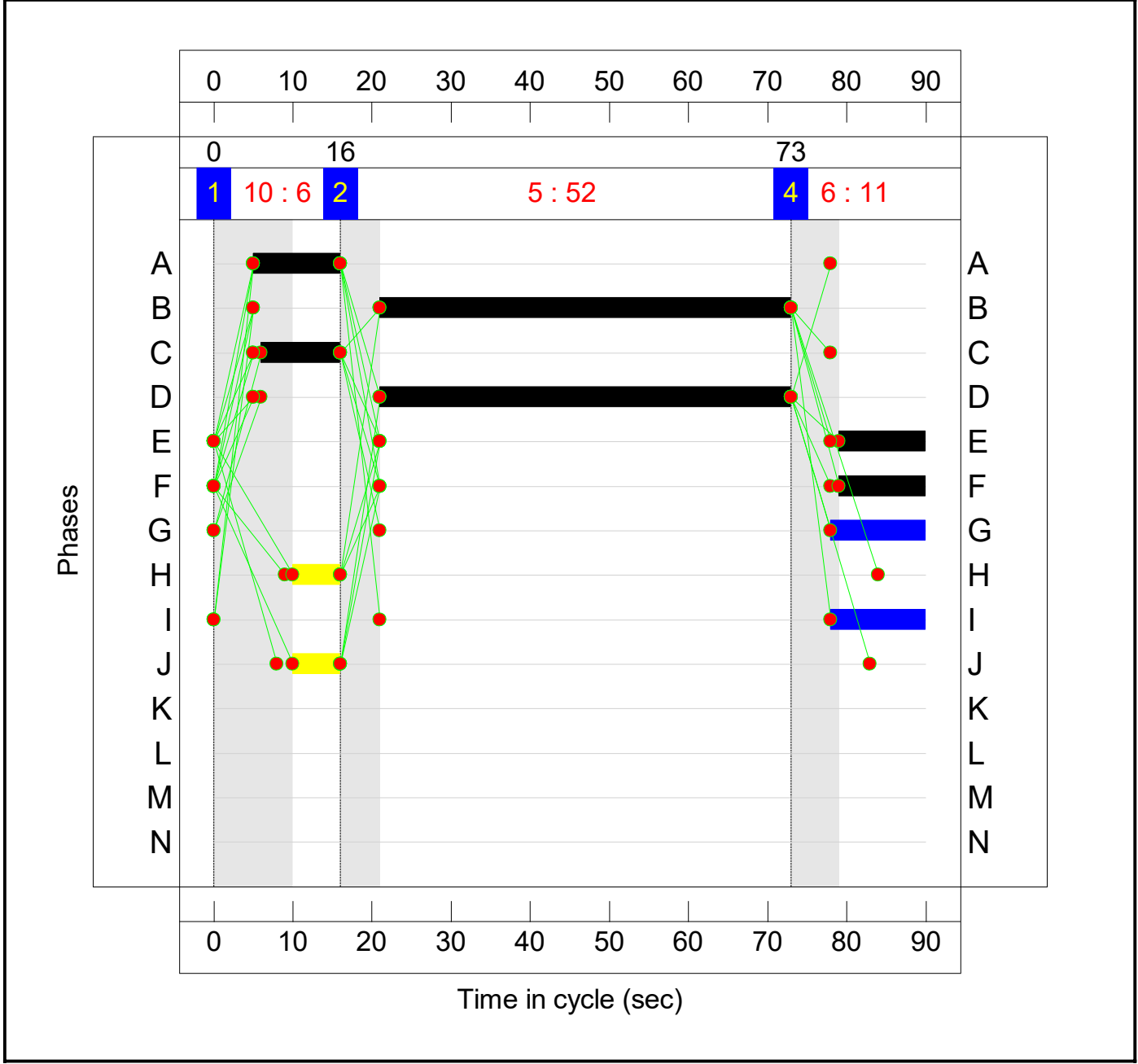
	Destination					
	A	B	C	D	Tot.	
Origin	A	0	4	16	98	118
	B	82	0	70	851	1003
	C	4	15	0	26	45
	D	122	708	99	0	929
	Tot.	208	727	185	975	2095

Lane Saturation Flows

Junction: A18/Wesley Road/Old Courts Road								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Wesley Road)	3.00	0.00	Y	Arm 6 Left	9.00	3.4 %	1759	1759
				Arm 7 Ahead	Inf	13.6 %		
				Arm 8 Right	15.00	83.1 %		
2/1 (A18 (East))	3.00	0.00	Y	Arm 7 Left	12.00	7.6 %	1897	1897
				Arm 8 Ahead	Inf	92.4 %		
2/2 (A18 (East))	3.00	0.00	N	Arm 5 Right	15.00	100.0 %	1868	1868
3/1 (Old Courts Road)	3.50	0.00	Y	Arm 5 Ahead	Inf	8.9 %	1754	1754
				Arm 6 Right	15.00	33.3 %		
				Arm 8 Left	10.00	57.8 %		
4/1 (A18 (West))	2.50	0.00	Y	Arm 5 Left	9.00	14.7 %	1820	1820
				Arm 6 Ahead	Inf	85.3 %		
4/2 (A18 (West))	2.50	0.00	N	Arm 7 Right	15.00	100.0 %	1823	1823
5/1 (Wesley Road Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (A18 (East) Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Old Courts Road Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (A18 (West) Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 3: '2038 Design Year (115 dwellings)' (FG3: '2038 Design Year (115 dwellings)', Plan 1: 'Network Control Plan 1')

Signal Timings Diagram



Traffic Flows, Desired

Desired Flow :

		Destination				
Origin		A	B	C	D	Tot.
	A	0	4	23	137	164
	B	87	0	70	851	1008
	C	4	15	0	26	45
	D	129	708	99	0	936
	Tot.	220	727	192	1014	2153

Lane Saturation Flows

Junction: A18/Wesley Road/Old Courts Road								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Wesley Road)	3.00	0.00	Y	Arm 6 Left	9.00	2.4 %	1761	1761
				Arm 7 Ahead	Inf	14.0 %		
				Arm 8 Right	15.00	83.5 %		
2/1 (A18 (East))	3.00	0.00	Y	Arm 7 Left	12.00	7.6 %	1897	1897
				Arm 8 Ahead	Inf	92.4 %		
2/2 (A18 (East))	3.00	0.00	N	Arm 5 Right	15.00	100.0 %	1868	1868
3/1 (Old Courts Road)	3.50	0.00	Y	Arm 5 Ahead	Inf	8.9 %	1754	1754
				Arm 6 Right	15.00	33.3 %		
				Arm 8 Left	10.00	57.8 %		
4/1 (A18 (West))	2.50	0.00	Y	Arm 5 Left	9.00	15.4 %	1818	1818
				Arm 6 Ahead	Inf	84.6 %		
4/2 (A18 (West))	2.50	0.00	N	Arm 7 Right	15.00	100.0 %	1823	1823
5/1 (Wesley Road Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (A18 (East) Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Old Courts Road Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (A18 (West) Lane 1)	Infinite Saturation Flow						Inf	Inf

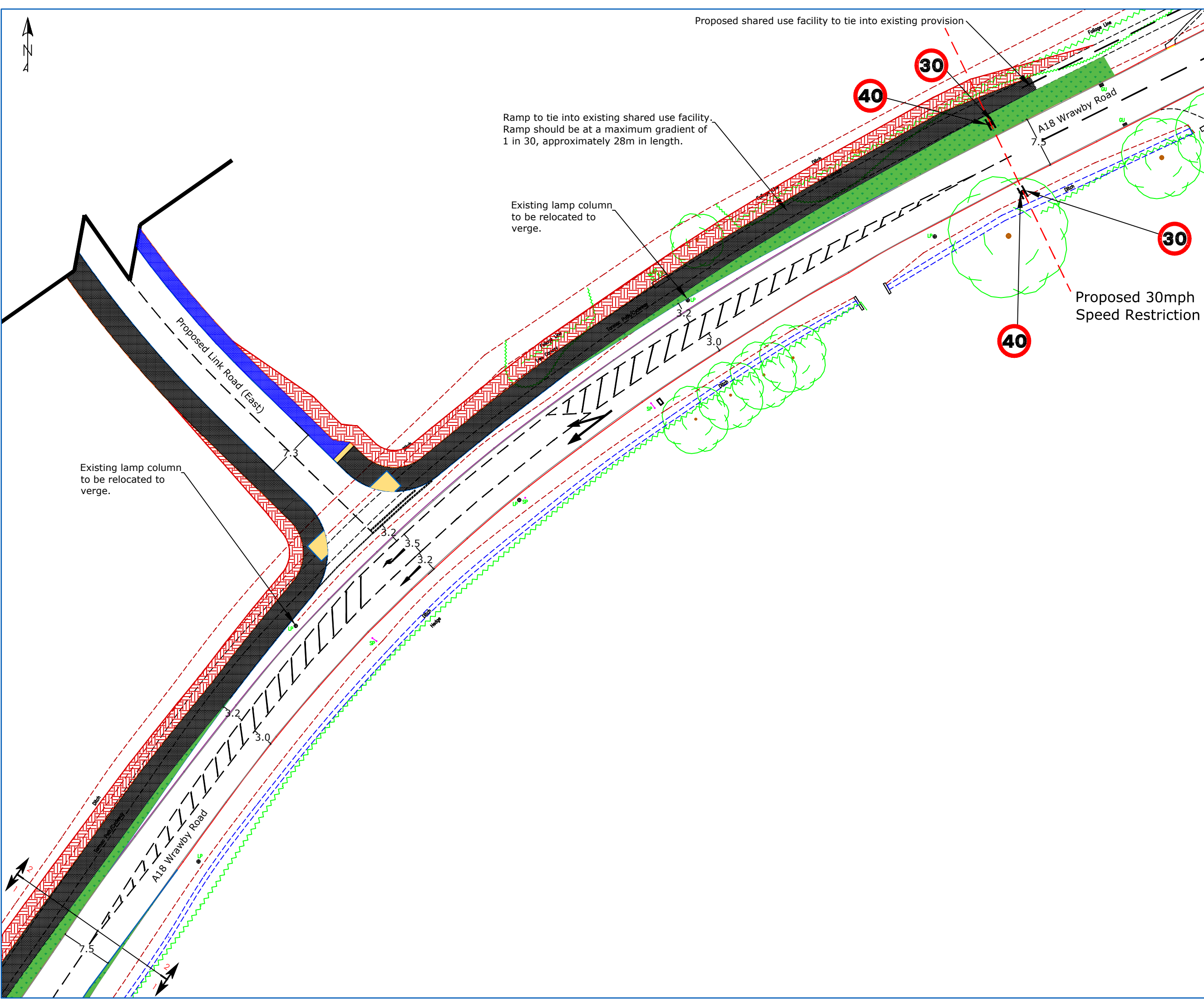
Scenario 1: '2016 Base' (FG1: '2016 Base', Plan 1: 'Network Control Plan 1')

[illegible][illegible]

Scenario 2: '2038 Design Year' (FG2: '2038 Design Year', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A18/Wesley Road/Old Courts Road Signalised Junction	-	-	-		-	-	-	-	-	-	81.6%	-	-	113	173	8	15.7	-	-
A18/Wesley Road/Old Courts Road	-	-	-		-	-	-	-	-	-	81.6%	-	-	113	173	8	15.7	-	-
1/1	Wesley Road Left Ahead Right	O	F		1	9	-	118	1759	160	73.5%	118	118	98	0	0	2.6	80.3	4.2
2/1+2/2	A18 (East) Right Left Ahead	U+O	D C		1	54:10	-	1003	1897:1868	1129+100	81.6 : 81.6%	1003	1003	0	78	4	6.4	22.9	19.6
3/1	Old Courts Road Ahead Right Left	O	E		1	9	-	45	1754	195	23.1%	45	45	15	0	0	0.6	48.5	1.2
4/1+4/2	A18 (West) Left Ahead Right	U+O	B A		1	54:11	-	929	1820:1823	1025+122	81.0 : 81.0%	929	929	0	95	4	6.0	23.4	18.4
C1																			

Appendix 2 – Wrawby Rd Concept Drawings



Notes:-
PRELIMINARY DESIGN ONLY not for construction purposes. Design subject to C3/C4 utilities search and detailed design etc.
Key:-
Existing kerbline to be removed:
Existing kerbline to be retained:
Proposed kerbline:
Proposed back of shared use area:
Extents of proposed embankment:
Existing hedgeline to be removed:
Shared pedestrian/cycle facility:
Footway:
Proposed Verge:
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v. Based on topographical survey conducted and supplied by Latitude Surveys Ltd.

A	25 Jan '17	TE	RP	Minor design and annotation changes.
Rev.	Date	By	Chk	Description

Client
North Lincolnshire Council

Project
Brigg Link Road Highways Masterplan

Title
A18 Wrawby Road/ Link Road East
Ghost Island Right Turn Lane
Preliminary Design

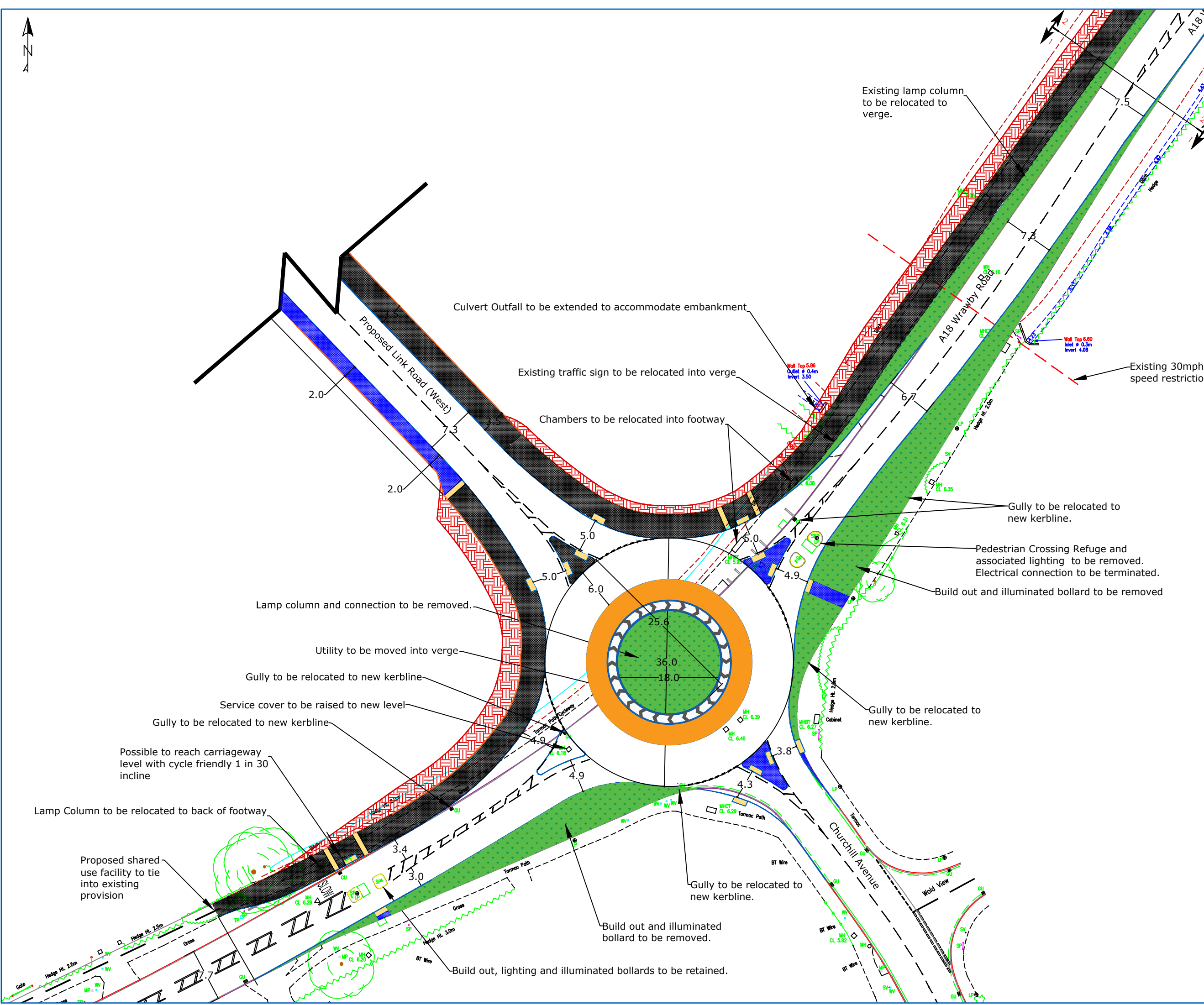
traffic engineering and transport planning

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Registered No. 5295328

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Drawn	CW/TE	Date	20/01/2017										
Scale	1:500	Checked	NW										
Status	☐ INTERNAL DRAFT ☐ DRAFT ☐ APPROVED ☐ PRELIMINARY ☐ CONSTRUCTION ☐ AS BUILT												
Drawing number	<table><tr><td>Project</td><td>Job</td><td>Drawing</td><td>Sheet</td><td>Revision</td></tr><tr><td>LTP/2494/P1</td><td>/001</td><td>.01</td><td>A</td><td></td></tr></table>			Project	Job	Drawing	Sheet	Revision	LTP/2494/P1	/001	.01	A	
Project	Job	Drawing	Sheet	Revision									
LTP/2494/P1	/001	.01	A										



10mm

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A3

Notes:-

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Key:-

Existing kerblines to be removed: —

Existing kerblines to be retained: —

Proposed kerblines: —

Proposed back of shared use area: —

Extents of proposed embankment: —

Existing hedgeline to be removed: —

Shared pedestrian/cycle facility:

Footway:

Proposed Verge:

Proposed Overrun Area:

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Rev.	Date	By	Chk	Description
A	25 Jan '17	TE	RP	Provision of overrun area and annotation modifications.

Client

North Lincolnshire Council

Project

Brigg Link Road Highways Masterplan

Title

A18 Wrawby Road/ Link Road West/ Churchill Avenue Roundabout Preliminary Design

traffic engineering and transport planning

INSTITUTE OF HIGHWAY ENGINEERS

25 000

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Registered No. 5295328

Drawn	CW/TE	Date	20/01/2017
Scale	1:500	Checked	NW

Status

INTERNAL DRAFT

DRAFT

APPROVED

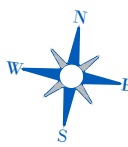
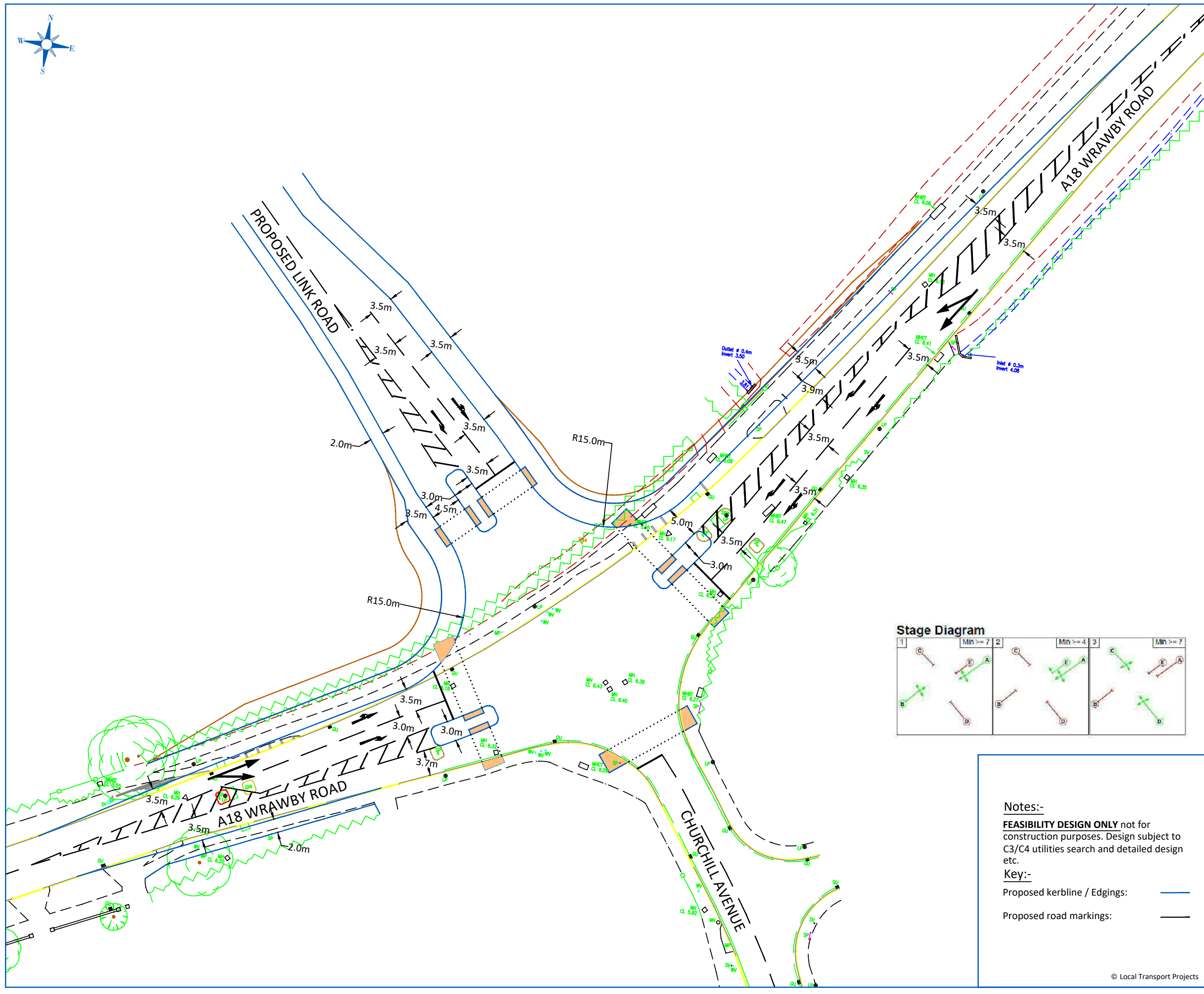
PRELIMINARY

CONSTRUCTION

AS BUILT

Drawing number

Project	Job	Drawing	Sheet	Revision
LTP/2494/P1	/001	02	A	



10mm

A3

HEALTH AND SAFETY INFORMATION

IN ADDITION TO THE HAZARDS/RISKS NORMALLY ASSOCIATED WITH THE TYPES OF WORK DETAILED ON THIS DRAWING, NOTE THE FOLLOWING:

CONSTRUCTION:

- WORKS ADJACENT TO LIVE TRAFFIC
- WORKS IN VICINITY OF LIVE SERVICES

MAINTENANCE/CLEANING/OPERATION:

- WORKS ADJACENT TO LIVE TRAFFIC
- WORKS IN VICINITY OF LIVE SERVICES

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- Based on topographical survey conducted and supplied by Latitude Surveys Ltd.

0	-	-	-	-
Rev.	Date	By	Chk	Description

Client
North Lincolnshire Council

Project
Brigg Link Road
Highways Master Plan

Title
A18 Wrawby Road/ Link Road
West/ Churchill Avenue
Traffic Signal Layout
Conceptual Design

The Stage Diagram illustrates three stages of traffic signal layout for the intersection. Each stage shows the sequence of vehicle movements and the timing constraints between them.

- Stage 1:** Shows movements C, E, A, B, and D. The minimum time between stages is ≥ 7 seconds.
- Stage 2:** Shows movements C, E, A, B, and D. The minimum time between stages is ≥ 4 seconds.
- Stage 3:** Shows movements C, E, A, B, and D. The minimum time between stages is ≥ 7 seconds.

Notes:-
FEASIBILITY DESIGN ONLY not for construction purposes. Design subject to C3/C4 utilities search and detailed design etc.
Key:-
 Proposed kerbline / Edgings: ———
 Proposed road markings: ———

local transport projects

traffic engineering and transport planning

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Registered No. 5295328

Drawn

CW/GR

Date

10/02/2021

Scale

1 : 500

Checked

NW

Approved

TK

Status

DRAFT FEASIBILITY

Drawing number

Project

Job

Drawing

Sheet

Revision

LTP/2494/ P2 / 01

01

0

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Appendix 3 – Wrawby Rd Modelling Results

Junctions 9													
PICADY 9 - Priority Intersection Module													
Version: 9.5.1.7462													
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Filename: Proposed Ghost Island Junction.j9

Path: Z:\Projects\2494 Brigg Link Road Masterplan\Data\Junction Capacity Modelling\A18 Wrawby Road Options

Report generation date: 08/04/2021 10:00:41

- »Proposed Layout - Scenario 1, AM
- »Proposed Layout - Scenario 1, PM
- »Proposed Layout - Scenario 3, AM
- »Proposed Layout - Scenario 3, PM
- »Proposed Layout - Scenario 4, AM
- »Proposed Layout - Scenario 4, PM
- »Proposed Layout - Scenario 5, AM
- »Proposed Layout - Scenario 5, PM

Summary of junction performance

	AM							PM						
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Network Residual Capacity
	Proposed Layout - Scenario 1													
Stream B-AC	D1	1.9	22.15	0.64	C	5.99	13 %	D2	0.7	12.72	0.38	B	3.02	43 %
Stream C-AB		1.0	13.43	0.48	B		[Stream B-AC]		0.8	11.61	0.41	B		[Stream B-AC]
	Proposed Layout - Scenario 3													
Stream B-AC	D3	0.6	13.48	0.35	B	1.99	39 %	D4	0.3	10.87	0.21	B	1.24	48 %
Stream C-AB		0.4	10.43	0.26	B		[Stream B-AC]		0.3	9.61	0.22	A		[Stream B-AC]
	Proposed Layout - Scenario 4													
Stream B-AC	D5	1.1	17.77	0.51	C	3.67	22 %	D6	0.5	12.02	0.30	B	2.06	43 %
Stream C-AB		0.7	12.27	0.39	B		[Stream B-AC]		0.5	10.80	0.33	B		[Stream B-AC]
	Proposed Layout - Scenario 5													
Stream B-AC	D7	0.4	12.58	0.28	B	1.21	44 %	D8	0.1	10.06	0.11	B	0.57	50 %
Stream C-AB		0.2	9.33	0.14	A		[Stream B-AC]		0.1	8.63	0.11	A		[Stream B-AC]

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. 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	Ghost Island Priority Junction (BRIH-3)
Location	A18 Wrawby Road, Brigg
Site number	
Date	08/02/2021
Version	
Status	
Identifier	
Client	North Lincolnshire Council
Jobnumber	2494
Enumerator	LTP\MR
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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Scenario 1	AM	ONE HOUR	07:45	09:15	15	✓
D2	Scenario 1	PM	ONE HOUR	16:45	18:15	15	✓
D3	Scenario 3	AM	ONE HOUR	07:45	09:15	15	✓
D4	Scenario 3	PM	ONE HOUR	16:45	18:15	15	✓
D5	Scenario 4	AM	ONE HOUR	07:45	09:15	15	✓
D6	Scenario 4	PM	ONE HOUR	16:45	18:15	15	✓
D7	Scenario 5	AM	ONE HOUR	07:45	09:15	15	✓
D8	Scenario 5	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

Proposed Layout - Scenario 1, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Proposed Ghost Island Junction	T-Junction	Two-way		5.99	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	13	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm type
A	A18 Wrawby Road (SW)		Major
B	Link Road (BRIH-3 Access)		Minor
C	A18 Wrawby Road (NE)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - A18 Wrawby Road (NE)	6.35		✓	3.50	145.0	✓	6.00

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)	Visibility to left (m)	Visibility to right (m)
B - Link Road (BRIH-3 Access)	One lane	3.65	33	30

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	536	0.096	0.243	0.153	0.347
B-C	685	0.103	0.261	-	-
C-B	751	0.287	0.287	-	-

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 Demand

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
D1	Scenario 1	AM	ONE HOUR	07:45	09:15	15	✓

Default vehicle mix	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 (%)
A - A18 Wrawby Road (SW)		ONE HOUR	✓	607	100.000
B - Link Road (BRIH-3 Access)		ONE HOUR	✓	283	100.000
C - A18 Wrawby Road (NE)		ONE HOUR	✓	711	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
		A - A18 Wrawby Road (SW)	B - Link Road (BRIH-3 Access)	C - A18 Wrawby Road (NE)
	A - A18 Wrawby Road (SW)	0	5	602
	B - Link Road (BRIH-3 Access)	8	0	275
	C - A18 Wrawby Road (NE)	466	245	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - A18 Wrawby Road (SW)	B - Link Road (BRIH-3 Access)	C - A18 Wrawby Road (NE)
	A - A18 Wrawby Road (SW)	10	10	10
	B - Link Road (BRIH-3 Access)	10	10	10
	C - A18 Wrawby Road (NE)	10	10	10

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)
B-AC	0.64	22.15	1.9	C	260	390
C-AB	0.48	13.43	1.0	B	227	340
C-A					426	639
A-B					5	7
A-C					552	829

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	213	53	553	0.385	210	0.0	0.7	11.478	B
C-AB	185	46	621	0.297	183	0.0	0.5	9.008	A
C-A	351	88			351				
A-B	4	0.94			4				
A-C	453	113			453				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	254	64	527	0.483	253	0.7	1.0	14.390	B
C-AB	221	55	597	0.370	220	0.5	0.6	10.504	B
C-A	418	105			418				
A-B	4	1			4				
A-C	541	135			541				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	312	78	490	0.636	308	1.0	1.8	21.449	C
C-AB	274	69	569	0.482	273	0.6	1.0	13.304	B
C-A	508	127			508				
A-B	6	1			6				
A-C	663	166			663				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	312	78	490	0.636	311	1.8	1.9	22.151	C
C-AB	274	69	569	0.482	274	1.0	1.0	13.432	B
C-A	508	127			508				
A-B	6	1			6				
A-C	663	166			663				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	254	64	527	0.483	258	1.9	1.1	14.878	B
C-AB	221	55	597	0.370	222	1.0	0.7	10.625	B
C-A	418	105			418				
A-B	4	1			4				
A-C	541	135			541				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	213	53	553	0.386	214	1.1	0.7	11.759	B
C-AB	185	46	621	0.297	185	0.7	0.5	9.114	A
C-A	351	88			351				
A-B	4	0.94			4				
A-C	453	113			453				

Proposed Layout - Scenario 1, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Proposed Ghost Island Junction	T-Junction	Two-way		3.02	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	43	Stream B-AC

Traffic Demand

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
D2	Scenario 1	PM	ONE HOUR	16:45	18:15	15	✓

Default vehicle mix	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 (%)
A - A18 Wrawby Road (SW)		ONE HOUR	✓	569	100.000
B - Link Road (BRIH-3 Access)		ONE HOUR	✓	171	100.000
C - A18 Wrawby Road (NE)		ONE HOUR	✓	800	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A18 Wrawby Road (SW)	B - Link Road (BRIH-3 Access)	C - A18 Wrawby Road (NE)
From	A - A18 Wrawby Road (SW)	0	8	561
	B - Link Road (BRIH-3 Access)	5	0	166
	C - A18 Wrawby Road (NE)	588	212	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A18 Wrawby Road (SW)	B - Link Road (BRIH-3 Access)	C - A18 Wrawby Road (NE)
From	A - A18 Wrawby Road (SW)	10	10	10
	B - Link Road (BRIH-3 Access)	10	10	10
	C - A18 Wrawby Road (NE)	10	10	10

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)
B-AC	0.38	12.72	0.7	B	157	235
C-AB	0.41	11.61	0.8	B	195	293
C-A					539	808
A-B					7	11
A-C					515	772

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	129	32	560	0.230	127	0.0	0.3	9.133	A
C-AB	160	40	629	0.254	158	0.0	0.4	8.394	A
C-A	443	111			443				
A-B	6	2			6				
A-C	422	106			422				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	154	38	535	0.287	153	0.3	0.4	10.355	B
C-AB	191	48	605	0.315	190	0.4	0.5	9.528	A
C-A	528	132			528				
A-B	7	2			7				
A-C	504	126			504				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	188	47	500	0.377	187	0.4	0.7	12.647	B
C-AB	235	59	576	0.408	234	0.5	0.7	11.547	B
C-A	645	161			645				
A-B	9	2			9				
A-C	618	154			618				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	188	47	500	0.377	188	0.7	0.7	12.717	B
C-AB	235	59	576	0.408	235	0.7	0.8	11.610	B
C-A	645	161			645				
A-B	9	2			9				
A-C	618	154			618				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	154	38	535	0.287	155	0.7	0.5	10.426	B
C-AB	191	48	605	0.315	192	0.8	0.5	9.599	A
C-A	528	132			528				
A-B	7	2			7				
A-C	504	126			504				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	129	32	560	0.230	129	0.5	0.3	9.209	A
C-AB	160	40	629	0.254	160	0.5	0.4	8.465	A
C-A	443	111			443				
A-B	6	2			6				
A-C	422	106			422				

Proposed Layout - Scenario 3, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Proposed Ghost Island Junction	T-Junction	Two-way		1.99	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	39	Stream B-AC

Traffic Demand

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
D3	Scenario 3	AM	ONE HOUR	07:45	09:15	15	✓

Default vehicle mix	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 (%)
A - A18 Wrawby Road (SW)		ONE HOUR	✓	752	100.000
B - Link Road (BRIH-3 Access)		ONE HOUR	✓	142	100.000
C - A18 Wrawby Road (NE)		ONE HOUR	✓	710	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A18 Wrawby Road (SW)	B - Link Road (BRIH-3 Access)	C - A18 Wrawby Road (NE)
From	A - A18 Wrawby Road (SW)	0	3	749
	B - Link Road (BRIH-3 Access)	4	0	138
	C - A18 Wrawby Road (NE)	588	122	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A18 Wrawby Road (SW)	B - Link Road (BRIH-3 Access)	C - A18 Wrawby Road (NE)
From	A - A18 Wrawby Road (SW)	10	10	10
	B - Link Road (BRIH-3 Access)	10	10	10
	C - A18 Wrawby Road (NE)	10	10	10

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)
B-AC	0.35	13.48	0.6	B	130	195
C-AB	0.26	10.43	0.4	B	112	168
C-A					540	809
A-B					3	4
A-C					687	1031

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	107	27	525	0.204	106	0.0	0.3	9.415	A
C-AB	92	23	589	0.156	91	0.0	0.2	7.943	A
C-A	443	111			443				
A-B	2	0.56			2				
A-C	564	141			564				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	128	32	494	0.258	127	0.3	0.4	10.773	B
C-AB	110	27	557	0.197	109	0.2	0.3	8.834	A
C-A	529	132			529				
A-B	3	0.67			3				
A-C	673	168			673				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	156	39	450	0.347	156	0.4	0.6	13.406	B
C-AB	134	34	514	0.261	134	0.3	0.4	10.402	B
C-A	647	162			647				
A-B	3	0.83			3				
A-C	825	206			825				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	156	39	450	0.347	156	0.6	0.6	13.476	B
C-AB	134	34	514	0.261	134	0.4	0.4	10.427	B
C-A	647	162			647				
A-B	3	0.83			3				
A-C	825	206			825				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	128	32	494	0.258	128	0.6	0.4	10.844	B
C-AB	110	27	557	0.197	110	0.4	0.3	8.864	A
C-A	529	132			529				
A-B	3	0.67			3				
A-C	673	168			673				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	107	27	525	0.204	107	0.4	0.3	9.485	A
C-AB	92	23	589	0.156	92	0.3	0.2	7.978	A
C-A	443	111			443				
A-B	2	0.56			2				
A-C	564	141			564				

Proposed Layout - Scenario 3, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Proposed Ghost Island Junction	T-Junction	Two-way		1.24	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	48	Stream B-AC

Traffic Demand

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	Scenario 3	PM	ONE HOUR	16:45	18:15	15	✓

Default vehicle mix	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 (%)
A - A18 Wrawby Road (SW)		ONE HOUR	✓	702	100.000
B - Link Road (BRIH-3 Access)		ONE HOUR	✓	86	100.000
C - A18 Wrawby Road (NE)		ONE HOUR	✓	801	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A18 Wrawby Road (SW)	B - Link Road (BRIH-3 Access)	C - A18 Wrawby Road (NE)
From	A - A18 Wrawby Road (SW)	0	4	698
	B - Link Road (BRIH-3 Access)	3	0	83
	C - A18 Wrawby Road (NE)	694	107	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A18 Wrawby Road (SW)	B - Link Road (BRIH-3 Access)	C - A18 Wrawby Road (NE)
From	A - A18 Wrawby Road (SW)	10	10	10
	B - Link Road (BRIH-3 Access)	10	10	10
	C - A18 Wrawby Road (NE)	10	10	10

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)
B-AC	0.21	10.87	0.3	B	79	118
C-AB	0.22	9.61	0.3	A	98	147
C-A					637	955
A-B					4	6
A-C					640	961

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	65	16	532	0.122	64	0.0	0.2	8.456	A
C-AB	81	20	600	0.134	80	0.0	0.2	7.610	A
C-A	522	131			522				
A-B	3	0.75			3				
A-C	525	131			525				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	77	19	502	0.154	77	0.2	0.2	9.316	A
C-AB	96	24	570	0.169	96	0.2	0.2	8.347	A
C-A	624	156			624				
A-B	4	0.90			4				
A-C	627	157			627				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	95	24	459	0.206	94	0.2	0.3	10.853	B
C-AB	118	29	530	0.222	117	0.2	0.3	9.596	A
C-A	764	191			764				
A-B	4	1			4				
A-C	769	192			769				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	95	24	459	0.206	95	0.3	0.3	10.873	B
C-AB	118	29	530	0.222	118	0.3	0.3	9.613	A
C-A	764	191			764				
A-B	4	1			4				
A-C	769	192			769				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	77	19	502	0.154	78	0.3	0.2	9.338	A
C-AB	96	24	570	0.169	97	0.3	0.2	8.366	A
C-A	624	156			624				
A-B	4	0.90			4				
A-C	627	157			627				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	65	16	532	0.122	65	0.2	0.2	8.486	A
C-AB	81	20	600	0.134	81	0.2	0.2	7.637	A
C-A	522	131			522				
A-B	3	0.75			3				
A-C	525	131			525				

Proposed Layout - Scenario 4, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Proposed Ghost Island Junction	T-Junction	Two-way		3.67	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	22	Stream B-AC

Traffic Demand

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
D5	Scenario 4	AM	ONE HOUR	07:45	09:15	15	✓

Default vehicle mix	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 (%)
A - A18 Wrawby Road (SW)		ONE HOUR	✓	722	100.000
B - Link Road (BRIH-3 Access)		ONE HOUR	✓	213	100.000
C - A18 Wrawby Road (NE)		ONE HOUR	✓	712	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A18 Wrawby Road (SW)	B - Link Road (BRIH-3 Access)	C - A18 Wrawby Road (NE)
From	A - A18 Wrawby Road (SW)	0	4	718
	B - Link Road (BRIH-3 Access)	6	0	207
	C - A18 Wrawby Road (NE)	528	184	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A18 Wrawby Road (SW)	B - Link Road (BRIH-3 Access)	C - A18 Wrawby Road (NE)
From	A - A18 Wrawby Road (SW)	10	10	10
	B - Link Road (BRIH-3 Access)	10	10	10
	C - A18 Wrawby Road (NE)	10	10	10

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)
B-AC	0.51	17.77	1.1	C	195	293
C-AB	0.39	12.27	0.7	B	169	254
C-A					484	726
A-B					4	6
A-C					659	988

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	160	40	531	0.302	158	0.0	0.5	10.590	B
C-AB	139	35	595	0.233	137	0.0	0.3	8.618	A
C-A	397	99			397				
A-B	3	0.75			3				
A-C	541	135			541				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	191	48	500	0.383	191	0.5	0.7	12.749	B
C-AB	166	41	566	0.293	165	0.3	0.4	9.875	A
C-A	474	119			474				
A-B	4	0.90			4				
A-C	645	161			645				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	235	59	457	0.513	233	0.7	1.1	17.507	C
C-AB	204	51	527	0.387	203	0.4	0.7	12.202	B
C-A	580	145			580				
A-B	4	1			4				
A-C	791	198			791				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	235	59	457	0.513	234	1.1	1.1	17.774	C
C-AB	204	51	527	0.387	204	0.7	0.7	12.270	B
C-A	580	145			580				
A-B	4	1			4				
A-C	791	198			791				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	191	48	500	0.383	193	1.1	0.7	12.963	B
C-AB	166	41	566	0.293	166	0.7	0.5	9.944	A
C-A	474	119			474				
A-B	4	0.90			4				
A-C	645	161			645				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	160	40	531	0.302	161	0.7	0.5	10.746	B
C-AB	139	35	595	0.233	139	0.5	0.3	8.688	A
C-A	397	99			397				
A-B	3	0.75			3				
A-C	541	135			541				

Proposed Layout - Scenario 4, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Proposed Ghost Island Junction	T-Junction	Two-way		2.06	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	43	Stream B-AC

Traffic Demand

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
D6	Scenario 4	PM	ONE HOUR	16:45	18:15	15	✓

Default vehicle mix	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 (%)
A - A18 Wrawby Road (SW)		ONE HOUR	✓	663	100.000
B - Link Road (BRIH-3 Access)		ONE HOUR	✓	129	100.000
C - A18 Wrawby Road (NE)		ONE HOUR	✓	801	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A18 Wrawby Road (SW)	B - Link Road (BRIH-3 Access)	C - A18 Wrawby Road (NE)
From	A - A18 Wrawby Road (SW)	0	6	657
	B - Link Road (BRIH-3 Access)	4	0	125
	C - A18 Wrawby Road (NE)	641	160	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A18 Wrawby Road (SW)	B - Link Road (BRIH-3 Access)	C - A18 Wrawby Road (NE)
From	A - A18 Wrawby Road (SW)	10	10	10
	B - Link Road (BRIH-3 Access)	10	10	10
	C - A18 Wrawby Road (NE)	10	10	10

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)
B-AC	0.30	12.02	0.5	B	118	178
C-AB	0.33	10.80	0.5	B	147	221
C-A					588	882
A-B					6	8
A-C					603	904

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	97	24	541	0.180	96	0.0	0.2	8.890	A
C-AB	120	30	608	0.198	119	0.0	0.3	8.086	A
C-A	483	121			483				
A-B	5	1			5				
A-C	495	124			495				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	116	29	512	0.226	116	0.2	0.3	9.971	A
C-AB	144	36	581	0.248	144	0.3	0.4	9.055	A
C-A	576	144			576				
A-B	5	1			5				
A-C	591	148			591				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	142	36	472	0.301	141	0.3	0.5	11.975	B
C-AB	177	44	543	0.325	176	0.4	0.5	10.759	B
C-A	705	176			705				
A-B	7	2			7				
A-C	723	181			723				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	142	36	471	0.301	142	0.5	0.5	12.017	B
C-AB	177	44	543	0.325	177	0.5	0.5	10.797	B
C-A	705	176			705				
A-B	7	2			7				
A-C	723	181			723				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	116	29	512	0.226	117	0.5	0.3	10.016	B
C-AB	144	36	581	0.248	145	0.5	0.4	9.096	A
C-A	576	144			576				
A-B	5	1			5				
A-C	591	148			591				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	97	24	541	0.180	97	0.3	0.2	8.941	A
C-AB	120	30	608	0.198	121	0.4	0.3	8.135	A
C-A	483	121			483				
A-B	5	1			5				
A-C	495	124			495				

Proposed Layout - Scenario 5, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Proposed Ghost Island Junction	T-Junction	Two-way		1.21	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	44	Stream B-AC

Traffic Demand

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
D7	Scenario 5	AM	ONE HOUR	07:45	09:15	15	✓

Default vehicle mix	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 (%)
A - A18 Wrawby Road (SW)		ONE HOUR	✓	819	100.000
B - Link Road (BRIH-3 Access)		ONE HOUR	✓	112	100.000
C - A18 Wrawby Road (NE)		ONE HOUR	✓	712	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A18 Wrawby Road (SW)	B - Link Road (BRIH-3 Access)	C - A18 Wrawby Road (NE)
From	A - A18 Wrawby Road (SW)	0	2	817
	B - Link Road (BRIH-3 Access)	2	0	110
	C - A18 Wrawby Road (NE)	650	62	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A18 Wrawby Road (SW)	B - Link Road (BRIH-3 Access)	C - A18 Wrawby Road (NE)
From	A - A18 Wrawby Road (SW)	10	10	10
	B - Link Road (BRIH-3 Access)	10	10	10
	C - A18 Wrawby Road (NE)	10	10	10

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)
B-AC	0.28	12.58	0.4	B	103	154
C-AB	0.14	9.33	0.2	A	57	85
C-A					596	895
A-B					2	3
A-C					750	1125

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	84	21	517	0.163	83	0.0	0.2	9.124	A
C-AB	47	12	574	0.081	46	0.0	0.1	7.495	A
C-A	489	122			489				
A-B	2	0.38			2				
A-C	615	154			615				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	101	25	484	0.208	100	0.2	0.3	10.320	B
C-AB	56	14	540	0.103	56	0.1	0.1	8.173	A
C-A	584	146			584				
A-B	2	0.45			2				
A-C	734	184			734				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	123	31	438	0.281	123	0.3	0.4	12.533	B
C-AB	68	17	493	0.139	68	0.1	0.2	9.323	A
C-A	716	179			716				
A-B	2	0.55			2				
A-C	900	225			900				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	123	31	438	0.281	123	0.4	0.4	12.575	B
C-AB	68	17	493	0.139	68	0.2	0.2	9.330	A
C-A	716	179			716				
A-B	2	0.55			2				
A-C	900	225			900				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	101	25	484	0.208	101	0.4	0.3	10.358	B
C-AB	56	14	540	0.103	56	0.2	0.1	8.184	A
C-A	584	146			584				
A-B	2	0.45			2				
A-C	734	184			734				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	84	21	517	0.163	85	0.3	0.2	9.173	A
C-AB	47	12	574	0.081	47	0.1	0.1	7.507	A
C-A	489	122			489				
A-B	2	0.38			2				
A-C	615	154			615				

Proposed Layout - Scenario 5, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Proposed Ghost Island Junction	T-Junction	Two-way		0.57	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	50	Stream B-AC

Traffic Demand

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
D8	Scenario 5	PM	ONE HOUR	16:45	18:15	15	✓

Default vehicle mix	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 (%)
A - A18 Wrawby Road (SW)		ONE HOUR	✓	742	100.000
B - Link Road (BRIH-3 Access)		ONE HOUR	✓	44	100.000
C - A18 Wrawby Road (NE)		ONE HOUR	✓	801	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A18 Wrawby Road (SW)	B - Link Road (BRIH-3 Access)	C - A18 Wrawby Road (NE)
From	A - A18 Wrawby Road (SW)	0	2	740
	B - Link Road (BRIH-3 Access)	2	0	42
	C - A18 Wrawby Road (NE)	748	53	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A18 Wrawby Road (SW)	B - Link Road (BRIH-3 Access)	C - A18 Wrawby Road (NE)
From	A - A18 Wrawby Road (SW)	10	10	10
	B - Link Road (BRIH-3 Access)	10	10	10
	C - A18 Wrawby Road (NE)	10	10	10

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)
B-AC	0.11	10.06	0.1	B	40	61
C-AB	0.11	8.63	0.1	A	49	73
C-A					686	1030
A-B					2	3
A-C					679	1019

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	33	8	520	0.064	33	0.0	0.1	8.120	A
C-AB	40	10	591	0.068	40	0.0	0.1	7.179	A
C-A	563	141			563				
A-B	2	0.38			2				
A-C	557	139			557				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	40	10	488	0.081	39	0.1	0.1	8.818	A
C-AB	48	12	560	0.085	48	0.1	0.1	7.729	A
C-A	672	168			672				
A-B	2	0.45			2				
A-C	665	166			665				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	48	12	442	0.110	48	0.1	0.1	10.046	B
C-AB	58	15	517	0.113	58	0.1	0.1	8.630	A
C-A	824	206			824				
A-B	2	0.55			2				
A-C	815	204			815				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	48	12	442	0.110	48	0.1	0.1	10.057	B
C-AB	58	15	517	0.113	58	0.1	0.1	8.635	A
C-A	824	206			824				
A-B	2	0.55			2				
A-C	815	204			815				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	40	10	488	0.081	40	0.1	0.1	8.830	A
C-AB	48	12	560	0.085	48	0.1	0.1	7.734	A
C-A	672	168			672				
A-B	2	0.45			2				
A-C	665	166			665				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	33	8	520	0.064	33	0.1	0.1	8.135	A
C-AB	40	10	591	0.068	40	0.1	0.1	7.187	A
C-A	563	141			563				
A-B	2	0.38			2				
A-C	557	139			557				

Junctions 9													
ARCADY 9 - Roundabout Module													
Version: 9.5.1.7462													
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Filename: Compact Roundabout Option.j9

Path: Z:\Projects\2494 Brigg Link Road Masterplan\Data\Junction Capacity Modelling\A18 Wrawby Road Options

Report generation date: 08/04/2021 10:09:48

- »Proposed Layout - 2038 With Scenario 2, AM
- »Proposed Layout - 2038 With Scenario 2, PM
- »Proposed Layout - 2038 With Scenario 3, AM
- »Proposed Layout - 2038 With Scenario 3, PM
- »Proposed Layout - 2038 With Scenario 4, AM
- »Proposed Layout - 2038 With Scenario 4, PM
- »Proposed Layout - 2038 With Scenario 5, AM
- »Proposed Layout - 2038 With Scenario 5, PM

Summary of junction performance

	AM							PM						
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Network Residual Capacity
	Proposed Layout - 2038 With Scenario 2													
1 - Link Road (BRIH-4)	D1	0.5	6.05	0.32	A	7.63	40 % [4 - A18 Wrawby Road (SW)]	D2	0.3	5.16	0.20	A	8.79	37 % [4 - A18 Wrawby Road (SW)]
2 - A18 Wrawby Road (NE)		1.6	7.37	0.59	A				2.2	9.12	0.67	A		
3 - Churchill Avenue		0.2	5.32	0.13	A				0.0	5.07	0.04	A		
4 - A18 Wrawby Road (SW)		1.6	9.08	0.60	A				1.9	9.49	0.63	A		
	Proposed Layout - 2038 With Scenario 3													
1 - Link Road (BRIH-4)	D3	0.2	4.90	0.16	A	6.51	54 % [4 - A18 Wrawby Road (SW)]	D4	0.1	4.61	0.10	A	7.47	49 % [4 - A18 Wrawby Road (SW)]
2 - A18 Wrawby Road (NE)		1.1	5.90	0.49	A				1.5	7.23	0.58	A		
3 - Churchill Avenue		0.1	4.81	0.12	A				0.0	4.68	0.03	A		
4 - A18 Wrawby Road (SW)		1.4	7.76	0.56	A				1.6	8.22	0.60	A		
	Proposed Layout - 2038 With Scenario 4													
1 - Link Road (BRIH-4)	D5	0.2	4.71	0.13	A	6.09	62 % [4 - A18 Wrawby Road (SW)]	D6	0.1	4.38	0.05	A	6.97	55 % [4 - A18 Wrawby Road (SW)]
2 - A18 Wrawby Road (NE)		0.9	5.38	0.44	A				1.3	6.53	0.54	A		
3 - Churchill Avenue		0.1	4.60	0.11	A				0.0	4.49	0.03	A		
4 - A18 Wrawby Road (SW)		1.3	7.23	0.55	A				1.5	7.69	0.58	A		
	Proposed Layout - 2038 With Scenario 5													
1 - Link Road (BRIH-4)	D7	0.4	5.43	0.24	A	7.02	46 % [4 - A18 Wrawby Road (SW)]	D8	0.2	4.87	0.15	A	8.07	43 % [4 - A18 Wrawby Road (SW)]
2 - A18 Wrawby Road (NE)		1.3	6.56	0.54	A				1.8	8.08	0.63	A		
3 - Churchill Avenue		0.2	5.06	0.12	A				0.0	4.87	0.03	A		
4 - A18 Wrawby Road (SW)		1.5	8.42	0.58	A				1.7	8.81	0.62	A		

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. 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	Compact Roundabout Option (BRIH-4)
Location	A18 Wrawby Road, Brigg
Site number	
Date	21/01/2021
Version	
Status	
Identifier	
Client	North Lincolnshire Council
Jobnumber	2494
Enumerator	LTP\MR
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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2038 With Scenario 2	AM	ONE HOUR	07:45	09:15	15	✓
D2	2038 With Scenario 2	PM	ONE HOUR	16:45	18:15	15	✓
D3	2038 With Scenario 3	AM	ONE HOUR	07:45	09:15	15	✓
D4	2038 With Scenario 3	PM	ONE HOUR	16:45	18:15	15	✓
D5	2038 With Scenario 4	AM	ONE HOUR	07:45	09:15	15	✓
D6	2038 With Scenario 4	PM	ONE HOUR	16:45	18:15	15	✓
D7	2038 With Scenario 5	AM	ONE HOUR	07:45	09:15	15	✓
D8	2038 With Scenario 5	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

Proposed Layout - 2038 With Scenario 2, AM

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	Compact Roundabout	Standard Roundabout		3, 4, 1, 2	7.63	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	40	4 - A18 Wrawby Road (SW)

Arms

Arms

Arm	Name	Description
1	Link Road (BRIH-4)	
2	A18 Wrawby Road (NE)	
3	Churchill Avenue	
4	A18 Wrawby Road (SW)	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Link Road (BRIH-4)	3.65	5.02	10.6	19.6	36.0	36.0	
2 - A18 Wrawby Road (NE)	3.34	5.22	7.9	31.6	36.0	34.0	
3 - Churchill Avenue	3.81	4.69	2.0	32.7	36.0	27.0	
4 - A18 Wrawby Road (SW)	3.07	4.57	17.7	17.5	36.0	32.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Link Road (BRIH-4)	0.576	1369
2 - A18 Wrawby Road (NE)	0.579	1342
3 - Churchill Avenue	0.579	1304
4 - A18 Wrawby Road (SW)	0.559	1270

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

Traffic Demand

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
D1	2038 With Scenario 2	AM	ONE HOUR	07:45	09:15	15	✓

Default vehicle mix	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 - Link Road (BRIH-4)		ONE HOUR	✓	283	100.000
2 - A18 Wrawby Road (NE)		ONE HOUR	✓	711	100.000
3 - Churchill Avenue		ONE HOUR	✓	100	100.000
4 - A18 Wrawby Road (SW)		ONE HOUR	✓	597	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1 - Link Road (BRIH-4)	2 - A18 Wrawby Road (NE)	3 - Churchill Avenue	4 - A18 Wrawby Road (SW)
From	1 - Link Road (BRIH-4)	0	275	0	8
	2 - A18 Wrawby Road (NE)	245	0	14	452
	3 - Churchill Avenue	0	42	0	58
	4 - A18 Wrawby Road (SW)	5	566	26	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Link Road (BRIH-4)	2 - A18 Wrawby Road (NE)	3 - Churchill Avenue	4 - A18 Wrawby Road (SW)
From	1 - Link Road (BRIH-4)	10	10	10	10
	2 - A18 Wrawby Road (NE)	10	10	10	10
	3 - Churchill Avenue	10	10	10	10
	4 - A18 Wrawby Road (SW)	10	10	10	10

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 - Link Road (BRIH-4)	0.32	6.05	0.5	A	260	390
2 - A18 Wrawby Road (NE)	0.59	7.37	1.6	A	652	979
3 - Churchill Avenue	0.13	5.32	0.2	A	92	138
4 - A18 Wrawby Road (SW)	0.60	9.08	1.6	A	548	822

Main Results for each time segment

07:45 - 08:00

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 - Link Road (BRIH-4)	213	53	474	1095	0.195	212	187	0.0	0.3	4.477	A
2 - A18 Wrawby Road (NE)	535	134	25	1327	0.403	532	661	0.0	0.7	4.967	A
3 - Churchill Avenue	75	19	528	998	0.075	75	30	0.0	0.1	4.289	A
4 - A18 Wrawby Road (SW)	449	112	215	1150	0.391	447	388	0.0	0.7	5.611	A

08:00 - 08:15

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 - Link Road (BRIH-4)	254	64	569	1041	0.244	254	224	0.3	0.4	5.030	A
2 - A18 Wrawby Road (NE)	639	160	31	1324	0.483	638	792	0.7	1.0	5.764	A
3 - Churchill Avenue	90	22	633	937	0.096	90	36	0.1	0.1	4.671	A
4 - A18 Wrawby Road (SW)	537	134	258	1126	0.477	536	465	0.7	1.0	6.695	A

08:15 - 08:30

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 - Link Road (BRIH-4)	312	78	695	968	0.322	311	274	0.4	0.5	6.021	A
2 - A18 Wrawby Road (NE)	783	196	37	1320	0.593	781	969	1.0	1.6	7.311	A
3 - Churchill Avenue	110	28	774	856	0.129	110	44	0.1	0.2	5.308	A
4 - A18 Wrawby Road (SW)	657	164	315	1094	0.601	655	569	1.0	1.6	8.971	A

08:30 - 08:45

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 - Link Road (BRIH-4)	312	78	698	966	0.322	312	275	0.5	0.5	6.046	A
2 - A18 Wrawby Road (NE)	783	196	37	1320	0.593	783	972	1.6	1.6	7.369	A
3 - Churchill Avenue	110	28	776	854	0.129	110	44	0.2	0.2	5.319	A
4 - A18 Wrawby Road (SW)	657	164	316	1093	0.601	657	570	1.6	1.6	9.080	A

08:45 - 09:00

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 - Link Road (BRIH-4)	254	64	572	1039	0.245	255	226	0.5	0.4	5.056	A
2 - A18 Wrawby Road (NE)	639	160	31	1324	0.483	641	797	1.6	1.0	5.820	A
3 - Churchill Avenue	90	22	636	936	0.096	90	36	0.2	0.1	4.686	A
4 - A18 Wrawby Road (SW)	537	134	259	1125	0.477	539	467	1.6	1.0	6.786	A

09:00 - 09:15

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 - Link Road (BRIH-4)	213	53	479	1093	0.195	213	189	0.4	0.3	4.504	A
2 - A18 Wrawby Road (NE)	535	134	26	1327	0.403	536	666	1.0	0.8	5.019	A
3 - Churchill Avenue	75	19	532	996	0.076	75	30	0.1	0.1	4.302	A
4 - A18 Wrawby Road (SW)	449	112	217	1149	0.391	451	391	1.0	0.7	5.684	A

Proposed Layout - 2038 With Scenario 2, 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	Compact Roundabout	Standard Roundabout		3, 4, 1, 2	8.79	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	37	4 - A18 Wrawby Road (SW)

Traffic Demand

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
D2	2038 With Scenario 2	PM	ONE HOUR	16:45	18:15	15	✓

Default vehicle mix	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 - Link Road (BRIH-4)		ONE HOUR	✓	171	100.000
2 - A18 Wrawby Road (NE)		ONE HOUR	✓	800	100.000
3 - Churchill Avenue		ONE HOUR	✓	26	100.000
4 - A18 Wrawby Road (SW)		ONE HOUR	✓	652	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
From		1 - Link Road (BRIH-4)	2 - A18 Wrawby Road (NE)	3 - Churchill Avenue	4 - A18 Wrawby Road (SW)
	1 - Link Road (BRIH-4)	0	166	0	5
	2 - A18 Wrawby Road (NE)	212	0	29	559
	3 - Churchill Avenue	0	7	0	19
	4 - A18 Wrawby Road (SW)	8	607	37	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1 - Link Road (BRIH-4)	2 - A18 Wrawby Road (NE)	3 - Churchill Avenue	4 - A18 Wrawby Road (SW)
	1 - Link Road (BRIH-4)	10	10	10	10
	2 - A18 Wrawby Road (NE)	10	10	10	10
	3 - Churchill Avenue	10	10	10	10
	4 - A18 Wrawby Road (SW)	10	10	10	10

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 - Link Road (BRIH-4)	0.20	5.16	0.3	A	157	235
2 - A18 Wrawby Road (NE)	0.67	9.12	2.2	A	734	1101
3 - Churchill Avenue	0.04	5.07	0.0	A	24	36
4 - A18 Wrawby Road (SW)	0.63	9.49	1.9	A	598	897

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 - Link Road (BRIH-4)	129	32	487	1088	0.118	128	165	0.0	0.1	4.123	A
2 - A18 Wrawby Road (NE)	602	151	31	1323	0.455	599	584	0.0	0.9	5.437	A
3 - Churchill Avenue	20	5	581	968	0.020	19	49	0.0	0.0	4.176	A
4 - A18 Wrawby Road (SW)	491	123	164	1178	0.417	488	436	0.0	0.8	5.712	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 - Link Road (BRIH-4)	154	38	584	1032	0.149	154	197	0.1	0.2	4.505	A
2 - A18 Wrawby Road (NE)	719	180	38	1320	0.545	718	700	0.9	1.3	6.559	A
3 - Churchill Avenue	23	6	696	901	0.026	23	59	0.0	0.0	4.513	A
4 - A18 Wrawby Road (SW)	586	147	196	1160	0.505	585	523	0.8	1.1	6.871	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 - Link Road (BRIH-4)	188	47	714	957	0.197	188	241	0.2	0.3	5.144	A
2 - A18 Wrawby Road (NE)	881	220	46	1315	0.670	877	856	1.3	2.2	8.978	A
3 - Churchill Avenue	29	7	851	811	0.035	29	72	0.0	0.0	5.060	A
4 - A18 Wrawby Road (SW)	718	179	240	1135	0.632	715	639	1.1	1.8	9.350	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 - Link Road (BRIH-4)	188	47	717	956	0.197	188	242	0.3	0.3	5.159	A
2 - A18 Wrawby Road (NE)	881	220	46	1315	0.670	881	859	2.2	2.2	9.115	A
3 - Churchill Avenue	29	7	854	809	0.035	29	73	0.0	0.0	5.072	A
4 - A18 Wrawby Road (SW)	718	179	241	1135	0.633	718	642	1.8	1.9	9.486	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 - Link Road (BRIH-4)	154	38	588	1030	0.149	154	199	0.3	0.2	4.524	A
2 - A18 Wrawby Road (NE)	719	180	38	1320	0.545	723	704	2.2	1.3	6.670	A
3 - Churchill Avenue	23	6	701	898	0.026	23	60	0.0	0.0	4.529	A
4 - A18 Wrawby Road (SW)	586	147	198	1159	0.506	589	527	1.9	1.1	6.979	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 - Link Road (BRIH-4)	129	32	491	1085	0.119	129	166	0.2	0.1	4.142	A
2 - A18 Wrawby Road (NE)	602	151	32	1323	0.455	604	589	1.3	0.9	5.517	A
3 - Churchill Avenue	20	5	586	965	0.020	20	50	0.0	0.0	4.190	A
4 - A18 Wrawby Road (SW)	491	123	165	1177	0.417	492	440	1.1	0.8	5.793	A

Proposed Layout - 2038 With Scenario 3, AM

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	Compact Roundabout	Standard Roundabout		3, 4, 1, 2	6.51	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	54	4 - A18 Wrawby Road (SW)

Traffic Demand

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
D3	2038 With Scenario 3	AM	ONE HOUR	07:45	09:15	15	✓

Default vehicle mix	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)

Am	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Link Road (BRIH-4)		ONE HOUR	✓	142	100.000
2 - A18 Wrawby Road (NE)		ONE HOUR	✓	592	100.000
3 - Churchill Avenue		ONE HOUR	✓	99	100.000
4 - A18 Wrawby Road (SW)		ONE HOUR	✓	598	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
From		1 - Link Road (BRIH-4)	2 - A18 Wrawby Road (NE)	3 - Churchill Avenue	4 - A18 Wrawby Road (SW)
	1 - Link Road (BRIH-4)	0	138	0	4
	2 - A18 Wrawby Road (NE)	122	0	14	456
	3 - Churchill Avenue	1	42	0	56
	4 - A18 Wrawby Road (SW)	3	569	26	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1 - Link Road (BRIH-4)	2 - A18 Wrawby Road (NE)	3 - Churchill Avenue	4 - A18 Wrawby Road (SW)
	1 - Link Road (BRIH-4)	10	10	10	10
	2 - A18 Wrawby Road (NE)	10	10	10	10
	3 - Churchill Avenue	10	10	10	10
	4 - A18 Wrawby Road (SW)	10	10	10	10

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 - Link Road (BRIH-4)	0.16	4.90	0.2	A	130	195
2 - A18 Wrawby Road (NE)	0.49	5.90	1.1	A	543	815
3 - Churchill Avenue	0.12	4.81	0.1	A	91	136
4 - A18 Wrawby Road (SW)	0.56	7.76	1.4	A	549	823

Main Results for each time segment

07:45 - 08:00

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 - Link Road (BRIH-4)	107	27	477	1094	0.098	106	94	0.0	0.1	4.008	A
2 - A18 Wrawby Road (NE)	446	111	22	1329	0.335	443	561	0.0	0.6	4.464	A
3 - Churchill Avenue	75	19	436	1051	0.071	74	30	0.0	0.1	4.052	A
4 - A18 Wrawby Road (SW)	450	113	124	1201	0.375	448	387	0.0	0.7	5.241	A

08:00 - 08:15

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 - Link Road (BRIH-4)	128	32	572	1039	0.123	128	113	0.1	0.2	4.343	A
2 - A18 Wrawby Road (NE)	532	133	27	1326	0.401	531	672	0.6	0.7	4.980	A
3 - Churchill Avenue	89	22	523	1001	0.089	89	36	0.1	0.1	4.340	A
4 - A18 Wrawby Road (SW)	538	134	148	1187	0.453	537	463	0.7	0.9	6.081	A

08:15 - 08:30

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 - Link Road (BRIH-4)	156	39	699	966	0.162	156	138	0.2	0.2	4.890	A
2 - A18 Wrawby Road (NE)	652	163	33	1322	0.493	651	822	0.7	1.1	5.879	A
3 - Churchill Avenue	109	27	640	934	0.117	109	44	0.1	0.1	4.802	A
4 - A18 Wrawby Road (SW)	658	165	181	1168	0.564	656	567	0.9	1.4	7.706	A

08:30 - 08:45

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 - Link Road (BRIH-4)	156	39	701	965	0.162	156	139	0.2	0.2	4.899	A
2 - A18 Wrawby Road (NE)	652	163	33	1322	0.493	652	825	1.1	1.1	5.904	A
3 - Churchill Avenue	109	27	641	933	0.117	109	44	0.1	0.1	4.806	A
4 - A18 Wrawby Road (SW)	658	165	182	1168	0.564	658	568	1.4	1.4	7.765	A

08:45 - 09:00

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 - Link Road (BRIH-4)	128	32	575	1037	0.123	128	114	0.2	0.2	4.355	A
2 - A18 Wrawby Road (NE)	532	133	27	1326	0.401	533	675	1.1	0.7	5.004	A
3 - Churchill Avenue	89	22	524	1000	0.089	89	36	0.1	0.1	4.347	A
4 - A18 Wrawby Road (SW)	538	134	149	1187	0.453	540	465	1.4	0.9	6.139	A

09:00 - 09:15

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 - Link Road (BRIH-4)	107	27	481	1092	0.098	107	95	0.2	0.1	4.022	A
2 - A18 Wrawby Road (NE)	446	111	23	1328	0.336	446	565	0.7	0.6	4.494	A
3 - Churchill Avenue	75	19	439	1050	0.071	75	30	0.1	0.1	4.061	A
4 - A18 Wrawby Road (SW)	450	113	124	1200	0.375	451	389	0.9	0.7	5.294	A

Proposed Layout - 2038 With Scenario 3, 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	Compact Roundabout	Standard Roundabout		3, 4, 1, 2	7.47	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	49	4 - A18 Wrawby Road (SW)

Traffic Demand

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	2038 With Scenario 3	PM	ONE HOUR	16:45	18:15	15	✓

Default vehicle mix	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 - Link Road (BRIH-4)		ONE HOUR	✓	86	100.000
2 - A18 Wrawby Road (NE)		ONE HOUR	✓	698	100.000
3 - Churchill Avenue		ONE HOUR	✓	26	100.000
4 - A18 Wrawby Road (SW)		ONE HOUR	✓	652	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
From		1 - Link Road (BRIH-4)	2 - A18 Wrawby Road (NE)	3 - Churchill Avenue	4 - A18 Wrawby Road (SW)
	1 - Link Road (BRIH-4)	0	83	0	3
	2 - A18 Wrawby Road (NE)	107	0	29	562
	3 - Churchill Avenue	0	7	0	19
	4 - A18 Wrawby Road (SW)	4	611	37	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1 - Link Road (BRIH-4)	2 - A18 Wrawby Road (NE)	3 - Churchill Avenue	4 - A18 Wrawby Road (SW)
	1 - Link Road (BRIH-4)	10	10	10	10
	2 - A18 Wrawby Road (NE)	10	10	10	10
	3 - Churchill Avenue	10	10	10	10
	4 - A18 Wrawby Road (SW)	10	10	10	10

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 - Link Road (BRIH-4)	0.10	4.61	0.1	A	79	118
2 - A18 Wrawby Road (NE)	0.58	7.23	1.5	A	640	961
3 - Churchill Avenue	0.03	4.68	0.0	A	24	36
4 - A18 Wrawby Road (SW)	0.60	8.22	1.6	A	598	897

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 - Link Road (BRIH-4)	65	16	490	1086	0.060	64	83	0.0	0.1	3.875	A
2 - A18 Wrawby Road (NE)	525	131	30	1324	0.397	523	525	0.0	0.7	4.922	A
3 - Churchill Avenue	20	5	503	1012	0.019	19	49	0.0	0.0	3.988	A
4 - A18 Wrawby Road (SW)	491	123	85	1222	0.402	488	437	0.0	0.7	5.373	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 - Link Road (BRIH-4)	77	19	588	1030	0.075	77	100	0.1	0.1	4.156	A
2 - A18 Wrawby Road (NE)	627	157	36	1321	0.475	626	629	0.7	1.0	5.685	A
3 - Churchill Avenue	23	6	603	955	0.024	23	59	0.0	0.0	4.252	A
4 - A18 Wrawby Road (SW)	586	147	102	1212	0.483	585	524	0.7	1.0	6.299	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 - Link Road (BRIH-4)	95	24	719	954	0.099	95	122	0.1	0.1	4.605	A
2 - A18 Wrawby Road (NE)	769	192	44	1316	0.584	766	769	1.0	1.5	7.180	A
3 - Churchill Avenue	29	7	738	877	0.033	29	72	0.0	0.0	4.669	A
4 - A18 Wrawby Road (SW)	718	179	125	1200	0.598	716	641	1.0	1.6	8.137	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 - Link Road (BRIH-4)	95	24	721	953	0.099	95	122	0.1	0.1	4.612	A
2 - A18 Wrawby Road (NE)	769	192	44	1316	0.584	768	772	1.5	1.5	7.228	A
3 - Churchill Avenue	29	7	740	875	0.033	29	73	0.0	0.0	4.675	A
4 - A18 Wrawby Road (SW)	718	179	126	1200	0.598	718	643	1.6	1.6	8.217	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 - Link Road (BRIH-4)	77	19	591	1028	0.075	77	100	0.1	0.1	4.166	A
2 - A18 Wrawby Road (NE)	627	157	36	1321	0.475	630	632	1.5	1.0	5.746	A
3 - Churchill Avenue	23	6	606	953	0.025	23	60	0.0	0.0	4.260	A
4 - A18 Wrawby Road (SW)	586	147	103	1212	0.484	588	527	1.6	1.0	6.371	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 - Link Road (BRIH-4)	65	16	494	1084	0.060	65	84	0.1	0.1	3.886	A
2 - A18 Wrawby Road (NE)	525	131	30	1324	0.397	527	529	1.0	0.7	4.972	A
3 - Churchill Avenue	20	5	507	1010	0.019	20	50	0.0	0.0	3.997	A
4 - A18 Wrawby Road (SW)	491	123	86	1222	0.402	492	441	1.0	0.7	5.438	A

Proposed Layout - 2038 With Scenario 4, AM

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	Compact Roundabout	Standard Roundabout		3, 4, 1, 2	6.09	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	62	4 - A18 Wrawby Road (SW)

Traffic Demand

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
D5	2038 With Scenario 4	AM	ONE HOUR	07:45	09:15	15	✓

Default vehicle mix	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)

Am	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Link Road (BRIH-4)		ONE HOUR	✓	112	100.000
2 - A18 Wrawby Road (NE)		ONE HOUR	✓	534	100.000
3 - Churchill Avenue		ONE HOUR	✓	100	100.000
4 - A18 Wrawby Road (SW)		ONE HOUR	✓	598	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
From		1 - Link Road (BRIH-4)	2 - A18 Wrawby Road (NE)	3 - Churchill Avenue	4 - A18 Wrawby Road (SW)
	1 - Link Road (BRIH-4)	0	110	0	2
	2 - A18 Wrawby Road (NE)	62	0	14	458
	3 - Churchill Avenue	0	42	0	58
	4 - A18 Wrawby Road (SW)	2	570	26	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1 - Link Road (BRIH-4)	2 - A18 Wrawby Road (NE)	3 - Churchill Avenue	4 - A18 Wrawby Road (SW)
	1 - Link Road (BRIH-4)	10	10	10	10
	2 - A18 Wrawby Road (NE)	10	10	10	10
	3 - Churchill Avenue	10	10	10	10
	4 - A18 Wrawby Road (SW)	10	10	10	10

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 - Link Road (BRIH-4)	0.13	4.71	0.2	A	103	154
2 - A18 Wrawby Road (NE)	0.44	5.38	0.9	A	490	735
3 - Churchill Avenue	0.11	4.60	0.1	A	92	138
4 - A18 Wrawby Road (SW)	0.55	7.23	1.3	A	549	823

Main Results for each time segment

07:45 - 08:00

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 - Link Road (BRIH-4)	84	21	478	1093	0.077	84	48	0.0	0.1	3.922	A
2 - A18 Wrawby Road (NE)	402	101	21	1329	0.302	400	541	0.0	0.5	4.253	A
3 - Churchill Avenue	75	19	391	1077	0.070	75	30	0.0	0.1	3.950	A
4 - A18 Wrawby Road (SW)	450	113	78	1226	0.367	448	388	0.0	0.6	5.071	A

08:00 - 08:15

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 - Link Road (BRIH-4)	101	25	573	1039	0.097	101	57	0.1	0.1	4.221	A
2 - A18 Wrawby Road (NE)	480	120	25	1327	0.362	479	648	0.5	0.6	4.669	A
3 - Churchill Avenue	90	22	469	1032	0.087	90	36	0.1	0.1	4.201	A
4 - A18 Wrawby Road (SW)	538	134	93	1217	0.442	537	465	0.6	0.9	5.810	A

08:15 - 08:30

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 - Link Road (BRIH-4)	123	31	701	965	0.128	123	70	0.1	0.2	4.703	A
2 - A18 Wrawby Road (NE)	588	147	31	1324	0.444	587	793	0.6	0.9	5.366	A
3 - Churchill Avenue	110	28	574	972	0.113	110	44	0.1	0.1	4.596	A
4 - A18 Wrawby Road (SW)	658	165	114	1206	0.546	657	569	0.9	1.3	7.188	A

08:30 - 08:45

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 - Link Road (BRIH-4)	123	31	702	964	0.128	123	70	0.2	0.2	4.710	A
2 - A18 Wrawby Road (NE)	588	147	31	1324	0.444	588	795	0.9	0.9	5.381	A
3 - Churchill Avenue	110	28	575	971	0.113	110	44	0.1	0.1	4.599	A
4 - A18 Wrawby Road (SW)	658	165	115	1206	0.546	658	570	1.3	1.3	7.234	A

08:45 - 09:00

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 - Link Road (BRIH-4)	101	25	575	1037	0.097	101	58	0.2	0.1	4.231	A
2 - A18 Wrawby Road (NE)	480	120	25	1327	0.362	481	651	0.9	0.6	4.686	A
3 - Churchill Avenue	90	22	470	1032	0.087	90	36	0.1	0.1	4.206	A
4 - A18 Wrawby Road (SW)	538	134	94	1217	0.442	539	467	1.3	0.9	5.854	A

09:00 - 09:15

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 - Link Road (BRIH-4)	84	21	481	1091	0.077	84	48	0.1	0.1	3.934	A
2 - A18 Wrawby Road (NE)	402	101	21	1329	0.302	403	545	0.6	0.5	4.275	A
3 - Churchill Avenue	75	19	394	1076	0.070	75	30	0.1	0.1	3.959	A
4 - A18 Wrawby Road (SW)	450	113	78	1226	0.367	451	391	0.9	0.6	5.117	A

Proposed Layout - 2038 With Scenario 4, 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	Compact Roundabout	Standard Roundabout		3, 4, 1, 2	6.97	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	55	4 - A18 Wrawby Road (SW)

Traffic Demand

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
D6	2038 With Scenario 4	PM	ONE HOUR	16:45	18:15	15	✓

Default vehicle mix	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 - Link Road (BRIH-4)		ONE HOUR	✓	44	100.000
2 - A18 Wrawby Road (NE)		ONE HOUR	✓	645	100.000
3 - Churchill Avenue		ONE HOUR	✓	26	100.000
4 - A18 Wrawby Road (SW)		ONE HOUR	✓	652	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
From		1 - Link Road (BRIH-4)	2 - A18 Wrawby Road (NE)	3 - Churchill Avenue	4 - A18 Wrawby Road (SW)
	1 - Link Road (BRIH-4)	0	42	0	2
	2 - A18 Wrawby Road (NE)	53	0	29	563
	3 - Churchill Avenue	0	7	0	19
	4 - A18 Wrawby Road (SW)	2	613	37	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1 - Link Road (BRIH-4)	2 - A18 Wrawby Road (NE)	3 - Churchill Avenue	4 - A18 Wrawby Road (SW)
	1 - Link Road (BRIH-4)	10	10	10	10
	2 - A18 Wrawby Road (NE)	10	10	10	10
	3 - Churchill Avenue	10	10	10	10
	4 - A18 Wrawby Road (SW)	10	10	10	10

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 - Link Road (BRIH-4)	0.05	4.38	0.1	A	40	61
2 - A18 Wrawby Road (NE)	0.54	6.53	1.3	A	592	888
3 - Churchill Avenue	0.03	4.49	0.0	A	24	36
4 - A18 Wrawby Road (SW)	0.58	7.69	1.5	A	598	897

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 - Link Road (BRIH-4)	33	8	492	1085	0.031	33	41	0.0	0.0	3.762	A
2 - A18 Wrawby Road (NE)	486	121	29	1325	0.367	483	496	0.0	0.6	4.691	A
3 - Churchill Avenue	20	5	463	1036	0.019	19	49	0.0	0.0	3.896	A
4 - A18 Wrawby Road (SW)	491	123	45	1245	0.394	488	437	0.0	0.7	5.216	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 - Link Road (BRIH-4)	40	10	590	1029	0.038	40	49	0.0	0.0	4.002	A
2 - A18 Wrawby Road (NE)	580	145	35	1321	0.439	579	594	0.6	0.9	5.327	A
3 - Churchill Avenue	23	6	555	983	0.024	23	59	0.0	0.0	4.128	A
4 - A18 Wrawby Road (SW)	586	147	54	1240	0.473	585	524	0.7	1.0	6.040	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 - Link Road (BRIH-4)	48	12	721	953	0.051	48	60	0.0	0.1	4.377	A
2 - A18 Wrawby Road (NE)	710	178	43	1317	0.539	708	727	0.9	1.3	6.491	A
3 - Churchill Avenue	29	7	679	911	0.031	29	72	0.0	0.0	4.488	A
4 - A18 Wrawby Road (SW)	718	179	66	1233	0.582	716	642	1.0	1.5	7.626	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 - Link Road (BRIH-4)	48	12	723	952	0.051	48	61	0.1	0.1	4.383	A
2 - A18 Wrawby Road (NE)	710	178	43	1317	0.539	710	729	1.3	1.3	6.528	A
3 - Churchill Avenue	29	7	680	910	0.031	29	73	0.0	0.0	4.493	A
4 - A18 Wrawby Road (SW)	718	179	66	1233	0.582	718	643	1.5	1.5	7.687	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 - Link Road (BRIH-4)	40	10	593	1027	0.039	40	50	0.1	0.0	4.011	A
2 - A18 Wrawby Road (NE)	580	145	35	1321	0.439	581	597	1.3	0.9	5.364	A
3 - Churchill Avenue	23	6	557	981	0.024	23	60	0.0	0.0	4.134	A
4 - A18 Wrawby Road (SW)	586	147	54	1239	0.473	588	526	1.5	1.0	6.101	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 - Link Road (BRIH-4)	33	8	496	1083	0.031	33	41	0.0	0.0	3.774	A
2 - A18 Wrawby Road (NE)	486	121	29	1325	0.367	486	499	0.9	0.6	4.732	A
3 - Churchill Avenue	20	5	466	1034	0.019	20	50	0.0	0.0	3.905	A
4 - A18 Wrawby Road (SW)	491	123	45	1244	0.394	492	440	1.0	0.7	5.272	A

Proposed Layout - 2038 With Scenario 5, AM

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	Compact Roundabout	Standard Roundabout		3, 4, 1, 2	7.02	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	46	4 - A18 Wrawby Road (SW)

Traffic Demand

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
D7	2038 With Scenario 5	AM	ONE HOUR	07:45	09:15	15	✓

Default vehicle mix	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)

Am	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Link Road (BRIH-4)		ONE HOUR	✓	213	100.000
2 - A18 Wrawby Road (NE)		ONE HOUR	✓	652	100.000
3 - Churchill Avenue		ONE HOUR	✓	100	100.000
4 - A18 Wrawby Road (SW)		ONE HOUR	✓	600	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
From		1 - Link Road (BRIH-4)	2 - A18 Wrawby Road (NE)	3 - Churchill Avenue	4 - A18 Wrawby Road (SW)
	1 - Link Road (BRIH-4)	0	207	0	6
	2 - A18 Wrawby Road (NE)	184	0	14	454
	3 - Churchill Avenue	0	42	0	58
	4 - A18 Wrawby Road (SW)	4	570	26	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1 - Link Road (BRIH-4)	2 - A18 Wrawby Road (NE)	3 - Churchill Avenue	4 - A18 Wrawby Road (SW)
	1 - Link Road (BRIH-4)	10	10	10	10
	2 - A18 Wrawby Road (NE)	10	10	10	10
	3 - Churchill Avenue	10	10	10	10
	4 - A18 Wrawby Road (SW)	10	10	10	10

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 - Link Road (BRIH-4)	0.24	5.43	0.4	A	195	293
2 - A18 Wrawby Road (NE)	0.54	6.56	1.3	A	598	897
3 - Churchill Avenue	0.12	5.06	0.2	A	92	138
4 - A18 Wrawby Road (SW)	0.58	8.42	1.5	A	551	826

Main Results for each time segment

07:45 - 08:00

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 - Link Road (BRIH-4)	160	40	477	1093	0.147	160	141	0.0	0.2	4.236	A
2 - A18 Wrawby Road (NE)	491	123	24	1328	0.370	488	613	0.0	0.6	4.704	A
3 - Churchill Avenue	75	19	482	1025	0.073	75	30	0.0	0.1	4.169	A
4 - A18 Wrawby Road (SW)	452	113	169	1175	0.384	449	388	0.0	0.7	5.435	A

08:00 - 08:15

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 - Link Road (BRIH-4)	191	48	572	1039	0.184	191	169	0.2	0.2	4.671	A
2 - A18 Wrawby Road (NE)	586	147	29	1325	0.442	585	735	0.6	0.9	5.346	A
3 - Churchill Avenue	90	22	578	969	0.093	90	36	0.1	0.1	4.503	A
4 - A18 Wrawby Road (SW)	539	135	203	1156	0.466	538	465	0.7	0.9	6.395	A

08:15 - 08:30

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 - Link Road (BRIH-4)	235	59	700	965	0.243	234	206	0.2	0.4	5.415	A
2 - A18 Wrawby Road (NE)	718	179	35	1321	0.543	716	899	0.9	1.3	6.526	A
3 - Churchill Avenue	110	28	707	894	0.123	110	44	0.1	0.2	5.047	A
4 - A18 Wrawby Road (SW)	661	165	248	1131	0.584	658	569	0.9	1.5	8.338	A

08:30 - 08:45

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 - Link Road (BRIH-4)	235	59	702	964	0.243	235	207	0.4	0.4	5.428	A
2 - A18 Wrawby Road (NE)	718	179	35	1321	0.543	718	902	1.3	1.3	6.563	A
3 - Churchill Avenue	110	28	709	893	0.123	110	44	0.2	0.2	5.055	A
4 - A18 Wrawby Road (SW)	661	165	249	1131	0.584	661	570	1.5	1.5	8.421	A

08:45 - 09:00

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 - Link Road (BRIH-4)	191	48	576	1037	0.185	192	169	0.4	0.3	4.688	A
2 - A18 Wrawby Road (NE)	586	147	29	1325	0.442	588	739	1.3	0.9	5.384	A
3 - Churchill Avenue	90	22	581	968	0.093	90	36	0.2	0.1	4.514	A
4 - A18 Wrawby Road (SW)	539	135	204	1156	0.467	542	467	1.5	1.0	6.469	A

09:00 - 09:15

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 - Link Road (BRIH-4)	160	40	481	1091	0.147	161	142	0.3	0.2	4.256	A
2 - A18 Wrawby Road (NE)	491	123	24	1328	0.370	492	618	0.9	0.7	4.742	A
3 - Churchill Avenue	75	19	486	1023	0.074	75	30	0.1	0.1	4.182	A
4 - A18 Wrawby Road (SW)	452	113	170	1174	0.385	453	391	1.0	0.7	5.495	A

Proposed Layout - 2038 With Scenario 5, 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	Compact Roundabout	Standard Roundabout		3, 4, 1, 2	8.07	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	43	4 - A18 Wrawby Road (SW)

Traffic Demand

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
D8	2038 With Scenario 5	PM	ONE HOUR	16:45	18:15	15	✓

Default vehicle mix	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 - Link Road (BRIH-4)		ONE HOUR	✓	129	100.000
2 - A18 Wrawby Road (NE)		ONE HOUR	✓	750	100.000
3 - Churchill Avenue		ONE HOUR	✓	26	100.000
4 - A18 Wrawby Road (SW)		ONE HOUR	✓	652	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
From		1 - Link Road (BRIH-4)	2 - A18 Wrawby Road (NE)	3 - Churchill Avenue	4 - A18 Wrawby Road (SW)
	1 - Link Road (BRIH-4)	0	125	0	4
	2 - A18 Wrawby Road (NE)	160	0	29	561
	3 - Churchill Avenue	0	7	0	19
	4 - A18 Wrawby Road (SW)	6	609	37	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1 - Link Road (BRIH-4)	2 - A18 Wrawby Road (NE)	3 - Churchill Avenue	4 - A18 Wrawby Road (SW)
	1 - Link Road (BRIH-4)	10	10	10	10
	2 - A18 Wrawby Road (NE)	10	10	10	10
	3 - Churchill Avenue	10	10	10	10
	4 - A18 Wrawby Road (SW)	10	10	10	10

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 - Link Road (BRIH-4)	0.15	4.87	0.2	A	118	178
2 - A18 Wrawby Road (NE)	0.63	8.08	1.8	A	688	1032
3 - Churchill Avenue	0.03	4.87	0.0	A	24	36
4 - A18 Wrawby Road (SW)	0.62	8.81	1.7	A	598	897

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 - Link Road (BRIH-4)	97	24	489	1087	0.089	97	124	0.0	0.1	3.996	A
2 - A18 Wrawby Road (NE)	565	141	31	1324	0.427	561	555	0.0	0.8	5.173	A
3 - Churchill Avenue	20	5	543	990	0.020	19	49	0.0	0.0	4.082	A
4 - A18 Wrawby Road (SW)	491	123	125	1200	0.409	488	437	0.0	0.8	5.539	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 - Link Road (BRIH-4)	116	29	586	1031	0.112	116	149	0.1	0.1	4.327	A
2 - A18 Wrawby Road (NE)	674	169	37	1320	0.511	673	665	0.8	1.1	6.105	A
3 - Churchill Avenue	23	6	651	927	0.025	23	59	0.0	0.0	4.381	A
4 - A18 Wrawby Road (SW)	586	147	150	1186	0.494	585	524	0.8	1.1	6.575	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 - Link Road (BRIH-4)	142	36	716	956	0.149	142	182	0.1	0.2	4.863	A
2 - A18 Wrawby Road (NE)	826	206	45	1316	0.628	823	813	1.1	1.8	7.997	A
3 - Churchill Avenue	29	7	796	843	0.034	29	72	0.0	0.0	4.861	A
4 - A18 Wrawby Road (SW)	718	179	183	1167	0.615	715	641	1.1	1.7	8.709	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 - Link Road (BRIH-4)	142	36	719	954	0.149	142	183	0.2	0.2	4.874	A
2 - A18 Wrawby Road (NE)	826	206	45	1315	0.628	826	816	1.8	1.8	8.082	A
3 - Churchill Avenue	29	7	798	842	0.034	29	73	0.0	0.0	4.870	A
4 - A18 Wrawby Road (SW)	718	179	184	1167	0.615	718	643	1.7	1.7	8.812	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 - Link Road (BRIH-4)	116	29	590	1029	0.113	116	150	0.2	0.1	4.341	A
2 - A18 Wrawby Road (NE)	674	169	37	1320	0.511	677	669	1.8	1.2	6.181	A
3 - Churchill Avenue	23	6	654	925	0.025	23	60	0.0	0.0	4.392	A
4 - A18 Wrawby Road (SW)	586	147	151	1185	0.494	589	527	1.7	1.1	6.663	A

18:00 - 18:15

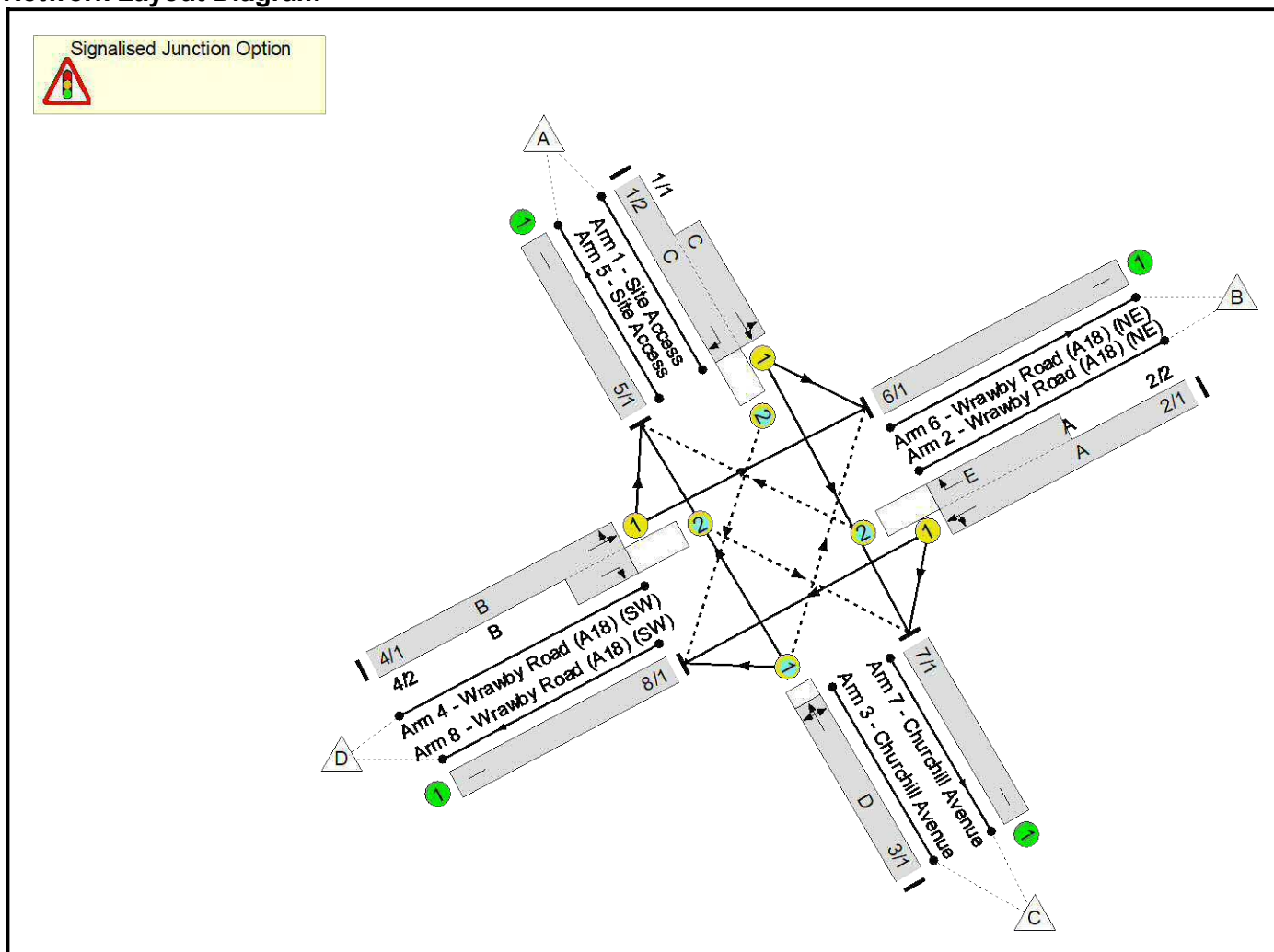
Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Link Road (BRIH-4)	97	24	493	1085	0.090	97	125	0.1	0.1	4.012	A
2 - A18 Wrawby Road (NE)	565	141	31	1324	0.427	566	559	1.2	0.8	5.235	A
3 - Churchill Avenue	20	5	547	987	0.020	20	50	0.0	0.0	4.094	A
4 - A18 Wrawby Road (SW)	491	123	126	1199	0.409	492	441	1.1	0.8	5.609	A

LTP LinSig Output

User and Project Details

Project:	Brigg Link Road
Title:	Signalised Junction Option
Location:	Brigg, North Lincolnshire
Client:	North Lincolnshire Council
Additional detail:	
File name:	Signalised Junction Option (BRIH-4).lsg3x
Author:	MR
Company:	LTP
Address:	

Network Layout Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7
E	Ind. Arrow	A	4	4

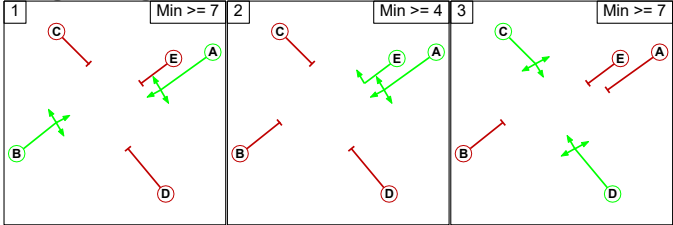
Phase Intergreens Matrix

Terminating Phase	Starting Phase					
		A	B	C	D	E
	A		-	5	6	-
	B	-		6	5	5
	C	5	5		-	5
	D	5	7	-		5
	E	-	6	5	6	

Phases in Stage

Stage No.	Phases in Stage
1	A B
2	A E
3	C D

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

From Stage	To Stage		
	1	2	3
	1		5 6
	2	6	

Give-Way Lane Input Data

Junction: Signalised Junction Option											
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
1/2 (Site Access)	8/1 (Right)	1439	0	3/1	1.09	To 5/1 (Ahead) To 8/1 (Left)	2.60	-	0.50	3	2.00
2/2 (Wrawby Road (A18) (NE))	5/1 (Right)	1439	0	4/1	1.09	All	3.00	-	0.50	3	2.00
3/1 (Churchill Avenue)	6/1 (Right)	1439	0	1/1	1.09	All	1.00	-	0.50	1	2.00
4/2 (Wrawby Road (A18) (SW))	7/1 (Right)	1439	0	2/1	1.09	All	3.00	-	0.50	3	2.00

Lane Input Data

Junction: Signalised Junction Option

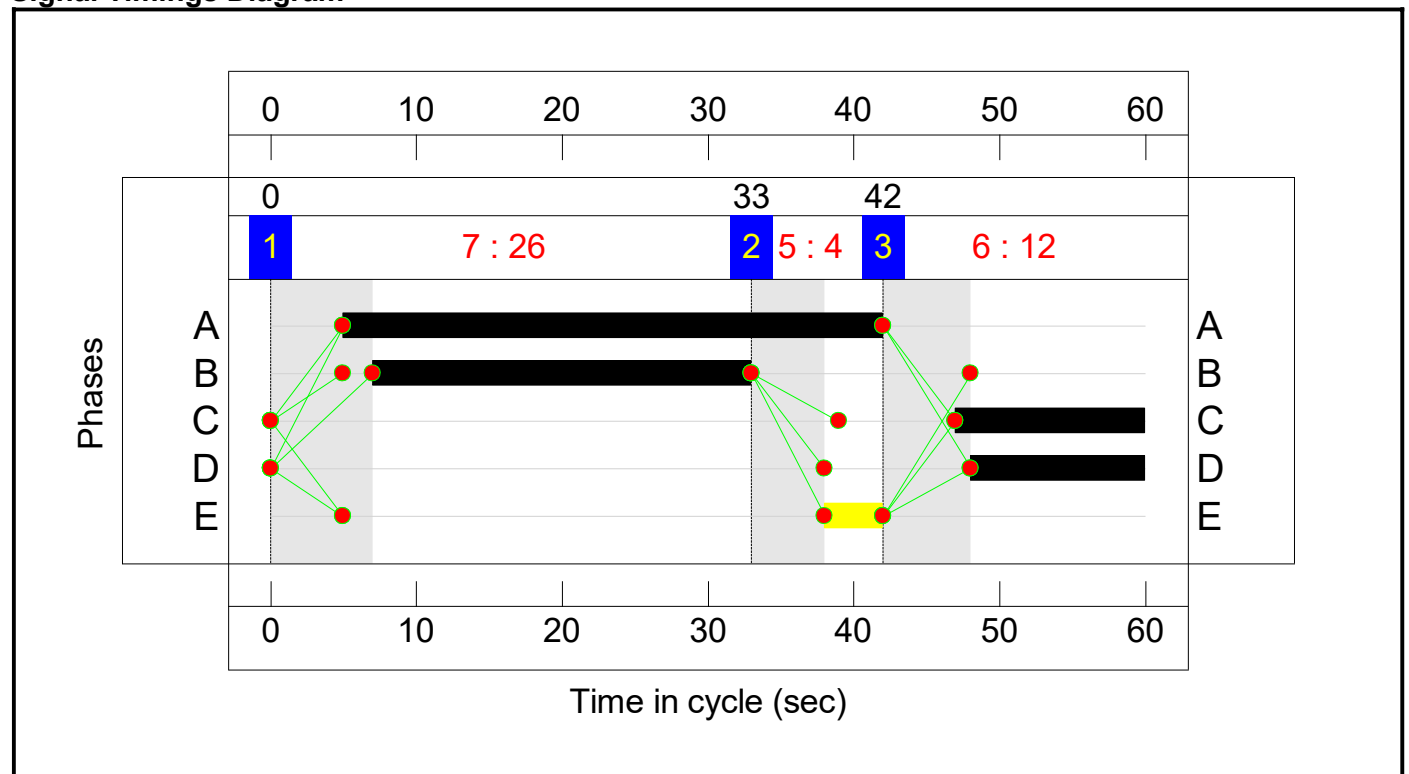
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (Site Access)	U	C	2	3	6.8	Geom	-	3.50	0.00	Y	Arm 6 Left	14.83
											Arm 7 Ahead	Inf
1/2 (Site Access)	O	C	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 8 Right	17.64
2/1 (Wrawby Road (A18) (NE))	U	A	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 7 Left	19.60
											Arm 8 Ahead	Inf
2/2 (Wrawby Road (A18) (NE))	O	A E	2	3	7.8	Geom	-	3.50	0.00	Y	Arm 5 Right	23.50
3/1 (Churchill Avenue)	O	D	2	3	60.0	Geom	-	3.75	0.00	Y	Arm 5 Ahead	Inf
											Arm 6 Right	23.93
											Arm 8 Left	15.70
4/1 (Wrawby Road (A18) (SW))	U	B	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 5 Left	15.70
											Arm 6 Ahead	Inf
4/2 (Wrawby Road (A18) (SW))	O	B	2	3	3.5	Geom	-	3.50	0.00	Y	Arm 7 Right	23.70
5/1 (Site Access)	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (Wrawby Road (A18) (NE))	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1 (Churchill Avenue)	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1 (Wrawby Road (A18) (SW))	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: 'Scenario 2 AM'	08:00	09:00	01:00	
2: 'Scenario 2 PM'	17:00	18:00	01:00	
3: 'Scenario 3 AM'	08:00	09:00	01:00	
4: 'Scenario 3 PM'	17:00	18:00	01:00	
5: 'Scenario 4 AM'	08:00	09:00	01:00	
6: 'Scenario 4 PM'	17:00	18:00	01:00	
7: 'Scenario 5 AM'	08:00	09:00	01:00	
8: 'Scenario 5 PM'	17:00	18:00	01:00	

Scenario 1: 'Scenario 2 AM' (FG1: 'Scenario 2 AM', Plan 1: 'Network Control Plan 1')

Signal Timings Diagram



Traffic Flows, Desired

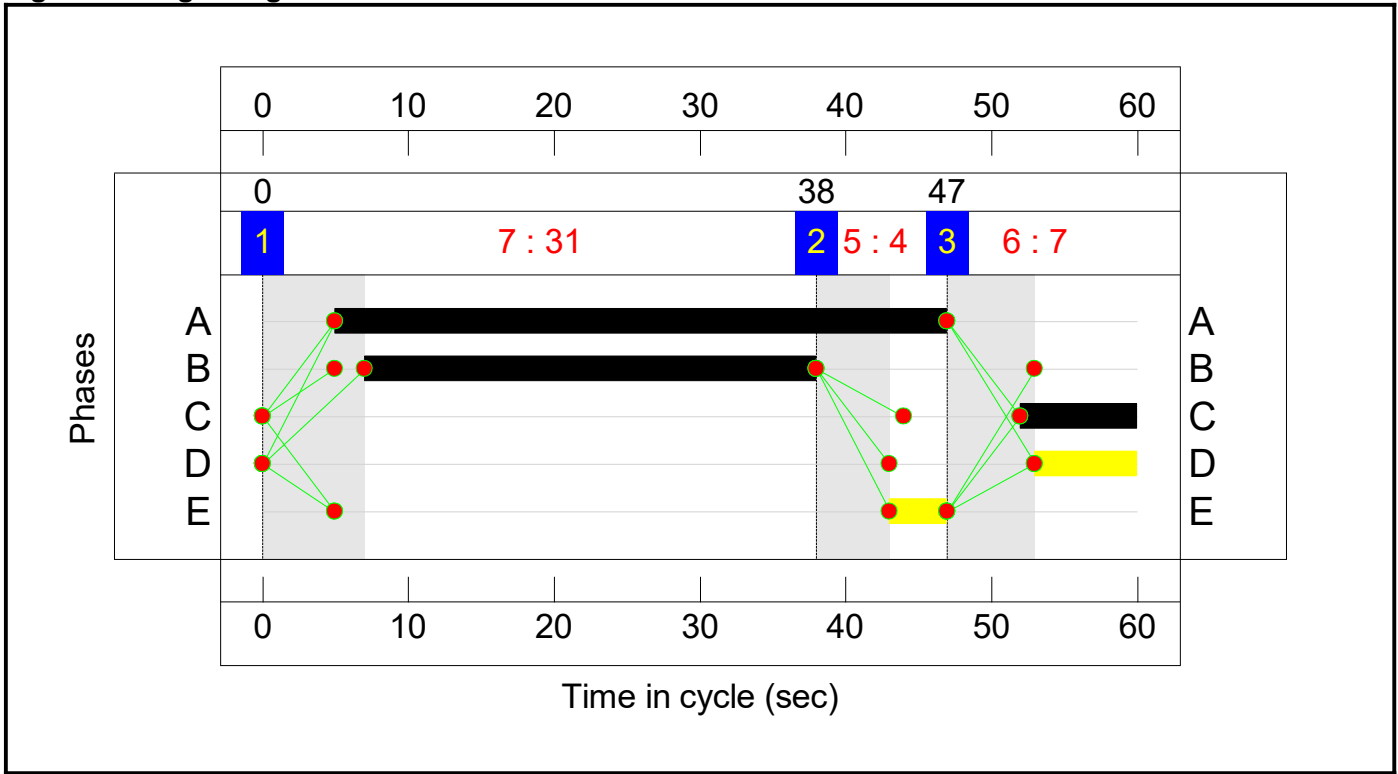
Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	275	0	8	283
	B	245	0	14	452	711
	C	0	42	0	58	100
	D	5	566	26	0	597
	Tot.	250	883	40	518	1691

Lane Saturation Flows

Junction: Signalised Junction Option								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Site Access)	3.50	0.00	Y	Arm 6 Left	14.83	100.0 %	1785	1785
				Arm 7 Ahead	Inf	0.0 %		
1/2 (Site Access)	3.50	0.00	Y	Arm 8 Right	17.64	100.0 %	1811	1811
2/1 (Wrawby Road (A18) (NE))	3.50	0.00	Y	Arm 7 Left	19.60	3.0 %	1960	1960
				Arm 8 Ahead	Inf	97.0 %		
2/2 (Wrawby Road (A18) (NE))	3.50	0.00	Y	Arm 5 Right	23.50	100.0 %	1847	1847
3/1 (Churchill Avenue)	3.75	0.00	Y	Arm 5 Ahead	Inf	0.0 %	1840	1840
				Arm 6 Right	23.93	42.0 %		
				Arm 8 Left	15.70	58.0 %		
4/1 (Wrawby Road (A18) (SW))	3.50	0.00	Y	Arm 5 Left	15.70	0.9 %	1963	1963
				Arm 6 Ahead	Inf	99.1 %		
4/2 (Wrawby Road (A18) (SW))	3.50	0.00	Y	Arm 7 Right	23.70	100.0 %	1848	1848
5/1 (Site Access Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Wrawby Road (A18) (NE) Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Churchill Avenue Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Wrawby Road (A18) (SW) Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 2: 'Scenario 2 PM' (FG2: 'Scenario 2 PM', Plan 1: 'Network Control Plan 1')
Signal Timings Diagram



Traffic Flows, Desired
Desired Flow :

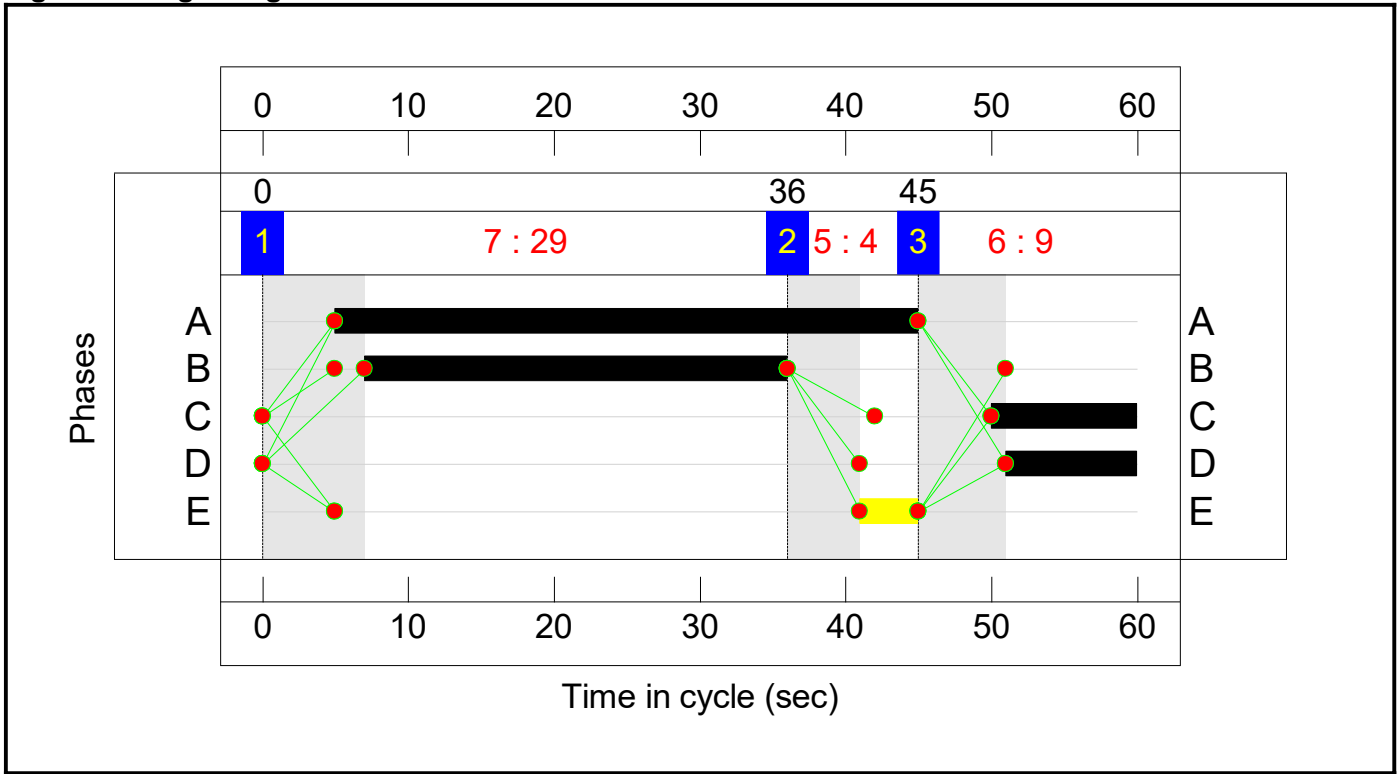
	Destination					
		A	B	C	D	Tot.
Origin	A	0	166	0	5	171
	B	212	0	29	559	800
	C	0	7	0	19	26
	D	8	607	37	0	652
	Tot.	220	780	66	583	1649

Lane Saturation Flows

Junction: Signalised Junction Option								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Site Access)	3.50	0.00	Y	Arm 6 Left	14.83	100.0 %	1785	1785
				Arm 7 Ahead	Inf	0.0 %		
1/2 (Site Access)	3.50	0.00	Y	Arm 8 Right	17.64	100.0 %	1811	1811
2/1 (Wrawby Road (A18) (NE))	3.50	0.00	Y	Arm 7 Left	19.60	4.9 %	1958	1958
				Arm 8 Ahead	Inf	95.1 %		
2/2 (Wrawby Road (A18) (NE))	3.50	0.00	Y	Arm 5 Right	23.50	100.0 %	1847	1847
3/1 (Churchill Avenue)	3.75	0.00	Y	Arm 5 Ahead	Inf	0.0 %	1831	1831
				Arm 6 Right	23.93	26.9 %		
				Arm 8 Left	15.70	73.1 %		
4/1 (Wrawby Road (A18) (SW))	3.50	0.00	Y	Arm 5 Left	15.70	1.3 %	1963	1963
				Arm 6 Ahead	Inf	98.7 %		
4/2 (Wrawby Road (A18) (SW))	3.50	0.00	Y	Arm 7 Right	23.70	100.0 %	1848	1848
5/1 (Site Access Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Wrawby Road (A18) (NE) Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Churchill Avenue Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Wrawby Road (A18) (SW) Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 3: 'Scenario 3 AM' (FG3: 'Scenario 3 AM', Plan 1: 'Network Control Plan 1')

Signal Timings Diagram



Traffic Flows, Desired

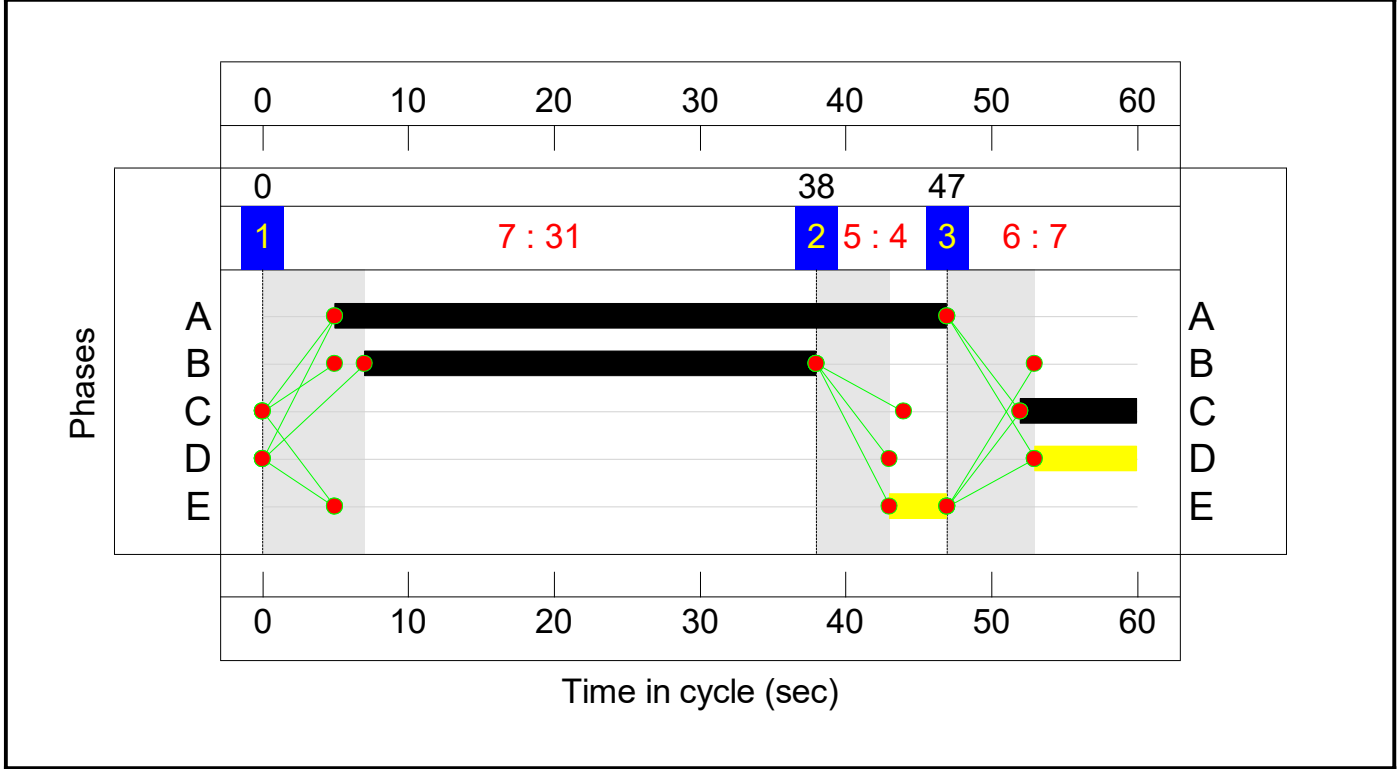
Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	138	0	4	142
	B	122	0	14	456	592
	C	0	42	0	56	98
	D	3	569	26	0	598
	Tot.	125	749	40	516	1430

Lane Saturation Flows

Junction: Signalised Junction Option								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Site Access)	3.50	0.00	Y	Arm 6 Left	14.83	100.0 %	1785	1785
				Arm 7 Ahead	Inf	0.0 %		
1/2 (Site Access)	3.50	0.00	Y	Arm 8 Right	17.64	100.0 %	1811	1811
2/1 (Wrawby Road (A18) (NE))	3.50	0.00	Y	Arm 7 Left	19.60	3.0 %	1961	1961
				Arm 8 Ahead	Inf	97.0 %		
2/2 (Wrawby Road (A18) (NE))	3.50	0.00	Y	Arm 5 Right	23.50	100.0 %	1847	1847
3/1 (Churchill Avenue)	3.75	0.00	Y	Arm 5 Ahead	Inf	0.0 %	1840	1840
				Arm 6 Right	23.93	42.9 %		
				Arm 8 Left	15.70	57.1 %		
4/1 (Wrawby Road (A18) (SW))	3.50	0.00	Y	Arm 5 Left	15.70	0.5 %	1964	1964
				Arm 6 Ahead	Inf	99.5 %		
4/2 (Wrawby Road (A18) (SW))	3.50	0.00	Y	Arm 7 Right	23.70	100.0 %	1848	1848
5/1 (Site Access Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Wrawby Road (A18) (NE) Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Churchill Avenue Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Wrawby Road (A18) (SW) Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 4: 'Scenario 3 PM' (FG4: 'Scenario 3 PM', Plan 1: 'Network Control Plan 1')
Signal Timings Diagram



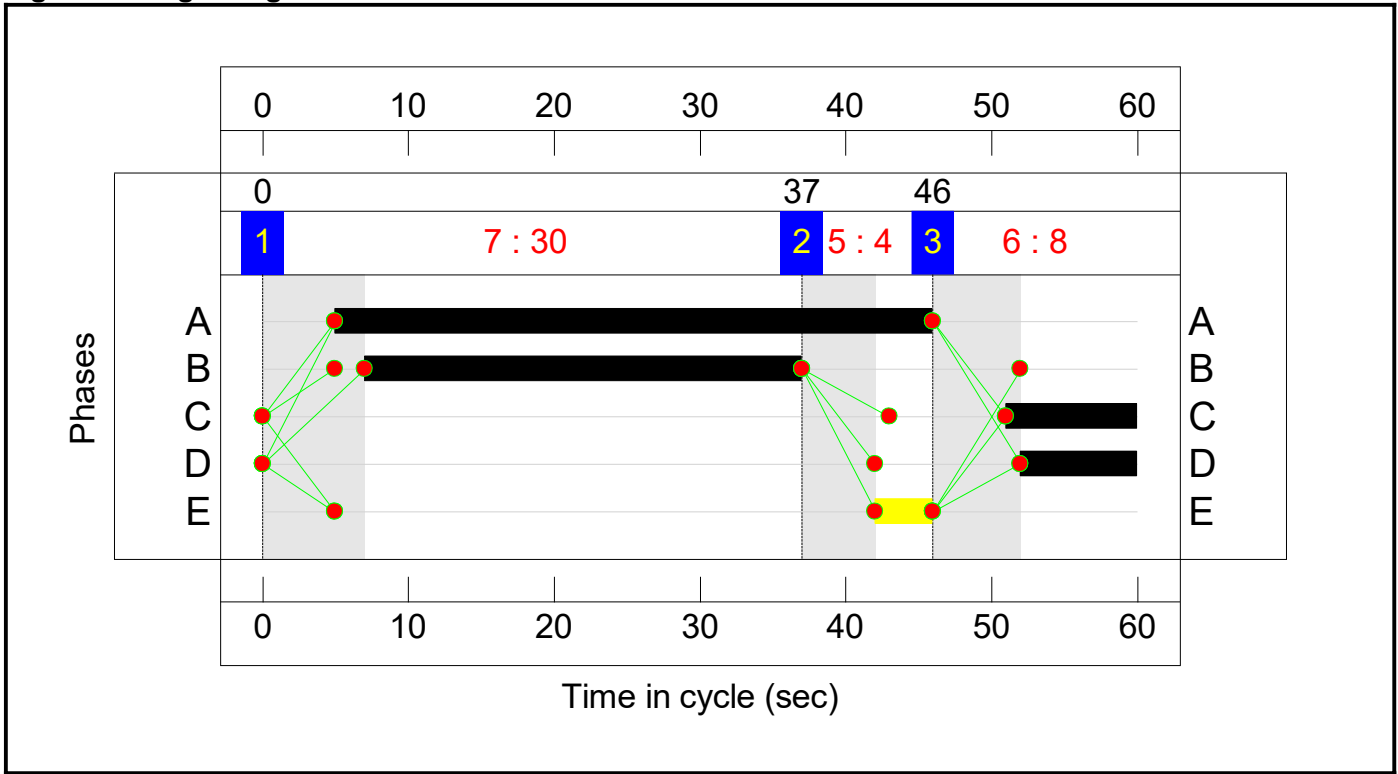
Traffic Flows, Desired
Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	83	0	3	86
	B	107	0	29	562	698
	C	0	7	0	19	26
	D	4	611	37	0	652
	Tot.	111	701	66	584	1462

Lane Saturation Flows

Junction: Signalised Junction Option								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Site Access)	3.50	0.00	Y	Arm 6 Left	14.83	100.0 %	1785	1785
				Arm 7 Ahead	Inf	0.0 %		
1/2 (Site Access)	3.50	0.00	Y	Arm 8 Right	17.64	100.0 %	1811	1811
2/1 (Wrawby Road (A18) (NE))	3.50	0.00	Y	Arm 7 Left	19.60	4.9 %	1958	1958
				Arm 8 Ahead	Inf	95.1 %		
2/2 (Wrawby Road (A18) (NE))	3.50	0.00	Y	Arm 5 Right	23.50	100.0 %	1847	1847
3/1 (Churchill Avenue)	3.75	0.00	Y	Arm 5 Ahead	Inf	0.0 %	1831	1831
				Arm 6 Right	23.93	26.9 %		
				Arm 8 Left	15.70	73.1 %		
4/1 (Wrawby Road (A18) (SW))	3.50	0.00	Y	Arm 5 Left	15.70	0.7 %	1964	1964
				Arm 6 Ahead	Inf	99.3 %		
4/2 (Wrawby Road (A18) (SW))	3.50	0.00	Y	Arm 7 Right	23.70	100.0 %	1848	1848
5/1 (Site Access Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Wrawby Road (A18) (NE) Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Churchill Avenue Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Wrawby Road (A18) (SW) Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 5: 'Scenario 4 AM' (FG5: 'Scenario 4 AM', Plan 1: 'Network Control Plan 1')
Signal Timings Diagram



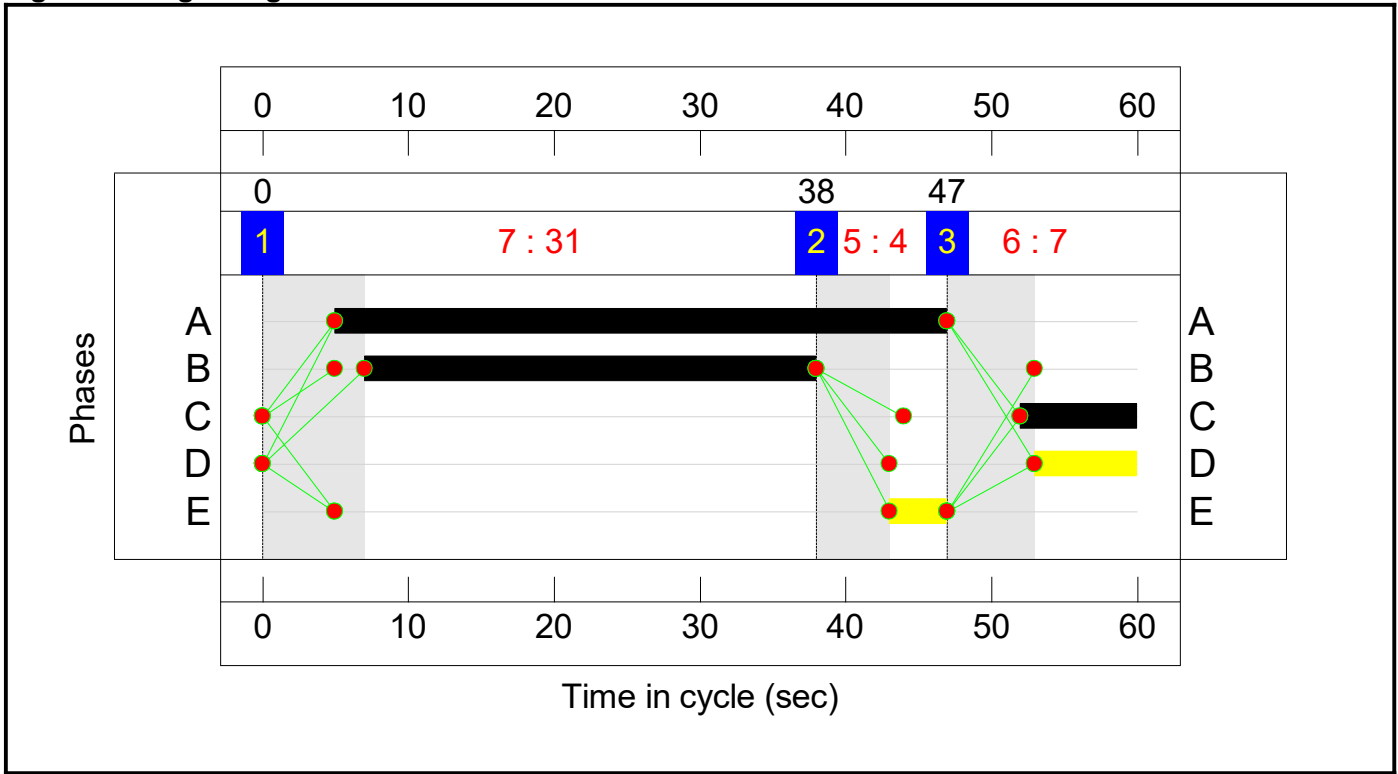
Traffic Flows, Desired
Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	110	0	2	112
	B	62	0	14	458	534
	C	0	42	0	58	100
	D	2	570	26	0	598
	Tot.	64	722	40	518	1344

Lane Saturation Flows

Junction: Signalised Junction Option								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Site Access)	3.50	0.00	Y	Arm 6 Left	14.83	100.0 %	1785	1785
				Arm 7 Ahead	Inf	0.0 %		
1/2 (Site Access)	3.50	0.00	Y	Arm 8 Right	17.64	100.0 %	1811	1811
2/1 (Wrawby Road (A18) (NE))	3.50	0.00	Y	Arm 7 Left	19.60	3.0 %	1961	1961
				Arm 8 Ahead	Inf	97.0 %		
2/2 (Wrawby Road (A18) (NE))	3.50	0.00	Y	Arm 5 Right	23.50	100.0 %	1847	1847
3/1 (Churchill Avenue)	3.75	0.00	Y	Arm 5 Ahead	Inf	0.0 %	1840	1840
				Arm 6 Right	23.93	42.0 %		
				Arm 8 Left	15.70	58.0 %		
4/1 (Wrawby Road (A18) (SW))	3.50	0.00	Y	Arm 5 Left	15.70	0.3 %	1964	1964
				Arm 6 Ahead	Inf	99.7 %		
4/2 (Wrawby Road (A18) (SW))	3.50	0.00	Y	Arm 7 Right	23.70	100.0 %	1848	1848
5/1 (Site Access Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Wrawby Road (A18) (NE) Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Churchill Avenue Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Wrawby Road (A18) (SW) Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 6: 'Scenario 4 PM' (FG6: 'Scenario 4 PM', Plan 1: 'Network Control Plan 1')
Signal Timings Diagram



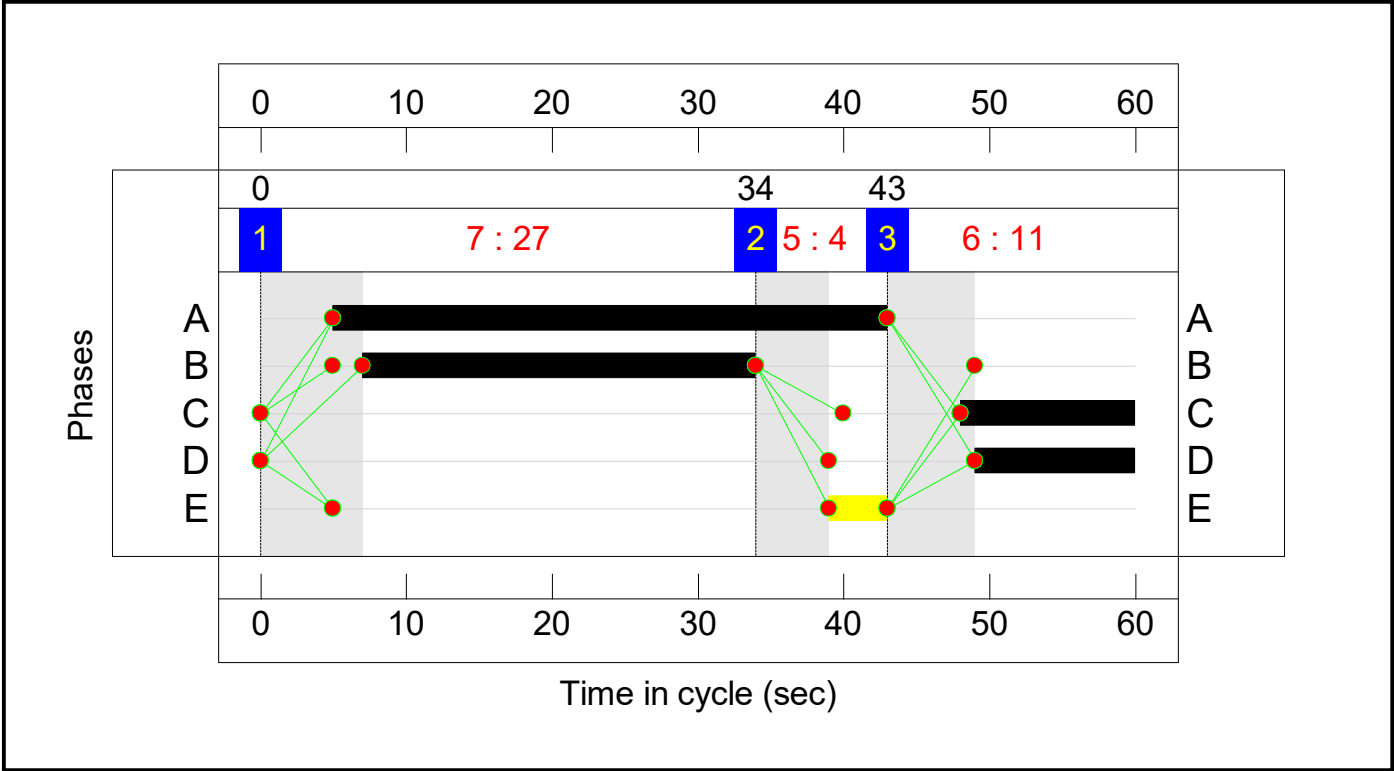
Traffic Flows, Desired
Desired Flow :

		Destination				
Origin	A	A	B	C	D	Tot.
	A	0	42	0	2	44
	B	53	0	29	563	645
	C	0	7	0	19	26
	D	2	613	37	0	652
	Tot.	55	662	66	584	1367

Lane Saturation Flows

Junction: Signalised Junction Option								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Site Access)	3.50	0.00	Y	Arm 6 Left	14.83	100.0 %	1785	1785
				Arm 7 Ahead	Inf	0.0 %		
1/2 (Site Access)	3.50	0.00	Y	Arm 8 Right	17.64	100.0 %	1811	1811
2/1 (Wrawby Road (A18) (NE))	3.50	0.00	Y	Arm 7 Left	19.60	4.9 %	1958	1958
				Arm 8 Ahead	Inf	95.1 %		
2/2 (Wrawby Road (A18) (NE))	3.50	0.00	Y	Arm 5 Right	23.50	100.0 %	1847	1847
3/1 (Churchill Avenue)	3.75	0.00	Y	Arm 5 Ahead	Inf	0.0 %	1831	1831
				Arm 6 Right	23.93	26.9 %		
				Arm 8 Left	15.70	73.1 %		
4/1 (Wrawby Road (A18) (SW))	3.50	0.00	Y	Arm 5 Left	15.70	0.3 %	1964	1964
				Arm 6 Ahead	Inf	99.7 %		
4/2 (Wrawby Road (A18) (SW))	3.50	0.00	Y	Arm 7 Right	23.70	100.0 %	1848	1848
5/1 (Site Access Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Wrawby Road (A18) (NE) Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Churchill Avenue Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Wrawby Road (A18) (SW) Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 7: 'Scenario 5 AM' (FG7: 'Scenario 5 AM', Plan 1: 'Network Control Plan 1')
Signal Timings Diagram



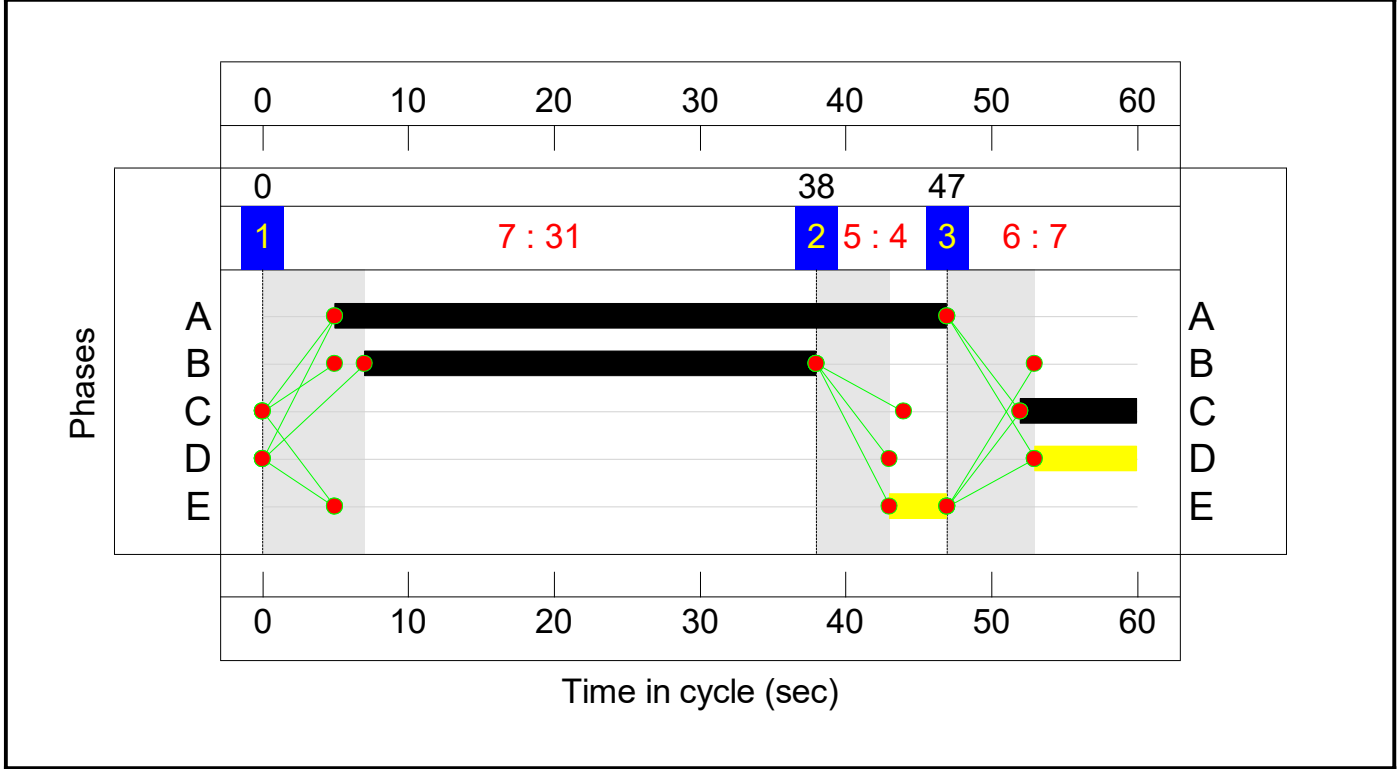
Traffic Flows, Desired
Desired Flow :

		Destination				
Origin		A	B	C	D	Tot.
	A	0	207	0	6	213
	B	184	0	14	454	652
	C	0	42	0	58	100
	D	4	570	26	0	600
	Tot.	188	819	40	518	1565

Lane Saturation Flows

Junction: Signalised Junction Option								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Site Access)	3.50	0.00	Y	Arm 6 Left	14.83	100.0 %	1785	1785
				Arm 7 Ahead	Inf	0.0 %		
1/2 (Site Access)	3.50	0.00	Y	Arm 8 Right	17.64	100.0 %	1811	1811
2/1 (Wrawby Road (A18) (NE))	3.50	0.00	Y	Arm 7 Left	19.60	3.0 %	1961	1961
				Arm 8 Ahead	Inf	97.0 %		
2/2 (Wrawby Road (A18) (NE))	3.50	0.00	Y	Arm 5 Right	23.50	100.0 %	1847	1847
3/1 (Churchill Avenue)	3.75	0.00	Y	Arm 5 Ahead	Inf	0.0 %	1840	1840
				Arm 6 Right	23.93	42.0 %		
				Arm 8 Left	15.70	58.0 %		
4/1 (Wrawby Road (A18) (SW))	3.50	0.00	Y	Arm 5 Left	15.70	0.7 %	1964	1964
				Arm 6 Ahead	Inf	99.3 %		
4/2 (Wrawby Road (A18) (SW))	3.50	0.00	Y	Arm 7 Right	23.70	100.0 %	1848	1848
5/1 (Site Access Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Wrawby Road (A18) (NE) Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Churchill Avenue Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Wrawby Road (A18) (SW) Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 8: 'Scenario 5 PM' (FG8: 'Scenario 5 PM', Plan 1: 'Network Control Plan 1')
Signal Timings Diagram



Traffic Flows, Desired
Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	125	0	4	129
	B	160	0	29	561	750
	C	0	7	0	19	26
	D	6	609	37	0	652
	Tot.	166	741	66	584	1557

Lane Saturation Flows

Junction: Signalised Junction Option								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Site Access)	3.50	0.00	Y	Arm 6 Left	14.83	100.0 %	1785	1785
				Arm 7 Ahead	Inf	0.0 %		
1/2 (Site Access)	3.50	0.00	Y	Arm 8 Right	17.64	100.0 %	1811	1811
2/1 (Wrawby Road (A18) (NE))	3.50	0.00	Y	Arm 7 Left	19.60	4.9 %	1958	1958
				Arm 8 Ahead	Inf	95.1 %		
2/2 (Wrawby Road (A18) (NE))	3.50	0.00	Y	Arm 5 Right	23.50	100.0 %	1847	1847
3/1 (Churchill Avenue)	3.75	0.00	Y	Arm 5 Ahead	Inf	0.0 %	1831	1831
				Arm 6 Right	23.93	26.9 %		
				Arm 8 Left	15.70	73.1 %		
4/1 (Wrawby Road (A18) (SW))	3.50	0.00	Y	Arm 5 Left	15.70	1.0 %	1963	1963
				Arm 6 Ahead	Inf	99.0 %		
4/2 (Wrawby Road (A18) (SW))	3.50	0.00	Y	Arm 7 Right	23.70	100.0 %	1848	1848
5/1 (Site Access Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Wrawby Road (A18) (NE) Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Churchill Avenue Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Wrawby Road (A18) (SW) Lane 1)	Infinite Saturation Flow						Inf	Inf

Network Results

Scenario 1: 'Scenario 2 AM' (FG1: 'Scenario 2 AM', Plan 1: 'Network Control Plan 1')

[illegible]

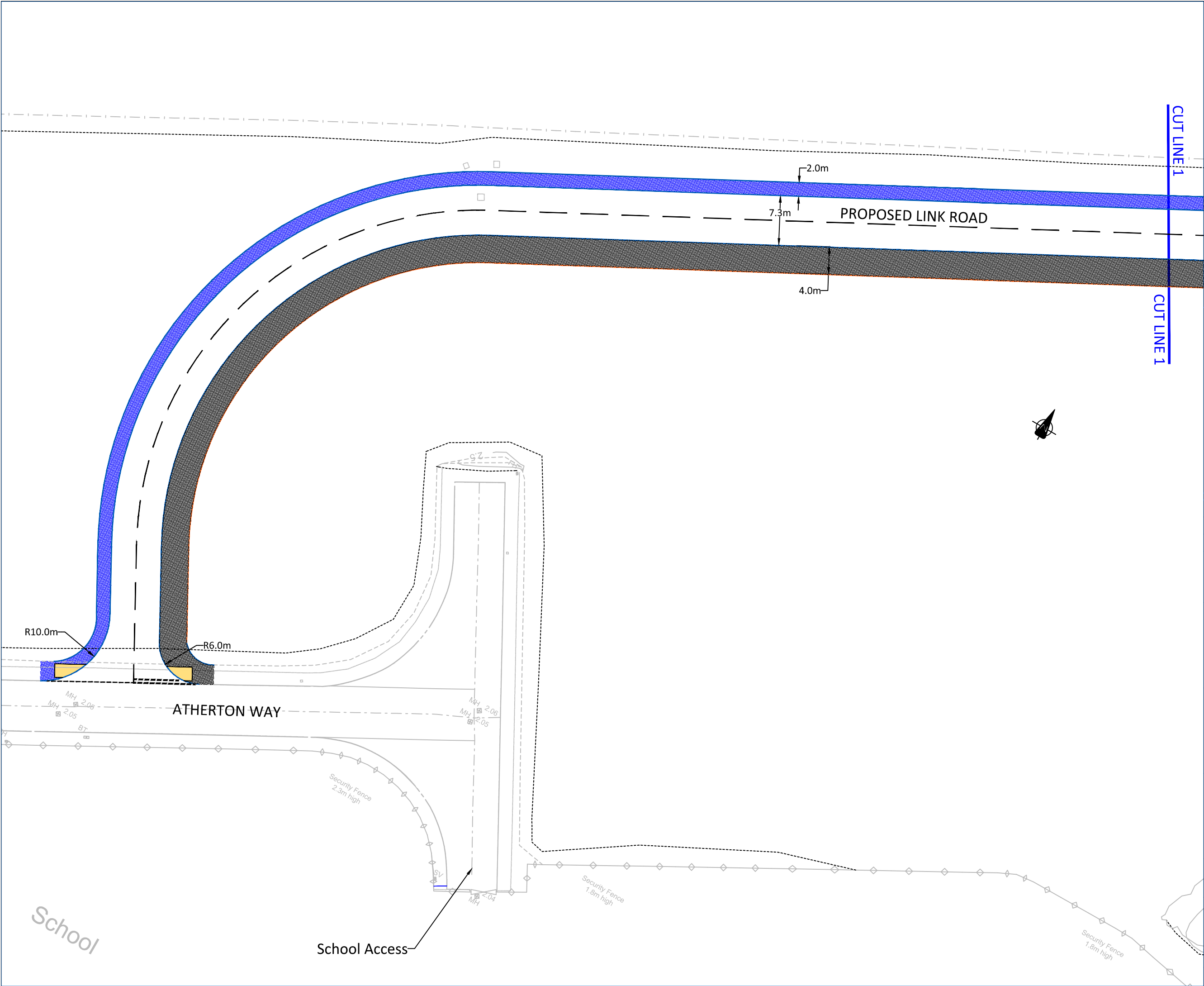
Scenario 3: 'Scenario 3 AM' (FG3: 'Scenario 3 AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Signalised Junction Option	-	-	-		-	-	-	-	-	-	58.6%	-	-	173	14	7	6.1	-	-
Signalised Junction Option	-	-	-		-	-	-	-	-	-	58.6%	-	-	173	14	7	6.1	-	-
1/2+1/1	Site Access Left Ahead Right	O+U	C		1	10	-	142	1811:1785	9+327	42.2 : 42.2%	142	142	4	0	0	1.2	30.9	2.4
2/1+2/2	Wrawby Road (A18) (NE) Right Left Ahead	U+O	A	E	1	40	4	592	1961:1847	1166+303	40.3 : 40.3%	592	592	102	14	6	1.2	7.3	3.5
3/1	Churchill Avenue Ahead Right Left	O	D		1	9	-	98	1840	183	53.6%	98	98	41	0	1	1.2	45.4	2.1
4/1+4/2	Wrawby Road (A18) (SW) Left Ahead Right	U+O	B		1	29	-	598	1964:1848	975+44	58.6 : 58.6%	598	598	26	0	0	2.5	14.8	7.4
C1 PRC for Signalled Lanes (%): 53.5 PRC Over All Lanes (%): 53.5 Total Delay for Signalled Lanes (pcuHr): 6.13 Total Delay Over All Lanes(pcuHr): 6.13 Cycle Time (s): 60																			

Scenario 6: 'Scenario 4 PM' (FG6: 'Scenario 4 PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Signalised Junction Option	-	-	-		-	-	-	-	-	-	60.0%	-	-	90	6	3	4.2	-	-
Signalised Junction Option	-	-	-		-	-	-	-	-	-	60.0%	-	-	90	6	3	4.2	-	-
1/2+1/1	Site Access Left Ahead Right	O+U	C		1	8	-	44	1811:1785	13+268	15.7 : 15.7%	44	44	2	0	0	0.4	29.9	0.7
2/1+2/2	Wrawby Road (A18) (NE) Right Left Ahead	U+O	A	E	1	42	4	645	1958:1847	1339+120	44.2 : 44.2%	645	645	44	6	3	1.1	6.1	4.3
3/1	Churchill Avenue Ahead Right Left	O	D		1	7	-	26	1831	225	11.5%	26	26	7	0	0	0.2	32.2	0.4
4/1+4/2	Wrawby Road (A18) (SW) Left Ahead Right	U+O	B		1	31	-	652	1964:1848	1026+62	60.0 : 60.0%	652	652	37	0	0	2.5	13.7	7.6
C1 PRC for Signalled Lanes (%): PRC Over All Lanes (%): 50.1 50.1 Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr): 4.16 4.16 Cycle Time (s): 60																			

Appendix 4 – Grammar School Rd Drawings



PRELIMINARY DESIGN ONLY not for construction purposes. Design subject to C3/C4 utilities search and detailed design etc.

- Key:-**
- Proposed kerbline:
- Proposed back of shared use area:
- Extents of proposed embankment / cutting:
- Proposed vehicle restraint barrier:
- Shared pedestrian/cycle facility:
- Footway:

- Disclaimers:-**
- i.

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- ii.

Reference should be made to the project's drawing register to ensure the latest drawing is being referred to.
- iii.

All dimensions are to be checked by the contractor prior to commencement of work. Any discrepancy shall be reported immediately to Local Transport Projects Ltd
- iv.

All work shall be carried out in accordance with local authority, statutory authority and health & safety requirements & regulations
- v.

Based on topographical survey supplied by North Lincolnshire Council 2017.

A	24 10 17	CW	NW	Link road re-aligned to north of development land.
Rev.	Date	By	Chk	Description

Client

North Lincolnshire Council

Project

Brigg Link Road
Grammar School Lane Link to
Atherton Way

Title

Preliminary Design Layout
Sheet 1 of 3

local transport projects

traffic engineering and transport planning

INSTITUTE OF
HIGHWAY
ENGINEERS

Armstrong House,
The Flemington Centre,
Armstrong Way, Beverley.
HU17 0NZ.

25 000
+
years

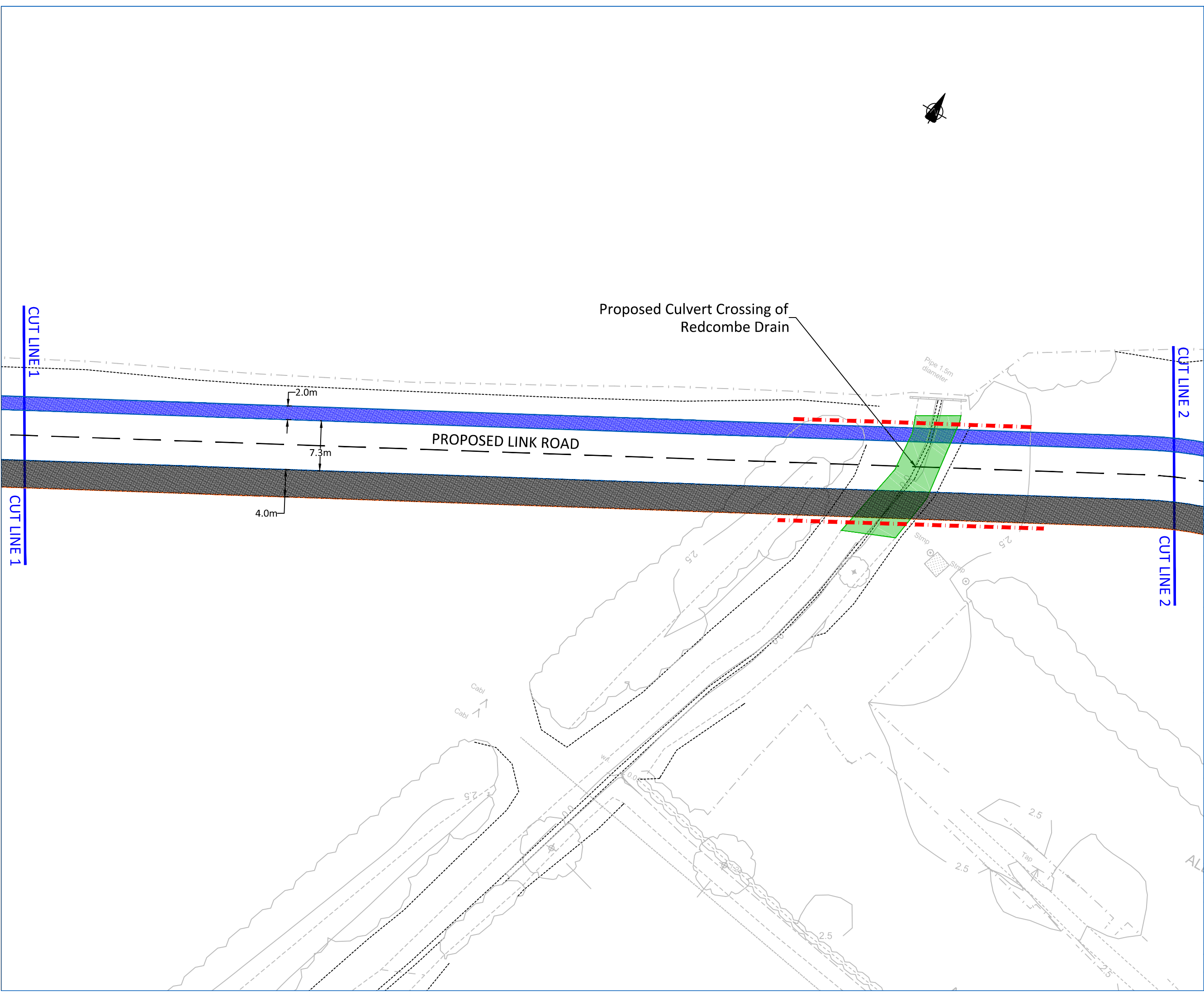
ISO 9001

CRS

01482 679 911
info@local-transport-projects.co.uk
www.local-transport-projects.co.uk

Registered No. 5295328

Drawn	CW	Date	20 09 17										
Scale	1 : 500	Checked	NW										
Status	☐ INTERNAL DRAFT ☒ DRAFT ☐ APPROVED ☐ PRELIMINARY ☐ CONSTRUCTION ☐ AS BUILT												
Drawing number	<table><tr><td>Project</td><td>Job</td><td>Drawing</td><td>Sheet</td><td>Revision</td></tr><tr><td>LTP/2494/</td><td>T1/</td><td>01</td><td>01</td><td>A</td></tr></table>			Project	Job	Drawing	Sheet	Revision	LTP/2494/	T1/	01	01	A
Project	Job	Drawing	Sheet	Revision									
LTP/2494/	T1/	01	01	A									



10mm

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A3

Notes:-

PRELIMINARY DESIGN ONLY not for construction purposes. Design subject to C3/C4 utilities search and detailed design etc.

Key:-

Proposed kerblines:

Proposed back of shared use area:

Extents of proposed embankment / cutting:

Proposed vehicle restraint barrier:

Shared pedestrian/cycle facility:

Footway:

Disclaimers:-

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iii. All dimensions are to be checked by the contractor prior to commencement of work. Any discrepancy shall be reported immediately to Local Transport Projects Ltd

iv. All work shall be carried out in accordance with local authority, statutory authority and health & safety requirements & regulations

v. Based on topographical survey supplied by North Lincolnshire Council 2017.

B	12 07 17	CW	NW	Atherton Road link amended to avoid development land parcel H5337082.
A	24 10 17	CW	NW	Link road re-aligned to north of development land.

Rev.	Date	By	Chk	Description

Client

North Lincolnshire Council

Project

Brigg Link Road
Grammar School Lane Link to
Atherton Way

Title

Preliminary Design Layout
Sheet 2 of 3

local transport projects

traffic engineering and transport planning

INSTITUTE OF HIGHWAY ENGINEERS

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25 000

Registered No. 5295328

Drawn	CW	Date	20 09 17
Scale	1 : 500	Checked	NW

Status

☐ INTERNAL DRAFT

☐ PRELIMINARY

☒ DRAFT

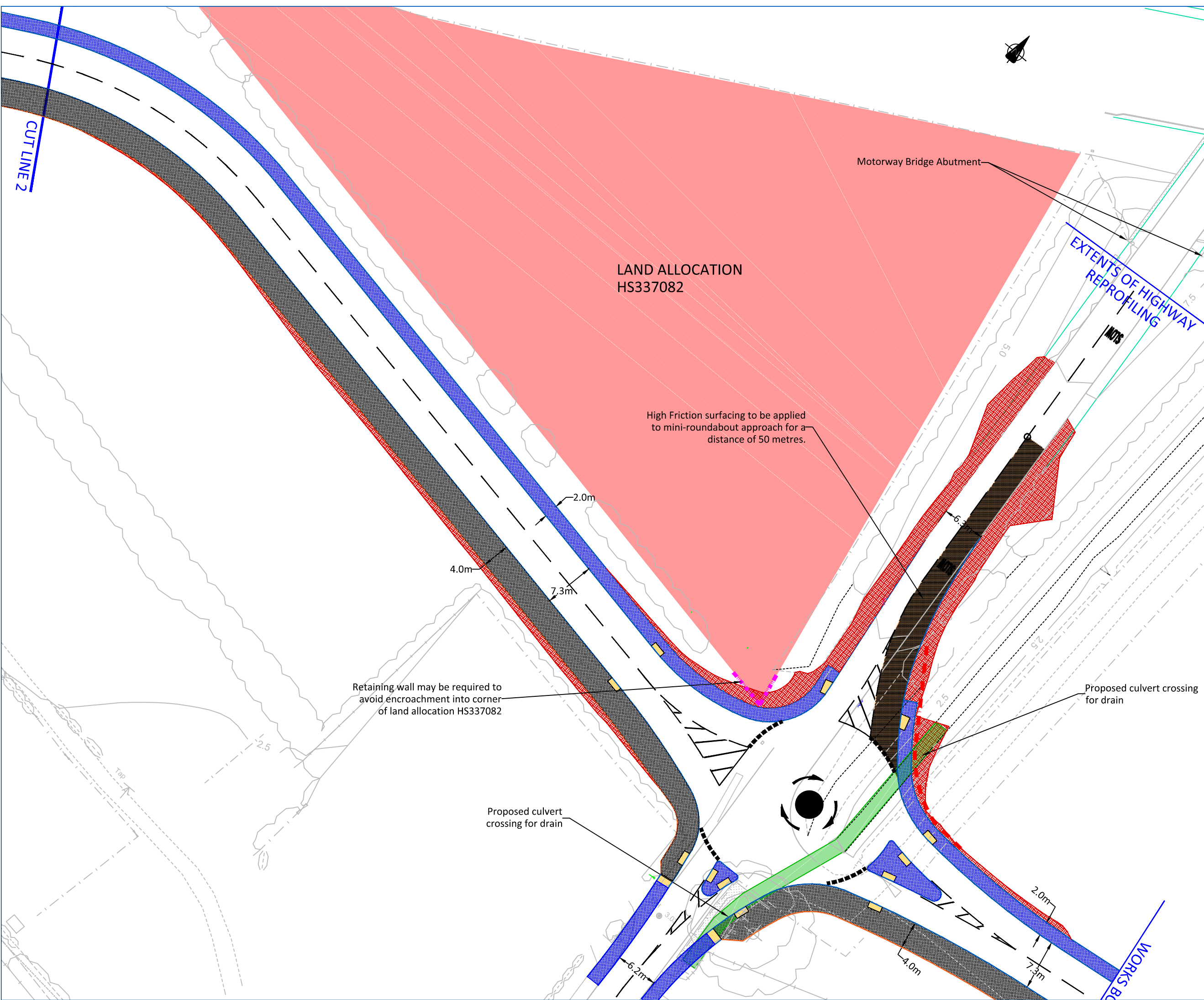
☐ CONSTRUCTION

☐ APPROVED

☐ AS BUILT

Drawing number

Project	Job	Drawing	Sheet	Revision
LTP/2494/	T1/	01	02	B



Notes:- 10mm © Local Transport Projects A3

PRELIMINARY DESIGN ONLY not for construction purposes. Design subject to C3/C4 utilities search and detailed design etc.

Key:-

Proposed kerbline: _____

Proposed back of shared use area:

Extents of proposed embankment / cutting: _____

Proposed vehicle restraint barrier: 

Shared pedestrian/cycle facility:

Footway: 

Proposed development land package HS337082 (not to be developed at this time)

Disclaimers:-

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- ii. Reference should be made to the project's drawing register to ensure the latest drawing is being referred to.

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v. Based on topographical survey supplied by North Lincolnshire Council 2017.

B	12 07 17	CW	NW	Atherton Road link amended to avoid development land parcel H5337082.
A	24 10 17	CW	NW	Link road re-aligned to north of development land.

Rev.	Date	By	Chk	Description
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Client

North Lincolnshire Council

Project	
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Brigg Link Road
Grammar School Lane Link to
Atherton Way

Title	
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Preliminary Design Layout
Sheet 3 of 3



local transport projects

traffic engineering and transport planning



**INSTITUTE OF
HIGHWAY
ENGINEERS**

Armstrong House,
The Flemington Centre,
Armstrong Way, Beverley.
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25 000
YEARS OF
TRANSPORT
PLANNING



HAS
Advanced Consulting Ltd

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☛ www.local-transport-projects.co.uk

Registered No. 5295328



All highway works shall comply with the current edition of the Highway Agency's "Specification for Highway Works" and the "Department for Transport's "Design Manual for Roads and Bridges" except as modified hereinafter, and the appropriate Local Authority Specification.

LAND PACKAGE REF:
HS337082

ALLOTMENTS

Notes:-

FEASIBILITY DESIGN ONLY not for construction purposes. Design subject to C3/C4 utilities search and detailed design etc.

Key:-

- Proposed kerblines: ———
- Proposed back of shared use area: ———
- Shared pedestrian/cycle facility: [Pattern]
- Footway: [Pattern]
- Tactile Paving: [Pattern]
- Proposed development land package HS337082 (not included in current development proposals) [Red Area]

CAUTION

This design is provided to determine the feasibility of the proposed highway layout in terms of meeting scheme objectives and highway design standards and may include risks/issues that affect the deliverability of the scheme.

POTENTIAL DESIGN RISKS/ISSUES

- HGV swept paths
- 'See through' from side roads
- Hooking right turns
- Cycle/footway widths
- Provision of retaining wall

Retaining wall may be required to avoid encroachment into corner of land package HS337082

Grammar School Road to operate one-way northbound (south of the junction) following the implementation of Phase 1C of the Brigg Link Road Masterplan

Proposed culvert crossing for drain

Proposed culvert crossing for drain

WORKS BOUNDARY

HEALTH AND SAFETY INFORMATION

IN ADDITION TO THE HAZARDS/RISKS NORMALLY ASSOCIATED WITH THE TYPES OF WORK DETAILED ON THIS DRAWING, NOTE THE FOLLOWING:

- CONSTRUCTION:**
- WORKS ADJACENT TO LIVE TRAFFIC
 - WORKS IN VICINITY OF LIVE SERVICES
- MAINTENANCE/CLANNING/OPERATION:**
- WORKS ADJACENT TO LIVE TRAFFIC
 - WORKS IN VICINITY OF LIVE SERVICES
- DECOMMISSIONING/DEMOLITION:**
- WORKS ADJACENT TO LIVE TRAFFIC
 - WORKS IN VICINITY OF LIVE SERVICES



There are no specific Risks or Hazards identified by the Designer which a Competent Contractor should not already be aware of. If the Contractor considers otherwise, he must bring the matter to the attention of the Principal Designer at the earliest opportunity and in the meantime must not undertake any operation pertaining to that matter.

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- Based on topographical survey supplied by North Lincolnshire Council 2017.

0	-	-	-	
Rev.	Date	By	Chk	Description

Client:
North Lincolnshire Council

Project:
Brigg Link Road
Highways Masterplan

Title:
Grammar School Road Junction
Options - Option 3: Ghost Island
Right Turn Priority Junction
(Priority to Grammar School
Road)

local transport projects
traffic engineering and transport planning

ARMSTRONG
The Gateway Centre,
Beverley,
East Riding of Yorkshire
HU17 0NU

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w www.local-transport-projects.co.uk
Registered No. 5246388

Drawn GR/SL Date 14 05 21
Scale 1 : 500 Checked MR Approved NW
Status

DRAFT FEASIBILITY

Drawing number
LTP/2494/P7/03/01 0



WORKS BOUNDARY

LAND PACKAGE REF:
HS337082

EXTENTS OF HIGHWAY
REPROFILING

All Highway works shall comply with the current edition of the Highways England's "Specification for Highway Works" and the "Department for Transport's "Design Manual for Roads and Bridges" except as modified hereinafter, and the appropriate Local Authority Specification.

Retaining wall may be required to avoid encroachment into corner of land package HS337082

Grammar School Road to operate as Access Only to the link road (one-way northbound) following the implementation of Phase 1C of the Brigg Link Road Masterplan

Notes:-

FEASIBILITY DESIGN ONLY not for construction purposes. Design subject to C3/C4 utilities search and detailed design etc.

Key:-

- Proposed kerbline: ————
- Proposed back of shared use area: ————
- Shared pedestrian/cycle facility: [Pattern]
- Footway: [Pattern]
- Tactile Paving: [Pattern]
- Proposed development land package HS337082 (not included in current development proposals) [Red Area]

CAUTION

This design is provided to determine the feasibility of the proposed highway layout in terms of meeting scheme objectives and highway design standards and may include risks/issues that affect the deliverability of the scheme.

POTENTIAL DESIGN RISKS/ISSUES

- HGV swept paths
- 'See through' from side roads
- Hooking right turns
- Cycle/footway widths
- Provision of retaining wall



HEALTH AND SAFETY INFORMATION

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- WORKS ADJACENT TO LIVE TRAFFIC
 - WORKS IN VICINITY OF LIVE SERVICES
- MAINTENANCE/CLEANING/OPERATION:**
- WORKS ADJACENT TO LIVE TRAFFIC
 - WORKS IN VICINITY OF LIVE SERVICES
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- Based on topographical survey supplied by North Lincolnshire Council 2017.

0	-	-	-	-

Rev.	Date	By	Chk	Description
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Client

North Lincolnshire Council

Project

Brigg Link Road
Highways Masterplan

Title

Grammar School Road Junction
Options - Option 5: Crossroads
(Priority to Link Road)

local transport projects
traffic engineering and transport planning

Armstrong House,
The Humbergate Centre,
Sewerby,
East Riding of Yorkshire
HU17 0NR.

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e info@local-transport-projects.co.uk
w www.local-transport-projects.co.uk
Registered No. 5295428

Drawn	SL	Date	07 04 21
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Scale	1 : 500	Checked	MR	Approved	NW
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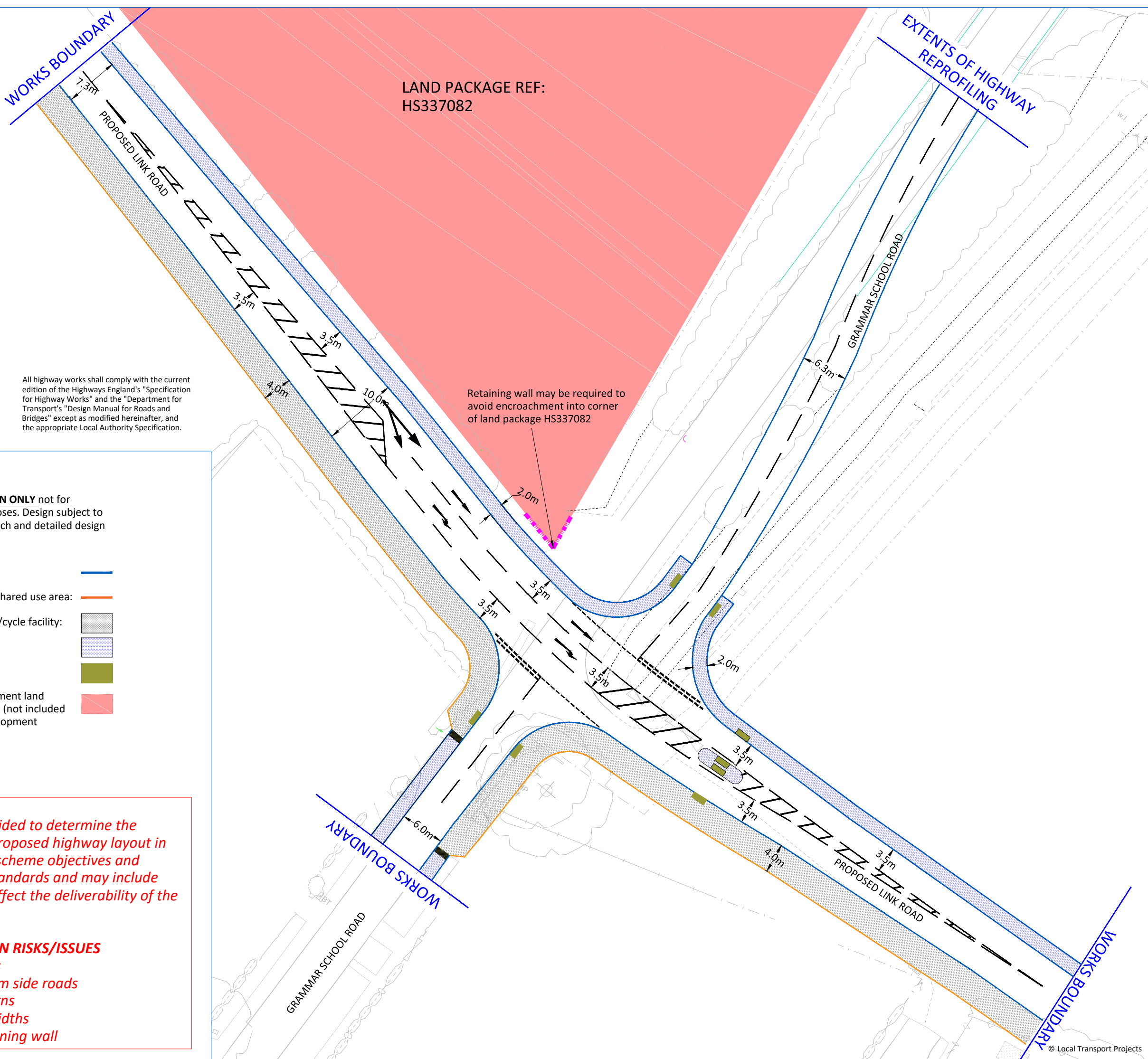
Status

DRAFT FEASIBILITY

Drawing number	Project	Job	Drawing	Sheet	Revision
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LTP/2494/P7	05	01	0		
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Notes:-

FEASIBILITY DESIGN ONLY not for construction purposes. Design subject to C3/C4 utilities search and detailed design etc.

Key:-

- Proposed kerbline:
- Proposed back of shared use area:
- Shared pedestrian/cycle facility:
- Footway:
- Tactile Paving:
- Proposed development land package HS337082 (not included in current de development proposals)

CAUTION

This design is provided to determine the feasibility of the proposed highway layout in terms of meeting scheme objectives and highway design standards and may include risks/issues that affect the deliverability of the scheme.

POTENTIAL DESIGN RISKS/ISSUES

- HGV swept paths
- 'See through' from side roads
- Hooking right turns
- Cycle/footway widths
- Provision of retaining wall



HEALTH AND SAFETY INFORMATION

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- WORKS ADJACENT TO LIVE TRAFFIC
 - WORKS IN VICINITY OF LIVE SERVICES

- MAINTENANCE/CLEANING/OPERATION:
- WORKS ADJACENT TO LIVE TRAFFIC
 - WORKS IN VICINITY OF LIVE SERVICES

- DECOMMISSIONING/DEMOLITION:
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0	-	-	-	-

Rev.	Date	By	Chk	Description
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Client
North Lincolnshire Council

Project
Brigg Link Road Highways Masterplan

Title
Grammar School Road Junction Options - Option 5: Ghost Island Right Turn Priority Junction (Priority to Proposed Link Road)

traffic engineering and transport planning

INSTITUTE OF HIGHWAY ENGINEERS

25 000

TAS

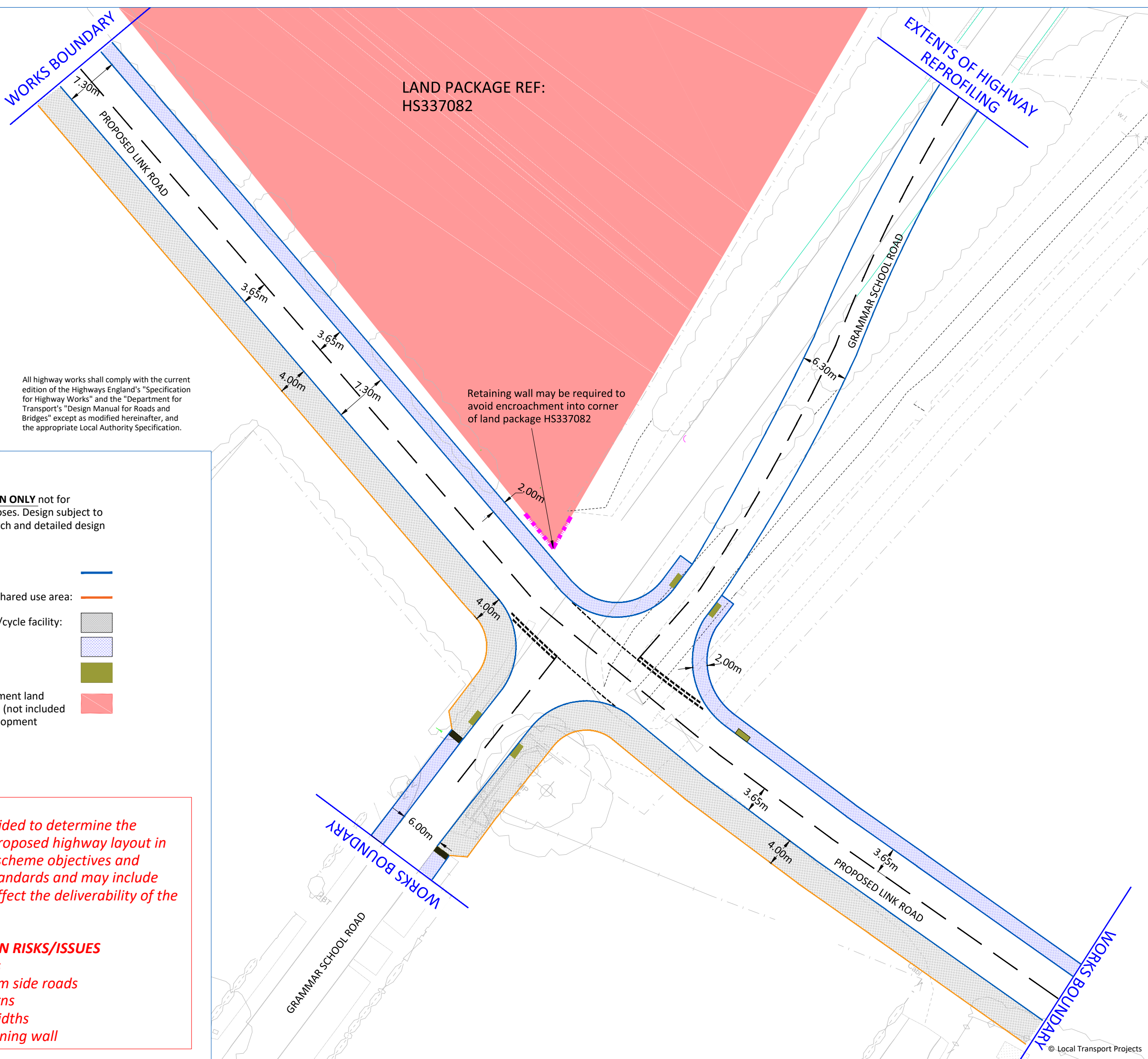
Armstrong House,
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Beverley,
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www.local-transport-projects.co.uk
Registered No. 5295328

Drawn	SL	Date	07 04 21
Scale	1 : 500	Checked	MR
		Approved	NW

Status
DRAFT FEASIBILITY

Drawing number	Project	Job	Drawing	Sheet	Revision
LTP/2494/P4/	01	.01	0		



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Notes:-

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Key:-

- Proposed kerbline:
- Proposed back of shared use area:
- Shared pedestrian/cycle facility:
- Footway:
- Tactile Paving:
- Proposed development land package HS337082 (not included in current de development proposals)

CAUTION

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POTENTIAL DESIGN RISKS/ISSUES

- HGV swept paths
- 'See through' from side roads
- Hooking right turns
- Cycle/footway widths
- Provision of retaining wall



HEALTH AND SAFETY INFORMATION

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- WORKS IN VICINITY OF LIVE SERVICES

MAINTENANCE/CLEANING/OPERATION:

- WORKS ADJACENT TO LIVE TRAFFIC
- WORKS IN VICINITY OF LIVE SERVICES

DECOMMISSIONING/DEMOLITION:

- WORKS ADJACENT TO LIVE TRAFFIC
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0	-	-	-	-

Rev.	Date	By	Chk	Description
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Client
North Lincolnshire Council

Project
Brigg Link Road Highways Masterplan

Title
Grammar School Road Junction Options - Option 6: Crossroads (Priority to Link Road)

local transport projects
traffic engineering and transport planning

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HU17 0NW.

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www.local-transport-projects.co.uk
Registered No. 5295328

Drawn	SL	Date	07 04 21
Scale	1 : 500	Checked	MR
		Approved	NW

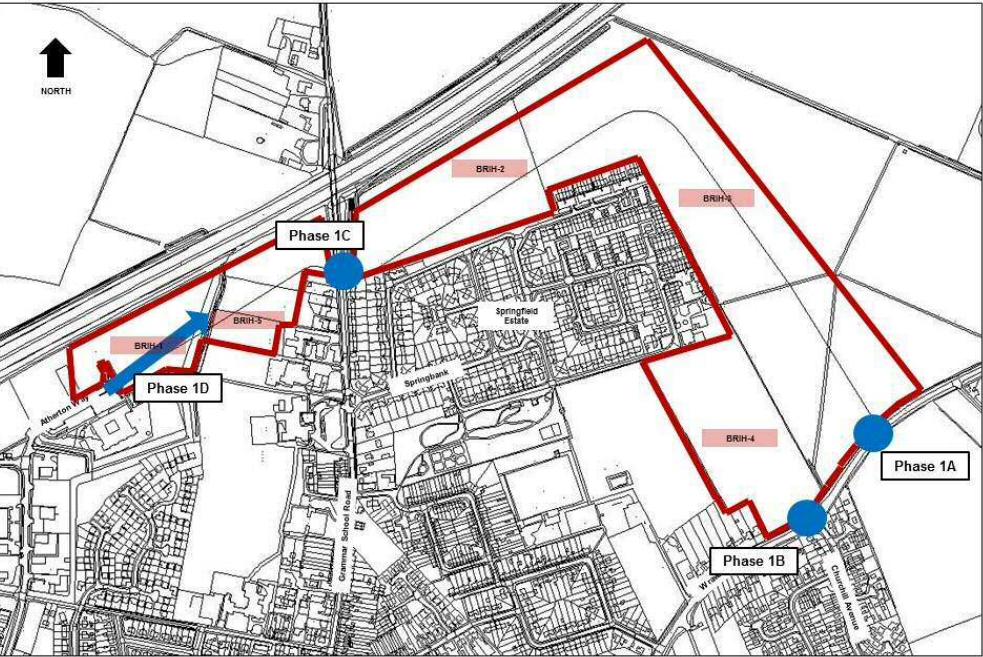
Status
DRAFT FEASIBILITY

Drawing number	Project	Job	Drawing	Sheet	Revision
LTP/2494/P4/02				.01	0

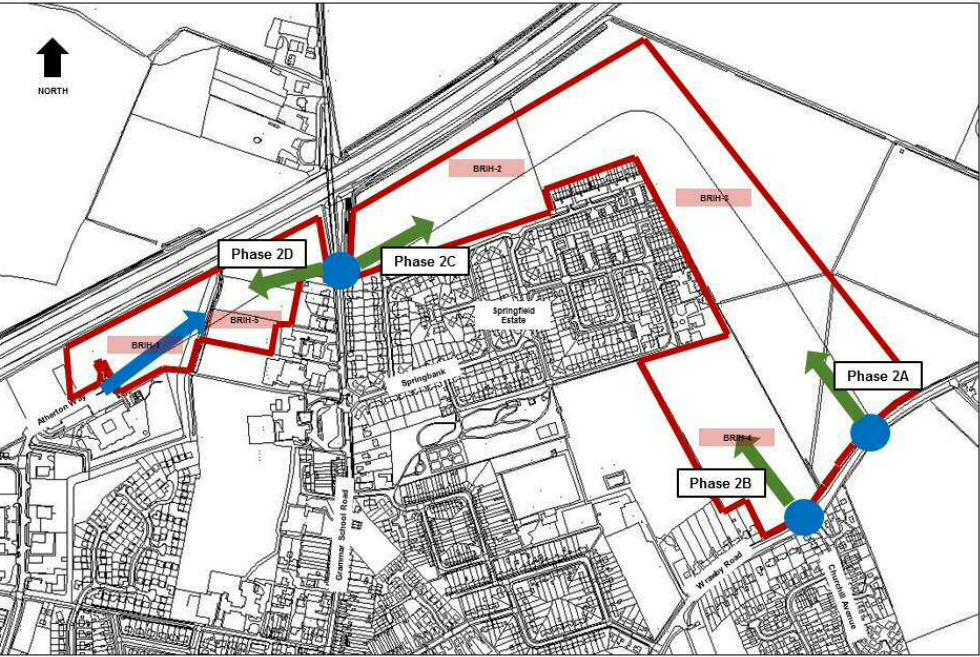
Appendix 5 – Proposed Phasing Plan

Proposed Link Road Phasing Plan

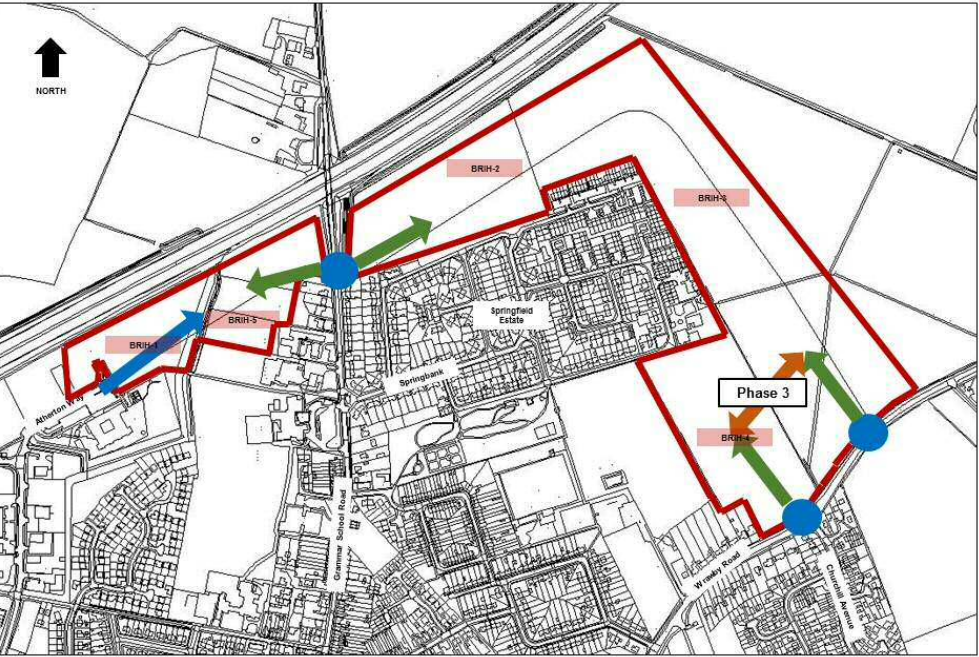
Phase 1



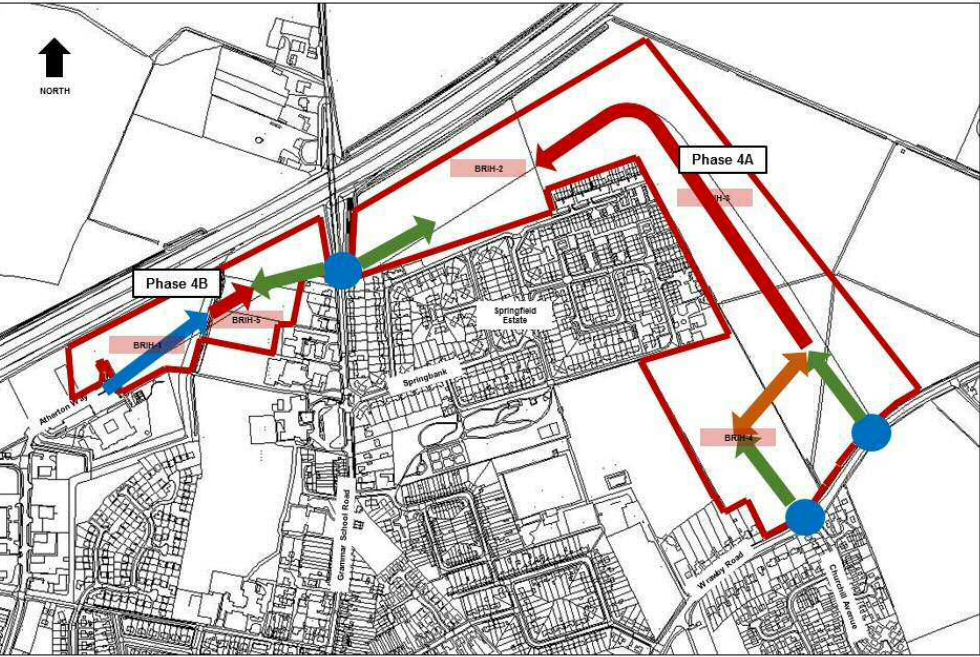
Phase 2



Phase 3



Phase 4



Phase 5

