

Appendices



Appendix A Technical Note – Scoping and BMBC Response





Land South of Halifax Road, Penistone

Full Planning Application – Development of 447 Homes & Associated Infrastructure

Technical Note – Scoping for Transport Assessment

1.0 Size and Description of Proposal

1.1 The proposed development of 447 homes and associated infrastructure is located on land to the south of Halifax Road in Penistone. The land is designated as housing allocation Ref. H82 in the Draft Barnsley Local Plan.

1.2 The proposed development will deliver a mix of 2, 3, 4 and 5 bedroom properties and there will be 30% affordable homes on the Site comprising 2 and 3 bedroom properties.

1.3 The land is currently within Green Belt and part of it is nominated in the Barnsley Unitary Development Plan as being within an Area of Borough Landscape Value. The land is currently farmed and therefore has no significant use in terms of traffic generation and there will be no relocation of an existing use which would result in additional traffic on a different part of the local highway network.

1.4 The proposed development will be served by a new access from A929 Halifax Road and from a new access from Wellhouse Lane. Both accesses will take the form of simple priority junctions, with the one from Halifax Road benefiting from a ghost island right turn holding lane which can be accommodated within the current carriageway width given the existing hatched central reserve.

2.0 Traffic Data Collection

2.1 Fully classified turning count surveys will be carried out at the following junctions to cover the weekday AM peak period between 0700 and 1000hrs and the weekday PM peak period between 1500 and 1900hrs:

- A629 Halifax Road / A628 Barnsley Road Roundabout;
- A629 Halifax Road / Wellhouse Lane priority junction;
- A628 Barnsley Road / Wellhouse Lane / Water Hall Lane staggered priority junctions;
- A628 Barnsley Road / B6462 Huddersfield Road priority junction; and
- A628 Thurlstone Road / A628 Barnsley Road / B6462 Bridge Street traffic signal controlled junction.

2.2 Automatic Traffic Count (ATC) surveys will also be carried out to inform any Noise and Air Quality Assessments that are required. Speed surveys will be carried out on A629 Halifax Road and on Wellhouse Lane to inform the design of the proposed accesses into the Site.

2.3 Traffic surveys will be undertaken prior to the October half-term holiday to ensure that they are carried out in a neutral month in accordance with National Planning Policy Guidance, 'Transport evidence bases in plan making and decision taking', October 2014.

3.0 Traffic Generation, Assignment and Distribution

3.1 The TRICS 7.5.3 Online database will be used to derive appropriate vehicular trip rates for the proposed development. Census data for the local area will be used to estimate the likely modal split for the development in order to derive multi-modal trips.

3.2 Census data will also be used to estimate the likely distribution of the trips from the proposed development and Google Maps will be used to derive the assignment of the trips on to the local highway network based on the shortest journey times between origin and destination.

3.3 An initial review of TRICS data suggests 85th percentile two-way trip rates of some 0.62 and 0.6 in the AM and PM peak hours respectively. These are broadly in line with the trip rates used in the assessment of the Persimmon development off Hartcliff Road in Penistone which has a similar level of accessibility.

3.4 An initial consideration of the likely assignment of trips on to the local highway network shows that the split will be broadly as follows:

- A629 N – 6%
- A628 E – 76%
- A629 S – 11%
- Penistone Town Centre via B6462 Bridge Street – 5%
- A628 W – 2%

4.0 Assessment Years, Growth and Committed Development

4.1 The Transport Assessment will contain an assessment of the existing operation of the local highway network (2018) and an Opening / Design Year assessment.

4.2 Assuming the proposed development is granted planning permission in early-mid 2019, the first dwellings will be constructed starting late 2019. Assuming a build-out rate of up to 50 dwellings per year, a full Opening Year of 2030 will be assumed, ten years after first occupation.

4.3 TEMPro will be utilised to obtain local growth rates to be applied to the existing traffic flows and these will be adjusted to take account of the proposed development as this is a significant part of the growth assumptions for the local area and therefore to include it within the TEMPro growth rates as well as adding the generated traffic manually will result in a significant over assessment of the impact.

4.4 Information is sought from BMBC regarding any other committed developments in the area which also need to be taken account of within the Transport Assessment.

5.0 Content of Transport Assessment

5.1 The document structure of the Transport Assessment will be as follows:

- Section 2 - will describe the Site and the existing transport conditions including a review of collision data for the local highway network;
- Section 3 - will define the development proposals including the access strategy. This section will consider on-site parking providing and connectivity for non-car modes;

- Section 4 - will describe the accessibility of the Site by non-car modes including accessibility to local facilities / services;
- Section 5 - will set out the trip generation and distribution methodologies applied in the assessment of the highway network;
- Section 6 - will describe the build-up of traffic flow information for the base and design years and will provide a materiality assessment of the highway network;
- Section 7 – will provide a commentary of the junction assessment that have been undertaken to determine the impact of the development and will describe any mitigation works that have been designed. If mitigation works are necessary, Section 7 will also contain an assessment of the improved junctions under Design Year traffic flows; and
- Section 8 – will summarise and conclude the Transport Assessment.

5.2 A separate Travel Plan will also be prepared to accompany the planning application.

**Prepared by: Elizabeth Green BEng MSc CEng MICE FCIHT
Associate Director**

Date: 8th October 2018

Technical Note – Review of Transport Assessment Scope

PREPARED FOR: Barbara Wilson
PREPARED BY: Henry Eyre (AECOM)
DATE: 17th October 2018
PROJECT NUMBER: 60590101
DOCUMENT REF: TN01
REVIEWED / APPROVED BY: Stephen Moss (AECOM)

Introduction

AECOM has been commissioned by Barnsley Metropolitan Borough Council [BMBC] to undertake a review of the Technical Note (dated 8th October 2018), provided by Optima Intelligent Highways Solutions (OIHS) in relation to a proposed 447 residential development south of Halifax Road, Penistone. The site is proposed to take access south from Halifax Road and west from Wellhouse Lane. and is designated in the Local Plan as H82.

We can then set out our review as follows

Traffic Data Collection

Fully classified turning count surveys will be carried out at the following junctions to cover the weekday AM peak period between 0700 and 1000hrs and the weekday PM peak period between 1500 and 1900hrs:

- A629 Halifax Road / A628 Barnsley Road Roundabout;
- A629 Halifax Road / Wellhouse Lane priority junction;
- A628 Barnsley Road / Wellhouse Lane / Water Hall Lane staggered priority junctions;
- A628 Barnsley Road / B6462 Huddersfield Road priority junction; and
- A628 Thurlstone Road / A628 Barnsley Road / B6462 Bridge Street traffic signal controlled junction.

Following an e-mail exchange dated 12th October 2018 the above can then be agreed.

It is agreed that speed surveys should be carried out on A629 Halifax Road and on Wellhouse Lane to inform the design of the proposed accesses into the Site.

Traffic Generation, Assignment and Distribution

OIHS have used TRICS 7.5.3 Online database to derive 85thile vehicle trip rates for the proposed development, resulting in two way values of 0.62 in the AM and 0.6 in the PM.

These can then be agreed, although a detailed list of the parameters used to calculate these trip rates should be included in the TA. Furthermore full person trips by all modes must be provided as part of the Transport Assessment.

It is agreed that census data should be used for the local area to estimate the likely modal split and distribution for the development.

Google Maps has been used to derive assignment trips on the local highway network based on the shortest journey times between origin and destination. The initial review of this shows that the split will be broadly as follows:

- A629 N – 6%
- A628 E – 76%
- A629 S – 11%
- Penistone Town Centre via B6462 Bridge Street – 5%
- A628 W – 2%

It is accepted that the initial trip distribution can be assumed for the scope, although, this will need to be reviewed in more detail for the final TA.

Assessment Years, Growth and Committed Development

It is agreed that the TA should include assessment for the existing highways network (2018) and future (opening / design) years. It is agreed that a base construction design year of 2019 and future opening year 2030 can be reasonable to assume.

It would also be useful if an assessment 5 years post registration of the planning application is provided within the TA.

TEMPRO will be used to obtain local growth rates, which will be applied to the Base + Development years. It is understood that information is sought from BMBC regarding the list of committed developments to be included in the TA.

Content of Transport Assessment

It is recommended that in addition to those sections listed in the scoping TA, a section on planning policy should be included.

It is agreed that a separate Travel Plan should also be prepared to accompany the planning application.

Summary and Conclusions

AECOM has been commissioned by BMBC to undertake a review of this scoping Technical Note, provided by OIHS in relation to a proposed 447 residential development south of Halifax Road, Penistone.

The note is generally inclusive of the information expected for the proposed site, although it is recommended that the following be considered:

- Full person trips must be included within the TA;
- A full breakdown of the distribution is provided;
- An analysis of the network five years post registration of the planning application would be required, and
- A section on relevant Transport Policy should also be included.

Appendix B Speed Survey Data



Well House Lane, Penistone- Speed Survey (Thursday 15th November 2018)

Weather Conditions - Fine & Overcast/Road Surface - Dry

Northbound

31	24	34	26	29	41	32	39	30	35
38	29	40	32	37	22	29	36	25	33
29	40	25	37	29	35	38	30	35	24
38	34	31	36	34	37	32	38	29	36
28	33	37	32	43	36	33	35	28	32
37	32	31	34	28	37	35	38	29	33
33	36	44	33	35	25	31	34	37	32
38	33	36	31	33	37	26	34	32	39
33	31	38	34	31	28	36	39	31	34
29	39	33	30	35	31	41	35	29	31
32	30	34	43	31	36	33	44	31	35
35	39	28	34	37	31	28	32	35	39
31	36	34	29	36	25	31	34	30	23
35	33	30	35	29	33	37	30	26	31
34	32	35	30	24	33	42	32	29	34
30	34	26	30	34	44	32	36	30	27
30	34	29	34	30	33	31	27	32	29
24	53	31	23	34	31	29	26	32	30
33	30	32	36	31	40	29	33	37	34
38	32	36	40	26	31	34	41	31	39

Max - 53

Min - 22

85% - 37

Ave - 33

Sp. Limit - 30

31 - Cars/LGV's

27 - HGV's/PSV's

Well House Lane, Penistone- Speed Survey (Thursday 15th November 2018)

Weather Conditions - Fine & Overcast/Road Surface - Dry

Southbound

28	25	28	33	26	20	36	23	32	23
21	25	37	27	24	34	22	27	30	25
26	33	27	21	30	27	22	29	36	31
29	24	31	37	28	22	25	32	28	32
32	26	30	20	32	27	31	29	33	26
31	25	31	28	32	30	26	32	27	30
29	21	26	30	32	27	33	24	31	28
22	30	24	32	29	21	32	27	23	20
27	24	27	24	29	34	26	23	29	27
24	22	31	27	23	31	23	25	29	23
23	31	26	23	29	27	25	31	23	27
28	24	32	28	23	30	27	29	23	33
24	28	22	26	28	23	30	21	27	23
27	33	27	23	29	25	28	23	26	29
33	27	29	25	23	27	25	30	23	27
27	24	26	27	31	24	30	27	29	26
25	27	29	33	23	32	24	27	24	29
31	28	37	23	28	30	25	32	27	31
27	34	25	28	22	26	29	22	26	25
29	21	26	29	31	25	31	27	22	29

Max - 37

Min - 20

85% - 31

Ave - 27

Sp. Limit - 30

28 - Cars/LGV's

25 - HGV's/PSV's

A629 Halifax Road, Penistone- Speed Survey (Friday 15th November 2018)

Weather Conditions - Fine & Overcast/Road Surface - Dry

Westbound - To Huddersfield

48	40	50	47	42	38	49	42	51	37
40	43	37	36	47	39	48	41	52	44
42	46	36	42	46	39	46	51	44	38
40	42	48	44	38	41	43	48	52	44
42	38	44	40	55	43	48	38	57	43
45	43	49	38	32	49	40	45	38	43
39	49	46	36	41	54	47	59	38	40
42	52	38	46	43	47	51	41	56	48
45	39	41	47	51	39	49	43	40	45
37	42	46	42	44	54	50	38	46	51
42	52	35	44	37	41	57	42	59	46
43	49	40	52	41	46	39	44	52	43
42	36	56	40	45	54	41	49	38	43
37	41	48	43	49	44	65	49	44	52
42	45	57	46	42	53	43	46	50	44
33	41	39	50	43	75	52	44	46	42
45	42	53	45	42	50	42	57	51	44
51	36	56	43	50	37	54	43	48	54
44	41	48	54	42	49	36	41	46	44
42	46	40	55	45	41	56	42	46	50

Max - 75

Min - 32

85% - 52

Ave - 45

Sp. Limit - 60

48 - Cars/LGV's

38 - HGV's/PSV's

Weather Conditions - Fine & Overcast/Road Surface - Dry

Eastbound - To Rotherham

47	44	55	49	45	59	51	47	42	45
45	56	49	54	47	52	60	46	52	41
51	44	48	51	44	47	39	52	47	46
45	52	47	50	59	47	52	45	59	47
50	46	67	52	47	55	44	50	56	50
47	40	49	44	51	49	42	53	40	48
51	40	43	54	46	61	52	42	46	49
42	50	47	74	57	47	40	45	54	47
44	42	50	47	53	46	57	45	49	40
47	54	45	59	48	67	42	48	39	50
53	46	67	49	42	46	49	55	48	46
46	54	50	47	41	52	49	45	51	48
51	47	42	52	46	51	44	50	44	55
54	49	58	49	53	45	49	42	57	50
37	48	53	46	60	48	51	44	40	46
50	46	40	52	48	44	55	49	45	50
47	50	45	42	53	48	45	42	49	43
49	46	42	48	41	63	48	55	43	47
47	51	43	48	55	50	46	49	36	48
46	43	49	46	51	49	46	57	43	46

Max - 74

Min - 36

85% - 54

Ave - 49

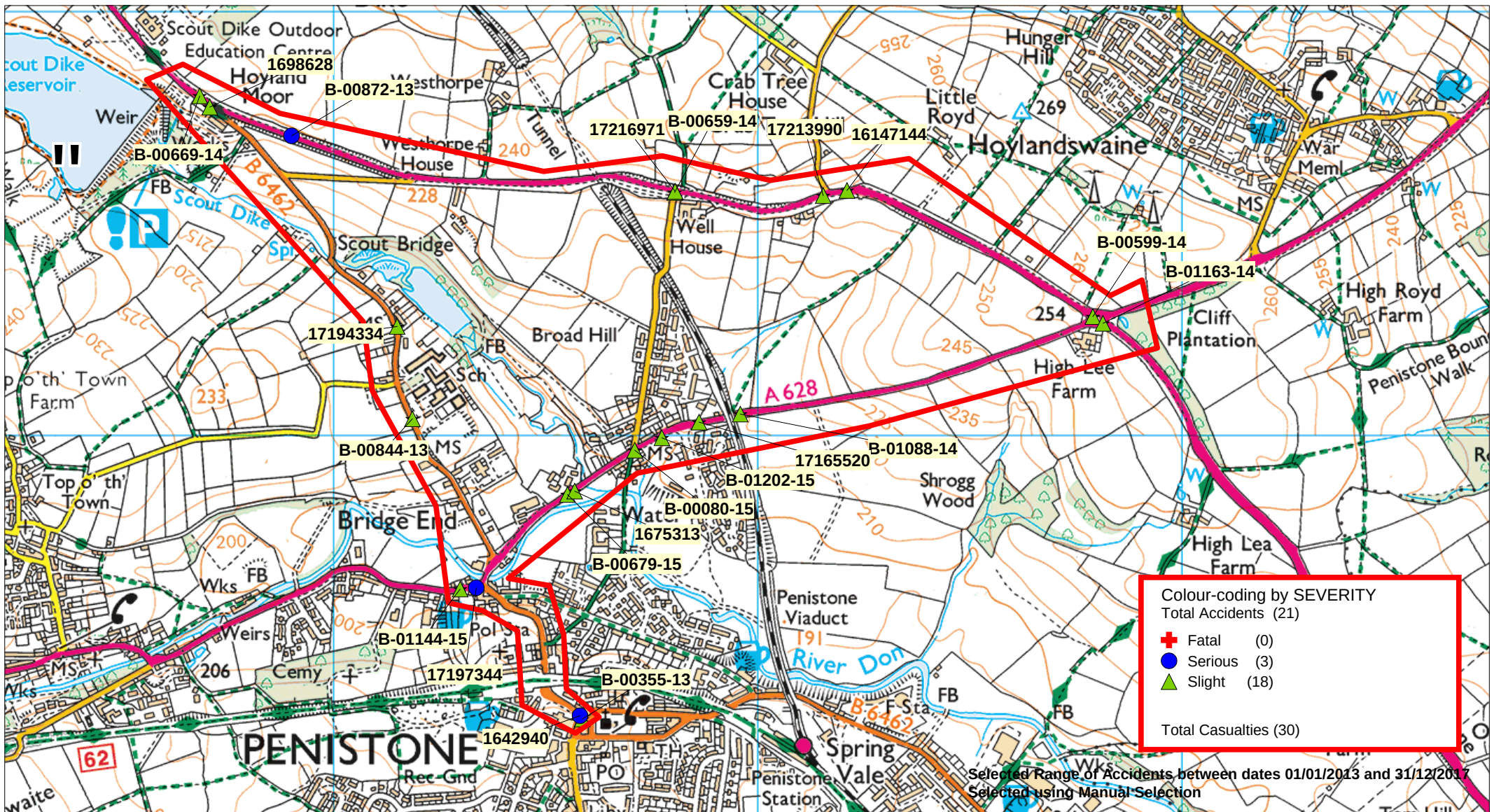
Sp. Limit - 60

47 - Cars/LGV's

45 - HGV's/PSV's

Appendix C Personal Injury Collision Data





MAKING SOUTH YORKSHIRE
ROADS SAFER

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 No. 100019587.
 South Yorkshire LTP Partnership
 Licence No. 100019587 2018

Selected map area

SCALE	1 : 12510
DATE	01/11/2018
DRWG No.	
DRN BY	

Details of Personal Injury Accidents for Period - 01/01/2013 to 31/12/2017 (60) months

Selection:

Selected using Build Query : Local_auth = 'Barnsley'

Notes:

Usman Khan - Optima Highways

Police Ref.	Day	Location Description	Vehicles				Casualties			
	Date		Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Road No.	Time									
2nd Road No.	D/L									
Grid Ref.	R.S.C									
	Weather									
	Speed									
	Account of Accident									
Causation Factor:										

B-00355-13 Thursday ST MARYS STREET, PENISTONE Veh 1 Goods > 7.5t Starting E to W Ped M 66 Slight
20/06/2013 BARNSELY J/W MARKET STREET
R1: B 6462 1400hrs
R2: U Daylight:street lights present
E 424,587 Dry
N 403,331 Fine without high winds
30 mph

Causation Factor:

1st: Failed to look properly
2nd: Vehicle blind spot

Participant:

Casualty 1
Vehicle 1

Confidence:

Very Likely
Very Likely

V1 WAS STATIONARY AT THE JUNCTION WAITING FOR A GAP IN THE TRAFFIC, A PEDESTRIAN THOUGHT HE HAD STOPPED TO ALLOW HIM TO CROSS, V1 THEN SET OF AND COLLIDED WITH C1

B-00844-13 Tuesday HUDDERSFIELD RD PENISTONE Veh 1 Car Going ahead SE to NW Ped M 13 Slight
10/12/2013
R1: B 6462 1508hrs
Daylight:street lights present
E 424,186 Dry
N 404,040 Fine without high winds
30 mph

Causation Factor:

1st: Failed to look properly

Participant:

Casualty 1

Confidence:

Very Likely

PED STEPPED OUT FROM BEHIND PARKED VEH'S INTO PATH OF V1 AND COLL OCC.

B-00872-13 Saturday HALIFAX RD BARNSELY 300 MTS Veh 1 Goods > 7.5t Going ahead SE to NW Dri M 39 Slight
21/12/2013 FROM HUDDERSFIELD RD Veh 1 Goods > 7.5t Going ahead SE to NW Ped M 50 Serious
R1: A 629 1251hrs
Daylight:street lights present
E 423,901 Wet/Damp
N 404,708 Fine with high winds
60 mph

Causation Factor:

1st: Failed to look properly
2nd: Careless/Reckless/In a hurry
3rd: Dangerous action in carriageway
4th: Other

Participant:

Casualty 1
Casualty 1
Casualty 1
Casualty 1

Confidence:

Possible
Possible
Possible
Possible

PED RAN INTO CARR AND INTO PATH OF VEH, POSSIBLY DELIBERATE.

Details of Personal Injury Accidents for Period - 01/01/2013 to 31/12/2017 (60) months

Selection:

Selected using Build Query : Local_auth = 'Barnsley'

Notes:

Usman Khan - Optima Highways

Police Ref.	Day	Location Description	Vehicles					Casualties		
			Veh No / Type / Manv / Dir / Class					Sex / Age / Sev		
Road No.	Date									
2nd Road No.	Time									
Grid Ref.	D/L									
	R.S.C									
	Weather									
	Speed									
	Account of Accident									
Causation Factor:										

B-00599-14 Wednesday HALIFAX ROAD BARNSELEY J/W BARNSELEY ROAD
02/07/2014
R1: A 629 1205hrs
R2: A 628 Daylight:street lights present
E 425,792 Dry
N 404,281 Fine without high winds
60 mph

Causation Factor:

1st: Failed to look properly
2nd: Careless/Reckless/In a hurry

Participant:

Vehicle 1
Vehicle 1

Confidence:

Very Likely
Very Likely

VEH1 TV BARNSELEY RD TW SILKSTONE ENTERS RNDBT AND COLL WITH VEH2 WHICH WAS ALREADY NEG RNDBT TV A629 TW INGBIRCHWORTH.

B-00659-14 Thursday HALIFAX ROAD PENISTONE J/W WELLHOUSE LANE
17/07/2014
R1: A 629 1740hrs
R2: U Daylight:street lights present
E 424,805 Dry
N 404,574 Fine without high winds
60 mph

Causation Factor:

1st: Failed to judge other persons path or speed
2nd: Failed to look properly

Participant:

Vehicle 2
Vehicle 2

Confidence:

Very Likely
Possible

V2 EMERGING FROM A MINOR RD ONTO THE MAIN A629. V1 HAS BEEN PASSING THE JUNC. AS V2 PULLS OUT INTENDING TO TURN RIGHT. THE FRONT OF V2 COLLIDES WITH THE N/S/F OF V1. THE DRIVER OF V1SUSTAINED WHIPLASH.

B-00669-14 Sunday HALIFAX ROAD PENISTONE J/W SPOUT DIKE CAR PARK
20/07/2014
R1: A 629 1220hrs
R2: U Daylight:street lights present
E 423,684 Dry
N 404,802 Fine without high winds
60 mph

Causation Factor:

1st: Failed to look properly

Participant:

Vehicle 1

Confidence:

Very Likely

V1 PULLED OUT OF RURAL CAR PARK ONTO MAIN C/W AND COLL WITH V2

Details of Personal Injury Accidents for Period - 01/01/2013 to 31/12/2017 (60) months

Selection:

Selected using Build Query : Local_auth = 'Barnsley'

Notes:

Usman Khan - Optima Highways

Police Ref.	Day	Location Description	Vehicles					Casualties		
	Date		Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Road No.	Time									
2nd Road No.	D/L									
Grid Ref.	R.S.C									
	Weather									
	Speed									
	Account of Accident									
Causation Factor:										

B-01088-14 Friday BARNSELEY ROAD PENISTONE 130 Veh 1 Car Stopping E to W Dri F 32 Slight
14/11/2014 MTS WINDERMERE ROAD Veh 2 Car Going ahead E to W Dri F 55 Slight
R1: A 628 1820hrs
Darkness: no street lighting
E 424,960 Wet/Damp
N 404,051 Fine without high winds
60 mph

Causation Factor:

1st: Following too close
2nd: Failed to judge other persons path or speed
3rd: Slippery road (due to weather)

Participant:

Vehicle 2
Vehicle 2
Vehicle 2

Confidence:

Possible
Possible

A HGV TRAVELLING FROM PENISTONE TW BARNSELEY) HAS MOVED TO CENTRE OF RD TO CLEAR RAILWAY BRIDGE. V1 SLOWED TO A STOP AS SHE WAS ONCOMING TO THE HGV. V2 TV BEHIND V1 FAILED TO STOP & COLLIDED WITH REAR OF V1. THE HGV CONTINUED ON ITS WAY.

B-01163-14 Friday HOYLANDSWAINE ROUNDABOUT Veh 1 Car Going ahead SE to NW Dri M 52 Slight
28/11/2014 PENISTONE, BARNSELEY J/W HIGH Veh 2 Car Going ahead NW to SW Dri M 32 Slight
R1: A 628 0710hrs
R2: A 629 Darkness: street lights present
E 425,816 Wet/Damp
N 404,265 Fog or mist
60 mph

Causation Factor:

1st: Junction overshoot
2nd: Rain, sleet, snow, or fog

Participant:

Vehicle 1
Vehicle 1

Confidence:

Very Likely
Very Likely

V1 ENTERING ROUNDABOUT INTO THE PATH OF V2 ON THE ROUNDABOUT

B-00080-15 Sunday BARNSELEY ROAD PENISTONE J/W Veh 1 Car Going ahead SW to NE FSP F 9 Slight
25/01/2015 WELLHOUSE LANE Veh 1 Car Going ahead SW to NE Dri F 43 Slight
R1: A 628 0613hrs
R2: U Darkness: street lights present
E 424,711 Wet/Damp
N 403,966 Fine without high winds
40 mph

Causation Factor:

1st: Failed to look properly

Participant:

Vehicle 2

Confidence:

Very Likely

VEH1 TRAVELLING ALONG BARNSELEY ROAD AWAY FROM PENISTONE. VEH2 PULLS OUT OF JUNCTION INTO PATH OF VEH1 AND COLLISION OCCURS

Details of Personal Injury Accidents for Period - 01/01/2013 to 31/12/2017 (60) months

Selection:

Selected using Build Query : Local_auth = 'Barnsley'

Notes:

Usman Khan - Optima Highways

Police Ref.	Day	Location Description	Vehicles					Casualties			
	Date		Veh No	Type	Manv	Dir	Class	Sex	Age	Sev	
Road No.	Time										
2nd Road No.	D/L										
Grid Ref.	R.S.C										
	Weather										
	Speed										
	Account of Accident										
Causation Factor:											

B-00679-15 Monday BARNSELEY ROAD PENISTONE 170 Veh 1 Car Going ahead SW to NE Ped M 32 Slight
13/07/2015 MTS WATER HALL LANE
R1: A 628 2335hrs
Darkness: street lights present
E 424,552 Dry
N 403,861 Fine without high winds
40 mph

Causation Factor:

1st: Impaired by alcohol

2nd: Dangerous action in carriageway

VEH 1 TRAV TOWARDS BARNSELEY AND COLLIDES WITH PED WHO IS INTOXICATED

Participant:

Casualty 1

Casualty 1

Confidence:

Very Likely

Very Likely

B-01202-15 Sunday BARNSELEY ROAD PENISTONE 45 Veh 1 Car Going ahead NE to SW Dri M 21 Slight
08/11/2015 MTS WINDERMERE ROAD
R1: A 628 0100hrs
Darkness: street lights present
E 424,775 Dry
N 403,995 Fine without high winds
40 mph

Causation Factor:

1st: Inexperienced or learner driver/rider

2nd: Loss of control

VEH TV TW PENISTONE WHEN DRIVER LOSES CONTROL COLL WITH KERB AND BUS SHELTER.

Participant:

Vehicle 1

Vehicle 1

Confidence:

Very Likely

Very Likely

B-01144-15 Thursday THURLSTONE ROAD PENISTONE 25 Veh 1 Car Going ahead E to W Ped M 11 Slight
10/12/2015 MTS TALBOT ROAD
R1: A 628 0815hrs
Daylight:street lights present
E 424,299 Wet/Damp
N 403,638 Fine without high winds
30 mph

Causation Factor:

1st: Failed to look properly

2nd: Careless/Reckless/In a hurry

3rd: Failed to judge vehicles path or speed

VEH TR ALONG A628 SCHOOL CHILDREN PRESENT BOTH SIDES OF RD COLL WITH CAS

Participant:

Casualty 1

Casualty 1

Casualty 1

Confidence:

Very Likely

Possible

Details of Personal Injury Accidents for Period - 01/01/2013 to 31/12/2017 (60) months

Selection:

Selected using Build Query : Local_auth = 'Barnsley'

Notes:

Usman Khan - Optima Highways

Police Ref.	Vehicles						Casualties		
	Day	Location Description	Veh No / Type / Manv / Dir / Class						Sex / Age / Sev
	Date								
	Time								
	D/L								
	R.S.C								
	Weather								
	Speed								
	Account of Accident								
	Causation Factor:								

1642940 Sunday ST MARY'S STREET (B6462) Veh 1 Car Going ahead LH bend S to NW Ped M 62 Serious
 31/01/2016 BARNSELY AT OR WITHIN 20 MTS
 1445hrs OF ST MARY'S STREET (B6462)
R1: B 6462 Daylight:street lights present
R2: B 6462 Wet/Damp
E 424,582 Raining without high winds
N 403,339 30 mph

Causation Factor:

1st: Impaired by alcohol

2nd: Failed to look properly

V1 DRIVING AROUND SHARP BEND. PEDN STEPPED OUT INTO ROAD INTO PATH OF V1. PEDN HAS BEEN HIT AT SLOW SPEED AND FELL TO THE GROUND.

Participant:

Casualty 1

Casualty 1

Confidence:

Very Likely

Very Likely

1675313 Saturday BARNSELY ROAD (A628) BARNSELY Veh 1 Car Stopping NE to SW FSP F 37 Slight
 28/05/2016 J/W PRIVATE ENTRANCE Veh 2 Car Going ahead NE to SW
 1346hrs
R1: A 628 Daylight:street lights present
R2: U Dry
E 424,569 Fine without high winds
N 403,869 40 mph

Causation Factor:

1st: Failed to look properly

2nd: Failed to judge other persons path or speed

VEH HAS INDICATED RIGHT TO TURN INTO AN ADDRESS. V1 HAS SLOWED BEHIND THE VEH TURNING RIGHT AND V2 HAS RUN INTO THE BACK OF V1. ALL PARTIES EXCHANGED DETAILS AT SCENE.

Participant:

Vehicle 2

Vehicle 2

Confidence:

Very Likely

Very Likely

1698628 Tuesday HUDDERSFIELD ROAD (B6462) Veh 1 Car Wait to turn left SE to NW Dri M 80 Slight
 09/08/2016 BARNSELY AT OR WITHIN 20 MTS Veh 2 Car Turning left SE to NW
 1634hrs OF HALIFAX ROAD (A629)
R1: B 6462 Daylight:street lights present
R2: A 629 Dry
E 423,708 Fine without high winds
N 404,776 60 mph

Causation Factor:

1st: Road layout (eg bend, hill etc.)

2nd: Following too close

3rd: Failed to look properly

4th: Failed to judge other persons path or speed

V2 COLL WITH REAR OF V1 APPROACHING JCT

Participant:

Vehicle 2

Vehicle 2

Vehicle 2

Vehicle 2

Confidence:

Very Likely

Very Likely

Very Likely

Very Likely

Details of Personal Injury Accidents for Period - 01/01/2013 to 31/12/2017 (60) months

Selection:

Selected using Build Query : Local_auth = 'Barnsley'

Notes:

Usman Khan - Optima Highways

Police Ref.	Day	Location Description	Vehicles						Casualties		
	Date		Veh No	Type	Manv	Dir	Class		Sex	Age	Sev
Road No.	Time										
2nd Road No.	D/L										
Grid Ref.	R.S.C										
	Weather										
	Speed										
	Account of Accident										
Causation Factor:											

16147144 Saturday HALIFAX ROAD (A629) BARNSELY Veh 1 Car Going ahead LH bend E to W Dri M 23 Slight
 19/11/2016 Veh 2 Car Going ahead RH bend W to E Dri M 52 Slight
 R1: A 629 1300hrs Veh 2 Car Going ahead RH bend W to E FSP F 42 Slight
 Daylight:street lights present
 E 425,212 Wet/Damp
 N 404,579 Fine without high winds
 60 mph

Causation Factor:

1st: Slippery road (due to weather)
 2nd: Defective steering or suspension
 3rd: Loss of control

Participant:

Vehicle 1
 Vehicle 1
 Vehicle 1

Confidence:

Possible
 Possible

V1 LOSES CONTROL ON BEND COLL WITH GRASS VERGE AND COLL WITH V2

17165520 Thursday BARNSELY ROAD (A628) BARNSELY Veh 1 Car Wait go ahead held up W to E Dri M 45 Slight
 09/03/2017 Veh 2 Car Going ahead W to E
 R1: A 628 1445hrs
 Daylight:street lights present
 E 424,863 Dry
 N 404,032 Fine without high winds
 40 mph

Causation Factor:

1st: Failed to look properly
 2nd: Careless/Reckless/In a hurry

Participant:

Vehicle 2
 Vehicle 2

Confidence:

Possible
 Possible

V1 STATIONARY ON BARNSELY RD WAITING FOR ONCOMING TRAFFIC TO PASS UNDER THE NARROW BRIDGE. WHILST STATIONARY THE DRIVER LOOKED INTO THE REAR VIEW MIRROR AND SAW V2 TRAVELLING. V2 THEN COLLIDED WITH REAR OF V1. DETAILS EXCHANGED, INJURY SUSTAINED.

17194334 Wednesday HUDDERSFIELD ROAD (B6462) Veh 1 Car Going ahead N to S Dri M 65 Slight
 31/05/2017 BARNSELY Veh 2 Car Parked 0 to 0
 R1: B 6462 1701hrs
 Daylight:street lights present
 E 424,150 Dry
 N 404,258 Fine without high winds
 30 mph

Causation Factor:

1st: Illness or disability, mental or physical

Participant:

Vehicle 1

Confidence:

Possible

IT APPEARS THAT THE DRIVER OF V1 MAY HAVE BLACKED OUT JUST PRIOR TO THE COLLISION. VEHICLE 2 WAS PARKED UP AN UNATTENDED. IT WAS ON HER DRIVE AND SHE WAS IN THE HOUSE WHEN SHE HEARD A BANG CAME OUT OF THE HOUSE AND SA A CAR ON ITS SIDE UP AGGAINST HERS

Details of Personal Injury Accidents for Period - 01/01/2013 to 31/12/2017 (60) months

Selection:

Selected using Build Query : Local_auth = 'Barnsley'

Notes:

Usman Khan - Optima Highways

Police Ref.	Day	Location Description	Vehicles					Casualties		
			Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Road No.	Date									
2nd Road No.	Time									
Grid Ref.	D/L									
	R.S.C									
	Weather									
	Speed									
	Account of Accident									
Causation Factor:										

17197344 Monday THURLSTONE ROAD (A628) Veh 1 Goods < 3.5t Reversing E to S
 26/06/2017 BARNSELY AT JN WITH THE BRIDGE Veh 2 M/C > 500 cc Going ahead LH bend SE to W Dri M 67 Serious
 R1: A 628 1211hrs PUBLIC HOUSE
 R2: U Daylight:street lights present
 E 424,337 Dry
 N 403,641 Fine without high winds
 30 mph

Causation Factor:

1st: Careless/Reckless/In a hurry
 2nd: Dazzling sun
 3rd: Dazzling sun
 4th: Failed to look properly
 5th: Failed to judge other persons path or speed

Participant:

Vehicle 2
 Vehicle 1
 Vehicle 2
 Vehicle 2
 Vehicle 2

Confidence:

Possible
 Possible
 Very Likely
 Very Likely
 Very Likely

VEHICLE REVERSING INTO PARKING AREA AT SIDE OF PREMISES. MOTORCYCLE COMES ROUND CORNER AND COLLIDES WITH VEHICLE

17216971 Saturday HALIFAX ROAD (A629) BARNSELY Veh 1 M/C > 500 cc O/take m/veh o/side E to W Dri M 47 Slight
 12/08/2017 AT OR NR JN WITH WELL HOUSE Veh 2 Car Turning right W to S
 R1: A 629 1413hrs LANE
 R2: U Daylight:street lights present
 E 424,806 Dry
 N 404,577 Fine without high winds
 60 mph

Causation Factor:

1st: Aggressive driving
 2nd: Careless/Reckless/In a hurry
 3rd: Failed to judge other persons path or speed
 4th: Failed to look properly

Participant:

Vehicle 1
 Vehicle 1
 Vehicle 1
 Vehicle 1

Confidence:

Very Likely
 Very Likely
 Very Likely
 Very Likely

VEHICLE 1 AND VEHICLE 2 BOTH TRAVELLING IN THE SAME DIRECTION. VEHICLE 2 ATTEMPTING TO TURN RIGHT AND VEHICLE HAS ATTEMPTED TO OVERTAKE, VEHICLE 1 HITTING VEHICLE 2 WITH A GLANCING BLOW.

17213990 Sunday HALIFAX ROAD (A629) BARNSELY Veh 1 Car Turning left W to N
 27/08/2017 AT OR NR JN WITH RENALD LANE Veh 2 Car Going ahead W to E FSP F 17 Slight
 R1: A 629 1556hrs
 R2: U Daylight:street lights present
 E 425,156 Dry
 N 404,567 Fine without high winds
 60 mph

V1 IS TRAVELLING ALONG THE A629. V1 IS SLOWING TO TURN LEFT ONTO CRABTREE HILL LANE / RENALD LANE AND V2 FAILS T SLOW DOWN AND CRASHES IN THE BACK OF V1 WHO HAD SLOWED TO TURN INTO THE JUNCTION. INJURY TO PASSENGER OF V2.

Accidents between dates 01/01/2013 and 31/12/2017 (60) months

Selection:

Selected using Build Query : Local_auth = 'Barnsley'

Notes:

Usman Khan - Optima Highways

Police Ref.	Acc Class	Date	Time	Grid References	Casualties			Causation Factors/ Prob	Ped			Light	Weather	Road Surface	Vehicle Types
					Ftl	Ser	Slt		L	M	D				
B-00355-13	Slight	20/06/2013	1400	424587 403331	0	0	1	802C1A 710V1A	5	1	1	Light	Fine without high winds	Dry	21
B-00844-13	Slight	10/12/2013	1508	424186 404040	0	0	1	802C1A	5	3	7	Light	Fine without high winds	Dry	9
B-00872-13	Serious	21/12/2013	1251	423901 404708	0	1	1	802C1B 808C1B 805C1B 999C1B	9	9		Light	Fine with high winds	Wet/Damp	21
B-00599-14	Slight	02/07/2014	1205	425792 404281	0	0	1	405V1A 602V1A	0	0	0	Light	Fine without high winds	Dry	9 9
B-00659-14	Slight	17/07/2014	1740	424805 404574	0	0	1	406V2A 405V2B	0	0	0	Light	Fine without high winds	Dry	9 9
B-00669-14	Slight	20/07/2014	1220	423684 404802	0	0	3	405V1A	0	0	0	Light	Fine without high winds	Dry	9 9
B-01088-14	Slight	14/11/2014	1820	424960 404051	0	0	2	308V2B 406V2B 103V2B	0	0	0	Dark	Fine without high winds	Wet/Damp	9 9
B-01163-14	Slight	28/11/2014	0710	425816 404265	0	0	2	401V1A 707V1A	0	0	0	Dark	Fog or mist	Wet/Damp	9 9
B-00080-15	Slight	25/01/2015	0613	424711 403966	0	0	3	405V2A	0	0	0	Dark	Fine without high winds	Wet/Damp	9 9
B-00679-15	Slight	13/07/2015	2335	424552 403861	0	0	1	806C1A 805C1A	9	5	0	Dark	Fine without high winds	Dry	9
B-01202-15	Slight	08/11/2015	0100	424775 403995	0	0	1	605V1A 410V1A	0	0	0	Dark	Fine without high winds	Dry	9
B-01144-15	Slight	10/12/2015	0815	424299 403638	0	0	1	802C1A 808C1B 803C1B	5	1	5	Light	Fine without high winds	Wet/Damp	9
1642940	Serious	31/01/2016	1445	424582 403339	0	1	0	806C1A 802C1A	5	1	4	Light	Raining without high winds	Wet/Damp	9
1675313	Slight	28/05/2016	1346	424569 403869	0	0	1	405V2A 406V2A	0	0	0	Light	Fine without high winds	Dry	9 9
1698628	Slight	09/08/2016	1634	423708 404776	0	0	1	108V2A 308V2A 405V2A 406V2A	0	0	0	Light	Fine without high winds	Dry	9 9
16147144	Slight	19/11/2016	1300	425212 404579	0	0	3	103V1B 204V1B 410V1A	0	0	0	Light	Fine without high winds	Wet/Damp	9 9
17165520	Slight	09/03/2017	1445	424863 404032	0	0	1	405V2B 602V2B	0	0	0	Light	Fine without high winds	Dry	9 9
17194334	Slight	31/05/2017	1701	424150 404258	0	0	1	505V1B	0	0	0	Light	Fine without high winds	Dry	9 9
17197344	Serious	26/06/2017	1211	424337 403641	0	1	0	602V2B 706V1B 706V2B 405V2A 406V2A	0	0	0	Light	Fine without high winds	Dry	19 5
17216971	Slight	12/08/2017	1413	424806 404577	0	0	1	601V1A 602V1A 406V1A 405V1A	0	0	0	Light	Fine without high winds	Dry	5 9
17213990	Slight	27/08/2017	1556	425156 404567	0	0	1		0	0	0	Light	Fine without high winds	Dry	9 9
Column Totals	Slight :	18			0	3	27					Light : 16		Dry : 14	
	Serious :	3										Dark : 5		Wet : 7	

Accidents between dates 01/01/2013 and 31/12/2017 (60) months

Selection:

Selected using Build Query : Local_auth = 'Barnsley'

Notes:

Usman Khan - Optima Highways

Police Ref.	Acc Class	Date	Time	Grid References	Casualties			Causation Factors/ Prob	Ped			Weather	Road Surface	Vehicle Types
					Ftl	Ser	Slt		L	M	D			
Fatal :		0												

Total number of accidents listed: 21

Accidents between dates **01/01/2013 and 31/12/2017** (60) months

Selection: **Notes:**
Selected using Build Query : Local_auth = 'Barnsley' Usman Khan - Optima Highways

Police Ref.	Date	Cas.	Sev.	P2W	Cycs	Peds	Ch	OAPs	Vis.	Manv.	Road Cond.	Time	Location
B-00355-13	20/06/2013	1	Slight	0	0	1	0	1	Light	No turn	Dry	1400	ST MARYS STREET, PENISTONE BARNSELY J/W MARKET STREET
B-00844-13	10/12/2013	1	Slight	0	0	1	1	0	Light	No turn	Dry	1508	HUDDERSFIELD RD PENISTONE
B-00872-13	21/12/2013	2	Serious	0	0	1	0	0	Light	No turn	Wet/Damp	1251	HALIFAX RD BARNSELY 300 MTS FROM HUDDERSFIELD RD
B-00599-14	02/07/2014	1	Slight	0	0	0	0	0	Light	No turn	Dry	1205	HALIFAX ROAD BARNSELY J/W BARNSELY ROAD
B-00659-14	17/07/2014	1	Slight	0	0	0	0	0	Light	Right	Dry	1740	HALIFAX ROAD PENISTONE J/W WELLHOUSE LANE
B-00669-14	20/07/2014	3	Slight	0	0	0	1	1	Light	Right	Dry	1220	HALIFAX ROAD PENISTONE J/W SPOUT DIKE CAR PARK
B-01088-14	14/11/2014	2	Slight	0	0	0	0	0	Dark	No turn	Wet/Damp	1820	BARNSELY ROAD PENISTONE 130 MTS WINDERMERE ROAD
B-01163-14	28/11/2014	2	Slight	0	0	0	0	0	Dark	No turn	Wet/Damp	0710	HOYLANDSWAINE ROUNDABOUT PENISTONE, BARNSELY J/W HIGH
B-00080-15	25/01/2015	3	Slight	0	0	0	1	0	Dark	No turn	Wet/Damp	0613	BARNSELY ROAD PENISTONE J/W WELLHOUSE LANE
B-00679-15	13/07/2015	1	Slight	0	0	1	0	0	Dark	No turn	Dry	2335	BARNSELY ROAD PENISTONE 170 MTS WATER HALL LANE
B-01202-15	08/11/2015	1	Slight	0	0	0	0	0	Dark	No turn	Dry	0100	BARNSELY ROAD PENISTONE 45 MTS WINDERMERE ROAD
B-01144-15	10/12/2015	1	Slight	0	0	1	1	0	Light	No turn	Wet/Damp	0815	THURLSTONE ROAD PENISTONE 25 MTS TALBOT ROAD
1642940	31/01/2016	1	Serious	0	0	1	0	1	Light	No turn	Wet/Damp	1445	ST MARY'S STREET (B6462) BARNSELY AT OR WITHIN 20 MTS OF ST I
1675313	28/05/2016	1	Slight	0	0	0	0	0	Light	No turn	Dry	1346	BARNSELY ROAD (A628) BARNSELY J/W PRIVATE ENTRANCE
1698628	09/08/2016	1	Slight	0	0	0	0	1	Light	Left	Dry	1634	HUDDERSFIELD ROAD (B6462) BARNSELY AT OR WITHIN 20 MTS OF
16147144	19/11/2016	3	Slight	0	0	0	0	0	Light	No turn	Wet/Damp	1300	HALIFAX ROAD (A629) BARNSELY
17165520	09/03/2017	1	Slight	0	0	0	0	0	Light	No turn	Dry	1445	BARNSELY ROAD (A628) BARNSELY
17194334	31/05/2017	1	Slight	0	0	0	0	1	Light	No turn	Dry	1701	HUDDERSFIELD ROAD (B6462) BARNSELY
17197344	26/06/2017	1	Serious	1	0	0	0	1	Light	No turn	Dry	1211	THURLSTONE ROAD (A628) BARNSELY AT JN WITH THE BRIDGE PU
17216971	12/08/2017	1	Slight	1	0	0	0	0	Light	Right	Dry	1413	HALIFAX ROAD (A629) BARNSELY AT OR NR JN WITH WELL HOUSE I
17213990	27/08/2017	1	Slight	0	0	0	0	0	Light	Left	Dry	1556	HALIFAX ROAD (A629) BARNSELY AT OR NR JN WITH RENALD LAN
Column Totals		30		2	0	6	4	6					
No. of Accidents				2	0	6	4	6					

Total number of accidents listed: 21

Accidents between dates 01/01/2013 and 31/12/2017 (60) months

Selection:

Notes:

Selected using Build Query : Local_auth = 'Barnsley'

Usman Khan - Optima Highways

B-00355-13 20/06/2013 Thursday Time: 1400 Vehicles 1 Casualties 1 Slight
Easting: 424,587 Northing: 403,331
Fine without high winds Road Surface: Dry Daylight
Road Type: Single carriageway Speed Limit: 30

Location: ST MARYS STREET, PENISTONE BARNSELY J/W MARKET STREET

Description: V1 WAS STATIONARY AT THE JUNCTION WAITING FOR A GAP IN THE TRAFFIC, A
PEDESTRIAN THOUGHT HE HAD STOPPED TO ALLOW HIM TO CROSS, V1 THEN
SET OF AND COLLIDED WITH C1

Vehicle Reference: 1 Goods >= 7.5 tonnes mgw Moving off

First point of impact: Offside

Vehicle direction: E to W

Journey: Journey as part of work

Age of Driver : 49

Breath test: Not requested

Contributory Factors : 802 710

Casualty Reference: 1 Age: 66 Male Pedestrian Severity: Slight

Ped Dir: Pedestrian Ped Movement : Driver's nearside

Ped Location: In carr elsewhere

Accidents between dates 01/01/2013 and 31/12/2017 (60) months

Selection:

Notes:

Selected using Build Query : Local_auth = 'Barnsley'

Usman Khan - Optima Highways

B-00844-13 10/12/2013 Tuesday Time: 1508 Vehicles 1 Casualties 1 Slight
Easting: 424,186 Northing: 404,040
Fine without high winds Road Surface: Dry Daylight
Road Type: Single carriageway Speed Limit: 30

Location: HUDDERSFIELD RD PENISTONE

Description: PED STEPPED OUT FROM BEHIND PARKED VEH'S INTO PATH OF V1 AND COLL OCC.

Vehicle Reference: 1 Car

Going ahead

First point of impact: Front

Vehicle direction: SE to NW

Journey: Pupil riding to/from school

Age of Driver : 35

Breath test: Not requested

Contributory Factors : 802

Casualty Reference: 1 Age: 13 Male Pedestrian Severity: Slight

Ped Dir: Pedestrian Ped Movement : Driver's offside

Ped Location: In carr elsewhere

Accidents between dates 01/01/2013 and 31/12/2017 (60) months

Selection:

Notes:

Selected using Build Query : Local_auth = 'Barnsley'

Usman Khan - Optima Highways

B-00872-13 21/12/2013 Saturday Time: 1251 Vehicles 1 Casualties 2 Serious

Easting: 423,901 Northing: 404,708

Fine with high winds Road Surface: Wet/Damp Daylight

Road Type: Single carriageway Speed Limit: 60

Location: HALIFAX RD BARNSELY 300 MTS FROM HUDDERSFIELD RD

Description: PED RAN INTO CARR AND INTO PATH OF VEH, POSSIBLY DELIBERATE.

Vehicle Reference: 1 Goods >= 7.5 tonnes mgw Going ahead

First point of impact: Front

Vehicle direction: SE to NW

Journey: Journey as part of work

Age of Driver : 39

Breath test: Negative

Contributory Factors : 802 808 805 999

Casualty Reference: 1 Age: 39 Male Driver/rider Severity: Slight

Ped Dir: Ped Movement :

Ped Location:

Casualty Reference: 2 Age: 50 Male Pedestrian Severity: Serious

Ped Dir: Ped Movement : Movement U/K

Ped Location: In carr not crossing

Accidents between dates 01/01/2013 and 31/12/2017 (60) months

Selection:

Notes:

Selected using Build Query : Local_auth = 'Barnsley'

Usman Khan - Optima Highways

B-00599-14 02/07/2014 Wednesda Time: 1205 Vehicles 2 Casualties 1 Slight
Easting: 425,792 Northing: 404,281
Fine without high winds Road Surface: Dry Daylight
Road Type: Roundabout Speed Limit: 60

Location: HALIFAX ROAD BARNSELY J/W BARNSELY ROAD

Description: VEH1 TV BARNSELY RD TW SILKSTONE ENTERS RNDBT AND COLL WITH VEH2
WHICH WAS ALREADY NEG RNDBT TV A629 TW INGBIRCHWORTH.

Vehicle Reference: 1 Car Going ahead
First point of impact: Front
Vehicle direction: SW to NE Journey: Other
Age of Driver : 92 Breath test: Not requested

Contributory Factors : 405 602

Vehicle Reference: 2 Car Going ahead
First point of impact: Nearside
Vehicle direction: SE to NW Journey: Other
Age of Driver : 49 Breath test: Not requested

Contributory Factors : 405 602

Casualty Reference: 1 Age: 49 Female Driver/rider Severity: Slight

Ped Dir: Ped Movement :

Ped Location:

Accidents between dates 01/01/2013 and 31/12/2017 (60) months

Selection:

Notes:

Selected using Build Query : Local_auth = 'Barnsley'

Usman Khan - Optima Highways

B-00659-14 17/07/2014 Thursday Time: 1740 Vehicles 2 Casualties 1 Slight
Easting: 424,805 Northing: 404,574
Fine without high winds Road Surface: Dry Daylight
Road Type: Single carriageway Speed Limit: 60

Location: HALIFAX ROAD PENISTONE J/W WELLHOUSE LANE

Description: V2 EMERGING FROM A MINOR RD ONTO THE MAIN A629. V1 HAS BEEN PASSING
THE JUNC. AS V2 PULLS OUT INTENDING TO TURN RIGHT. THE FRONT OF V2
COLLIDES WITH THE N/S/F OF V1. THE DRIVER OF V1 SUSTAINED WHIPLASH.

Vehicle Reference: 1 Car

Going ahead

First point of impact: Nearside

Vehicle direction: E to W

Journey: Commuting to/from work

Age of Driver : 26

Breath test: Not requested

Contributory Factors : 406 405

Casualty Reference: 1 Age: 26 Female Driver/rider Severity: Slight

Ped Dir: Ped Movement :

Ped Location:

Vehicle Reference: 2 Car

Turning right

First point of impact: Front

Vehicle direction: S to E

Journey: Other

Age of Driver : 20

Breath test: Not requested

Contributory Factors : 406 405

Accidents between dates 01/01/2013 and 31/12/2017 (60) months

Selection:

Notes:

Selected using Build Query : Local_auth = 'Barnsley'

Usman Khan - Optima Highways

B-00669-14 20/07/2014 Sunday Time: 1220 Vehicles 2 Casualties 3 Slight
Easting: 423,684 Northing: 404,802
Fine without high winds Road Surface: Dry Daylight
Road Type: Single carriageway Speed Limit: 60

Location: HALIFAX ROAD PENISTONE J/W SPOUT DIKE CAR PARK

Description: V1 PULLED OUT OF RURAL CAR PARK ONTO MAIN C/W AND COLL WITH V2

Vehicle Reference: 1 Car Waiting to turn right

First point of impact: Front

Vehicle direction: SW to SE

Journey: Other

Age of Driver : 70

Breath test: Negative

Contributory Factors : 405

Casualty Reference: 1 Age: 70 Male Driver/rider Severity: Slight

Ped Dir: Ped Movement :

Ped Location:

Vehicle Reference: 2 Car Going ahead

First point of impact: Front

Vehicle direction: SE to NW

Journey: Other

Age of Driver : 51

Breath test: Negative

Contributory Factors : 405

Casualty Reference: 2 Age: 51 Female Driver/rider Severity: Slight

Ped Dir: Ped Movement :

Ped Location:

Casualty Reference: 3 Age: 8 Female Passenger Severity: Slight

Ped Dir: Ped Movement :

Ped Location:

Accidents between dates 01/01/2013 and 31/12/2017 (60) months

Selection:

Notes:

Selected using Build Query : Local_auth = 'Barnsley'

Usman Khan - Optima Highways

B-01088-14 14/11/2014 Friday Time: 1820 Vehicles 2 Casualties 2 Slight
Easting: 424,960 Northing: 404,051
Fine without high winds Road Surface: Wet/Damp Darkness: no street lighting
Road Type: Single carriageway Speed Limit: 60

Location: BARNSELY ROAD PENISTONE 130 MTS WINDERMERE ROAD

Description: A HGV TRAVELLING FROM PENISTONE TW BARNSELY) HAS MOVED TO CENTRE
OF RD TO CLEAR RAILWAY BRIDGE. V1 SLOWED TO A STOP AS SHE WAS
ONCOMING TO THE HGV. V2 TV BEHIND V1 FAILED TO STOP & COLLIDED WITH
REAR OF V1. THE HGV CONTINUED ON ITS WAY.

Vehicle Reference: 1 Car Slowing or Stopping
First point of impact: Back
Vehicle direction: E to W Journey: Other
Age of Driver : 32 Breath test: Negative

Contributory Factors : 308 406 103

Casualty Reference: 1 Age: 32 Female Driver/rider Severity: Slight

Ped Dir: Ped Movement :

Ped Location:

Vehicle Reference: 2 Car Going ahead
First point of impact: Front
Vehicle direction: E to W Journey: Other
Age of Driver : 55 Breath test: Negative

Contributory Factors : 308 406 103

Casualty Reference: 2 Age: 55 Female Driver/rider Severity: Slight

Ped Dir: Ped Movement :

Ped Location:

Accidents between dates 01/01/2013 and 31/12/2017 (60) months

Selection:

Notes:

Selected using Build Query : Local_auth = 'Barnsley'

Usman Khan - Optima Highways

B-01163-14 28/11/2014 Friday Time: 0710 Vehicles 2 Casualties 2 Slight
Easting: 425,816 Northing: 404,265
Fog or mist Road Surface: Wet/Damp Darkness: street lights present and lit
Road Type: Roundabout Speed Limit: 60

Location: HOYLANDSWAINE ROUNDABOUT PENISTONE, BARNSELY J/W HIGH LEE LANE
Description: V1 ENTERING ROUNDABOUT INTO THE PATH OF V2 ON THE ROUNDABOUT

Vehicle Reference: 1 Car Going ahead
First point of impact: Front
Vehicle direction: SE to NW Journey: Other
Age of Driver : 52 Breath test: Negative

Contributory Factors : 401 707

Casualty Reference: 1 Age: 52 Male Driver/rider Severity: Slight

Ped Dir: Ped Movement :

Ped Location:

Vehicle Reference: 2 Car Going ahead
First point of impact: Front
Vehicle direction: NW to SW Journey: 0
Age of Driver : 32 Breath test: Negative

Contributory Factors : 401 707

Casualty Reference: 2 Age: 32 Male Driver/rider Severity: Slight

Ped Dir: Ped Movement :

Ped Location:

Accidents between dates 01/01/2013 and 31/12/2017 (60) months

Selection:

Notes:

Selected using Build Query : Local_auth = 'Barnsley'

Usman Khan - Optima Highways

B-00080-15 25/01/2015 Sunday Time: 0613 Vehicles 2 Casualties 3 Slight

Easting: 424,711 Northing: 403,966

Fine without high winds Road Surface: Wet/Damp Darkness: street lights present and lit

Road Type: Single carriageway Speed Limit: 40

Location: BARNSELY ROAD PENISTONE J/W WELLHOUSE LANE

Description: VEH1 TRAVELLING ALONG BARNSELY ROAD AWAY FROM PENISTONE. VEH2
PULLS OUT OF JUNCTION INTO PATH OF VEH1 AND COLLISION OCCURS

Vehicle Reference: 1 Car Going ahead

First point of impact: Nearside

Vehicle direction: SW to NE Journey: Other

Age of Driver : 43 Breath test: Negative

Contributory Factors : 405

Casualty Reference: 1 Age: 43 Female Driver/rider Severity: Slight

Ped Dir: Ped Movement :

Ped Location:

Casualty Reference: 3 Age: 9 Female Passenger Severity: Slight

Ped Dir: Ped Movement :

Ped Location:

Vehicle Reference: 2 Car Moving off

First point of impact: Front

Vehicle direction: N to SW Journey: Other

Age of Driver : 50 Breath test: Negative

Contributory Factors : 405

Casualty Reference: 2 Age: 50 Female Driver/rider Severity: Slight

Ped Dir: Ped Movement :

Ped Location:

Accidents between dates 01/01/2013 and 31/12/2017 (60) months

Selection:

Notes:

Selected using Build Query : Local_auth = 'Barnsley'

Usman Khan - Optima Highways

B-00679-15 13/07/2015 Monday Time: 2335 Vehicles 1 Casualties 1 Slight

Easting: 424,552 Northing: 403,861

Fine without high winds Road Surface: Dry Darkness: street lights present and lit

Road Type: Single carriageway Speed Limit: 40

Location: BARNSELY ROAD PENISTONE 170 MTS WATER HALL LANE

Description: VEH 1 TRAV TOWARDS BARNSELY AND COLLIDES WITH PED WHO IS
INTOXICATED

Vehicle Reference: 1 Car

Going ahead

First point of impact: Front

Vehicle direction: SW to NE

Journey: Other

Age of Driver : 24

Breath test: Negative

Contributory Factors : 806 805

Casualty Reference: 1 Age: 32 Male Pedestrian Severity: Slight

Ped Dir: Pedestrian Ped Movement : In carr not crossing

Ped Location: In carr not crossing

Accidents between dates 01/01/2013 and 31/12/2017 (60) months

Selection:

Notes:

Selected using Build Query : Local_auth = 'Barnsley'

Usman Khan - Optima Highways

B-01202-15 08/11/2015 Sunday Time: 0100 Vehicles 1 Casualties 1 Slight

Easting: 424,775 Northing: 403,995

Fine without high winds Road Surface: Dry Darkness: street lights present and lit

Road Type: Single carriageway Speed Limit: 40

Location: BARNSELY ROAD PENISTONE 45 MTS WINDERMERE ROAD

Description: VEH TV TW PENISTONE WHEN DRIVER LOSES CONTROL COLL WITH KERB AND BUS SHELTER.

Vehicle Reference: 1 Car

Going ahead

First point of impact: Front

Vehicle direction: NE to SW

Journey: Other

Age of Driver : 21

Breath test: Negative

Contributory Factors : 605 410

Casualty Reference: 1 Age: 21 Male Driver/rider Severity: Slight

Ped Dir: Ped Movement :

Ped Location:

Accidents between dates 01/01/2013 and 31/12/2017 (60) months

Selection:

Notes:

Selected using Build Query : Local_auth = 'Barnsley'

Usman Khan - Optima Highways

B-01144-15 10/12/2015 Thursday Time: 0815 Vehicles 1 Casualties 1 Slight

Easting: 424,299 Northing: 403,638

Fine without high winds Road Surface: Wet/Damp Daylight

Road Type: Single carriageway Speed Limit: 30

Location: THURLSTONE ROAD PENISTONE 25 MTS TALBOT ROAD

Description: VEH TR ALONG A628 SCHOOL CHILDREN PRESENT BOTH SIDES OF RD COLL WITH CAS

Vehicle Reference: 1 Car

Going ahead

First point of impact: Nearside

Vehicle direction: E to W

Journey: Other

Age of Driver : 43

Breath test: Not provided (medical)

Contributory Factors : 802 808 803

Casualty Reference: 1 Age: 11 Male Pedestrian Severity: Slight

Ped Dir: Pedestrian Ped Movement : Driver's nearside

Ped Location: In carr elsewhere

Accidents between dates 01/01/2013 and 31/12/2017 (60) months

Selection:

Notes:

Selected using Build Query : Local_auth = 'Barnsley'

Usman Khan - Optima Highways

1642940 31/01/2016 Sunday Time: 1445 Vehicles 1 Casualties 1 Serious

Easting: 424,582 Northing: 403,339

Raining without high winds Road Surface: Wet/Damp Daylight

Road Type: Single carriageway Speed Limit: 30

Location: ST MARY'S STREET (B6462) BARNSELY AT OR WITHIN 20 MTS OF ST MARY'S STREET (B6462)

Description: V1 DRIVING AROUND SHARP BEND. PEDN STEPPED OUT INTO ROAD INTO PATH OF V1. PEDN HAS BEEN HIT AT SLOW SPEED AND FELL TO THE GROUND.

Vehicle Reference: 1 Car

Going ahead left hand bend

First point of impact: Front

Vehicle direction: S to NW

Journey: Other

Age of Driver : 17

Breath test: Negative

Contributory Factors : 806 802

Casualty Reference: 1 Age: 62 Male Pedestrian Severity: Serious

Ped Dir: Pedestrian Ped Movement : Driver's nearside

Ped Location: In car elsewhere

Accidents between dates 01/01/2013 and 31/12/2017 (60) months

Selection:

Notes:

Selected using Build Query : Local_auth = 'Barnsley'

Usman Khan - Optima Highways

1675313 28/05/2016 Saturday Time: 1346 Vehicles 2 Casualties 1 Slight
Easting: 424,569 Northing: 403,869
Fine without high winds Road Surface: Dry Daylight
Road Type: Single carriageway Speed Limit: 40

Location: BARNSELY ROAD (A628) BARNSELY J/W PRIVATE ENTRANCE

Description: VEH HAS INDICATED RIGHT TO TURN INTO AN ADDRESS. V1 HAS SLOWED
BEHIND THE VEH TURNING RIGHT AND V2 HAS RUN INTO THE BACK OF V1. ALL
PARTIES EXCHANGED DETAILS AT SCENE.

Vehicle Reference: 1 Car Slowing or Stopping
First point of impact: Back
Vehicle direction: NE to SW Journey: Not known
Age of Driver : 21 Breath test: Negative

Contributory Factors : 405 406

Casualty Reference: 1 Age: 37 Female Passenger Severity: Slight

Ped Dir: Ped Movement :

Ped Location:

Vehicle Reference: 2 Car Going ahead
First point of impact: Front
Vehicle direction: NE to SW Journey: Not known
Age of Driver : 45 Breath test: Negative

Contributory Factors : 405 406

Accidents between dates 01/01/2013 and 31/12/2017 (60) months

Selection:

Notes:

Selected using Build Query : Local_auth = 'Barnsley'

Usman Khan - Optima Highways

1698628 09/08/2016 Tuesday Time: 1634 Vehicles 2 Casualties 1 Slight
Easting: 423,708 Northing: 404,776
Fine without high winds Road Surface: Dry Daylight
Road Type: Single carriageway Speed Limit: 60

Location: HUDDERSFIELD ROAD (B6462) BARNSELY AT OR WITHIN 20 MTS OF HALIFAX
ROAD (A629)

Description: V2 COLL WITH REAR OF V1 APPROACHING JCT

Vehicle Reference: 1 Car Waiting to turn left
First point of impact: Back
Vehicle direction: SE to NW Journey: Other
Age of Driver : 80 Breath test: Not requested

Contributory Factors : 108 308 405 406

Casualty Reference: 1 Age: 80 Male Driver/rider Severity: Slight

Ped Dir: Ped Movement :

Ped Location:

Vehicle Reference: 2 Car Turning left
First point of impact: Front
Vehicle direction: SE to NW Journey: Other
Age of Driver : 23 Breath test: Driver not contacted

Contributory Factors : 108 308 405 406

Accidents between dates 01/01/2013 and 31/12/2017 (60) months

Selection:

Notes:

Selected using Build Query : Local_auth = 'Barnsley'

Usman Khan - Optima Highways

16147144 19/11/2016 Saturday Time: 1300 Vehicles 2 Casualties 3 Slight
Easting: 425,212 Northing: 404,579
Fine without high winds Road Surface: Wet/Damp Daylight
Road Type: Single carriageway Speed Limit: 60

Location: HALIFAX ROAD (A629) BARNSELEY

Description: V1 LOSES CONTROL ON BEND COLL WITH GRASS VERGE AND COLL WITH V2

Vehicle Reference: 1 Car Going ahead left hand bend

First point of impact: Front

Vehicle direction: E to W

Journey: Other

Age of Driver : 23

Breath test: Not requested

Contributory Factors : 103 204 410

Casualty Reference: 1 Age: 23 Male Driver/rider Severity: Slight

Ped Dir: Ped Movement :

Ped Location:

Vehicle Reference: 2 Car Going ahead right hand bend

First point of impact: Offside

Vehicle direction: W to E

Journey: Other

Age of Driver : 52

Breath test: Not provided (medical)

Contributory Factors : 103 204 410

Casualty Reference: 2 Age: 52 Male Driver/rider Severity: Slight

Ped Dir: Ped Movement :

Ped Location:

Casualty Reference: 3 Age: 42 Female Passenger Severity: Slight

Ped Dir: Ped Movement :

Ped Location:

Accidents between dates 01/01/2013 and 31/12/2017 (60) months

Selection:

Notes:

Selected using Build Query : Local_auth = 'Barnsley'

Usman Khan - Optima Highways

17165520 09/03/2017 Thursday Time: 1445 Vehicles 2 Casualties 1 Slight
Easting: 424,863 Northing: 404,032
Fine without high winds Road Surface: Dry Daylight
Road Type: Single carriageway Speed Limit: 40

Location: BARNSELY ROAD (A628) BARNSELY

Description: V1 STATIONARY ON BARNSELY RD WAITING FOR ONCOMING TRAFFIC TO PASS
UNDER THE NARROW BRIDGE. WHILST STATIONARY THE DRIVER LOOKED INTO
THE REAR VIEW MIRROR AND SAW V2 TRAVELLING. V2 THEN COLLIDED WITH
REAR OF V1. DETAILS EXCHANGED, INJURY SUSTAINED.

Vehicle Reference: 1 Car Waiting to go ahead but held up
First point of impact: Back
Vehicle direction: W to E Journey: Journey as part of work
Age of Driver : 45 Breath test: Driver not contacted

Contributory Factors : 405 602

Casualty Reference: 1 Age: 45 Male Driver/rider Severity: Slight

Ped Dir: Ped Movement :

Ped Location:

Vehicle Reference: 2 Car Going ahead
First point of impact: Front
Vehicle direction: W to E Journey: Journey as part of work
Age of Driver : 51 Breath test: Driver not contacted

Contributory Factors : 405 602

Accidents between dates 01/01/2013 and 31/12/2017 (60) months

Selection:

Notes:

Selected using Build Query : Local_auth = 'Barnsley'

Usman Khan - Optima Highways

17194334 31/05/2017 Wednesda Time: 1701 Vehicles 2 Casualties 1 Slight
Easting: 424,150 Northing: 404,258
Fine without high winds Road Surface: Dry Daylight
Road Type: Single carriageway Speed Limit: 30

Location: HUDDERSFIELD ROAD (B6462) BARNSELY

Description: IT APPEARS THAT THE DRIVER OF V1 MAY HAVE BLACKED OUT JUST PRIOR TO
THE COLLISION. VEHICLE 2 WAS PARKED UP AND UNATTENDED. IT WAS ON HER
DRIVE AND SHE WAS IN THE HOUSE WHEN SHE HEARD A BANG CAME OUT OF
THE HOUSE AND SAW A CAR ON ITS SIDE UP AGGAINST
HERS

Vehicle Reference: 1 Car

Going ahead

First point of impact: Front

Vehicle direction: N to S

Journey: Other

Age of Driver : 65

Breath test: Negative

Contributory Factors : 505

Casualty Reference: 1 Age: 65 Male Driver/rider Severity: Slight

Ped Dir: Ped Movement :

Ped Location:

Vehicle Reference: 2 Car

Parked

First point of impact: Did not impact

Vehicle direction: Parked to Parked

Journey: Not known

Age of Driver : 71

Breath test: Driver not contacted

Contributory Factors : 505

Accidents between dates 01/01/2013 and 31/12/2017 (60) months

Selection:

Notes:

Selected using Build Query : Local_auth = 'Barnsley'

Usman Khan - Optima Highways

17197344 26/06/2017 Monday Time: 1211 Vehicles 2 Casualties 1 Serious
Easting: 424,337 Northing: 403,641
Fine without high winds Road Surface: Dry Daylight
Road Type: Single carriageway Speed Limit: 30

Location: THURLSTONE ROAD (A628) BARNSELY AT JN WITH THE BRIDGE PUBLIC HOUSE
Description: VEHICLE REVERSING INTO PARKING AREA AT SIDE OF PREMISES.
MOTORCYCLE COMES ROUND CORNER AND COLLIDES WITH VEHICLE

Vehicle Reference: 1 Van or Goods <= 3.5 tonnes Reversing

First point of impact: Back

Vehicle direction: E to S

Journey: Journey as part of work

Age of Driver : 58

Breath test: Negative

Contributory Factors : 602 706 706 405 406

Vehicle Reference: 2 Motorcycle over 500cc

Going ahead left hand bend

First point of impact: Offside

Vehicle direction: SE to W

Journey: Other

Age of Driver : 67

Breath test: Not provided (medical)

Contributory Factors : 602 706 706 405 406

Casualty Reference: 1 Age: 67 Male Driver/rider Severity: Serious

Ped Dir: Ped Movement :

Ped Location:

Accidents between dates 01/01/2013 and 31/12/2017 (60) months

Selection:

Notes:

Selected using Build Query : Local_auth = 'Barnsley'

Usman Khan - Optima Highways

17216971 12/08/2017 Saturday Time: 1413 Vehicles 2 Casualties 1 Slight
Easting: 424,806 Northing: 404,577
Fine without high winds Road Surface: Dry Daylight
Road Type: Single carriageway Speed Limit: 60

Location: HALIFAX ROAD (A629) BARNSELY AT OR NR JN WITH WELL HOUSE LANE
Description: VEHICLE 1 AND VEHICLE 2 BOTH TRAVELLING IN THE SAME DIRECTION. VEHICLE 2 ATTEMPTING TO TURN RIGHT AND VEHICLE 1 HAS ATTEMPTED TO OVERTAKE, VEHICLE 1 HITTING VEHICLE 2 WITH A GLANCING BLOW.

Vehicle Reference: 1 Motorcycle over 500cc Overtaking moving vehicle on its offside
First point of impact: Nearside
Vehicle direction: E to W Journey: Other
Age of Driver : 47 Breath test: Not requested

Contributory Factors : 601 602 406 405

Casualty Reference: 1 Age: 47 Male Driver/rider Severity: Slight

Ped Dir: Ped Movement :

Ped Location:

Vehicle Reference: 2 Car Turning right
First point of impact: Offside
Vehicle direction: W to S Journey: Other
Age of Driver : 39 Breath test: Not requested

Contributory Factors : 601 602 406 405

Accidents between dates 01/01/2013 and 31/12/2017 (60) months

Selection:

Notes:

Selected using Build Query : Local_auth = 'Barnsley'

Usman Khan - Optima Highways

17213990 27/08/2017 Sunday Time: 1556 Vehicles 2 Casualties 1 Slight
Easting: 425,156 Northing: 404,567
Fine without high winds Road Surface: Dry Daylight
Road Type: Single carriageway Speed Limit: 60

Location: HALIFAX ROAD (A629) BARNSELY AT OR NR JN WITH RENALD LANE
Description: V1 IS TRAVELLING ALONG THE A629. V1 IS SLOWING TO TURN LEFT ONTO
CRABTREE HILL LANE / RENALD LANE AND V2 FAILS TO SLOW DOWN AND
CRASHES IN THE BACK OF V1 WHO HAD SLOWED TO TURN INTO THE
JUNCTION. INJURY TO PASSENGER OF V2.

Vehicle Reference: 1 Car Turning left
First point of impact: Back
Vehicle direction: W to N Journey: Not known
Age of Driver : 32 Breath test: Negative

Contributory Factors :

Vehicle Reference: 2 Car Going ahead
First point of impact: Front
Vehicle direction: W to E Journey: Not known
Age of Driver : 19 Breath test: Negative

Contributory Factors :

Casualty Reference: 1 Age: 17 Female Passenger Severity: Slight

Ped Dir: Ped Movement :

Ped Location:

AccsMap - Accident Analysis System

Accidents between dates 01/01/2013 and 31/12/2017 (60) months

Selection:

Notes:

Selected using Build Query : Local_auth = 'Barnsley'

Usman Khan - Optima Highways

Accidents involving:

Casualties:

	Fatal	Serious	Slight	Total
Motor vehicles only excluding 2-wheels	0	2	17	19
2-wheeled motor vehicles	0	1	1	2
Pedal cycles	0	0	0	0
Horses & other	0	0	0	0
Total	0	3	18	21

	Fatal	Serious	Slight	Total
Vehicle driver	0	0	17	17
Passenger	0	0	5	5
Motorcycle rider	0	1	1	2
Cyclist	0	0	0	0
Pedestrian	0	2	4	6
Other	0	0	0	0
Total	0	3	27	30

Appendix D The Scheme Proposals



Private Barratt		
Name	Beds	Total Units
Kentley End	2	8
Kentley Mid	2	3
Maddstone Semi	3	31
Maddstone End	3	6
Maddstone Mid	3	4
Elerton Semi	3	24
Elerton End	3	4
Elerton Mid	3	3
Moorby Det	3	11
Moorby Semi	3	5
Dent	3	38
Windermere	4	43
Kentley	4	22
Alderny	4	11
Total		215

Private DW		
Name	Beds	Total Units
H433 Cornhill	4	10
H437 Brookgate	4	25
H456 Avoirdale	4	10
H469 Holden	4	23
H497 Chaworth	4	19
H421 Winstone	4	19
Total		106

Affordable		
Name	Beds	Total Units
Kentley	2	13
Maddstone	3	9
Elerton	3	15
Type 67	2	61
Type 69	3	40
Total		138
Total		459

REV: DESCRIPTIONBY: DATE:

STEN

ARCHITECTURE

Sten Architects Ltd
Station Office Park,
Barnet Avenue,
Huddersfield,
West Yorkshire
WF4 5BA
Tel: 01484 669454

Web: www.stenarchitects.co.uk
Twitter: @STEN_arch
Facebook: stenarchitects
LinkedIn: Sten Architecture

CLIENT: Barratt Homes and David Wilson Homes
Yorkshire West
(Trading names of BDW Trading Limited)

SITE: Penistone

TITLE: Planning Layout

SCALE AT A3: 1:500

DATE: 11.02.20

DRAWN: TS

CHECKED: SL

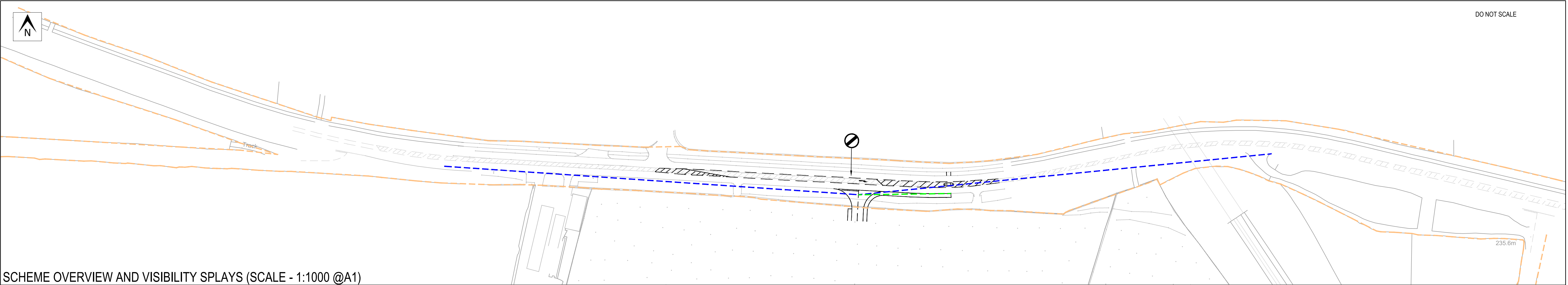
PROJECT NO: 2001

DRAWING NO: 2001.01

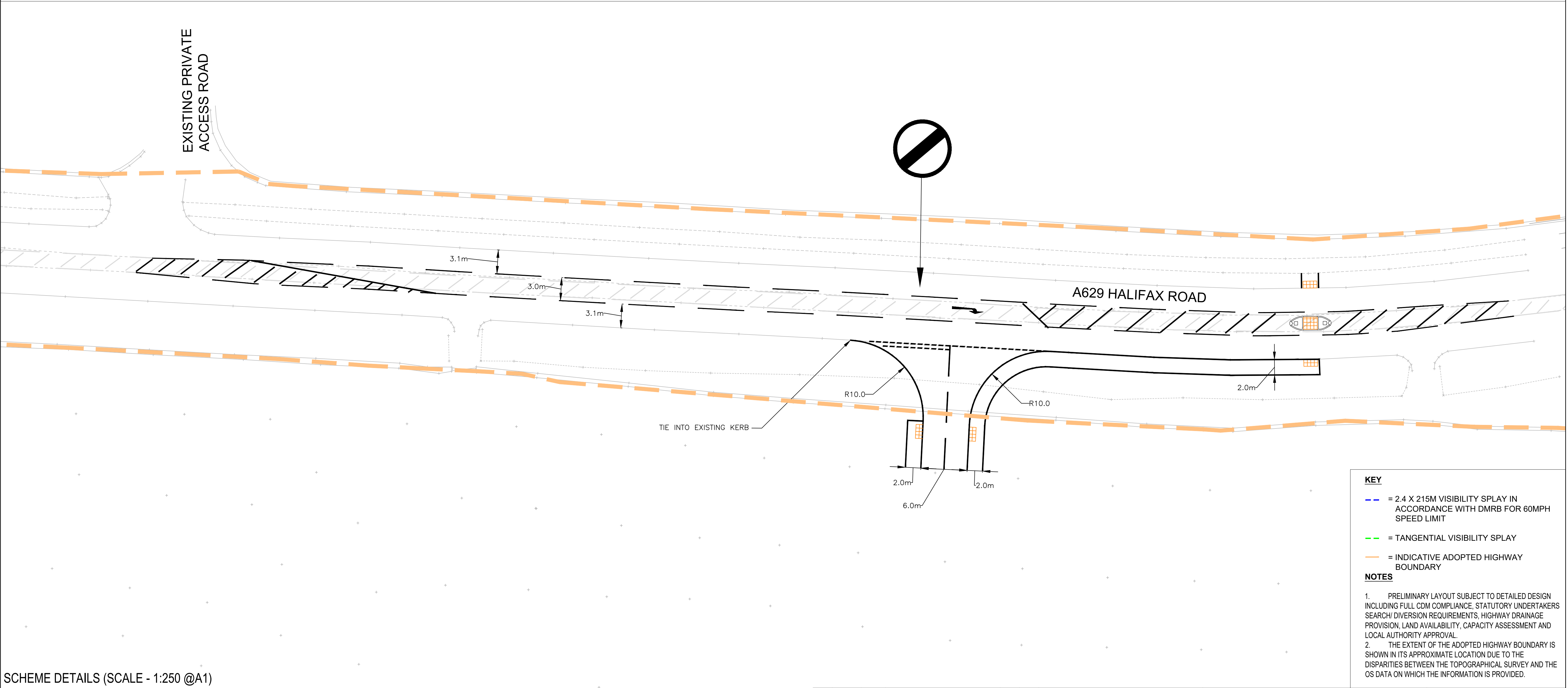
REVISION: B

Appendix E Optima Drg No 18105-GA-01 A629 Halifax Road Access





SCHEME OVERVIEW AND VISIBILITY SPLAYS (SCALE - 1:1000 @A1)

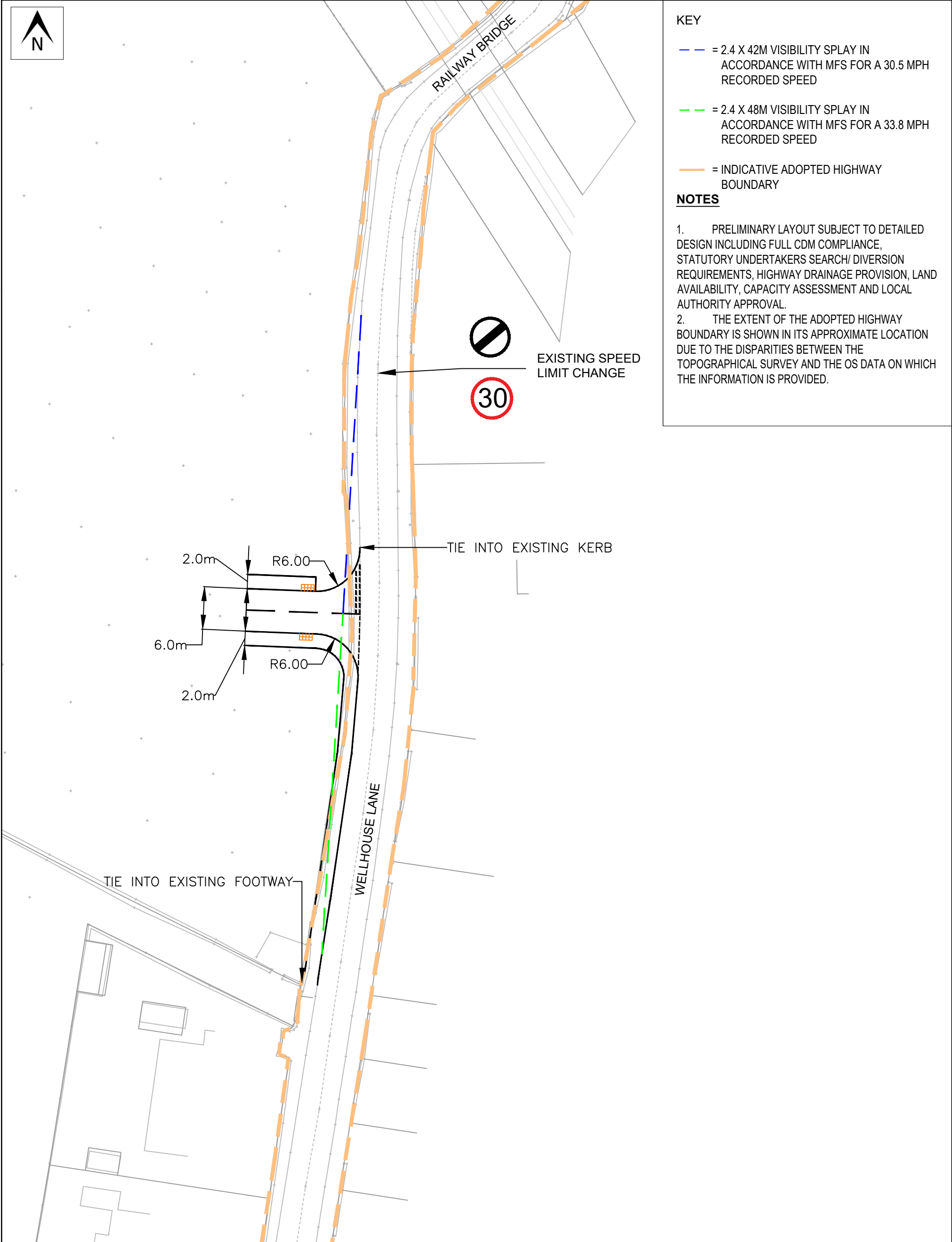


SCHEME DETAILS (SCALE - 1:250 @A1)

						PROJECT HALIFAX ROAD, PENISTONE		CLIENT BARRATT HOMES			 OPTIMA Intelligent Highways Solutions Atlas House, 31 King Street, Leeds, LS1 2HL optima@highways.com T 0113 245 1679 F 0113 245 9042
-	18/03/20	JS	INITIAL ISSUE	EAG	EAG	DRAWING TITLE		CHECKED EAG	APPROVED EAG	DRG No. 20005/GA/01	
REV	DATE	BY	DESCRIPTION	CHK	APP	HALIFAX ROAD SITE ACCESS ARRANGEMENT		DRAWN BY: JS	SCALE @ A1 AS SHOWN	DATE 18/03/20	REV. -
STATUS PRELIMINARY											

Appendix F Optima Drg No 18105-GA-02 Well House Lane Access





- KEY**
- = 2.4 X 42M VISIBILITY SPLAY IN ACCORDANCE WITH MFS FOR A 30.5 MPH RECORDED SPEED
 - = 2.4 X 48M VISIBILITY SPLAY IN ACCORDANCE WITH MFS FOR A 33.8 MPH RECORDED SPEED
 - = INDICATIVE ADOPTED HIGHWAY BOUNDARY

- NOTES**
- PRELIMINARY LAYOUT SUBJECT TO DETAILED DESIGN INCLUDING FULL CDM COMPLIANCE, STATUTORY UNDERTAKERS SEARCH/ DIVERSION REQUIREMENTS, HIGHWAY DRAINAGE PROVISION, LAND AVAILABILITY, CAPACITY ASSESSMENT AND LOCAL AUTHORITY APPROVAL.
 - THE EXTENT OF THE ADOPTED HIGHWAY BOUNDARY IS SHOWN IN ITS APPROXIMATE LOCATION DUE TO THE DISPARITIES BETWEEN THE TOPOGRAPHICAL SURVEY AND THE OS DATA ON WHICH THE INFORMATION IS PROVIDED.

						PROJECT HALIFAX ROAD, PENISTONE	CLIENT BARRATT HOMES			 OPTIMA Intelligent Highways Solutions Atlas House, 31 King Street, Leeds, LS1 2HL T 0113 245 1679 F 0113 245 9042	
-	18/03/20	JS	INITIAL ISSUE	EAG	EAG	DRAWING TITLE	CHECKED EAG	APPROVED EAG	DRG No. 20005/GA/02		
REV	DATE	BY	DESCRIPTION	CHK	APP	WELL HOUSE LANE SITE ACCESS ARRANGEMENT	DRAWN BY: JS	SCALE @ A3 1:500	DATE 18/03/20		REV. -
STATUS											
PRELIMINARY											


OPTIMA
Intelligent Highways Solutions
Atlas House, 31 King Street, Leeds, LS1 2HL
T 0113 245 1679 F 0113 245 9042

Appendix G TRICS Data



TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
 Category : A - HOUSES PRIVATELY OWNED
 VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	2 days
	EX ESSEX	1 days
	HC HAMPSHIRE	1 days
	KC KENT	4 days
	SC SURREY	1 days
	WS WEST SUSSEX	2 days
03	SOUTH WEST	
	DV DEVON	2 days
04	EAST ANGLIA	
	NF NORFOLK	1 days
06	WEST MIDLANDS	
	SH SHROPSHIRE	1 days
	ST STAFFORDSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NE NORTH EAST LINCOLNSHIRE	1 days
	NY NORTH YORKSHIRE	3 days
	SY SOUTH YORKSHIRE	1 days
09	NORTH	
	DH DURHAM	1 days
11	SCOTLAND	
	FA FALKIRK	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Secondary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Number of dwellings
 Actual Range: 50 to 432 (units:)
 Range Selected by User: 50 to 600 (units:)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/10 to 19/04/18

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	7 days
Tuesday	2 days
Wednesday	5 days
Thursday	5 days
Friday	4 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	23 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	11
Edge of Town	12

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	21
No Sub Category	2

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Secondary Filtering selection:

Use Class:

C3 23 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

1,000 or Less	1 days
1,001 to 5,000	2 days
5,001 to 10,000	6 days
10,001 to 15,000	9 days
15,001 to 20,000	3 days
20,001 to 25,000	2 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,001 to 25,000	4 days
25,001 to 50,000	2 days
50,001 to 75,000	3 days
75,001 to 100,000	6 days
100,001 to 125,000	2 days
125,001 to 250,000	4 days
250,001 to 500,000	2 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	5 days
1.1 to 1.5	18 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	3 days
No	20 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	22 days
2 Poor	1 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1	DH-03-A-01 GREENFIELDS ROAD BISHOP AUCKLAND	SEMI DETACHED	DURHAM
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 50 Survey date: TUESDAY 28/03/17		
2	DV-03-A-02 MILLHEAD ROAD HONITON	HOUSES & BUNGALOWS	DEVON
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 116 Survey date: FRIDAY 25/09/15		
3	DV-03-A-03 LOWER BRAND LANE HONITON	TERRACED & SEMI DETACHED	DEVON
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 70 Survey date: MONDAY 28/09/15		
4	ES-03-A-03 SHEPHAM LANE POLEGATE	MIXED HOUSES & FLATS	EAST SUSSEX
	Edge of Town Residential Zone Total Number of dwellings: 212 Survey date: MONDAY 11/07/16		
5	ES-03-A-04 NEW LYDD ROAD CAMBER	MIXED HOUSES & FLATS	EAST SUSSEX
	Edge of Town Residential Zone Total Number of dwellings: 134 Survey date: FRIDAY 15/07/16		
6	EX-03-A-02 MANOR ROAD CHIGWELL GRANGE HILL	DETACHED & SEMI-DETACHED	ESSEX
	Edge of Town Residential Zone Total Number of dwellings: 97 Survey date: MONDAY 27/11/17		
7	FA-03-A-02 ROSEBANK AVENUE & SPRINGFIELD DRIVE FALKIRK	MIXED HOUSES	FALKIRK
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 161 Survey date: WEDNESDAY 29/05/13		
8	HC-03-A-19 CANADA WAY LIPHOOK	HOUSES & FLATS	HAMPSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 62 Survey date: MONDAY 27/11/17		

Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

9	KC-03-A-03 HYTHE ROAD ASHFORD WILLESBOROUGH Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 51 Survey date: THURSDAY 14/07/16	MIXED HOUSES & FLATS	KENT	Survey Type: MANUAL
10	KC-03-A-04 KILN BARN ROAD AYLESFORD DITTON Edge of Town Residential Zone Total Number of dwellings: 110 Survey date: FRIDAY 22/09/17	SEMI-DETACHED & TERRACED	KENT	Survey Type: MANUAL
11	KC-03-A-06 MARGATE ROAD HERNE BAY Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 363 Survey date: WEDNESDAY 27/09/17	MIXED HOUSES & FLATS	KENT	Survey Type: MANUAL
12	KC-03-A-07 RECVLVER ROAD HERNE BAY Edge of Town Residential Zone Total Number of dwellings: 288 Survey date: WEDNESDAY 27/09/17	MIXED HOUSES	KENT	Survey Type: MANUAL
13	NE-03-A-02 HANOVER WALK SCUNTHORPE Edge of Town No Sub Category Total Number of dwellings: 432 Survey date: MONDAY 12/05/14	SEMI DETACHED & DETACHED	NORTH EAST LINCOLNSHIRE	Survey Type: MANUAL
14	NF-03-A-02 DEREHAM ROAD NORWICH Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 98 Survey date: MONDAY 22/10/12	HOUSES & FLATS	NORFOLK	Survey Type: MANUAL
15	NY-03-A-06 HORSEFAIR BOROUGHBRIDGE Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 115 Survey date: FRIDAY 14/10/11	BUNGALOWS & SEMI DET.	NORTH YORKSHIRE	Survey Type: MANUAL
16	NY-03-A-09 GRAMMAR SCHOOL LANE NORTHALLERTON Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 52 Survey date: MONDAY 16/09/13	MIXED HOUSING	NORTH YORKSHIRE	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

17	NY-03-A-10	HOUSES AND FLATS	NORTH YORKSHIRE
	BOROUGHBRIDGE ROAD		
	RIPON		
	Edge of Town		
	No Sub Category		
	Total Number of dwellings:	71	
	Survey date: TUESDAY	17/09/13	Survey Type: MANUAL
18	SC-03-A-04	DETACHED & TERRACED	SURREY
	HIGH ROAD		
	BYFLEET		
	Edge of Town		
	Residential Zone		
	Total Number of dwellings:	71	
	Survey date: THURSDAY	23/01/14	Survey Type: MANUAL
19	SH-03-A-05	SEMI-DETACHED / TERRACED	SHROPSHIRE
	SANDCROFT		
	TELFORD		
	SUTTON HILL		
	Edge of Town		
	Residential Zone		
	Total Number of dwellings:	54	
	Survey date: THURSDAY	24/10/13	Survey Type: MANUAL
20	ST-03-A-07	DETACHED & SEMI-DETACHED	STAFFORDSHIRE
	BEACONSIDE		
	STAFFORD		
	MARSTON GATE		
	Edge of Town		
	Residential Zone		
	Total Number of dwellings:	248	
	Survey date: WEDNESDAY	22/11/17	Survey Type: MANUAL
21	SY-03-A-01	SEMI DETACHED HOUSES	SOUTH YORKSHIRE
	A19 BENTLEY ROAD		
	DONCASTER		
	BENTLEY RISE		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of dwellings:	54	
	Survey date: WEDNESDAY	18/09/13	Survey Type: MANUAL
22	WS-03-A-04	MIXED HOUSES	WEST SUSSEX
	HILLS FARM LANE		
	HORSHAM		
	BROADBRIDGE HEATH		
	Edge of Town		
	Residential Zone		
	Total Number of dwellings:	151	
	Survey date: THURSDAY	11/12/14	Survey Type: MANUAL
23	WS-03-A-08	MIXED HOUSES	WEST SUSSEX
	ROUNDSTONE LANE		
	ANGMERING		
	Edge of Town		
	Residential Zone		
	Total Number of dwellings:	180	
	Survey date: THURSDAY	19/04/18	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

Optima Highways and Transportation Infirmary Street Leeds

Licence No: 750701

RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
VEHICLES

Ranking Type: TOTALS Time Range: 08:00-09:00

15th Percentile = No. 20 FA-03-A-02 Tot: 0.342

85th Percentile = No. 4 KC-03-A-07 Tot: 0.625

Median ValuesArrivals: 0.091
Departures: 0.386
Totals: 0.477Mean ValuesArrivals: 0.115
Departures: 0.354
Totals: 0.469

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Totals)			Park Spaces Per Dwelling
								Arrivals	Departures	Totals	
1	KC-03-A-03	MIXED HOUSES &	ASHFORD	KENT	51	Thu	14/07/16	0.157	0.588	0.745	2.16
2	NY-03-A-10	HOUSES AND FLA	RIPON	NORTH YORKSHIRE	71	Tue	17/09/13	0.183	0.521	0.704	0.83
3	ES-03-A-03	MIXED HOUSES &	POLEGATE	EAST SUSSEX	212	Mon	11/07/16	0.165	0.462	0.627	1.68
4	KC-03-A-07	MIXED HOUSES	HERNE BAY	KENT	288	Wed	27/09/17	0.240	0.385	0.625	3.09
5	DV-03-A-03	TERRACED & SEM	HONITON	DEVON	70	Mon	28/09/15	0.086	0.529	0.615	1.66
6	KC-03-A-04	SEMI-DETACHED	AYLESFORD	KENT	110	Fri	22/09/17	0.127	0.473	0.600	1.77
7	HC-03-A-19	HOUSES & FLATS	LIPHOOK	HAMPSHIRE	62	Mon	27/11/17	0.113	0.403	0.516	2.19
8	SH-03-A-05	SEMI-DETACHED/	TELFORD	SHROPSHIRE	54	Thu	24/10/13	0.130	0.370	0.500	1.17
9	NY-03-A-06	BUNGALOWS & SE	BOROUGHBRIDGE	NORTH YORKSHIRE	115	Fri	14/10/11	0.096	0.400	0.496	3.50
10	SC-03-A-04	DETACHED & TER	BYFLEET	SURREY	71	Thu	23/01/14	0.141	0.352	0.493	2.49
11	ST-03-A-07	DETACHED & SEM	STAFFORD	STAFFORDSHIRE	248	Wed	22/11/17	0.105	0.383	0.488	3.55
12	KC-03-A-06	MIXED HOUSES &	HERNE BAY	KENT	363	Wed	27/09/17	0.091	0.386	0.477	2.17
13	WS-03-A-08	MIXED HOUSES	ANGMERING	WEST SUSSEX	180	Thu	19/04/18	0.106	0.367	0.473	2.93
14	NF-03-A-02	HOUSES & FLATS	NORWICH	NORFOLK	98	Mon	22/10/12	0.122	0.347	0.469	2.24
15	SY-03-A-01	SEMI DETACHED	DONCASTER	SOUTH YORKSHIRE	54	Wed	18/09/13	0.056	0.389	0.445	1.13
16	NE-03-A-02	SEMI DETACHED	SCUNTHORPE	NORTH EAST LINCOLNS	432	Mon	12/05/14	0.067	0.354	0.421	1.00
17	WS-03-A-04	MIXED HOUSES	HORSHAM	WEST SUSSEX	151	Thu	11/12/14	0.139	0.278	0.417	2.28
18	NY-03-A-09	MIXED HOUSING	NORTHALLERTON	NORTH YORKSHIRE	52	Mon	16/09/13	0.173	0.212	0.385	2.60
19	DV-03-A-02	HOUSES & BUNGA	HONITON	DEVON	116	Fri	25/09/15	0.103	0.241	0.344	2.25
20	FA-03-A-02	MIXED HOUSES	FALKIRK	FALKIRK	161	Wed	29/05/13	0.062	0.280	0.342	1.66
21	EX-03-A-02	DETACHED & SEM	CHIGWELL	ESSEX	97	Mon	27/11/17	0.103	0.155	0.258	0.87
22	ES-03-A-04	MIXED HOUSES &	CAMBER	EAST SUSSEX	134	Fri	15/07/16	0.052	0.134	0.186	1.91
23	DH-03-A-01	SEMI DETACHED	BISHOP AUCKLAND	DURHAM	50	Tue	28/03/17	0.020	0.140	0.160	1.74

This section displays actual (not average) trip rates for each of the survey days in the selected set, and ranks them in order of relative trip rate intensity, for a given time period (or peak period irrespective of time) selected by the user. The count type and direction are both displayed just above the table, along with the rows within the table representing the 85th and 15th percentile trip rate figures (highlighted in bold within the table itself).

The table itself displays details of each individual survey, alongside arrivals, departures and totals trip rates, sorted by whichever of the three directional options has been chosen by the user. As with the preceding trip rate calculation results table, the trip rates shown are per the calculation factor (e.g. per 100m2 GFA, per employee, per hectare, etc). Note that if the peak period option has been selected (as opposed to a specific chosen time period), the peak period for each individual survey day in the table is also displayed.

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
 Category : A - HOUSES PRIVATELY OWNED
 VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	2 days
	EX ESSEX	1 days
	HC HAMPSHIRE	1 days
	KC KENT	4 days
	SC SURREY	1 days
	WS WEST SUSSEX	2 days
03	SOUTH WEST	
	DV DEVON	2 days
04	EAST ANGLIA	
	NF NORFOLK	1 days
06	WEST MIDLANDS	
	SH SHROPSHIRE	1 days
	ST STAFFORDSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NE NORTH EAST LINCOLNSHIRE	1 days
	NY NORTH YORKSHIRE	3 days
	SY SOUTH YORKSHIRE	1 days
09	NORTH	
	DH DURHAM	1 days
11	SCOTLAND	
	FA FALKIRK	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Secondary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Number of dwellings
 Actual Range: 50 to 432 (units:)
 Range Selected by User: 50 to 600 (units:)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/10 to 19/04/18

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	7 days
Tuesday	2 days
Wednesday	5 days
Thursday	5 days
Friday	4 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	23 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	11
Edge of Town	12

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	21
No Sub Category	2

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Secondary Filtering selection:

Use Class:

C3

23 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

1,000 or Less	1 days
1,001 to 5,000	2 days
5,001 to 10,000	6 days
10,001 to 15,000	9 days
15,001 to 20,000	3 days
20,001 to 25,000	2 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,001 to 25,000	4 days
25,001 to 50,000	2 days
50,001 to 75,000	3 days
75,001 to 100,000	6 days
100,001 to 125,000	2 days
125,001 to 250,000	4 days
250,001 to 500,000	2 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	5 days
1.1 to 1.5	18 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	3 days
No	20 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	22 days
2 Poor	1 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1	DH-03-A-01 GREENFIELDS ROAD BISHOP AUCKLAND	SEMI DETACHED	DURHAM
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 50 Survey date: TUESDAY 28/03/17		
2	DV-03-A-02 MILLHEAD ROAD HONITON	HOUSES & BUNGALOWS	DEVON
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 116 Survey date: FRIDAY 25/09/15		
3	DV-03-A-03 LOWER BRAND LANE HONITON	TERRACED & SEMI DETACHED	DEVON
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 70 Survey date: MONDAY 28/09/15		
4	ES-03-A-03 SHEPHAM LANE POLEGATE	MIXED HOUSES & FLATS	EAST SUSSEX
	Edge of Town Residential Zone Total Number of dwellings: 212 Survey date: MONDAY 11/07/16		
5	ES-03-A-04 NEW LYDD ROAD CAMBER	MIXED HOUSES & FLATS	EAST SUSSEX
	Edge of Town Residential Zone Total Number of dwellings: 134 Survey date: FRIDAY 15/07/16		
6	EX-03-A-02 MANOR ROAD CHIGWELL GRANGE HILL	DETACHED & SEMI-DETACHED	ESSEX
	Edge of Town Residential Zone Total Number of dwellings: 97 Survey date: MONDAY 27/11/17		
7	FA-03-A-02 ROSEBANK AVENUE & SPRINGFIELD DRIVE FALKIRK	MIXED HOUSES	FALKIRK
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 161 Survey date: WEDNESDAY 29/05/13		
8	HC-03-A-19 CANADA WAY LIPHOOK	HOUSES & FLATS	HAMPSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 62 Survey date: MONDAY 27/11/17		

Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

9	KC-03-A-03 HYTHE ROAD ASHFORD WILLESBOROUGH Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 51 Survey date: THURSDAY 14/07/16	MIXED HOUSES & FLATS	KENT	Survey Type: MANUAL
10	KC-03-A-04 KILN BARN ROAD AYLESFORD DITTON Edge of Town Residential Zone Total Number of dwellings: 110 Survey date: FRIDAY 22/09/17	SEMI-DETACHED & TERRACED	KENT	Survey Type: MANUAL
11	KC-03-A-06 MARGATE ROAD HERNE BAY Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 363 Survey date: WEDNESDAY 27/09/17	MIXED HOUSES & FLATS	KENT	Survey Type: MANUAL
12	KC-03-A-07 RECVLVER ROAD HERNE BAY Edge of Town Residential Zone Total Number of dwellings: 288 Survey date: WEDNESDAY 27/09/17	MIXED HOUSES	KENT	Survey Type: MANUAL
13	NE-03-A-02 HANOVER WALK SCUNTHORPE Edge of Town No Sub Category Total Number of dwellings: 432 Survey date: MONDAY 12/05/14	SEMI DETACHED & DETACHED	NORTH EAST LINCOLNSHIRE	Survey Type: MANUAL
14	NF-03-A-02 DEREHAM ROAD NORWICH Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 98 Survey date: MONDAY 22/10/12	HOUSES & FLATS	NORFOLK	Survey Type: MANUAL
15	NY-03-A-06 HORSEFAIR BOROUGHBRIDGE Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 115 Survey date: FRIDAY 14/10/11	BUNGALOWS & SEMI DET.	NORTH YORKSHIRE	Survey Type: MANUAL
16	NY-03-A-09 GRAMMAR SCHOOL LANE NORTHALLERTON Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 52 Survey date: MONDAY 16/09/13	MIXED HOUSING	NORTH YORKSHIRE	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

17	NY-03-A-10	HOUSES AND FLATS	NORTH YORKSHIRE
	BOROUGHBRIDGE ROAD		
	RIPON		
	Edge of Town		
	No Sub Category		
	Total Number of dwellings:	71	
	Survey date: TUESDAY	17/09/13	Survey Type: MANUAL
18	SC-03-A-04	DETACHED & TERRACED	SURREY
	HIGH ROAD		
	BYFLEET		
	Edge of Town		
	Residential Zone		
	Total Number of dwellings:	71	
	Survey date: THURSDAY	23/01/14	Survey Type: MANUAL
19	SH-03-A-05	SEMI-DETACHED / TERRACED	SHROPSHIRE
	SANDCROFT		
	TELFORD		
	SUTTON HILL		
	Edge of Town		
	Residential Zone		
	Total Number of dwellings:	54	
	Survey date: THURSDAY	24/10/13	Survey Type: MANUAL
20	ST-03-A-07	DETACHED & SEMI-DETACHED	STAFFORDSHIRE
	BEACONSIDE		
	STAFFORD		
	MARSTON GATE		
	Edge of Town		
	Residential Zone		
	Total Number of dwellings:	248	
	Survey date: WEDNESDAY	22/11/17	Survey Type: MANUAL
21	SY-03-A-01	SEMI DETACHED HOUSES	SOUTH YORKSHIRE
	A19 BENTLEY ROAD		
	DONCASTER		
	BENTLEY RISE		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of dwellings:	54	
	Survey date: WEDNESDAY	18/09/13	Survey Type: MANUAL
22	WS-03-A-04	MIXED HOUSES	WEST SUSSEX
	HILLS FARM LANE		
	HORSHAM		
	BROADBRIDGE HEATH		
	Edge of Town		
	Residential Zone		
	Total Number of dwellings:	151	
	Survey date: THURSDAY	11/12/14	Survey Type: MANUAL
23	WS-03-A-08	MIXED HOUSES	WEST SUSSEX
	ROUNDSTONE LANE		
	ANGMERING		
	Edge of Town		
	Residential Zone		
	Total Number of dwellings:	180	
	Survey date: THURSDAY	19/04/18	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

Optima Highways and Transportation Infirmary Street Leeds

Licence No: 750701

RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
VEHICLES

Ranking Type: TOTALS Time Range: 17:00-18:00

15th Percentile = No. 20 SY-03-A-01 Tot: 0.334

85th Percentile = No. 4 KC-03-A-07 Tot: 0.593

Median Values

Arrivals: 0.269

Departures: 0.192

Totals: 0.461

Mean Values

Arrivals: 0.312

Departures: 0.145

Totals: 0.457

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Totals)			Park Spaces Per Dwelling
								Arrivals	Departures	Totals	
1	KC-03-A-03	MIXED HOUSES &	ASHFORD	KENT	51	Thu	14/07/16	0.569	0.314	0.883	2.16
2	ES-03-A-03	MIXED HOUSES &	POLEGATE	EAST SUSSEX	212	Mon	11/07/16	0.434	0.217	0.651	1.68
3	DV-03-A-02	HOUSES & BUNGA	HONITON	DEVON	116	Fri	25/09/15	0.388	0.233	0.621	2.25
4	KC-03-A-07	MIXED HOUSES	HERNE BAY	KENT	288	Wed	27/09/17	0.444	0.149	0.593	3.09
5	NY-03-A-10	HOUSES AND FLA	RIPON	NORTH YORKSHIRE	71	Tue	17/09/13	0.479	0.099	0.578	0.83
6	KC-03-A-06	MIXED HOUSES &	HERNE BAY	KENT	363	Wed	27/09/17	0.380	0.198	0.578	2.17
7	FA-03-A-02	MIXED HOUSES	FALKIRK	FALKIRK	161	Wed	29/05/13	0.317	0.224	0.541	1.66
8	WS-03-A-08	MIXED HOUSES	ANGMERING	WEST SUSSEX	180	Thu	19/04/18	0.278	0.206	0.484	2.93
9	DV-03-A-03	TERRACED & SEM	HONITON	DEVON	70	Mon	28/09/15	0.371	0.100	0.471	1.66
10	NY-03-A-06	BUNGALOWS & SE	BOROUGHBRIDGE	NORTH YORKSHIRE	115	Fri	14/10/11	0.296	0.174	0.470	3.50
11	SC-03-A-04	DETACHED & TER	BYFLEET	SURREY	71	Thu	23/01/14	0.366	0.099	0.465	2.49
12	NY-03-A-09	MIXED HOUSING	NORTHALLERTON	NORTH YORKSHIRE	52	Mon	16/09/13	0.269	0.192	0.461	2.60
13	ST-03-A-07	DETACHED & SEM	STAFFORD	STAFFORDSHIRE	248	Wed	22/11/17	0.319	0.125	0.444	3.55
14	NE-03-A-02	SEMI DETACHED	SCUNTHORPE	NORTH EAST LINCOLNS	432	Mon	12/05/14	0.257	0.162	0.419	1.00
15	HC-03-A-19	HOUSES & FLATS	LIPHOOK	HAMPSHIRE	62	Mon	27/11/17	0.258	0.129	0.387	2.19
16	NF-03-A-02	HOUSES & FLATS	NORWICH	NORFOLK	98	Mon	22/10/12	0.235	0.143	0.378	2.24
17	WS-03-A-04	MIXED HOUSES	HORSHAM	WEST SUSSEX	151	Thu	11/12/14	0.252	0.119	0.371	2.28
18	SH-03-A-05	SEMI-DETACHED/	TELFORD	SHROPSHIRE	54	Thu	24/10/13	0.241	0.130	0.371	1.17
19	KC-03-A-04	SEMI-DETACHED	AYLESFORD	KENT	110	Fri	22/09/17	0.273	0.064	0.337	1.77
20	SY-03-A-01	SEMI DETACHED	DONCASTER	SOUTH YORKSHIRE	54	Wed	18/09/13	0.278	0.056	0.334	1.13
21	ES-03-A-04	MIXED HOUSES &	CAMBER	EAST SUSSEX	134	Fri	15/07/16	0.157	0.112	0.269	1.91
22	DH-03-A-01	SEMI DETACHED	BISHOP AUCKLAND	DURHAM	50	Tue	28/03/17	0.220	0.020	0.240	1.74
23	EX-03-A-02	DETACHED & SEM	CHIGWELL	ESSEX	97	Mon	27/11/17	0.103	0.062	0.165	0.87

This section displays actual (not average) trip rates for each of the survey days in the selected set, and ranks them in order of relative trip rate intensity, for a given time period (or peak period irrespective of time) selected by the user. The count type and direction are both displayed just above the table, along with the rows within the table representing the 85th and 15th percentile trip rate figures (highlighted in bold within the table itself).

The table itself displays details of each individual survey, alongside arrivals, departures and totals trip rates, sorted by whichever of the three directional options has been chosen by the user. As with the preceding trip rate calculation results table, the trip rates shown are per the calculation factor (e.g. per 100m2 GFA, per employee, per hectare, etc). Note that if the peak period option has been selected (as opposed to a specific chosen time period), the peak period for each individual survey day in the table is also displayed.

Appendix H Trip Distribution



Place of Work: 2011 Super Output Area - Middle Layer

E02001532:
Barnsley 024

Barnsley 016 Renald Lane		0.81
E02001509 : Barnsley 001	8	0.26
E02001512 : Barnsley 004	10	0.32
E02001513 : Barnsley 005	24	0.77
E02001524 : Barnsley 016	101	2.43
E02001725 : Newcastle upon Tyne 018	3	0.10
E02001730 : Newcastle upon Tyne 023	1	0.03
E02001822 : Sunderland 032	1	0.03
E02002724 : East Riding of Yorkshire 041	1	0.03
E02002663 : Kingston upon Hull 012	2	0.06
E02002678 : Kingston upon Hull 027	1	0.03
E02006813 : Kingston upon Hull 033	1	0.03
E02005775 : Harrogate 015	1	0.03
E02005809 : Selby 001	1	0.03
E02005812 : Selby 004	3	0.10
E02005813 : Selby 005	2	0.06
E02005818 : Selby 010	1	0.03
E02001510 : Barnsley 002	27	0.87
E02001511 : Barnsley 003	7	0.22
E02001514 : Barnsley 006	10	0.32
E02001515 : Barnsley 007	17	0.55
E02001516 : Barnsley 008	9	0.29
E02001517 : Barnsley 009	7	0.22
E02001518 : Barnsley 010	41	1.32
E02001519 : Barnsley 011	9	0.29
E02001520 : Barnsley 012	126	4.04
E02001521 : Barnsley 013	223	7.15
E02001523 : Barnsley 015	62	1.99
E02001525 : Barnsley 017	19	0.61
E02001526 : Barnsley 018	7	0.22
E02001527 : Barnsley 019	49	1.57
E02001528 : Barnsley 020	3	0.10
E02001540 : Doncaster 002	1	0.03
E02001578 : Rotherham 001	11	0.35
E02001579 : Rotherham 002	44	1.41
E02001580 : Rotherham 003	6	0.19
E02001585 : Rotherham 008	7	0.22
E02001586 : Rotherham 009	2	0.06
E02001588 : Rotherham 011	1	0.03
E02001591 : Rotherham 014	14	0.45
E02001592 : Rotherham 015	7	0.22
E02001593 : Rotherham 016	11	0.35
E02001594 : Rotherham 017	26	0.83
E02001595 : Rotherham 018	6	0.19
E02001596 : Rotherham 019	1	0.03
E02001597 : Rotherham 020	3	0.10
E02001600 : Rotherham 023	13	0.42
E02001601 : Rotherham 024	2	0.06
E02001602 : Rotherham 025	17	0.55
E02001603 : Rotherham 026	2	0.06
E02001604 : Rotherham 027	9	0.29
E02001605 : Rotherham 028	3	0.10
E02001606 : Rotherham 029	1	0.03
E02001609 : Rotherham 032	6	0.19
E02001617 : Sheffield 007	2	0.06
E02001620 : Sheffield 010	2	0.06
E02001624 : Sheffield 014	19	0.61
E02001628 : Sheffield 018	58	1.86
E02001632 : Sheffield 022	57	1.83
E02001637 : Sheffield 027	20	0.64
E02001642 : Sheffield 032	14	0.45
E02001647 : Sheffield 037	1	0.03
E02001649 : Sheffield 039	8	0.26
E02001654 : Sheffield 044	1	0.03
E02001659 : Sheffield 049	1	0.03

A628E	A628W	A629S	Renald Lane	B6462 South	Local	A629N
49.69	7.03	21.75	2.16	11.97	0	7.41

Barnsley 016	Hoylandswaine, Cawthorne, Silkstone	25% Renald Lane; 75% A628E
Barnsley 024	Penistone, Thurlstone, Millhouse Green	25% A628W; 75% B6462 South

E02001666 : Sheffield 056	1	0.03
E02001673 : Sheffield 063	1	0.03
E02001675 : Sheffield 065	1	0.03
E02006868 : Sheffield 075	19	0.61
E02006869 : Sheffield 076	2	0.06
E02002184 : Bradford 002	2	0.06
E02002190 : Bradford 008	1	0.03
E02002208 : Bradford 026	1	0.03
E02002220 : Bradford 038	1	0.03
E02002221 : Bradford 039	4	0.13
E02002222 : Bradford 040	2	0.06
E02002223 : Bradford 041	1	0.03
E02002226 : Bradford 044	1	0.03
E02002227 : Bradford 045	2	0.06
E02002228 : Bradford 046	6	0.19
E02002230 : Bradford 048	1	0.03
E02002235 : Bradford 053	1	0.03
E02002238 : Bradford 056	1	0.03
E02002242 : Bradford 060	3	0.10
E02002271 : Kirklees 001	1	0.03
E02002272 : Kirklees 002	3	0.10
E02002275 : Kirklees 005	4	0.13
E02002280 : Kirklees 010	2	0.06
E02002283 : Kirklees 013	1	0.03
E02002284 : Kirklees 014	2	0.06
E02002286 : Kirklees 016	1	0.03
E02002287 : Kirklees 017	3	0.10
E02002289 : Kirklees 019	4	0.13
E02002337 : Leeds 008	1	0.03
E02002339 : Leeds 010	1	0.03
E02002347 : Leeds 018	3	0.10
E02002348 : Leeds 019	1	0.03
E02002354 : Leeds 025	1	0.03
E02002356 : Leeds 027	2	0.06
E02002358 : Leeds 029	1	0.03
E02002367 : Leeds 038	1	0.03
E02002371 : Leeds 042	1	0.03
E02002384 : Leeds 055	3	0.10
E02002385 : Leeds 056	3	0.10
E02002392 : Leeds 063	8	0.26
E02002393 : Leeds 064	5	0.16
E02002395 : Leeds 066	2	0.06
E02002400 : Leeds 071	4	0.13
E02002402 : Leeds 073	7	0.22
E02002403 : Leeds 074	2	0.06
E02002404 : Leeds 075	5	0.16
E02002407 : Leeds 078	1	0.03
E02002409 : Leeds 080	1	0.03
E02002410 : Leeds 081	1	0.03
E02002411 : Leeds 082	2	0.06
E02002412 : Leeds 083	4	0.13
E02002415 : Leeds 086	1	0.03
E02002416 : Leeds 087	3	0.10
E02002418 : Leeds 089	1	0.03
E02002419 : Leeds 090	7	0.22
E02002420 : Leeds 091	5	0.16
E02002422 : Leeds 093	2	0.06
E02002424 : Leeds 095	1	0.03
E02002426 : Leeds 097	1	0.03
E02002428 : Leeds 099	2	0.06
E02002431 : Leeds 102	2	0.06
E02002435 : Leeds 106	6	0.19
E02002437 : Leeds 108	1	0.03
E02006852 : Leeds 109	3	0.10
E02006861 : Leeds 110	2	0.06
E02006875 : Leeds 111	43	1.38
E02006876 : Leeds 112	6	0.19
E02002439 : Wakefield 002	1	0.03

E02002441 : Wakefield 004	1	0.03
E02002442 : Wakefield 005	5	0.16
E02002443 : Wakefield 006	5	0.16
E02002444 : Wakefield 007	2	0.06
E02002446 : Wakefield 009	4	0.13
E02002448 : Wakefield 011	1	0.03
E02002450 : Wakefield 013	5	0.16
E02002451 : Wakefield 014	10	0.32
E02002452 : Wakefield 015	1	0.03
E02002453 : Wakefield 016	1	0.03
E02002454 : Wakefield 017	21	0.67
E02002456 : Wakefield 019	16	0.51
E02002457 : Wakefield 020	3	0.10
E02002458 : Wakefield 021	5	0.16
E02002459 : Wakefield 022	2	0.06
E02002461 : Wakefield 024	2	0.06
E02002462 : Wakefield 025	2	0.06
E02002463 : Wakefield 026	1	0.03
E02002464 : Wakefield 027	2	0.06
E02002465 : Wakefield 028	10	0.32
E02002466 : Wakefield 029	2	0.06
E02002467 : Wakefield 030	8	0.26
E02002468 : Wakefield 031	1	0.03
E02002469 : Wakefield 032	4	0.13
E02002470 : Wakefield 033	3	0.10
E02002472 : Wakefield 035	4	0.13
E02002473 : Wakefield 036	8	0.26
E02002474 : Wakefield 037	4	0.13
E02002475 : Wakefield 038	5	0.16
E02002478 : Wakefield 041	2	0.06
E02002479 : Wakefield 042	1	0.03
E02002480 : Wakefield 043	4	0.13
E02002481 : Wakefield 044	2	0.06
E02002802 : Derby 007	1	0.03
E02002803 : Derby 008	1	0.03
E02006851 : Leicester 041	1	0.03
E02002903 : Nottingham 036	1	0.03
E02004031 : Amber Valley 003	3	0.10
E02004035 : Amber Valley 007	1	0.03
E02004045 : Bolsover 001	1	0.03
E02004055 : Chesterfield 001	2	0.06
E02004056 : Chesterfield 002	2	0.06
E02004058 : Chesterfield 004	1	0.03
E02004061 : Chesterfield 007	1	0.03
E02004064 : Chesterfield 010	3	0.10
E02004066 : Chesterfield 012	3	0.10
E02004068 : Derbyshire Dales 001	1	0.03
E02004086 : Erewash 009	1	0.03
E02004096 : High Peak 004	1	0.03
E02004104 : High Peak 012	1	0.03
E02006872 : High Peak 013	3	0.10
E02004105 : North East Derbyshire 001	2	0.06
E02004106 : North East Derbyshire 002	1	0.03
E02004108 : North East Derbyshire 004	2	0.06
E02004116 : North East Derbyshire 012	1	0.03
E02004122 : South Derbyshire 005	1	0.03
E02005482 : South Kesteven 007	1	0.03
E02005500 : West Lindsey 009	1	0.03
E02005677 : Northampton 028	1	0.03
E02005821 : Ashfield 003	1	0.03
E02005822 : Ashfield 004	1	0.03
E02005828 : Ashfield 010	1	0.03
E02005838 : Bassetlaw 004	1	0.03
E02005849 : Bassetlaw 015	1	0.03
E02006903 : Bassetlaw 016	1	0.03
E02005891 : Mansfield 012	1	0.03
E02005892 : Mansfield 013	1	0.03
E02005919 : Rushcliffe 014	3	0.10

E02002908 : Herefordshire 004	1	0.03
E02006013 : Shropshire 034	5	0.16
E02002965 : Stoke-on-Trent 015	1	0.03
E02006171 : Newcastle-under-Lyme 014	2	0.06
E02006190 : Stafford 003	1	0.03
E02006198 : Stafford 011	1	0.03
E02006473 : North Warwickshire 006	2	0.06
E02006506 : Stratford-on-Avon 003	1	0.03
E02006516 : Stratford-on-Avon 013	1	0.03
E02001884 : Birmingham 058	1	0.03
E02001949 : Birmingham 123	1	0.03
E02002089 : Solihull 009	1	0.03
E02002095 : Solihull 015	1	0.03
E02003278 : Luton 021	1	0.03
E02003793 : South Cambridgeshire 019	1	0.03
E02004571 : Rochford 009	1	0.03
E02004976 : Watford 009	2	0.06
E02005552 : King's Lynn and West Norfolk 002	1	0.03
E02005564 : King's Lynn and West Norfolk 014	1	0.03
E02000970 : Westminster 011	1	0.03
E02000972 : Westminster 013	1	0.03
E02000979 : Westminster 020	1	0.03
E02000980 : Westminster 021	2	0.06
E02003475 : Milton Keynes 017	1	0.03
E02003375 : West Berkshire 009	1	0.03
E02003429 : Windsor and Maidenhead 009	1	0.03
E02004685 : Basingstoke and Deane 011	1	0.03
E02004704 : East Hampshire 008	2	0.06
E02005954 : Oxford 015	1	0.03
E02005958 : South Oxfordshire 001	3	0.10
E02005998 : West Oxfordshire 006	2	0.06
E02006578 : Crawley 004	2	0.06
E02003092 : South Gloucestershire 003	1	0.03
E02004227 : Torridge 008	1	0.03
W02000225 : Bridgend 008	1	0.03
E02001532 : Barnsley 024 Penistone	404	9.72
E02001611 : Sheffield 001	55	1.76
E02001618 : Sheffield 008	9	0.29
E02001633 : Sheffield 023	5	0.16
E02001651 : Sheffield 041	1	0.03
Barnsley 024 West		3.24
E02003829 : Cheshire East 038	1	0.03
E02003854 : Cheshire East 002	3	0.10
E02003849 : Cheshire West and Chester 011	1	0.03
E02002593 : Warrington 004	1	0.03
E02002603 : Warrington 014	1	0.03
E02003993 : Carlisle 007	1	0.03
E02004006 : Copeland 007	1	0.03
E02000999 : Bolton 016	1	0.03
E02001005 : Bolton 022	1	0.03
E02001015 : Bolton 032	1	0.03
E02001026 : Bury 008	6	0.19
E02001059 : Manchester 015	1	0.03
E02001062 : Manchester 018	2	0.06
E02001077 : Manchester 033	1	0.03
E02001089 : Manchester 045	2	0.06
E02001094 : Manchester 050	1	0.03
E02001096 : Manchester 052	1	0.03
E02001097 : Manchester 053	3	0.10
E02006902 : Manchester 054	3	0.10
E02006912 : Manchester 055	1	0.03
E02006917 : Manchester 060	5	0.16
E02001106 : Oldham 009	1	0.03
E02001110 : Oldham 013	1	0.03
E02001114 : Oldham 017	1	0.03
E02001116 : Oldham 019	1	0.03
E02001135 : Rochdale 004	3	0.10
E02001141 : Rochdale 010	2	0.06

E02001151 : Rochdale 020	1	0.03
E02001182 : Salford 026	1	0.03
E02001212 : Stockport 026	2	0.06
E02001235 : Tameside 007	1	0.03
E02001241 : Tameside 013	3	0.10
E02001260 : Trafford 002	2	0.06
E02001264 : Trafford 006	1	0.03
E02001283 : Trafford 025	1	0.03
E02001301 : Wigan 015	1	0.03
E02005256 : Preston 004	12	0.38
E02001490 : Wirral 024	1	0.03
E02002322 : Kirklees 052	1	0.03
E02002325 : Kirklees 055	2	0.06
E02002328 : Kirklees 058	7	0.22
E02002329 : Kirklees 059	35	1.12
E02001535 : Barnsley 027	162	5.20
E02002727 : North East Lincolnshire 002	1	0.03
E02002749 : North Lincolnshire 001	1	0.03
E02002753 : North Lincolnshire 005	1	0.03
E02002755 : North Lincolnshire 007	1	0.03
E02002756 : North Lincolnshire 008	1	0.03
E02002763 : North Lincolnshire 015	1	0.03
E02002768 : North Lincolnshire 020	1	0.03
E02001522 : Barnsley 014	8	0.26
E02001529 : Barnsley 021	11	0.35
E02001530 : Barnsley 022	14	0.45
E02001531 : Barnsley 023	10	0.32
E02001533 : Barnsley 025	4	0.13
E02001534 : Barnsley 026	16	0.51
E02001536 : Barnsley 028	55	1.76
E02001537 : Barnsley 029	6	0.19
E02001538 : Barnsley 030	11	0.35
E02001547 : Doncaster 009	2	0.06
E02001551 : Doncaster 013	1	0.03
E02001552 : Doncaster 014	1	0.03
E02001553 : Doncaster 015	2	0.06
E02001556 : Doncaster 018	1	0.03
E02001557 : Doncaster 019	4	0.13
E02001558 : Doncaster 020	2	0.06
E02001560 : Doncaster 022	1	0.03
E02001563 : Doncaster 025	1	0.03
E02001566 : Doncaster 028	10	0.32
E02001568 : Doncaster 030	1	0.03
E02001569 : Doncaster 031	1	0.03
E02001571 : Doncaster 033	3	0.10
E02001574 : Doncaster 036	1	0.03
E02001576 : Doncaster 038	1	0.03
E02001612 : Sheffield 002	9	0.29
E02001613 : Sheffield 003	5	0.16
E02001614 : Sheffield 004	40	1.28
E02001615 : Sheffield 005	17	0.55
E02001616 : Sheffield 006	10	0.32
E02001619 : Sheffield 009	3	0.10
E02001622 : Sheffield 012	1	0.03
E02001623 : Sheffield 013	2	0.06
E02001625 : Sheffield 015	9	0.29
E02001626 : Sheffield 016	1	0.03
E02001627 : Sheffield 017	15	0.48
E02001629 : Sheffield 019	7	0.22
E02001630 : Sheffield 020	8	0.26
E02001636 : Sheffield 026	16	0.51
E02001640 : Sheffield 030	27	0.87
E02001646 : Sheffield 036	18	0.58
E02001648 : Sheffield 038	2	0.06
E02001650 : Sheffield 040	8	0.26
E02001652 : Sheffield 042	9	0.29
E02001653 : Sheffield 043	5	0.16
E02001656 : Sheffield 046	2	0.06

E02001660 : Sheffield 050	6	0.19
E02001661 : Sheffield 051	3	0.10
E02001663 : Sheffield 053	3	0.10
E02001665 : Sheffield 055	4	0.13
E02001669 : Sheffield 059	3	0.10
E02001671 : Sheffield 061	4	0.13
E02001674 : Sheffield 064	4	0.13
E02001678 : Sheffield 068	2	0.06
E02006843 : Sheffield 073	71	2.28
E02006844 : Sheffield 074	28	0.90
E02002293 : Kirklees 023	3	0.10
E02002294 : Kirklees 024	1	0.03
E02002298 : Kirklees 028	2	0.06
E02002244 : Calderdale 001	1	0.03
E02002250 : Calderdale 007	1	0.03
E02002251 : Calderdale 008	7	0.22
E02002258 : Calderdale 015	2	0.06
E02002259 : Calderdale 016	1	0.03
E02002260 : Calderdale 017	1	0.03
E02002261 : Calderdale 018	1	0.03
E02002268 : Calderdale 025	3	0.10
E02002269 : Calderdale 026	1	0.03
E02002291 : Kirklees 021	3	0.10
E02002292 : Kirklees 022	3	0.10
E02002295 : Kirklees 025	5	0.16
E02002296 : Kirklees 026	2	0.06
E02002297 : Kirklees 027	2	0.06
E02002299 : Kirklees 029	33	1.06
E02002301 : Kirklees 031	4	0.13
E02002302 : Kirklees 032	2	0.06
E02002303 : Kirklees 033	11	0.35
E02002304 : Kirklees 034	2	0.06
E02002305 : Kirklees 035	4	0.13
E02002306 : Kirklees 036	1	0.03
E02002307 : Kirklees 037	2	0.06
E02002308 : Kirklees 038	1	0.03
E02002309 : Kirklees 039	6	0.19
E02002310 : Kirklees 040	1	0.03
E02002312 : Kirklees 042	20	0.64
E02002313 : Kirklees 043	3	0.10
E02002314 : Kirklees 044	5	0.16
E02002316 : Kirklees 046	2	0.06
E02002317 : Kirklees 047	2	0.06
E02002319 : Kirklees 049	5	0.16
E02002320 : Kirklees 050	5	0.16
E02002321 : Kirklees 051	10	0.32
E02002323 : Kirklees 053	5	0.16
E02002324 : Kirklees 054	5	0.16
E02002326 : Kirklees 056	19	0.61
E02002327 : Kirklees 057	44	1.41

3117 99.99852

In order to protect against disclosure of personal information, records have been swapped between different geographic areas. Some counts will be affected, particularly small counts at the lowest geographies

Appendix I TEMPro Growth Rates



TEMPO GROWTH RATE (2018 - 2030)

AM

Level	Area	Local Growth Figure
E02001532	Barnsley 024	1.11480426375308

The screenshot shows the TEMPro main form with the following details:

- Data selection:** Trip end selection, Trip end by time period selection, Select time period: Weekday AM peak period (0700 - 0900).
- Title and type:** Production/Attraction, Origin/Destination.
- Select data type:** Growth factors, Future year minus base year, Base year data, Future year data.
- Alternative Assumptions Applied:** *Statistical results indicate that there is a lower level of confidence in data presented at the zonal level than when aggregated to higher geographical levels.
- Car Driver:** Combined Modes.
- Area Description:** Level: E02001532, Name: Barnsley 024, Origin: 1.014, Destination: 1.0635.
- WPM Traffic Growth Calculations:**
 - 1. Select WPM Dataset:**

WPM Dataset Description	From	To
WPM AP 15 Dataset	2010	2040
WPM AP 09 Dataset	2003	2035
WPM AP 03 Dataset	2003	2035
 - 2. Select Areas to make up the geographic region:** ☒ Barnsley 024 (E02001532)
 - 3. Select area type:** ☐ Urban, ☐ Rural, ☒ All
 - 4. Select road type:** ☐ Motorway, ☐ Trunk, ☐ Primary, ☐ Secondary, ☐ All
 - 5. Select which area it serves:** ☒ Region, ☐ England
- Results:**

Level	Area	Local Growth Figure
E02001532	Barnsley 024	1.1148

PM

Level	Area	Local Growth Figure
E02001532	Barnsley 024	1.1090913878107

The screenshot shows the TEMPro main form with the following details:

- Data selection:** Trip end selection, Trip end by time period selection, Select time period: Weekday PM peak period (1600 - 1800).
- Title and type:** Production/Attraction, Origin/Destination.
- Select data type:** Growth factors, Future year minus base year, Base year data, Future year data.
- Alternative Assumptions Applied:** *Statistical results indicate that there is a lower level of confidence in data presented at the zonal level than when aggregated to higher geographical levels.
- Car Driver:** Combined Modes.
- Area Description:** Level: E02001532, Name: Barnsley 024, Origin: 1.0714, Destination: 1.0253.
- WPM Traffic Growth Calculations:**
 - 1. Select WPM Dataset:**

WPM Dataset Description	From	To
WPM AP 15 Dataset	2010	2040
WPM AP 09 Dataset	2003	2035
WPM AP 03 Dataset	2003	2035
 - 2. Select Areas to make up the geographic region:** ☒ Barnsley 024 (E02001532)
 - 3. Select area type:** ☐ Urban, ☐ Rural, ☒ All
 - 4. Select road type:** ☐ Motorway, ☐ Trunk, ☐ Primary, ☐ Secondary, ☐ All
 - 5. Select which area it serves:** ☒ Region, ☐ England
- Results:**

Level	Area	Local Growth Figure
E02001532	Barnsley 024	1.1091

Appendix J Junction Modelling Output



Junctions 9						
PICADY 9 - Priority Intersection Module						
Version: 9.5.1.7462 © Copyright TRL Limited, 2019						
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk						
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution						

Filename: A629 Halifax Road-Well House Lane.j9

Path: O:\Halifax Road, Penistone\ANALYSIS\CAPACITY\Priority Junctions\A629 Halifax Road-Well House Lane\200309 Halifax Road-Well House Lane

Report generation date: 10/03/2020 09:01:19

»2018 COUNT, AM

»2018 COUNT, PM

»2030 BASE, AM

»2030 BASE, PM

»2030 DESIGN, AM

»2030 DESIGN, PM

Summary of junction performance

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
2018 COUNT						
Stream B-C	0.1	11.50	0.06	0.0	9.27	0.02
Stream B-A	1.0	24.74	0.47	0.3	14.75	0.21
Stream C-AB	0.0	7.63	0.03	0.0	7.67	0.02
2030 BASE						
Stream B-C	0.1	13.86	0.07	0.0	9.74	0.03
Stream B-A	1.4	33.29	0.57	0.4	16.43	0.24
Stream C-AB	0.0	7.92	0.04	0.0	7.96	0.02
2030 DESIGN						
Stream B-C	0.1	14.50	0.08	0.0	10.63	0.03
Stream B-A	1.5	28.56	0.58	0.5	19.66	0.31
Stream C-AB	0.0	8.21	0.04	0.0	8.49	0.02

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

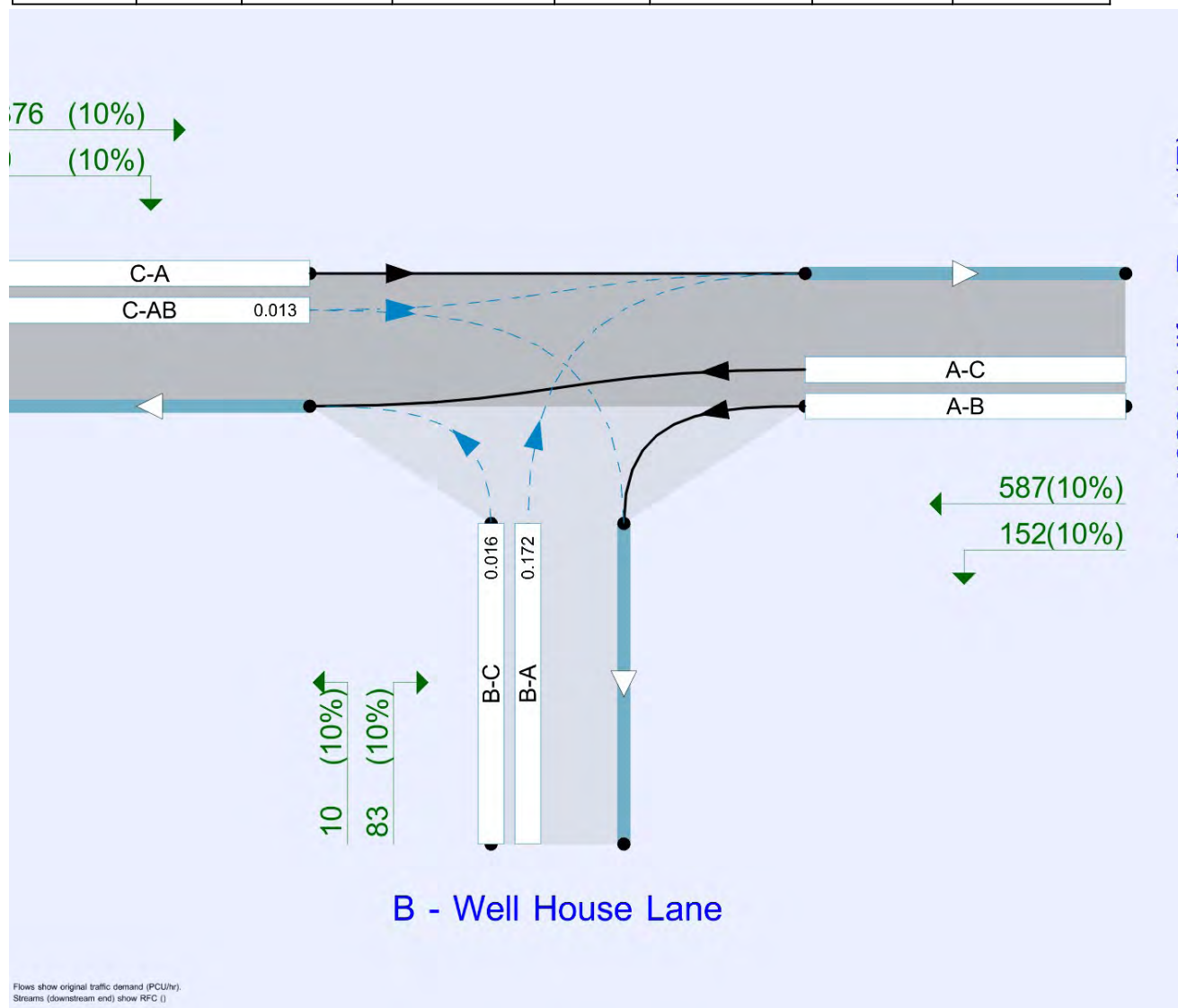
File summary

File Description

Title	A629 Halifax Road/Well House Lane
Location	
Site number	
Date	13/11/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	UK
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

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		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)
D1	2018 COUNT	AM	ONE HOUR	07:15	08:45	15
D2	2018 COUNT	PM	ONE HOUR	16:45	18:15	15
D3	2030 BASE	AM	ONE HOUR	07:15	08:45	15
D4	2030 BASE	PM	ONE HOUR	16:45	18:15	15
D5	2030 DESIGN	AM	ONE HOUR	07:15	08:45	15
D6	2030 DESIGN	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2018 COUNT, 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	A629 Halifax Road/Well House Lane	T-Junction	Two-way		2.88	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A629 Halifax Road (E)		Major
B	Well House Lane		Minor
C	A629 Halifax Road (W)		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 - A629 Halifax Road (W)	7.05		✓	2.40	160.0	✓	13.00

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	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Well House Lane	One lane plus flare	7.20	3.80	2.80	2.70	2.70		1.00	30	20

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	517	0.090	0.227	0.143	0.325
B-C	586	0.086	0.217	-	-
C-B	681	0.252	0.252	-	-

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)
D1	2018 COUNT	AM	ONE HOUR	07:15	08:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A629 Halifax Road (E)		✓	521	100.000
B - Well House Lane		✓	148	100.000
C - A629 Halifax Road (W)		✓	557	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A629 Halifax Road (E)	B - Well House Lane	C - A629 Halifax Road (W)
From	A - A629 Halifax Road (E)	0	42	479
	B - Well House Lane	129	0	19
	C - A629 Halifax Road (W)	541	16	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A629 Halifax Road (E)	B - Well House Lane	C - A629 Halifax Road (W)
From	A - A629 Halifax Road (E)	10	10	10
	B - Well House Lane	10	10	10
	C - A629 Halifax Road (W)	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.06	11.50	0.1	B
B-A	0.47	24.74	1.0	C
C-AB	0.03	7.63	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	14	463	0.031	14	0.0	8.824	A
B-A	97	370	0.262	96	0.4	14.351	B
C-AB	12	582	0.021	12	0.0	6.942	A
C-A	407			407			
A-B	32			32			
A-C	361			361			

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17	428	0.040	17	0.0	9.623	A
B-A	116	341	0.340	115	0.6	17.458	C
C-AB	14	563	0.026	14	0.0	7.214	A
C-A	486			486			
A-B	38			38			
A-C	431			431			

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	21	367	0.057	21	0.1	11.429	B
B-A	142	302	0.471	141	0.9	24.320	C
C-AB	18	537	0.033	18	0.0	7.628	A
C-A	596			596			
A-B	46			46			
A-C	527			527			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	21	365	0.057	21	0.1	11.498	B
B-A	142	302	0.471	142	1.0	24.745	C
C-AB	18	537	0.033	18	0.0	7.628	A
C-A	596			596			
A-B	46			46			
A-C	527			527			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17	427	0.040	17	0.0	9.674	A
B-A	116	341	0.340	117	0.6	17.798	C
C-AB	14	563	0.026	14	0.0	7.215	A
C-A	486			486			
A-B	38			38			
A-C	431			431			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	14	461	0.031	14	0.0	8.859	A
B-A	97	370	0.262	98	0.4	14.590	B
C-AB	12	582	0.021	12	0.0	6.943	A
C-A	407			407			
A-B	32			32			
A-C	361			361			

2018 COUNT, 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	A629 Halifax Road/Well House Lane	T-Junction	Two-way		1.13	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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)
D2	2018 COUNT	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A629 Halifax Road (E)		✓	564	100.000
B - Well House Lane		✓	73	100.000
C - A629 Halifax Road (W)		✓	324	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A629 Halifax Road (E)	B - Well House Lane	C - A629 Halifax Road (W)
From	A - A629 Halifax Road (E)	0	103	461
	B - Well House Lane	64	0	9
	C - A629 Halifax Road (W)	316	8	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A629 Halifax Road (E)	B - Well House Lane	C - A629 Halifax Road (W)
From	A - A629 Halifax Road (E)	10	10	10
	B - Well House Lane	10	10	10
	C - A629 Halifax Road (W)	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.02	9.27	0.0	A
B-A	0.21	14.75	0.3	B
C-AB	0.02	7.67	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	7	487	0.014	7	0.0	8.237	A
B-A	48	395	0.122	48	0.2	11.370	B
C-AB	6	574	0.010	6	0.0	6.968	A
C-A	238			238			
A-B	78			78			
A-C	347			347			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	467	0.017	8	0.0	8.631	A
B-A	58	372	0.155	57	0.2	12.592	B
C-AB	7	553	0.013	7	0.0	7.248	A
C-A	284			284			
A-B	93			93			
A-C	414			414			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	10	437	0.023	10	0.0	9.270	A
B-A	70	339	0.208	70	0.3	14.713	B
C-AB	9	525	0.017	9	0.0	7.674	A
C-A	348			348			
A-B	113			113			
A-C	508			508			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	10	437	0.023	10	0.0	9.274	A
B-A	70	339	0.208	70	0.3	14.751	B
C-AB	9	525	0.017	9	0.0	7.674	A
C-A	348			348			
A-B	113			113			
A-C	508			508			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	467	0.017	8	0.0	8.637	A
B-A	58	372	0.155	58	0.2	12.634	B
C-AB	7	553	0.013	7	0.0	7.251	A
C-A	284			284			
A-B	93			93			
A-C	414			414			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	7	487	0.014	7	0.0	8.244	A
B-A	48	395	0.122	48	0.2	11.422	B
C-AB	6	574	0.010	6	0.0	6.969	A
C-A	238			238			
A-B	78			78			
A-C	347			347			

2030 BASE, 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	A629 Halifax Road/Well House Lane	T-Junction	Two-way		3.82	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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)
D3	2030 BASE	AM	ONE HOUR	07:15	08:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A629 Halifax Road (E)		✓	581	100.000
B - Well House Lane		✓	165	100.000
C - A629 Halifax Road (W)		✓	621	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A629 Halifax Road (E)	B - Well House Lane	C - A629 Halifax Road (W)
From	A - A629 Halifax Road (E)	0	47	534
	B - Well House Lane	144	0	21
	C - A629 Halifax Road (W)	603	18	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A629 Halifax Road (E)	B - Well House Lane	C - A629 Halifax Road (W)
From	A - A629 Halifax Road (E)	10	10	10
	B - Well House Lane	10	10	10
	C - A629 Halifax Road (W)	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.07	13.86	0.1	B
B-A	0.57	33.29	1.4	D
C-AB	0.04	7.92	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	16	444	0.036	16	0.0	9.245	A
B-A	108	353	0.307	107	0.5	15.942	C
C-AB	14	571	0.024	13	0.0	7.103	A
C-A	454			454			
A-B	35			35			
A-C	402			402			

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	19	400	0.047	19	0.1	10.395	B
B-A	129	321	0.403	128	0.7	20.447	C
C-AB	16	550	0.029	16	0.0	7.423	A
C-A	542			542			
A-B	42			42			
A-C	480			480			

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	23	313	0.074	23	0.1	13.635	B
B-A	159	277	0.573	156	1.4	32.081	D
C-AB	20	520	0.038	20	0.0	7.916	A
C-A	664			664			
A-B	52			52			
A-C	588			588			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	23	309	0.075	23	0.1	13.858	B
B-A	159	277	0.573	158	1.4	33.294	D
C-AB	20	520	0.038	20	0.0	7.916	A
C-A	664			664			
A-B	52			52			
A-C	588			588			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	19	396	0.048	19	0.1	10.513	B
B-A	129	321	0.403	132	0.8	21.216	C
C-AB	16	550	0.029	16	0.0	7.427	A
C-A	542			542			
A-B	42			42			
A-C	480			480			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	16	442	0.036	16	0.0	9.303	A
B-A	108	353	0.307	109	0.5	16.331	C
C-AB	14	571	0.024	14	0.0	7.106	A
C-A	454			454			
A-B	35			35			
A-C	402			402			

2030 BASE, 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	A629 Halifax Road/Well House Lane	T-Junction	Two-way		1.25	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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)
D4	2030 BASE	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A629 Halifax Road (E)		✓	626	100.000
B - Well House Lane		✓	81	100.000
C - A629 Halifax Road (W)		✓	360	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A629 Halifax Road (E)	B - Well House Lane	C - A629 Halifax Road (W)
From	A - A629 Halifax Road (E)	0	114	512
	B - Well House Lane	71	0	10
	C - A629 Halifax Road (W)	351	9	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A629 Halifax Road (E)	B - Well House Lane	C - A629 Halifax Road (W)
From	A - A629 Halifax Road (E)	10	10	10
	B - Well House Lane	10	10	10
	C - A629 Halifax Road (W)	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.03	9.74	0.0	A
B-A	0.24	16.43	0.4	C
C-AB	0.02	7.96	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	476	0.016	7	0.0	8.451	A
B-A	53	382	0.140	53	0.2	12.010	B
C-AB	7	562	0.012	7	0.0	7.125	A
C-A	264			264			
A-B	86			86			
A-C	385			385			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9	453	0.020	9	0.0	8.928	A
B-A	64	356	0.180	64	0.2	13.554	B
C-AB	8	539	0.015	8	0.0	7.452	A
C-A	316			316			
A-B	102			102			
A-C	460			460			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	418	0.026	11	0.0	9.732	A
B-A	78	319	0.245	78	0.3	16.370	C
C-AB	10	508	0.020	10	0.0	7.957	A
C-A	386			386			
A-B	126			126			
A-C	564			564			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	418	0.026	11	0.0	9.738	A
B-A	78	319	0.245	78	0.4	16.428	C
C-AB	10	508	0.020	10	0.0	7.957	A
C-A	386			386			
A-B	126			126			
A-C	564			564			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9	452	0.020	9	0.0	8.937	A
B-A	64	355	0.180	64	0.2	13.616	B
C-AB	8	539	0.015	8	0.0	7.455	A
C-A	316			316			
A-B	102			102			
A-C	460			460			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	476	0.016	8	0.0	8.461	A
B-A	53	382	0.140	54	0.2	12.079	B
C-AB	7	562	0.012	7	0.0	7.126	A
C-A	264			264			
A-B	86			86			
A-C	385			385			

2030 DESIGN, 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	A629 Halifax Road/Well House Lane	T-Junction	Two-way		5.32	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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)
D5	2030 DESIGN	AM	ONE HOUR	07:15	08:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A629 Halifax Road (E)		✓	646	100.000
B - Well House Lane		✓	197	100.000
C - A629 Halifax Road (W)		✓	186	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A629 Halifax Road (E)	B - Well House Lane	C - A629 Halifax Road (W)
From	A - A629 Halifax Road (E)	0	67	579
	B - Well House Lane	176	0	21
	C - A629 Halifax Road (W)	168	18	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A629 Halifax Road (E)	B - Well House Lane	C - A629 Halifax Road (W)
From	A - A629 Halifax Road (E)	10	10	10
	B - Well House Lane	10	10	10
	C - A629 Halifax Road (W)	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.08	14.50	0.1	B
B-A	0.58	28.56	1.5	D
C-AB	0.04	8.21	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	16	428	0.037	16	0.0	9.600	A
B-A	133	391	0.339	130	0.6	15.080	C
C-AB	14	559	0.024	13	0.0	7.261	A
C-A	126			126			
A-B	50			50			
A-C	436			436			

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	19	382	0.049	19	0.1	10.916	B
B-A	158	366	0.432	157	0.8	18.854	C
C-AB	16	535	0.030	16	0.0	7.633	A
C-A	151			151			
A-B	60			60			
A-C	521			521			

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	23	300	0.077	23	0.1	14.294	B
B-A	194	332	0.584	191	1.4	27.667	D
C-AB	20	502	0.039	20	0.0	8.212	A
C-A	185			185			
A-B	74			74			
A-C	637			637			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	23	296	0.078	23	0.1	14.496	B
B-A	194	332	0.584	194	1.5	28.558	D
C-AB	20	502	0.039	20	0.0	8.212	A
C-A	185			185			
A-B	74			74			
A-C	637			637			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	19	378	0.050	19	0.1	11.037	B
B-A	158	366	0.432	161	0.9	19.509	C
C-AB	16	535	0.030	16	0.0	7.637	A
C-A	151			151			
A-B	60			60			
A-C	521			521			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	16	425	0.037	16	0.0	9.672	A
B-A	133	391	0.339	134	0.6	15.472	C
C-AB	14	559	0.024	14	0.0	7.267	A
C-A	126			126			
A-B	50			50			
A-C	436			436			

2030 DESIGN, 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	A629 Halifax Road/Well House Lane	T-Junction	Two-way		1.49	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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)
D6	2030 DESIGN	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A629 Halifax Road (E)		✓	739	100.000
B - Well House Lane		✓	93	100.000
C - A629 Halifax Road (W)		✓	385	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A629 Halifax Road (E)	B - Well House Lane	C - A629 Halifax Road (W)
From	A - A629 Halifax Road (E)	0	152	587
	B - Well House Lane	83	0	10
	C - A629 Halifax Road (W)	376	9	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A629 Halifax Road (E)	B - Well House Lane	C - A629 Halifax Road (W)
From	A - A629 Halifax Road (E)	10	10	10
	B - Well House Lane	10	10	10
	C - A629 Halifax Road (W)	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.03	10.63	0.0	B
B-A	0.31	19.66	0.5	C
C-AB	0.02	8.49	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	457	0.016	7	0.0	8.810	A
B-A	62	364	0.172	62	0.2	13.071	B
C-AB	7	541	0.013	7	0.0	7.411	A
C-A	283			283			
A-B	114			114			
A-C	442			442			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9	428	0.021	9	0.0	9.444	A
B-A	75	334	0.223	74	0.3	15.234	C
C-AB	8	514	0.016	8	0.0	7.830	A
C-A	338			338			
A-B	137			137			
A-C	528			528			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	384	0.029	11	0.0	10.613	B
B-A	91	293	0.312	91	0.5	19.540	C
C-AB	10	476	0.021	10	0.0	8.492	A
C-A	414			414			
A-B	167			167			
A-C	646			646			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	384	0.029	11	0.0	10.628	B
B-A	91	293	0.312	91	0.5	19.661	C
C-AB	10	476	0.021	10	0.0	8.492	A
C-A	414			414			
A-B	167			167			
A-C	646			646			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9	428	0.021	9	0.0	9.459	A
B-A	75	334	0.223	75	0.3	15.354	C
C-AB	8	514	0.016	8	0.0	7.830	A
C-A	338			338			
A-B	137			137			
A-C	528			528			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	456	0.017	8	0.0	8.826	A
B-A	62	364	0.172	63	0.2	13.181	B
C-AB	7	541	0.013	7	0.0	7.414	A
C-A	283			283			
A-B	114			114			
A-C	442			442			

Junctions 9						
PICADY 9 - Priority Intersection Module						
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Filename: Barnsley Rd-Well House Ln-Water Hall Ln.j9

Path: O:\Halifax Road, Penistone\ANALYSIS\CAPACITY\Priority Junctions\Barnsley Road-Well House Lane-Water Hall Lane\200309

Report generation date: 10/03/2020 09:29:22

»2018 COUNT, AM

»2018 COUNT, PM

»2030 BASE, AM

»2030 BASE, PM

»2030 DESIGN, AM

»2030 DESIGN, PM

Summary of junction performance

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
2018 COUNT						
Stream B-ACD	0.0	14.55	0.03	0.0	0.00	0.00
Stream A-BCD	0.0	7.59	0.01	0.0	6.45	0.01
Stream D-ABC	0.5	21.37	0.33	0.6	19.55	0.35
Stream C-ABD	0.0	0.00	0.00	0.0	0.00	0.00
2030 BASE						
Stream B-ACD	0.1	17.42	0.05	0.0	0.00	0.00
Stream A-BCD	0.0	8.09	0.01	0.0	6.65	0.01
Stream D-ABC	0.6	25.37	0.36	0.8	23.46	0.42
Stream C-ABD	0.0	0.00	0.00	0.0	0.00	0.00
2030 DESIGN						
Stream B-ACD	0.0	16.06	0.04	0.0	0.00	0.00
Stream A-BCD	0.1	8.69	0.06	0.1	7.48	0.08
Stream D-ABC	2.0	46.28	0.66	1.3	32.42	0.55
Stream C-ABD	0.0	0.00	0.00	0.0	0.00	0.00

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

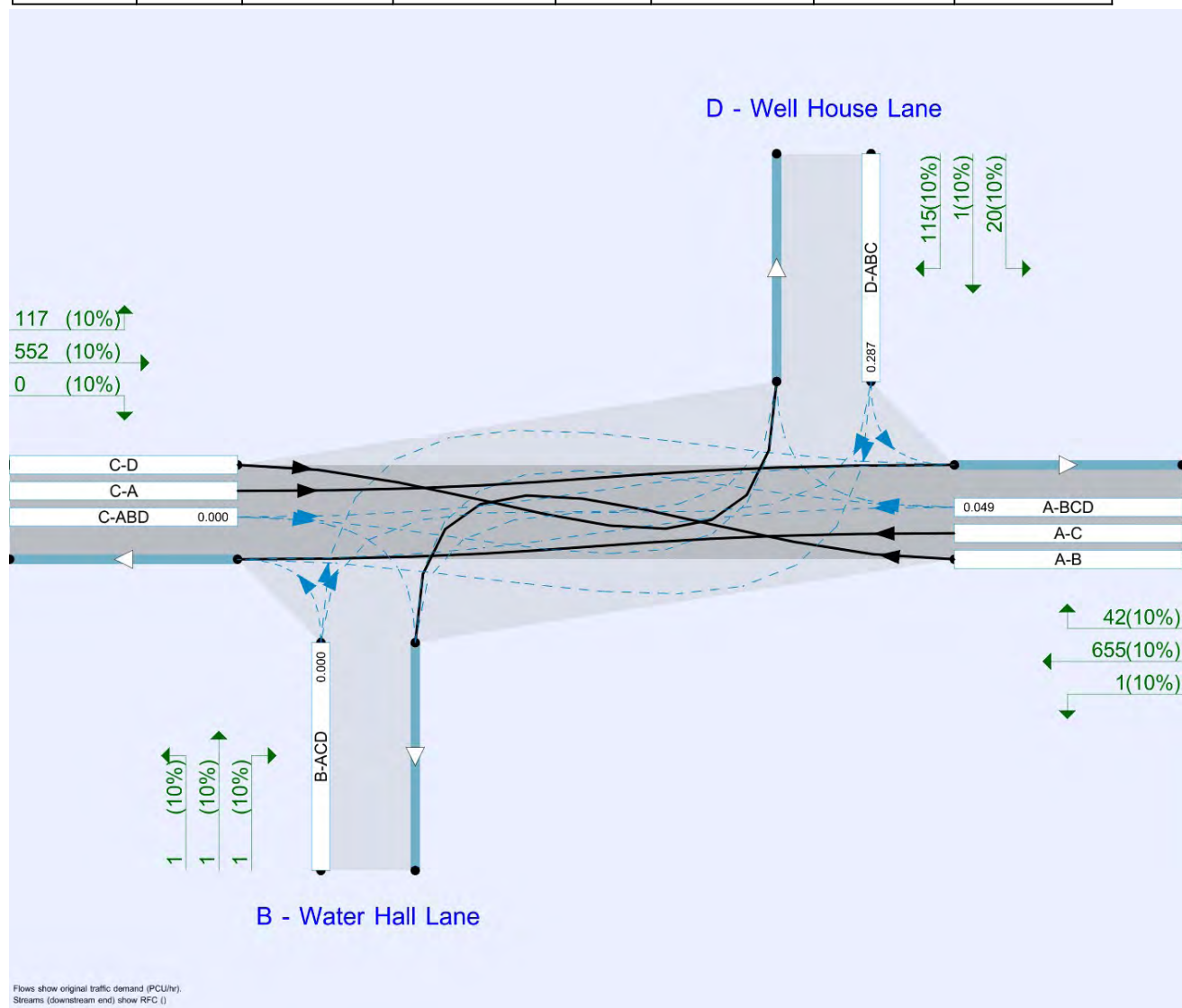
File summary

File Description

Title	Barnsley Road/Well House Lane/Water Hall Lane
Location	
Site number	
Date	13/11/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	UK
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



The junction diagram reflects the last run of Junctions.

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		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)
D1	2018 COUNT	AM	ONE HOUR	07:15	08:45	15
D2	2018 COUNT	PM	ONE HOUR	16:45	18:15	15
D3	2030 BASE	AM	ONE HOUR	07:15	08:45	15
D4	2030 BASE	PM	ONE HOUR	16:45	18:15	15
D5	2030 DESIGN	AM	ONE HOUR	07:15	08:45	15
D6	2030 DESIGN	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2018 COUNT, 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	Barnsley Road/Well House Lane/Water Hall Lane	Right-Left Stagger	Two-way		1.36	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A628 Barnsley Road (E)		Major
B	Water Hall Lane		Minor
C	A628 Barnsley Road (W)		Major
D	Well House Lane		Minor

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)
A - A628 Barnsley Road (E)	7.20		✓	3.10	250.0	✓	4.00
C - A628 Barnsley Road (W)	7.00		✓	3.10	75.0	✓	2.00

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 - Water Hall Lane	One lane	2.84	10	16
D - Well House Lane	One lane	3.48	15	23

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
A-D	789	-	-	-	0.290	0.290	0.290	-	0.290	-	-
B-AD	481	0.084	0.212	-	-	-	0.133	0.303	0.133	0.084	0.212
B-C	624	0.091	0.231	-	-	-	-	-	-	0.091	0.231
C-B	678	0.251	0.251	-	-	-	-	-	-	0.251	0.251
D-A	669	-	-	-	0.246	0.097	0.246	-	0.097	-	-
D-BC	518	0.142	0.142	0.323	0.226	0.089	0.226	-	0.089	-	-

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)
D1	2018 COUNT	AM	ONE HOUR	07:15	08:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A628 Barnsley Road (E)		✓	470	100.000
B - Water Hall Lane		✓	7	100.000
C - A628 Barnsley Road (W)		✓	817	100.000
D - Well House Lane		✓	81	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		A - A628 Barnsley Road (E)	B - Water Hall Lane	C - A628 Barnsley Road (W)	D - Well House Lane
From	A - A628 Barnsley Road (E)	0	9	456	5
	B - Water Hall Lane	4	0	2	1
	C - A628 Barnsley Road (W)	702	0	0	115
	D - Well House Lane	12	9	60	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A - A628 Barnsley Road (E)	B - Water Hall Lane	C - A628 Barnsley Road (W)	D - Well House Lane
From	A - A628 Barnsley Road (E)	10	10	10	10
	B - Water Hall Lane	10	10	10	10
	C - A628 Barnsley Road (W)	10	10	10	10
	D - Well House Lane	10	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.03	14.55	0.0	B
ABCD	0.01	7.59	0.0	A
A-B				
A-C				
D-ABC	0.33	21.37	0.5	C
C-ABD	0.00	0.00	0.0	A
C-D				
C-A				

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	357	0.015	5	0.0	11.249	B
ABCD	4	610	0.006	4	0.0	6.533	A
A-B	7			7			
A-C	343			343			
D-ABC	61	358	0.170	60	0.2	13.263	B
C-ABD	0	1154	0.000	0	0.0	0.000	A
C-D	87			87			
C-A	529			529			

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	6	325	0.019	6	0.0	12.419	B
ABCD	4	575	0.008	4	0.0	6.940	A
A-B	8			8			
A-C	410			410			
D-ABC	73	323	0.225	72	0.3	15.784	C
C-ABD	0	1114	0.000	0	0.0	0.000	A
C-D	103			103			
C-A	631			631			

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	8	280	0.028	8	0.0	14.543	B
ABCD	6	527	0.010	5	0.0	7.594	A
A-B	10			10			
A-C	502			502			
D-ABC	89	274	0.325	88	0.5	21.202	C
C-ABD	0	1060	0.000	0	0.0	0.000	A
C-D	127			127			
C-A	773			773			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	8	280	0.028	8	0.0	14.553	B
ABCD	6	527	0.010	6	0.0	7.594	A
A-B	10			10			
A-C	502			502			
D-ABC	89	274	0.325	89	0.5	21.373	C
C-ABD	0	1059	0.000	0	0.0	0.000	A
C-D	127			127			
C-A	773			773			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	6	325	0.019	6	0.0	12.430	B
A-BCD	4	575	0.008	5	0.0	6.943	A
A-B	8			8			
A-C	410			410			
D-ABC	73	323	0.225	74	0.3	15.931	C
C-ABD	0	1114	0.000	0	0.0	0.000	A
C-D	103			103			
C-A	631			631			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	357	0.015	5	0.0	11.262	B
A-BCD	4	610	0.006	4	0.0	6.536	A
A-B	7			7			
A-C	343			343			
D-ABC	61	358	0.170	61	0.2	13.373	B
C-ABD	0	1153	0.000	0	0.0	0.000	A
C-D	87			87			
C-A	529			529			

2018 COUNT, 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	Barnsley Road/Well House Lane/Water Hall Lane	Right-Left Stagger	Two-way		1.62	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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)
D2	2018 COUNT	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A628 Barnsley Road (E)		✓	584	100.000
B - Water Hall Lane		✓	3	100.000
C - A628 Barnsley Road (W)		✓	535	100.000
D - Well House Lane		✓	100	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		A - A628 Barnsley Road (E)	B - Water Hall Lane	C - A628 Barnsley Road (W)	D - Well House Lane
From	A - A628 Barnsley Road (E)	0	1	579	4
	B - Water Hall Lane	1	0	1	1
	C - A628 Barnsley Road (W)	464	0	0	71
	D - Well House Lane	7	1	92	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A - A628 Barnsley Road (E)	B - Water Hall Lane	C - A628 Barnsley Road (W)	D - Well House Lane
From	A - A628 Barnsley Road (E)	10	10	10	10
	B - Water Hall Lane	10	10	10	10
	C - A628 Barnsley Road (W)	10	10	10	10
	D - Well House Lane	10	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.00	0.00	0.0	A
A-BCD	0.01	6.45	0.0	A
A-B				
A-C				
D-ABC	0.35	19.55	0.6	C
C-ABD	0.00	0.00	0.0	A
C-D				
C-A				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	392	0.000	0	0.0	0.000	A
A-BCD	3	672	0.004	3	0.0	5.915	A
A-B	0.75			0.75			
A-C	436			436			
D-ABC	75	380	0.198	74	0.3	12.892	B
C-ABD	0	1101	0.000	0	0.0	0.000	A
C-D	53			53			
C-A	349			349			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	362	0.000	0	0.0	0.000	A
A-BCD	4	650	0.006	4	0.0	6.127	A
A-B	0.90			0.90			
A-C	521			521			
D-ABC	90	352	0.255	89	0.4	15.062	C
C-ABD	0	1051	0.000	0	0.0	0.000	A
C-D	64			64			
C-A	417			417			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	318	0.000	0	0.0	0.000	A
A-BCD	4	618	0.007	4	0.0	6.448	A
A-B	1			1			
A-C	637			637			
D-ABC	110	313	0.352	109	0.6	19.397	C
C-ABD	0	983	0.000	0	0.0	0.000	A
C-D	78			78			
C-A	511			511			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	318	0.000	0	0.0	0.000	A
ABCD	4	618	0.007	4	0.0	6.448	A
AB	1			1			
AC	637			637			
D-ABC	110	313	0.352	110	0.6	19.549	C
C-ABD	0	982	0.000	0	0.0	0.000	A
C-D	78			78			
C-A	511			511			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	361	0.000	0	0.0	0.000	A
ABCD	4	650	0.006	4	0.0	6.130	A
AB	0.90			0.90			
AC	521			521			
D-ABC	90	352	0.255	91	0.4	15.203	C
C-ABD	0	1051	0.000	0	0.0	0.000	A
C-D	64			64			
C-A	417			417			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	392	0.000	0	0.0	0.000	A
ABCD	3	672	0.004	3	0.0	5.917	A
AB	0.75			0.75			
AC	436			436			
D-ABC	75	380	0.198	76	0.3	13.018	B
C-ABD	0	1100	0.000	0	0.0	0.000	A
C-D	53			53			
C-A	349			349			

2030 BASE, 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	Barnsley Road/Well House Lane/Water Hall Lane	Right-Left Stagger	Two-way		1.49	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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)
D3	2030 BASE	AM	ONE HOUR	07:15	08:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A628 Barnsley Road (E)		✓	523	100.000
B - Water Hall Lane		✓	10	100.000
C - A628 Barnsley Road (W)		✓	911	100.000
D - Well House Lane		✓	81	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		A - A628 Barnsley Road (E)	B - Water Hall Lane	C - A628 Barnsley Road (W)	D - Well House Lane
From	A - A628 Barnsley Road (E)	0	9	508	6
	B - Water Hall Lane	4	0	2	4
	C - A628 Barnsley Road (W)	783	0	0	128
	D - Well House Lane	13	1	67	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A - A628 Barnsley Road (E)	B - Water Hall Lane	C - A628 Barnsley Road (W)	D - Well House Lane
From	A - A628 Barnsley Road (E)	10	10	10	10
	B - Water Hall Lane	10	10	10	10
	C - A628 Barnsley Road (W)	10	10	10	10
	D - Well House Lane	10	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.05	17.42	0.1	C
A-BCD	0.01	8.09	0.0	A
A-B				
A-C				
D-ABC	0.36	25.37	0.6	D
C-ABD	0.00	0.00	0.0	A
C-D				
C-A				

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	8	325	0.023	7	0.0	12.451	B
A-BCD	5	589	0.008	4	0.0	6.778	A
A-B	7			7			
A-C	382			382			
D-ABC	61	339	0.180	60	0.2	14.156	B
C-ABD	0	1134	0.000	0	0.0	0.000	A
C-D	96			96			
C-A	589			589			

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	9	289	0.031	9	0.0	14.126	B
A-BCD	5	550	0.010	5	0.0	7.274	A
A-B	8			8			
A-C	457			457			
D-ABC	73	300	0.243	72	0.3	17.388	C
C-ABD	0	1091	0.000	0	0.0	0.000	A
C-D	115			115			
C-A	704			704			

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	11	239	0.046	11	0.1	17.394	C
A-BCD	7	496	0.013	7	0.0	8.093	A
A-B	10			10			
A-C	559			559			
D-ABC	89	245	0.364	88	0.6	25.066	D
C-ABD	0	1032	0.000	0	0.0	0.000	A
C-D	141			141			
C-A	862			862			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	11	238	0.046	11	0.1	17.420	C
ABCD	7	496	0.013	7	0.0	8.093	A
AB	10			10			
AC	559			559			
D-ABC	89	245	0.364	89	0.6	25.374	D
C-ABD	0	1031	0.000	0	0.0	0.000	A
C-D	141			141			
C-A	862			862			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	9	289	0.031	9	0.0	14.153	B
ABCD	5	550	0.010	5	0.0	7.275	A
AB	8			8			
AC	457			457			
D-ABC	73	300	0.243	74	0.4	17.612	C
C-ABD	0	1090	0.000	0	0.0	0.000	A
C-D	115			115			
C-A	704			704			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	8	325	0.023	8	0.0	12.475	B
ABCD	5	589	0.008	5	0.0	6.779	A
AB	7			7			
AC	382			382			
D-ABC	61	339	0.180	61	0.2	14.304	B
C-ABD	0	1134	0.000	0	0.0	0.000	A
C-D	96			96			
C-A	589			589			

2030 BASE, 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	Barnsley Road/Well House Lane/Water Hall Lane	Right-Left Stagger	Two-way		1.93	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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)
D4	2030 BASE	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A628 Barnsley Road (E)		✓	647	100.000
B - Water Hall Lane		✓	3	100.000
C - A628 Barnsley Road (W)		✓	593	100.000
D - Well House Lane		✓	110	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		A - A628 Barnsley Road (E)	B - Water Hall Lane	C - A628 Barnsley Road (W)	D - Well House Lane
From	A - A628 Barnsley Road (E)	0	1	642	4
	B - Water Hall Lane	1	0	1	1
	C - A628 Barnsley Road (W)	514	0	0	79
	D - Well House Lane	8	0	102	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A - A628 Barnsley Road (E)	B - Water Hall Lane	C - A628 Barnsley Road (W)	D - Well House Lane
From	A - A628 Barnsley Road (E)	10	10	10	10
	B - Water Hall Lane	10	10	10	10
	C - A628 Barnsley Road (W)	10	10	10	10
	D - Well House Lane	10	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.00	0.00	0.0	A
A-BCD	0.01	6.65	0.0	A
A-B				
A-C				
D-ABC	0.42	23.46	0.8	C
C-ABD	0.00	0.00	0.0	A
C-D				
C-A				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	376	0.000	0	0.0	0.000	A
A-BCD	3	660	0.005	3	0.0	6.028	A
A-B	0.75			0.75			
A-C	483			483			
D-ABC	83	365	0.227	82	0.3	13.910	B
C-ABD	0	1074	0.000	0	0.0	0.000	A
C-D	59			59			
C-A	387			387			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	341	0.000	0	0.0	0.000	A
A-BCD	4	635	0.006	4	0.0	6.274	A
A-B	0.90			0.90			
A-C	577			577			
D-ABC	99	333	0.297	98	0.5	16.800	C
C-ABD	0	1019	0.000	0	0.0	0.000	A
C-D	71			71			
C-A	462			462			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	292	0.000	0	0.0	0.000	A
A-BCD	4	600	0.007	4	0.0	6.648	A
A-B	1			1			
A-C	707			707			
D-ABC	121	290	0.418	120	0.8	23.148	C
C-ABD	0	943	0.000	0	0.0	0.000	A
C-D	87			87			
C-A	566			566			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	292	0.000	0	0.0	0.000	A
ABCD	4	600	0.007	4	0.0	6.648	A
A-B	1			1			
A-C	707			707			
D-ABC	121	290	0.418	121	0.8	23.455	C
C-ABD	0	942	0.000	0	0.0	0.000	A
C-D	87			87			
C-A	566			566			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	341	0.000	0	0.0	0.000	A
ABCD	4	635	0.006	4	0.0	6.274	A
A-B	0.90			0.90			
A-C	577			577			
D-ABC	99	333	0.297	100	0.5	17.050	C
C-ABD	0	1018	0.000	0	0.0	0.000	A
C-D	71			71			
C-A	462			462			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	375	0.000	0	0.0	0.000	A
ABCD	3	660	0.005	3	0.0	6.031	A
A-B	0.75			0.75			
A-C	483			483			
D-ABC	83	365	0.227	83	0.3	14.092	B
C-ABD	0	1073	0.000	0	0.0	0.000	A
C-D	59			59			
C-A	387			387			

2030 DESIGN, 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	Barnsley Road/Well House Lane/Water Hall Lane	Right-Left Stagger	Two-way		4.28	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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)
D5	2030 DESIGN	AM	ONE HOUR	07:15	08:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A628 Barnsley Road (E)		✓	577	100.000
B - Water Hall Lane		✓	9	100.000
C - A628 Barnsley Road (W)		✓	951	100.000
D - Well House Lane		✓	148	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		A - A628 Barnsley Road (E)	B - Water Hall Lane	C - A628 Barnsley Road (W)	D - Well House Lane
From	A - A628 Barnsley Road (E)	0	10	541	26
	B - Water Hall Lane	4	0	4	1
	C - A628 Barnsley Road (W)	803	0	0	148
	D - Well House Lane	46	1	101	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A - A628 Barnsley Road (E)	B - Water Hall Lane	C - A628 Barnsley Road (W)	D - Well House Lane
From	A - A628 Barnsley Road (E)	10	10	10	10
	B - Water Hall Lane	10	10	10	10
	C - A628 Barnsley Road (W)	10	10	10	10
	D - Well House Lane	10	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.04	16.06	0.0	C
A-BCD	0.06	8.69	0.1	A
A-B				
A-C				
D-ABC	0.66	46.28	2.0	E
C-ABD	0.00	0.00	0.0	A
C-D				
C-A				

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	7	353	0.019	7	0.0	11.444	B
A-BCD	20	581	0.034	19	0.0	7.055	A
A-B	8			8			
A-C	407			407			
D-ABC	111	348	0.320	109	0.5	16.436	C
C-ABD	0	1109	0.000	0	0.0	0.000	A
C-D	111			111			
C-A	605			605			

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	8	314	0.026	8	0.0	12.956	B
A-BCD	23	540	0.043	23	0.0	7.662	A
A-B	9			9			
A-C	486			486			
D-ABC	133	306	0.434	132	0.8	22.516	C
C-ABD	0	1060	0.000	0	0.0	0.000	A
C-D	133			133			
C-A	722			722			

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	10	257	0.039	10	0.0	16.010	C
A-BCD	29	484	0.059	29	0.1	8.691	A
A-B	11			11			
A-C	596			596			
D-ABC	163	247	0.660	159	1.9	42.900	E
C-ABD	0	993	0.000	0	0.0	0.000	A
C-D	163			163			
C-A	884			884			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	10	256	0.039	10	0.0	16.063	C
ABCD	29	484	0.059	29	0.1	8.693	A
A-B	11			11			
A-C	596			596			
D-ABC	163	247	0.660	163	2.0	46.279	E
C-ABD	0	992	0.000	0	0.0	0.000	A
C-D	163			163			
C-A	884			884			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	8	313	0.026	8	0.0	13.007	B
ABCD	23	540	0.043	23	0.1	7.668	A
A-B	9			9			
A-C	486			486			
D-ABC	133	306	0.434	137	0.9	24.009	C
C-ABD	0	1058	0.000	0	0.0	0.000	A
C-D	133			133			
C-A	722			722			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	7	352	0.019	7	0.0	11.469	B
ABCD	20	581	0.034	20	0.0	7.059	A
A-B	8			8			
A-C	407			407			
D-ABC	111	348	0.320	113	0.5	16.910	C
C-ABD	0	1108	0.000	0	0.0	0.000	A
C-D	111			111			
C-A	605			605			

2030 DESIGN, 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	Barnsley Road/Well House Lane/Water Hall Lane	Right-Left Stagger	Two-way		3.14	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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)
D6	2030 DESIGN	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A628 Barnsley Road (E)		✓	698	100.000
B - Water Hall Lane		✓	3	100.000
C - A628 Barnsley Road (W)		✓	669	100.000
D - Well House Lane		✓	136	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		A - A628 Barnsley Road (E)	B - Water Hall Lane	C - A628 Barnsley Road (W)	D - Well House Lane
From	A - A628 Barnsley Road (E)	0	1	655	42
	B - Water Hall Lane	1	0	1	1
	C - A628 Barnsley Road (W)	552	0	0	117
	D - Well House Lane	20	1	115	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A - A628 Barnsley Road (E)	B - Water Hall Lane	C - A628 Barnsley Road (W)	D - Well House Lane
From	A - A628 Barnsley Road (E)	10	10	10	10
	B - Water Hall Lane	10	10	10	10
	C - A628 Barnsley Road (W)	10	10	10	10
	D - Well House Lane	10	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.00	0.00	0.0	A
A-BCD	0.08	7.48	0.1	A
A-B				
A-C				
D-ABC	0.55	32.42	1.3	D
C-ABD	0.00	0.00	0.0	A
C-D				
C-A				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	365	0.000	0	0.0	0.000	A
A-BCD	32	643	0.049	31	0.1	6.471	A
A-B	0.75			0.75			
A-C	493			493			
D-ABC	102	356	0.287	101	0.4	15.387	C
C-ABD	0	1064	0.000	0	0.0	0.000	A
C-D	88			88			
C-A	416			416			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	328	0.000	0	0.0	0.000	A
A-BCD	38	615	0.061	38	0.1	6.860	A
A-B	0.90			0.90			
A-C	589			589			
D-ABC	122	321	0.381	121	0.7	19.759	C
C-ABD	0	1006	0.000	0	0.0	0.000	A
C-D	105			105			
C-A	496			496			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	275	0.000	0	0.0	0.000	A
A-BCD	46	576	0.080	46	0.1	7.477	A
A-B	1			1			
A-C	721			721			
D-ABC	150	271	0.552	147	1.3	31.329	D
C-ABD	0	928	0.000	0	0.0	0.000	A
C-D	129			129			
C-A	608			608			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	274	0.000	0	0.0	0.000	A
ABCD	46	576	0.080	46	0.1	7.477	A
A-B	1			1			
A-C	721			721			
D-ABC	150	271	0.552	150	1.3	32.419	D
C-ABD	0	927	0.000	0	0.0	0.000	A
C-D	129			129			
C-A	608			608			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	327	0.000	0	0.0	0.000	A
ABCD	38	615	0.061	38	0.1	6.865	A
A-B	0.90			0.90			
A-C	589			589			
D-ABC	122	321	0.381	125	0.7	20.428	C
C-ABD	0	1005	0.000	0	0.0	0.000	A
C-D	105			105			
C-A	496			496			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	364	0.000	0	0.0	0.000	A
ABCD	32	643	0.049	32	0.1	6.478	A
A-B	0.75			0.75			
A-C	493			493			
D-ABC	102	356	0.287	103	0.5	15.719	C
C-ABD	0	1063	0.000	0	0.0	0.000	A
C-D	88			88			
C-A	416			416			

Junctions 9		
PICADY 9 - Priority Intersection Module		
Version: 9.5.1.7462 © Copyright TRL Limited, 2019		
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Filename: A628 Barnsley Road-B6462 Huddersfield Road (E).j9

Path: O:\Halifax Road, Penistone\ANALYSIS\CAPACITY\Priority Junctions\A628 Barnsley Road-B6462 Huddersfield Road\Eastern Side\200309

Report generation date: 10/03/2020 08:51:25

»2018 COUNT, AM

»2018 COUNT, PM

»2030 BASE, AM

»2030 BASE, PM

»2030 DESIGN, AM

»2030 DESIGN, PM

Summary of junction performance

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
2018 COUNT						
Stream B-C	0.2	12.10	0.16	0.1	10.78	0.08
Stream B-A	1.0	24.88	0.47	1.2	23.08	0.52
Stream C-AB	0.3	11.13	0.20	0.0	7.75	0.02
2030 BASE						
Stream B-C	0.3	16.25	0.22	0.1	13.41	0.11
Stream B-A	1.6	37.68	0.60	1.7	31.51	0.62
Stream C-AB	0.3	12.38	0.23	0.0	8.03	0.02
2030 DESIGN						
Stream B-C	0.3	15.35	0.21	0.1	13.81	0.10
Stream B-A	1.4	35.85	0.58	1.8	33.06	0.63
Stream C-AB	0.3	12.14	0.22	0.0	8.14	0.02

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

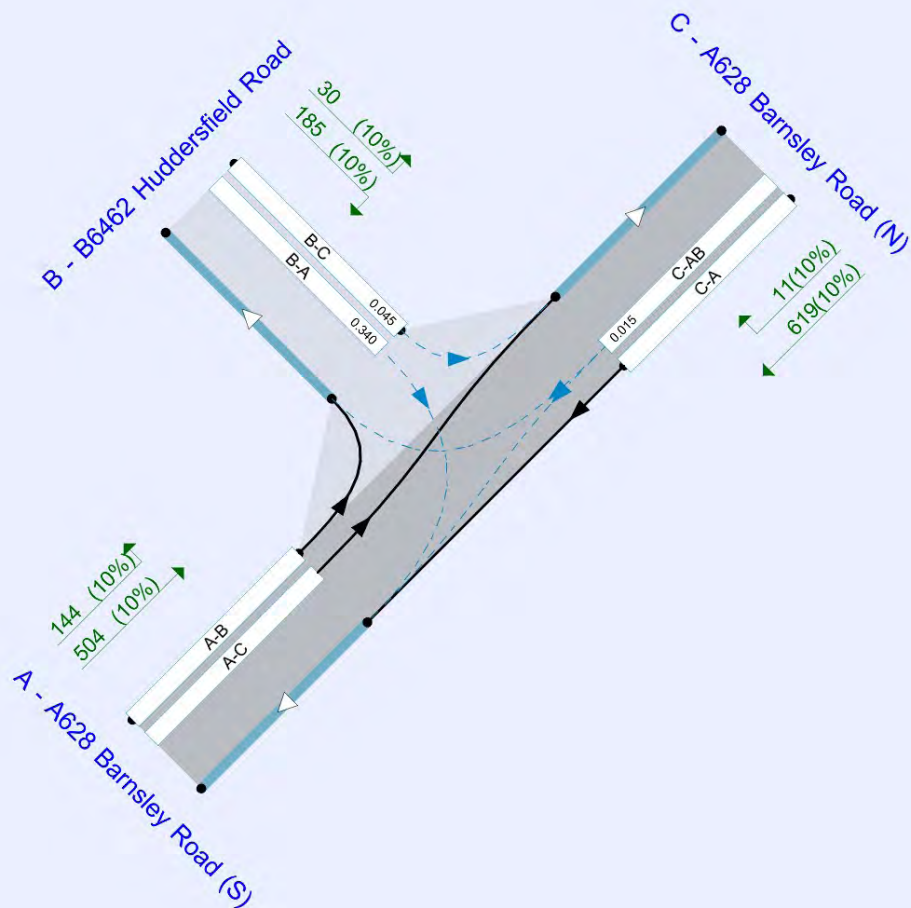
File summary

File Description

Title	A628 Barnsley Road-B6462 Huddersfield Road (E)
Location	
Site number	
Date	13/11/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	UK
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



Flows show original traffic demand (PCU/hr).
Streams (downstream end) show RFC (l)

The junction diagram reflects the last run of Junctions.

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		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)
D1	2018 COUNT	AM	ONE HOUR	07:15	08:45	15
D2	2018 COUNT	PM	ONE HOUR	16:45	18:15	15
D3	2030 BASE	AM	ONE HOUR	07:15	08:45	15
D4	2030 BASE	PM	ONE HOUR	16:45	18:15	15
D5	2030 DESIGN	AM	ONE HOUR	07:15	08:45	15
D6	2030 DESIGN	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2018 COUNT, 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	A628 Barnsley Road/B6462 Huddersfield Road (E)	T-Junction	Two-way		3.17	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A628 Barnsley Road (S)		Major
B	B6462 Huddersfield Road		Minor
C	A628 Barnsley Road (N)		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 - A628 Barnsley Road (N)	7.50		✓	3.16	60.0	✓	5.00

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	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - B6462 Huddersfield Road	One lane plus flare	10.00	6.00	4.20	3.30	3.30		1.00	70	70

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	620	0.105	0.267	0.168	0.381
B-C	696	0.100	0.252	-	-
C-B	672	0.243	0.243	-	-

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)
D1	2018 COUNT	AM	ONE HOUR	07:15	08:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A628 Barnsley Road (S)		✓	857	100.000
B - B6462 Huddersfield Road		✓	185	100.000
C - A628 Barnsley Road (N)		✓	460	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A628 Barnsley Road (S)	B - B6462 Huddersfield Road	C - A628 Barnsley Road (N)
From	A - A628 Barnsley Road (S)	0	218	639
	B - B6462 Huddersfield Road	128	0	57
	C - A628 Barnsley Road (N)	381	79	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A628 Barnsley Road (S)	B - B6462 Huddersfield Road	C - A628 Barnsley Road (N)
From	A - A628 Barnsley Road (S)	10	10	10
	B - B6462 Huddersfield Road	10	10	10
	C - A628 Barnsley Road (N)	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.16	12.10	0.2	B
B-A	0.47	24.88	1.0	C
C-AB	0.20	11.13	0.3	B
C-A				
A-B				
A-C				

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	43	518	0.083	43	0.1	8.323	A
B-A	96	403	0.239	95	0.3	12.821	B
C-AB	59	515	0.115	59	0.1	8.668	A
C-A	287			287			
A-B	164			164			
A-C	481			481			

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	51	473	0.108	51	0.1	9.392	A
B-A	115	360	0.320	114	0.5	16.097	C
C-AB	71	485	0.147	71	0.2	9.563	A
C-A	343			343			
A-B	196			196			
A-C	574			574			

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	63	392	0.160	62	0.2	11.992	B
B-A	141	300	0.470	139	0.9	24.400	C
C-AB	87	443	0.197	87	0.3	11.110	B
C-A	419			419			
A-B	240			240			
A-C	704			704			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	63	390	0.161	63	0.2	12.099	B
B-A	141	300	0.470	141	1.0	24.884	C
C-AB	87	443	0.197	87	0.3	11.129	B
C-A	419			419			
A-B	240			240			
A-C	704			704			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	51	470	0.109	52	0.1	9.460	A
B-A	115	360	0.320	117	0.5	16.408	C
C-AB	71	485	0.147	71	0.2	9.586	A
C-A	343			343			
A-B	196			196			
A-C	574			574			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	43	516	0.083	43	0.1	8.369	A
B-A	96	402	0.239	97	0.4	13.000	B
C-AB	59	515	0.115	60	0.1	8.697	A
C-A	287			287			
A-B	164			164			
A-C	481			481			

2018 COUNT, 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	A628 Barnsley Road/B6462 Huddersfield Road (E)	T-Junction	Two-way		3.24	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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)
D2	2018 COUNT	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A628 Barnsley Road (S)		✓	562	100.000
B - B6462 Huddersfield Road		✓	198	100.000
C - A628 Barnsley Road (N)		✓	563	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A628 Barnsley Road (S)	B - B6462 Huddersfield Road	C - A628 Barnsley Road (N)
From	A - A628 Barnsley Road (S)	0	132	430
	B - B6462 Huddersfield Road	169	0	29
	C - A628 Barnsley Road (N)	553	10	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A628 Barnsley Road (S)	B - B6462 Huddersfield Road	C - A628 Barnsley Road (N)
From	A - A628 Barnsley Road (S)	10	10	10
	B - B6462 Huddersfield Road	10	10	10
	C - A628 Barnsley Road (N)	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.08	10.78	0.1	B
B-A	0.52	23.08	1.2	C
C-AB	0.02	7.75	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	22	524	0.042	22	0.0	7.884	A
B-A	127	434	0.293	125	0.4	12.773	B
C-AB	8	569	0.013	7	0.0	7.048	A
C-A	416			416			
A-B	99			99			
A-C	324			324			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	26	481	0.054	26	0.1	8.705	A
B-A	152	402	0.378	151	0.7	15.747	C
C-AB	9	549	0.016	9	0.0	7.328	A
C-A	497			497			
A-B	119			119			
A-C	387			387			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	32	402	0.079	32	0.1	10.696	B
B-A	186	357	0.521	184	1.1	22.606	C
C-AB	11	522	0.021	11	0.0	7.754	A
C-A	609			609			
A-B	145			145			
A-C	473			473			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	32	399	0.080	32	0.1	10.780	B
B-A	186	357	0.521	186	1.2	23.075	C
C-AB	11	522	0.021	11	0.0	7.754	A
C-A	609			609			
A-B	145			145			
A-C	473			473			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	26	478	0.055	26	0.1	8.760	A
B-A	152	402	0.378	154	0.7	16.096	C
C-AB	9	549	0.016	9	0.0	7.328	A
C-A	497			497			
A-B	119			119			
A-C	387			387			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	22	522	0.042	22	0.0	7.921	A
B-A	127	434	0.293	128	0.5	13.000	B
C-AB	8	569	0.013	8	0.0	7.051	A
C-A	416			416			
A-B	99			99			
A-C	324			324			

2030 BASE, 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	A628 Barnsley Road/B6462 Huddersfield Road (E)	T-Junction	Two-way		4.48	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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)
D3	2030 BASE	AM	ONE HOUR	07:15	08:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A628 Barnsley Road (S)		✓	955	100.000
B - B6462 Huddersfield Road		✓	206	100.000
C - A628 Barnsley Road (N)		✓	513	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A628 Barnsley Road (S)	B - B6462 Huddersfield Road	C - A628 Barnsley Road (N)
From	A - A628 Barnsley Road (S)	0	243	712
	B - B6462 Huddersfield Road	143	0	63
	C - A628 Barnsley Road (N)	425	88	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A628 Barnsley Road (S)	B - B6462 Huddersfield Road	C - A628 Barnsley Road (N)
From	A - A628 Barnsley Road (S)	10	10	10
	B - B6462 Huddersfield Road	10	10	10
	C - A628 Barnsley Road (N)	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.22	16.25	0.3	C
B-A	0.60	37.68	1.6	E
C-AB	0.23	12.38	0.3	B
C-A				
A-B				
A-C				

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	47	492	0.096	47	0.1	8.883	A
B-A	108	378	0.285	106	0.4	14.487	B
C-AB	66	497	0.133	66	0.2	9.160	A
C-A	320			320			
A-B	183			183			
A-C	536			536			

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	57	435	0.130	56	0.2	10.457	B
B-A	129	330	0.390	128	0.7	19.501	C
C-AB	79	463	0.171	79	0.2	10.292	B
C-A	382			382			
A-B	218			218			
A-C	640			640			

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	69	319	0.217	69	0.3	15.777	C
B-A	157	262	0.601	154	1.5	35.721	E
C-AB	97	417	0.233	97	0.3	12.347	B
C-A	468			468			
A-B	268			268			
A-C	784			784			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	69	313	0.222	69	0.3	16.255	C
B-A	157	262	0.602	157	1.6	37.677	E
C-AB	97	417	0.233	97	0.3	12.379	B
C-A	468			468			
A-B	268			268			
A-C	784			784			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	57	430	0.132	57	0.2	10.641	B
B-A	129	330	0.390	132	0.7	20.364	C
C-AB	79	463	0.171	80	0.2	10.328	B
C-A	382			382			
A-B	218			218			
A-C	640			640			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	47	490	0.097	48	0.1	8.957	A
B-A	108	378	0.285	109	0.4	14.797	B
C-AB	66	497	0.133	66	0.2	9.198	A
C-A	320			320			
A-B	183			183			
A-C	536			536			

2030 BASE, 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	A628 Barnsley Road/B6462 Huddersfield Road (E)	T-Junction	Two-way		4.37	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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)
D4	2030 BASE	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A628 Barnsley Road (S)		✓	623	100.000
B - B6462 Huddersfield Road		✓	219	100.000
C - A628 Barnsley Road (N)		✓	625	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A628 Barnsley Road (S)	B - B6462 Huddersfield Road	C - A628 Barnsley Road (N)
From	A - A628 Barnsley Road (S)	0	146	477
	B - B6462 Huddersfield Road	187	0	32
	C - A628 Barnsley Road (N)	614	11	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A628 Barnsley Road (S)	B - B6462 Huddersfield Road	C - A628 Barnsley Road (N)
From	A - A628 Barnsley Road (S)	10	10	10
	B - B6462 Huddersfield Road	10	10	10
	C - A628 Barnsley Road (N)	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.11	13.41	0.1	B
B-A	0.62	31.51	1.7	D
C-AB	0.02	8.03	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	24	502	0.048	24	0.1	8.281	A
B-A	141	416	0.339	139	0.6	14.183	B
C-AB	8	558	0.015	8	0.0	7.201	A
C-A	462			462			
A-B	110			110			
A-C	359			359			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	29	447	0.064	29	0.1	9.472	A
B-A	168	380	0.442	167	0.8	18.466	C
C-AB	10	536	0.018	10	0.0	7.526	A
C-A	552			552			
A-B	131			131			
A-C	429			429			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	35	337	0.105	35	0.1	13.120	B
B-A	206	331	0.623	203	1.7	30.144	D
C-AB	12	505	0.024	12	0.0	8.029	A
C-A	676			676			
A-B	161			161			
A-C	525			525			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	35	331	0.107	35	0.1	13.405	B
B-A	206	331	0.623	206	1.7	31.514	D
C-AB	12	505	0.024	12	0.0	8.029	A
C-A	676			676			
A-B	161			161			
A-C	525			525			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	29	442	0.065	29	0.1	9.602	A
B-A	168	380	0.442	171	0.9	19.266	C
C-AB	10	536	0.018	10	0.0	7.530	A
C-A	552			552			
A-B	131			131			
A-C	429			429			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	24	499	0.048	24	0.1	8.339	A
B-A	141	416	0.339	142	0.6	14.545	B
C-AB	8	558	0.015	8	0.0	7.204	A
C-A	462			462			
A-B	110			110			
A-C	359			359			

2030 DESIGN, 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	A628 Barnsley Road/B6462 Huddersfield Road (E)	T-Junction	Two-way		4.03	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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)
D5	2030 DESIGN	AM	ONE HOUR	07:15	08:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A628 Barnsley Road (S)		✓	956	100.000
B - B6462 Huddersfield Road		✓	196	100.000
C - A628 Barnsley Road (N)		✓	530	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A628 Barnsley Road (S)	B - B6462 Huddersfield Road	C - A628 Barnsley Road (N)
From	A - A628 Barnsley Road (S)	0	234	722
	B - B6462 Huddersfield Road	135	0	61
	C - A628 Barnsley Road (N)	448	82	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A628 Barnsley Road (S)	B - B6462 Huddersfield Road	C - A628 Barnsley Road (N)
From	A - A628 Barnsley Road (S)	10	10	10
	B - B6462 Huddersfield Road	10	10	10
	C - A628 Barnsley Road (N)	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.21	15.35	0.3	C
B-A	0.58	35.85	1.4	E
C-AB	0.22	12.14	0.3	B
C-A				
A-B				
A-C				

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	46	495	0.093	45	0.1	8.792	A
B-A	102	375	0.271	100	0.4	14.332	B
C-AB	62	497	0.124	61	0.2	9.070	A
C-A	337			337			
A-B	176			176			
A-C	544			544			

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	55	440	0.125	55	0.2	10.270	B
B-A	121	326	0.372	120	0.6	19.137	C
C-AB	74	463	0.159	74	0.2	10.158	B
C-A	403			403			
A-B	210			210			
A-C	649			649			

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	67	331	0.203	67	0.3	14.982	B
B-A	149	258	0.575	146	1.4	34.259	D
C-AB	90	416	0.217	90	0.3	12.110	B
C-A	493			493			
A-B	258			258			
A-C	795			795			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	67	325	0.207	67	0.3	15.351	C
B-A	149	258	0.576	148	1.4	35.853	E
C-AB	90	416	0.217	90	0.3	12.142	B
C-A	493			493			
A-B	258			258			
A-C	795			795			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	55	436	0.126	55	0.2	10.423	B
B-A	121	326	0.372	124	0.7	19.870	C
C-AB	74	463	0.159	74	0.2	10.187	B
C-A	403			403			
A-B	210			210			
A-C	649			649			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	46	493	0.093	46	0.1	8.859	A
B-A	102	375	0.271	103	0.4	14.611	B
C-AB	62	497	0.124	62	0.2	9.106	A
C-A	337			337			
A-B	176			176			
A-C	544			544			

2030 DESIGN, 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	A628 Barnsley Road/B6462 Huddersfield Road (E)	T-Junction	Two-way		4.43	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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)
D6	2030 DESIGN	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A628 Barnsley Road (S)		✓	648	100.000
B - B6462 Huddersfield Road		✓	215	100.000
C - A628 Barnsley Road (N)		✓	630	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A628 Barnsley Road (S)	B - B6462 Huddersfield Road	C - A628 Barnsley Road (N)
From	A - A628 Barnsley Road (S)	0	144	504
	B - B6462 Huddersfield Road	185	0	30
	C - A628 Barnsley Road (N)	619	11	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A628 Barnsley Road (S)	B - B6462 Huddersfield Road	C - A628 Barnsley Road (N)
From	A - A628 Barnsley Road (S)	10	10	10
	B - B6462 Huddersfield Road	10	10	10
	C - A628 Barnsley Road (N)	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.10	13.81	0.1	B
B-A	0.63	33.06	1.8	D
C-AB	0.02	8.14	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	23	497	0.045	22	0.1	8.335	A
B-A	139	410	0.340	137	0.6	14.394	B
C-AB	8	554	0.015	8	0.0	7.261	A
C-A	466			466			
A-B	108			108			
A-C	379			379			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	27	441	0.061	27	0.1	9.571	A
B-A	166	373	0.445	165	0.9	18.893	C
C-AB	10	530	0.019	10	0.0	7.605	A
C-A	556			556			
A-B	129			129			
A-C	453			453			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	33	326	0.101	33	0.1	13.486	B
B-A	204	322	0.632	200	1.7	31.492	D
C-AB	12	499	0.024	12	0.0	8.139	A
C-A	682			682			
A-B	159			159			
A-C	555			555			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	33	320	0.103	33	0.1	13.814	B
B-A	204	322	0.632	203	1.8	33.058	D
C-AB	12	499	0.024	12	0.0	8.139	A
C-A	682			682			
A-B	159			159			
A-C	555			555			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	27	435	0.062	27	0.1	9.714	A
B-A	166	373	0.445	170	0.9	19.773	C
C-AB	10	530	0.019	10	0.0	7.609	A
C-A	556			556			
A-B	129			129			
A-C	453			453			

18:00 - 18:15

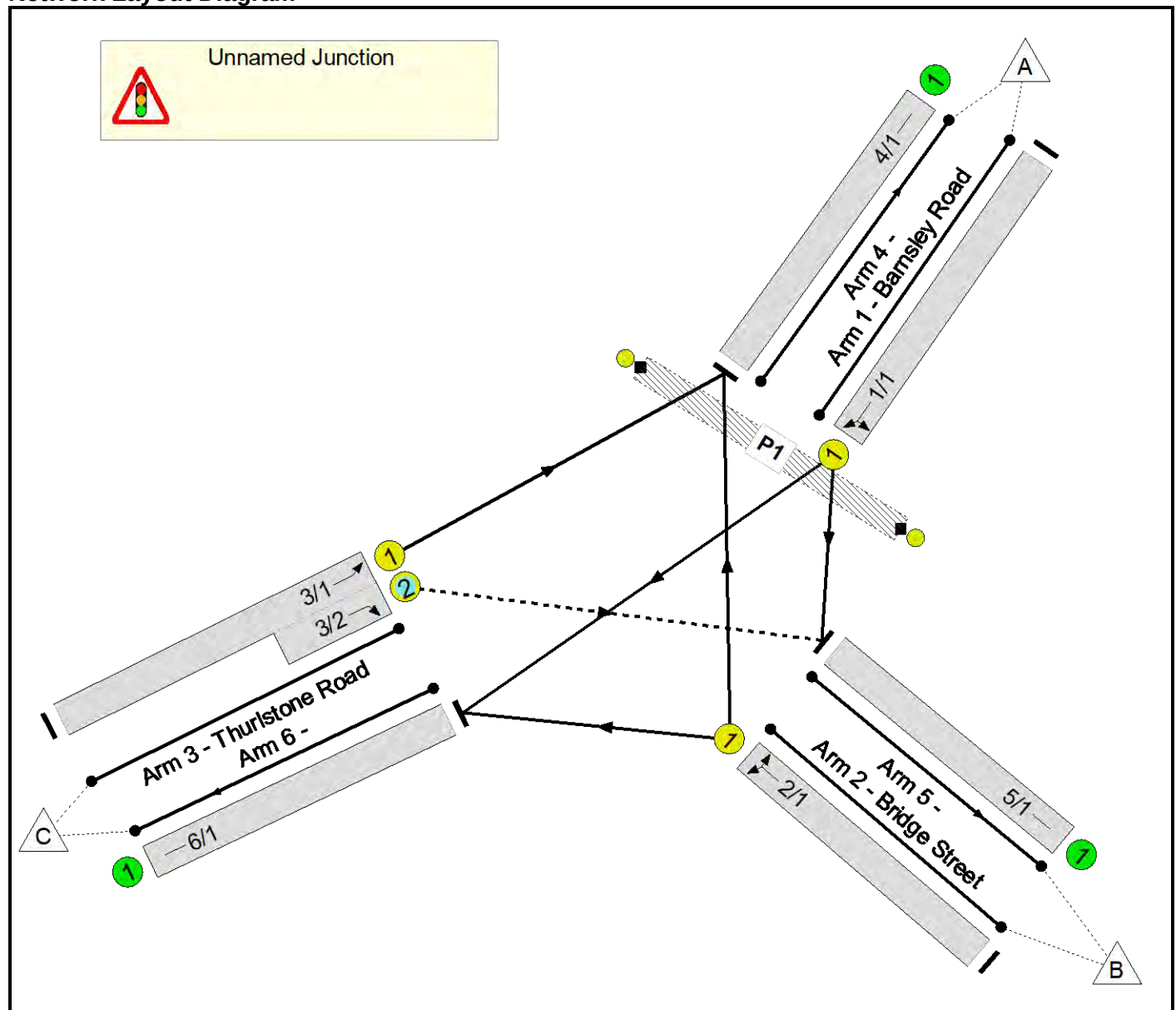
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	23	494	0.046	23	0.1	8.394	A
B-A	139	410	0.340	141	0.6	14.770	B
C-AB	8	554	0.015	8	0.0	7.262	A
C-A	466			466			
A-B	108			108			
A-C	379			379			

Full Input Data And Results
Full Input Data And Results

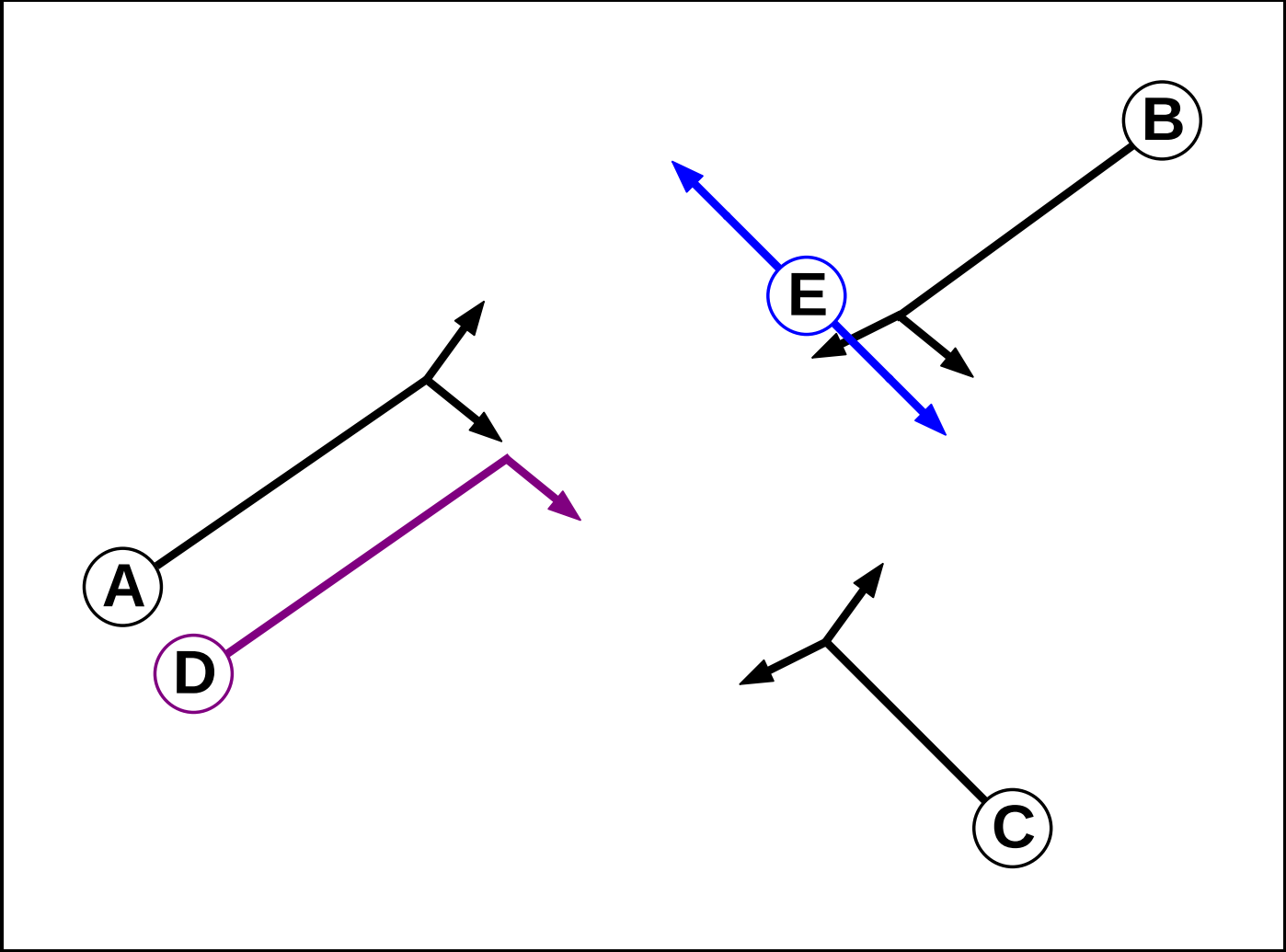
User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	200311 Thurston Road-Bridge Street-Barnsley.lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



Phase 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	Ind. Arrow	A	4	4
E	Pedestrian		10	10

Full Input Data And Results

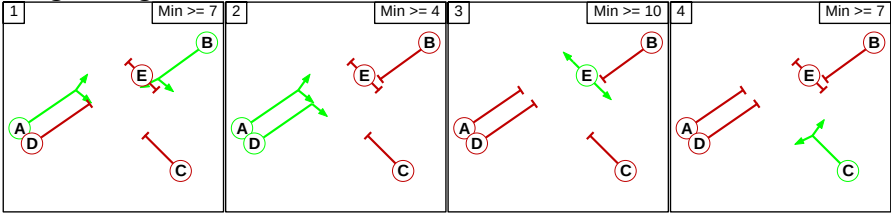
Phase Intergreens Matrix

Terminating Phase	Starting Phase					
		A	B	C	D	E
	A		-	6	-	6
	B	-		6	6	5
	C	7	7		6	8
	D	-	5	5		6
	E	8	8	8	8	

Phases in Stage

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

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	4
	1		6	6	6
	2	5		6	6
	3	8	8		8
	4	7	X	8	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Unnamed Junction											
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)
3/2 (Thurlstone Road)	5/1 (Right)	1439	0	1/1	1.09	All	-	-	-	-	-

Full Input Data And Results

Lane Input Data

Junction: Unnamed Junction												
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 (Barnsley Road)	U	B	2	3	60.0	Geom	-	4.50	0.00	Y	Arm 5 Left	Inf
											Arm 6 Ahead	Inf
2/1 (Bridge Street)	U	C	2	3	60.0	Geom	-	3.80	0.00	Y	Arm 4 Right	Inf
											Arm 6 Left	Inf
3/1 (Thurlstone Road)	U	A	2	3	60.0	Geom	-	2.80	0.00	Y	Arm 4 Ahead	Inf
3/2 (Thurlstone Road)	O	A D	2	3	5.0	Geom	-	3.00	0.00	N	Arm 5 Right	Inf
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2018 AM Peak Hour'	07:30	08:30	01:00	
2: '2018 PM Peak Hour'	17:00	18:00	01:00	
3: '2030 AM Base'	07:30	08:30	01:00	
4: '2030 PM Base'	17:00	18:00	01:00	
5: '2030 AM Design'	07:30	08:30	01:00	
6: '2030 PM Design'	17:00	18:00	01:00	

Scenario 1: '2018 AM Peak Hour' (FG1: '2018 AM Peak Hour', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination				
Origin	A	B	C	Tot.	
	A	0	293	216	509
	B	475	0	73	548
	C	407	122	0	529
	Tot.	882	415	289	1586

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: 2018 AM Peak Hour
Junction: Unnamed Junction	
1/1	509
2/1	548
3/1 (with short)	529(In) 407(Out)
3/2 (short)	122
4/1	882
5/1	415
6/1	289

Lane Saturation Flows

Junction: Unnamed Junction								
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 (Barnsley Road)	4.50	0.00	Y	Arm 5 Left	Inf	57.6 %	2065	2065
				Arm 6 Ahead	Inf	42.4 %		
2/1 (Bridge Street)	3.80	0.00	Y	Arm 4 Right	Inf	86.7 %	1995	1995
				Arm 6 Left	Inf	13.3 %		
3/1 (Thurlstone Road)	2.80	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1895	1895
3/2 (Thurlstone Road)	3.00	0.00	N	Arm 5 Right	Inf	100.0 %	2055	2055
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2018 PM Peak Hour' (FG2: '2018 PM Peak Hour', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination				
		A	B	C	Tot.
	A	0	443	290	733
	B	328	0	187	515
	C	242	147	0	389
	Tot.	570	590	477	1637

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: 2018 PM Peak Hour
Junction: Unnamed Junction	
1/1	733
2/1	515
3/1 (with short)	389(In) 242(Out)
3/2 (short)	147
4/1	570
5/1	590
6/1	477

Lane Saturation Flows

Junction: Unnamed Junction								
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 (Barnsley Road)	4.50	0.00	Y	Arm 5 Left	Inf	60.4 %	2065	2065
				Arm 6 Ahead	Inf	39.6 %		
2/1 (Bridge Street)	3.80	0.00	Y	Arm 4 Right	Inf	63.7 %	1995	1995
				Arm 6 Left	Inf	36.3 %		
3/1 (Thurlstone Road)	2.80	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1895	1895
3/2 (Thurlstone Road)	3.00	0.00	N	Arm 5 Right	Inf	100.0 %	2055	2055
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 3: '2030 AM Base' (FG3: '2030 AM Base', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination				
		A	B	C	Tot.
	A	0	327	241	568
	B	569	0	82	651
	C	454	136	0	590
	Tot.	1023	463	323	1809

Traffic Lane Flows

Lane	Scenario 3: 2030 AM Base
Junction: Unnamed Junction	
1/1	568
2/1	651
3/1 (with short)	590(In) 454(Out)
3/2 (short)	136
4/1	1023
5/1	463
6/1	323

Lane Saturation Flows

Junction: Unnamed Junction								
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 (Barnsley Road)	4.50	0.00	Y	Arm 5 Left Arm 6 Ahead	Inf Inf	57.6 % 42.4 %	2065	2065
2/1 (Bridge Street)	3.80	0.00	Y	Arm 4 Right Arm 6 Left	Inf Inf	87.4 % 12.6 %	1995	1995
3/1 (Thurlstone Road)	2.80	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1895	1895
3/2 (Thurlstone Road)	3.00	0.00	N	Arm 5 Right	Inf	100.0 %	2055	2055
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 4: '2030 PM Base' (FG4: '2030 PM Base', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination				
Origin		A	B	C	Tot.
	A	0	491	322	813
	B	360	0	207	567
	C	268	163	0	431
	Tot.	628	654	529	1811

Traffic Lane Flows

Lane	Scenario 4: 2030 PM Base
Junction: Unnamed Junction	
1/1	813
2/1	567
3/1 (with short)	431(In) 268(Out)
3/2 (short)	163
4/1	628
5/1	654
6/1	529

Lane Saturation Flows

Junction: Unnamed Junction								
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 (Barnsley Road)	4.50	0.00	Y	Arm 5 Left Arm 6 Ahead	Inf Inf	60.4 % 39.6 %	2065	2065
2/1 (Bridge Street)	3.80	0.00	Y	Arm 4 Right Arm 6 Left	Inf Inf	63.5 % 36.5 %	1995	1995
3/1 (Thurlstone Road)	2.80	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1895	1895
3/2 (Thurlstone Road)	3.00	0.00	N	Arm 5 Right	Inf	100.0 %	2055	2055
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 5: '2030 AM Design' (FG5: '2030 AM Design', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination				
Origin		A	B	C	Tot.
	A	0	348	253	601
	B	543	0	82	625
	C	462	136	0	598
	Tot.	1005	484	335	1824

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 5: 2030 AM Design
Junction: Unnamed Junction	
1/1	601
2/1	625
3/1 (with short)	598(In) 462(Out)
3/2 (short)	136
4/1	1005
5/1	484
6/1	335

Lane Saturation Flows

Junction: Unnamed Junction								
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 (Barnsley Road)	4.50	0.00	Y	Arm 5 Left	Inf	57.9 %	2065	2065
				Arm 6 Ahead	Inf	42.1 %		
2/1 (Bridge Street)	3.80	0.00	Y	Arm 4 Right	Inf	86.9 %	1995	1995
				Arm 6 Left	Inf	13.1 %		
3/1 (Thurlstone Road)	2.80	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1895	1895
3/2 (Thurlstone Road)	3.00	0.00	N	Arm 5 Right	Inf	100.0 %	2055	2055
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 6: '2030 PM Design' (FG6: '2030 PM Design', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination				
		A	B	C	Tot.
	A	0	499	327	826
	B	385	0	207	592
	C	282	163	0	445
	Tot.	667	662	534	1863

Full Input Data And Results

Traffic Lane Flows

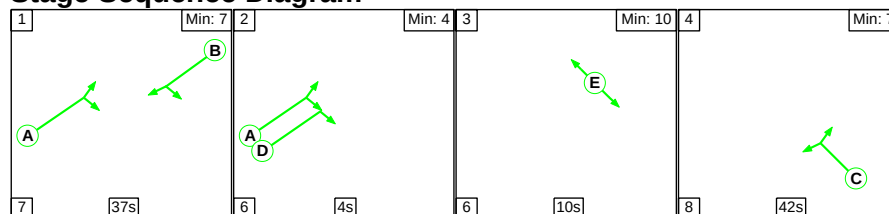
Lane	Scenario 6: 2030 PM Design
Junction: Unnamed Junction	
1/1	826
2/1	592
3/1 (with short)	445(In) 282(Out)
3/2 (short)	163
4/1	667
5/1	662
6/1	534

Lane Saturation Flows

Junction: Unnamed Junction								
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 (Barnsley Road)	4.50	0.00	Y	Arm 5 Left	Inf	60.4 %	2065	2065
				Arm 6 Ahead	Inf	39.6 %		
2/1 (Bridge Street)	3.80	0.00	Y	Arm 4 Right	Inf	65.0 %	1995	1995
				Arm 6 Left	Inf	35.0 %		
3/1 (Thurlstone Road)	2.80	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1895	1895
3/2 (Thurlstone Road)	3.00	0.00	N	Arm 5 Right	Inf	100.0 %	2055	2055
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 1: '2018 AM Peak Hour' (FG1: '2018 AM Peak Hour', Plan 1: 'Network Control Plan 1')

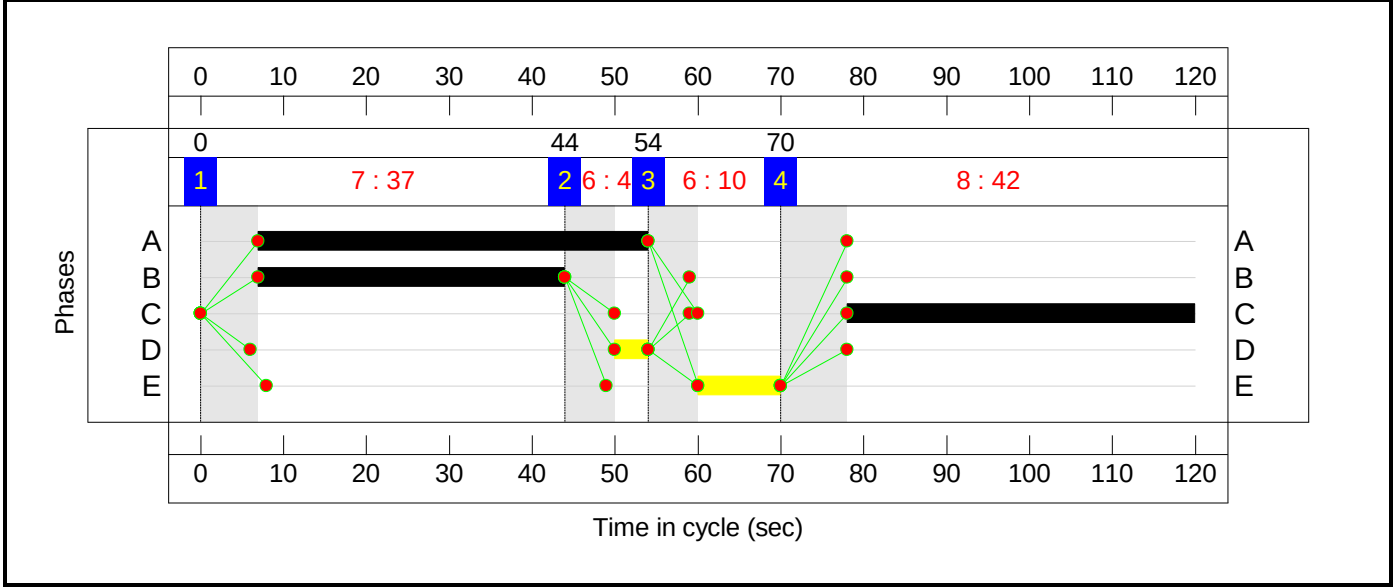
Stage Sequence Diagram

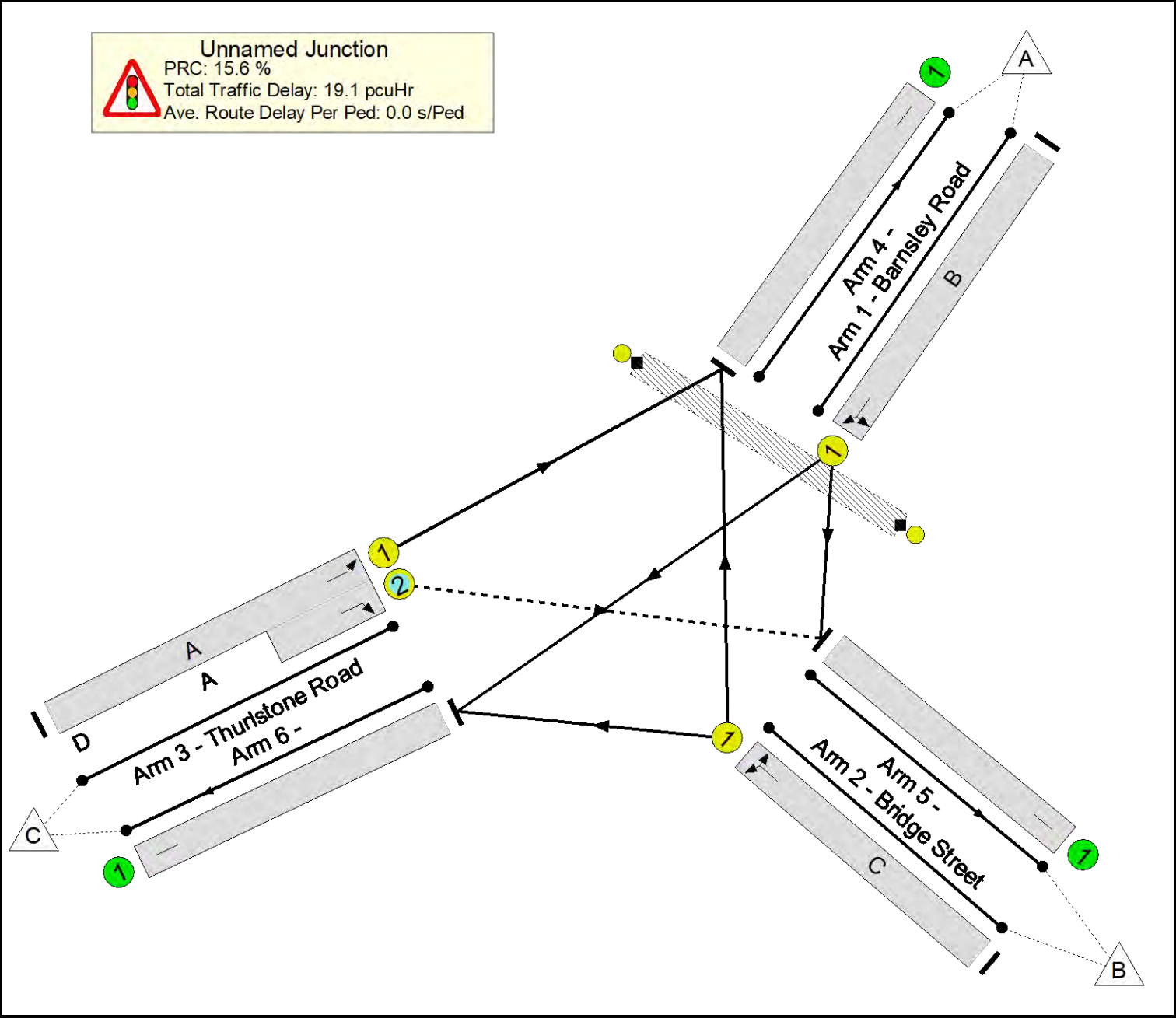


Stage Timings

Stage	1	2	3	4
Duration	37	4	10	42
Change Point	0	44	54	70

Signal Timings Diagram





Full Input Data And Results

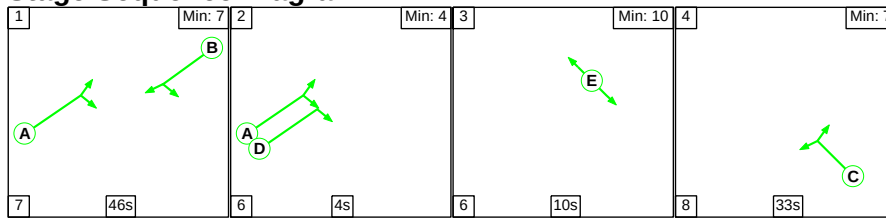
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	77.8%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	77.8%
1/1	Barnsley Road Left Ahead	U	N/A	N/A	B		1	37	-	509	2065	654	77.8%
2/1	Bridge Street Right Left	U	N/A	N/A	C		1	42	-	548	1995	715	76.7%
3/1+3/2	Thurlstone Road Ahead Right	U+O	N/A	N/A	A	D	1	47	4	529	1895:2055	633+190	64.3 : 64.3%
4/1		U	N/A	N/A	-		-	-	-	882	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	415	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	289	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	E		1	10	-	0	-	0	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	80	42	0	14.9	4.2	0.0	19.1	-	-	-	-
Unnamed Junction	-	-	80	42	0	14.9	4.2	0.0	19.1	-	-	-	-
1/1	509	509	-	-	-	5.3	1.7	-	7.0	49.3	15.3	1.7	17.0
2/1	548	548	-	-	-	5.2	1.6	-	6.8	44.6	16.1	1.6	17.7
3/1+3/2	529	529	80	42	0	4.4	0.9	-	5.3	36.3	12.3	0.9	13.2
4/1	882	882	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	415	415	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	289	289	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
C1 PRC for Signalled Lanes (%): 15.6 Total Delay for Signalled Lanes (pcuHr): 19.10 Cycle Time (s): 120 PRC Over All Lanes (%): 15.6 Total Delay Over All Lanes(pcuHr): 19.10													

Full Input Data And Results

Scenario 2: '2018 PM Peak Hour' (FG2: '2018 PM Peak Hour', Plan 1: 'Network Control Plan 1')

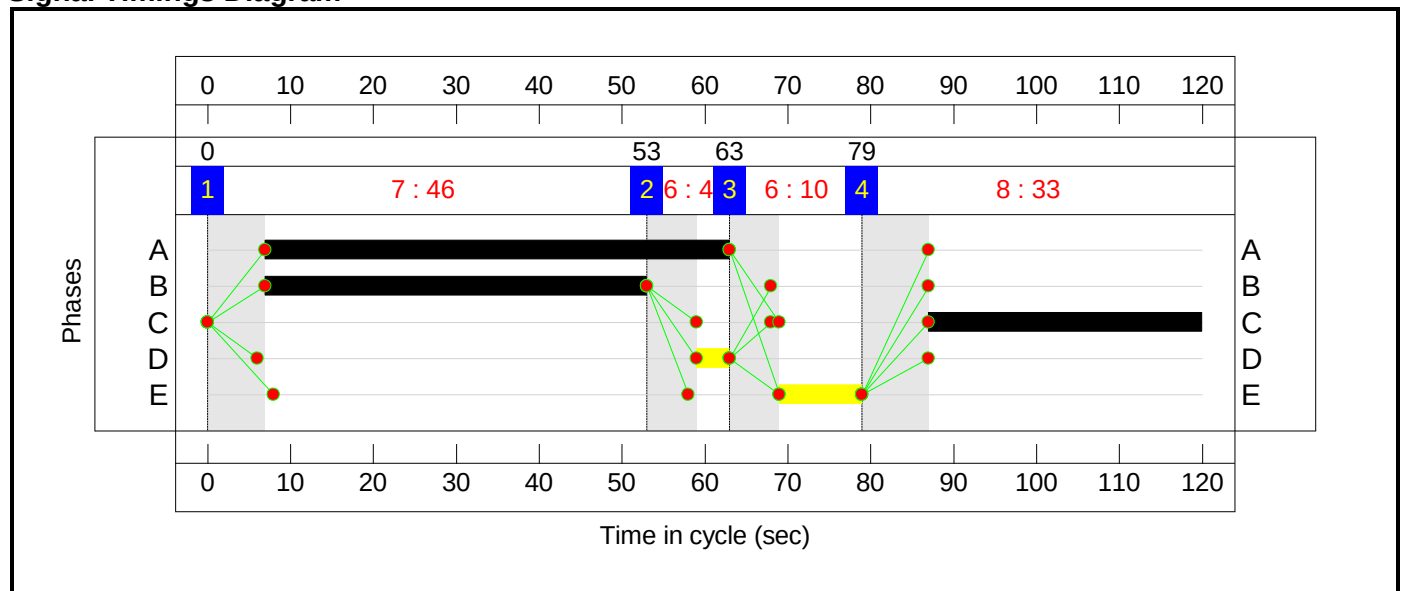
Stage Sequence Diagram



Stage Timings

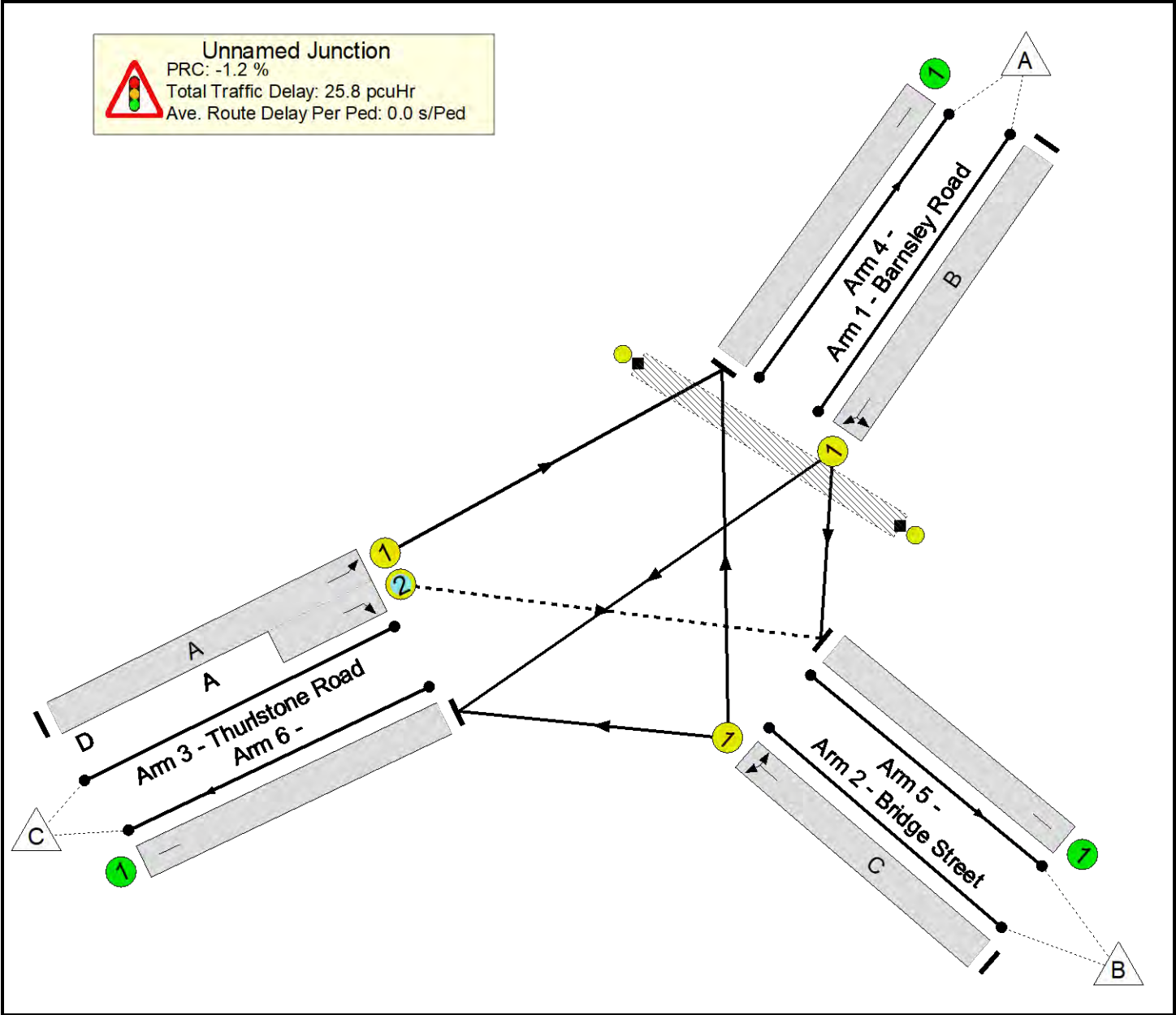
Stage	1	2	3	4
Duration	46	4	10	33
Change Point	0	53	63	79

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



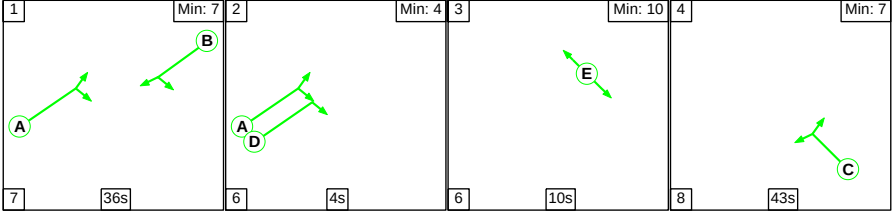
Network Results

Network Results

Full Input Data And Results

Scenario 3: '2030 AM Base' (FG3: '2030 AM Base', Plan 1: 'Network Control Plan 1')

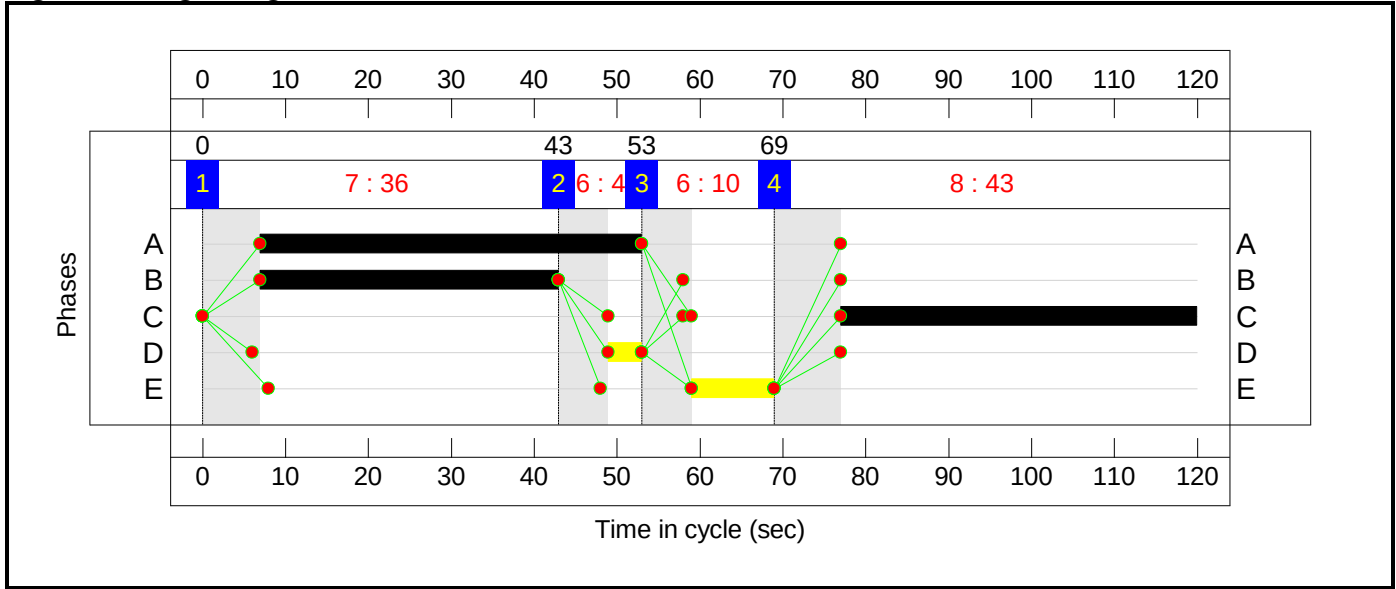
Stage Sequence Diagram



Stage Timings

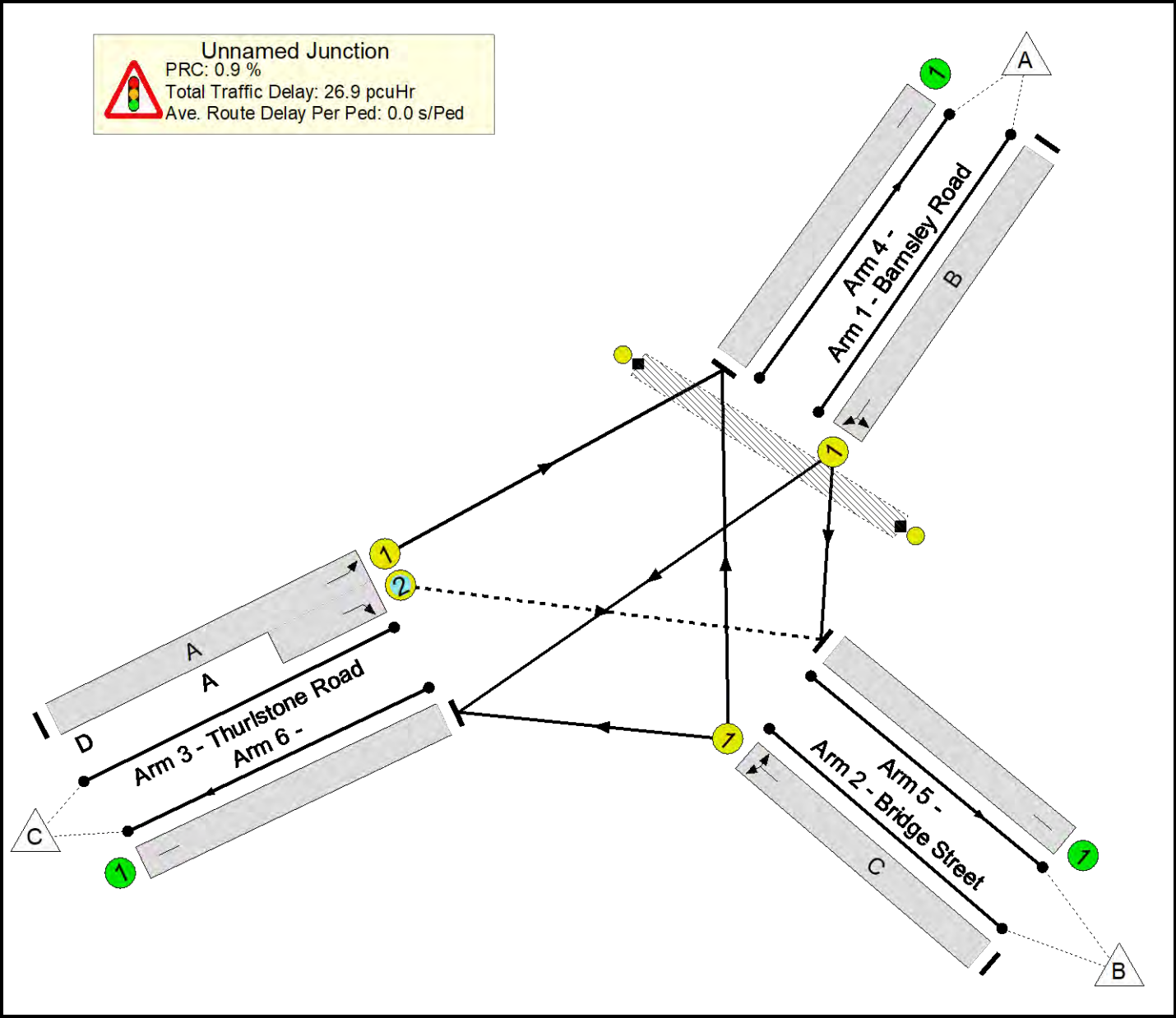
Stage	1	2	3	4
Duration	36	4	10	43
Change Point	0	43	53	69

Signal Timings Diagram



Full Input Data And Results

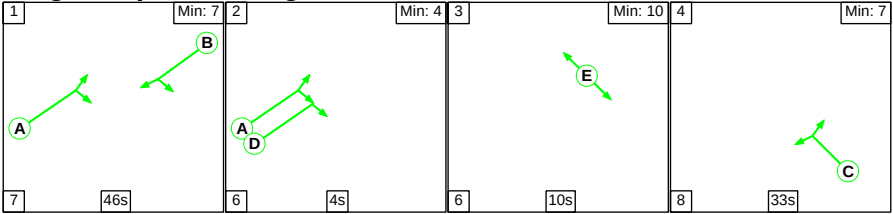
Network Layout Diagram



Network Results

Network Results

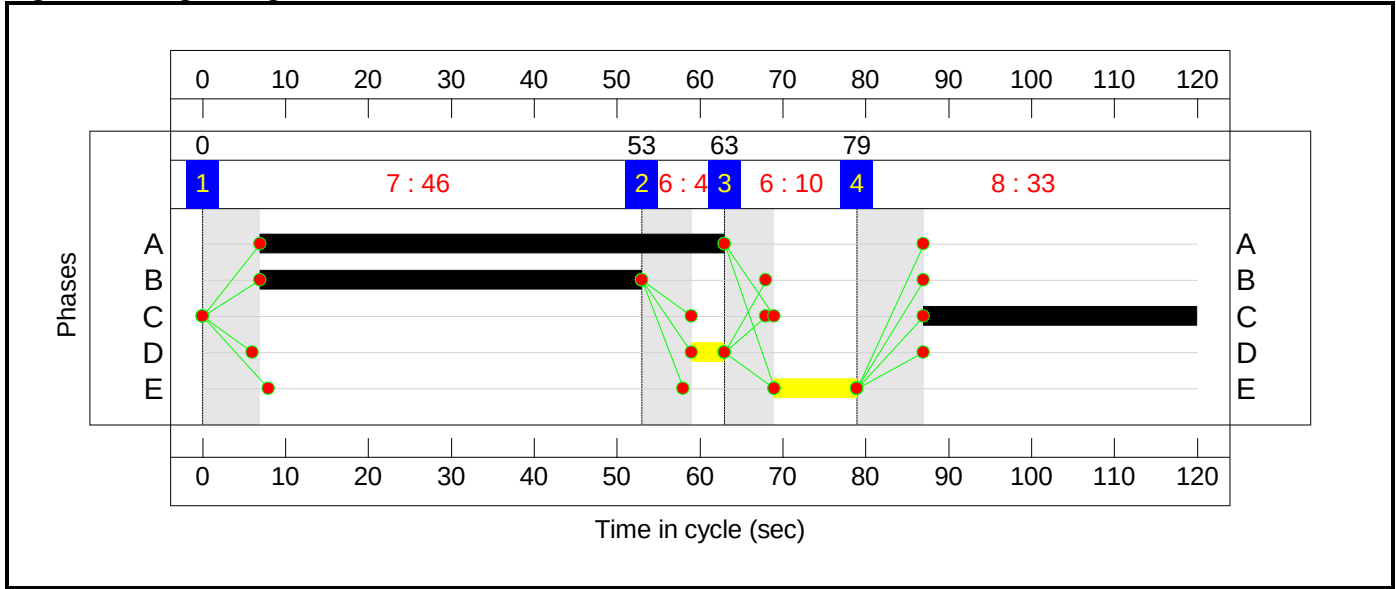
Stage Sequence Diagram



Stage Timings

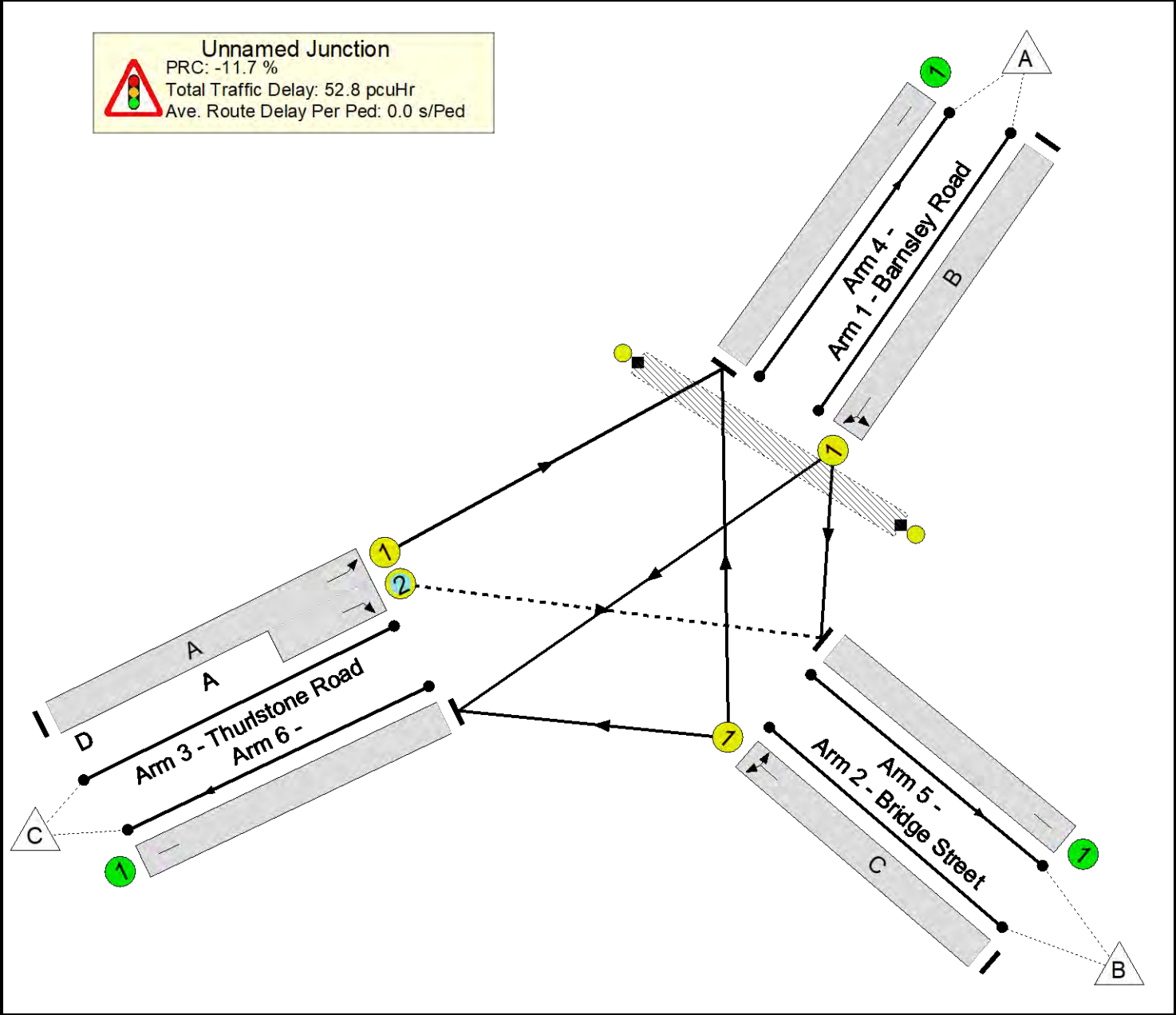
Stage	1	2	3	4
Duration	46	4	10	33
Change Point	0	53	63	79

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Network Results													
Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	100.5%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	100.5%
1/1	Barnsley Road Left Ahead	U	N/A	N/A	B		1	46	-	813	2065	809	100.5%
2/1	Bridge Street Right Left	U	N/A	N/A	C		1	33	-	567	1995	565	100.3%
3/1+3/2	Thurlstone Road Ahead Right	U+O	N/A	N/A	A	D	1	56	4	431	1895:2055	282+171	95.2 : 95.2%
4/1		U	N/A	N/A	-		-	-	-	628	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	654	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	529	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	E		1	10	-	0	-	0	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	0	163	0	18.8	34.0	0.0	52.8	-	-	-	-
Unnamed Junction	-	-	0	163	0	18.8	34.0	0.0	52.8	-	-	-	-
1/1	813	809	-	-	-	8.5	15.3	-	23.8	105.5	27.2	15.3	42.6
2/1	567	565	-	-	-	6.9	12.4	-	19.2	122.2	19.0	12.4	31.3
3/1+3/2	431	431	0	163	0	3.5	6.3	-	9.7	81.3	5.7	6.3	12.0
4/1	627	627	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	651	651	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	527	527	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
C1 PRC for Signalled Lanes (%): -11.7 Total Delay for Signalled Lanes (pcuHr): 52.82 Cycle Time (s): 120 PRC Over All Lanes (%): -11.7 Total Delay Over All Lanes(pcuHr): 52.82													

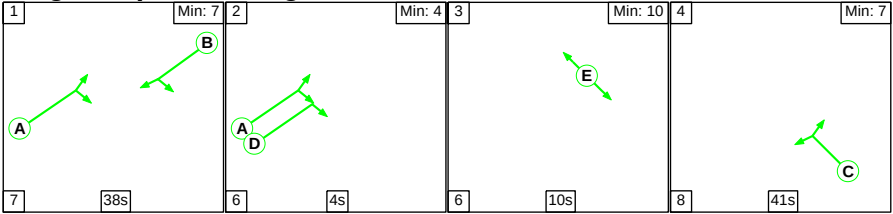
[illegible]

C1	PRC for Signalled Lanes (%):	-11.7	Total Delay for Signalled Lanes (pcuHr):	52.82	Cycle Time (s): 120
	PRC Over All Lanes (%):	-11.7	Total Delay Over All Lanes(pcuHr):	52.82	

Full Input Data And Results

Scenario 5: '2030 AM Design' (FG5: '2030 AM Design', Plan 1: 'Network Control Plan 1')

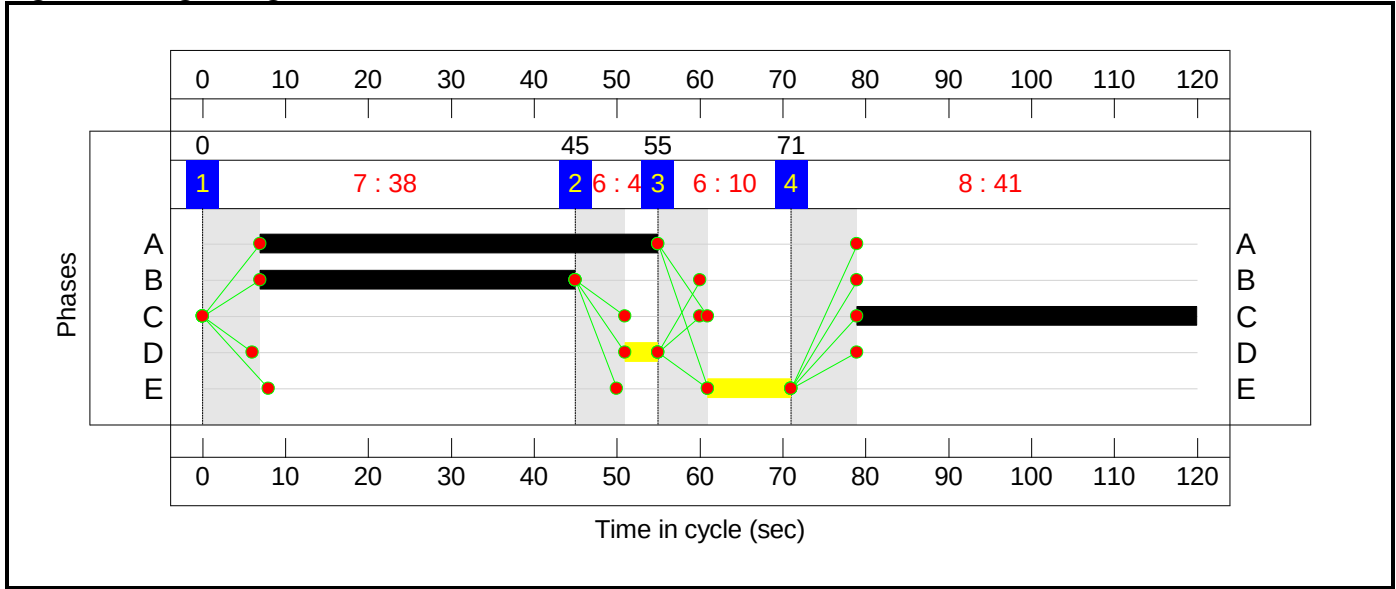
Stage Sequence Diagram



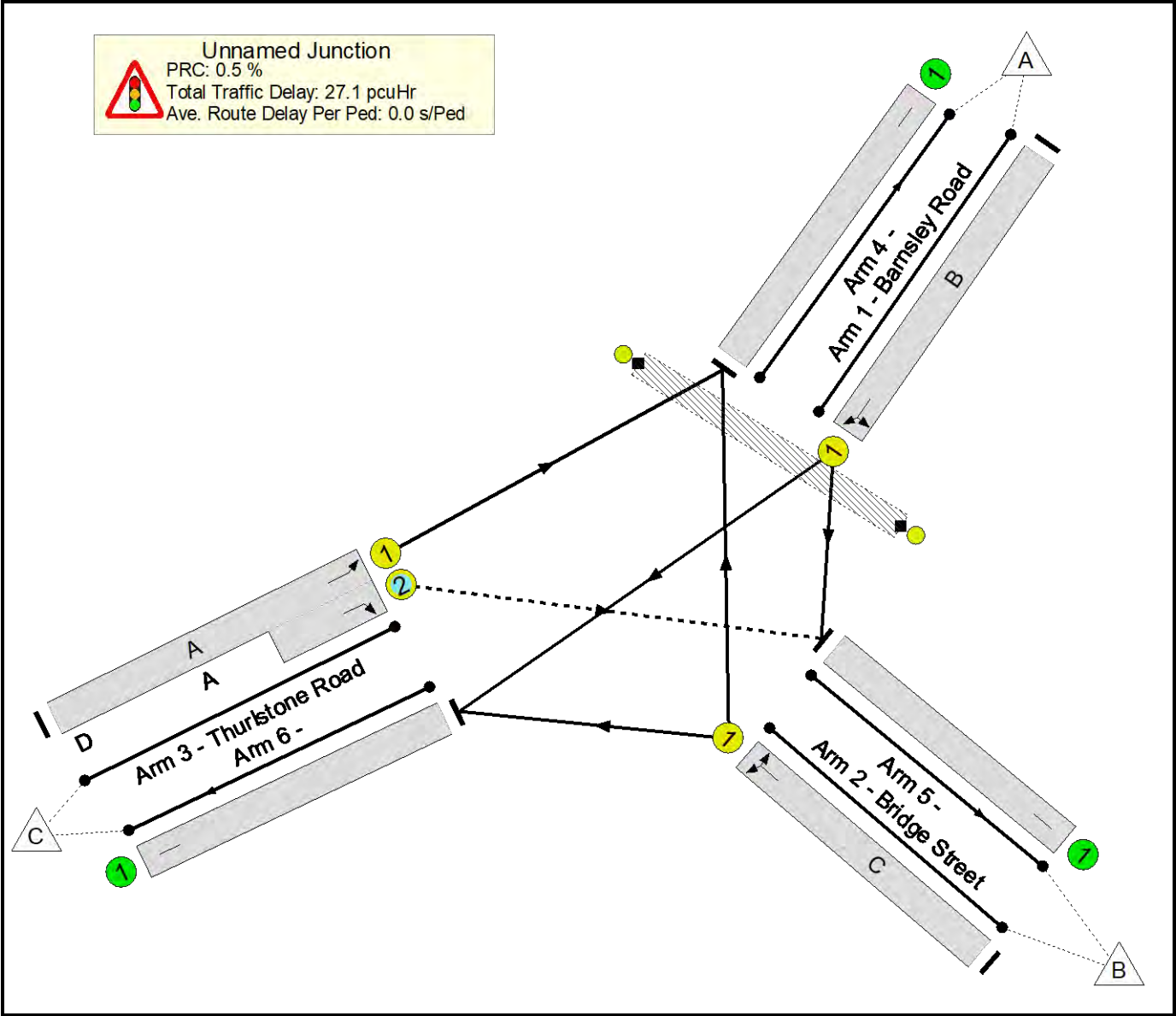
Stage Timings

Stage	1	2	3	4
Duration	38	4	10	41
Change Point	0	45	55	71

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram



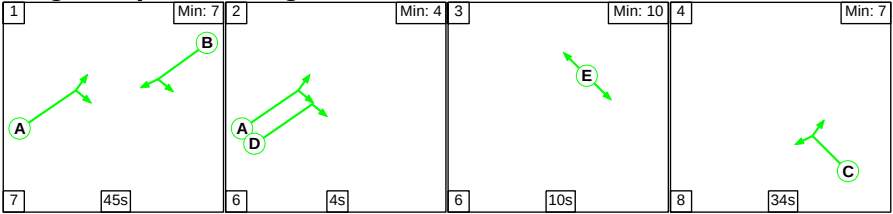
Network Results

Network Results

Full Input Data And Results

Scenario 6: '2030 PM Design' (FG6: '2030 PM Design', Plan 1: 'Network Control Plan 1')

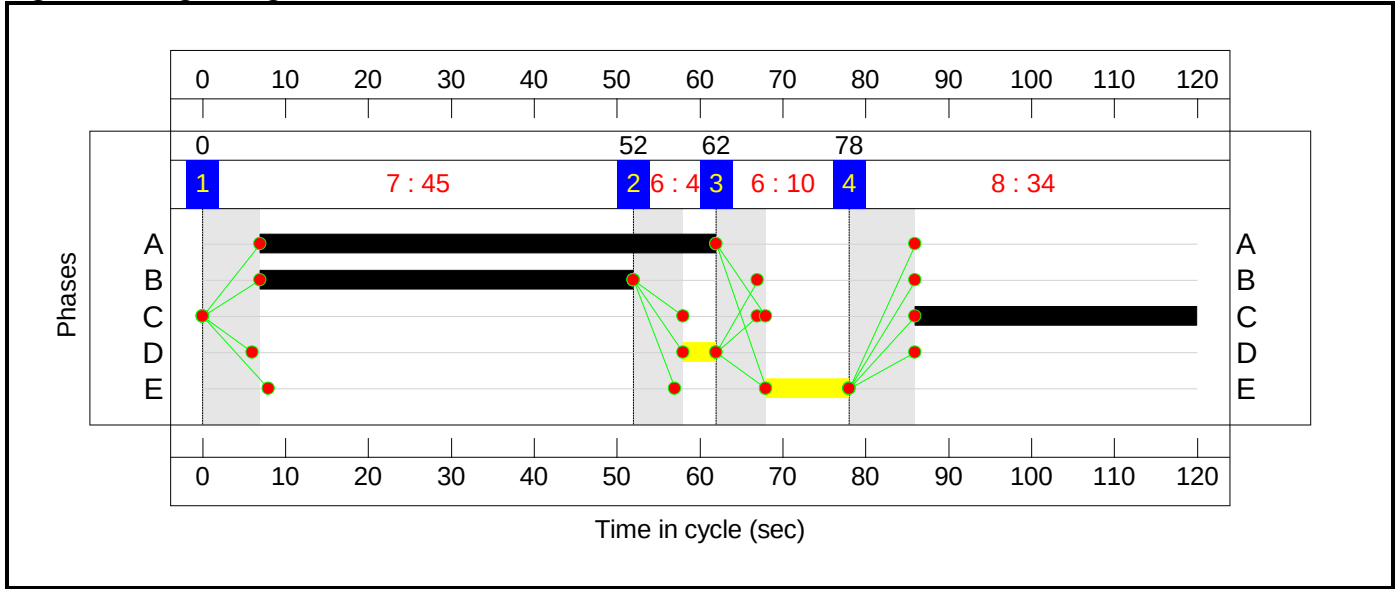
Stage Sequence Diagram



Stage Timings

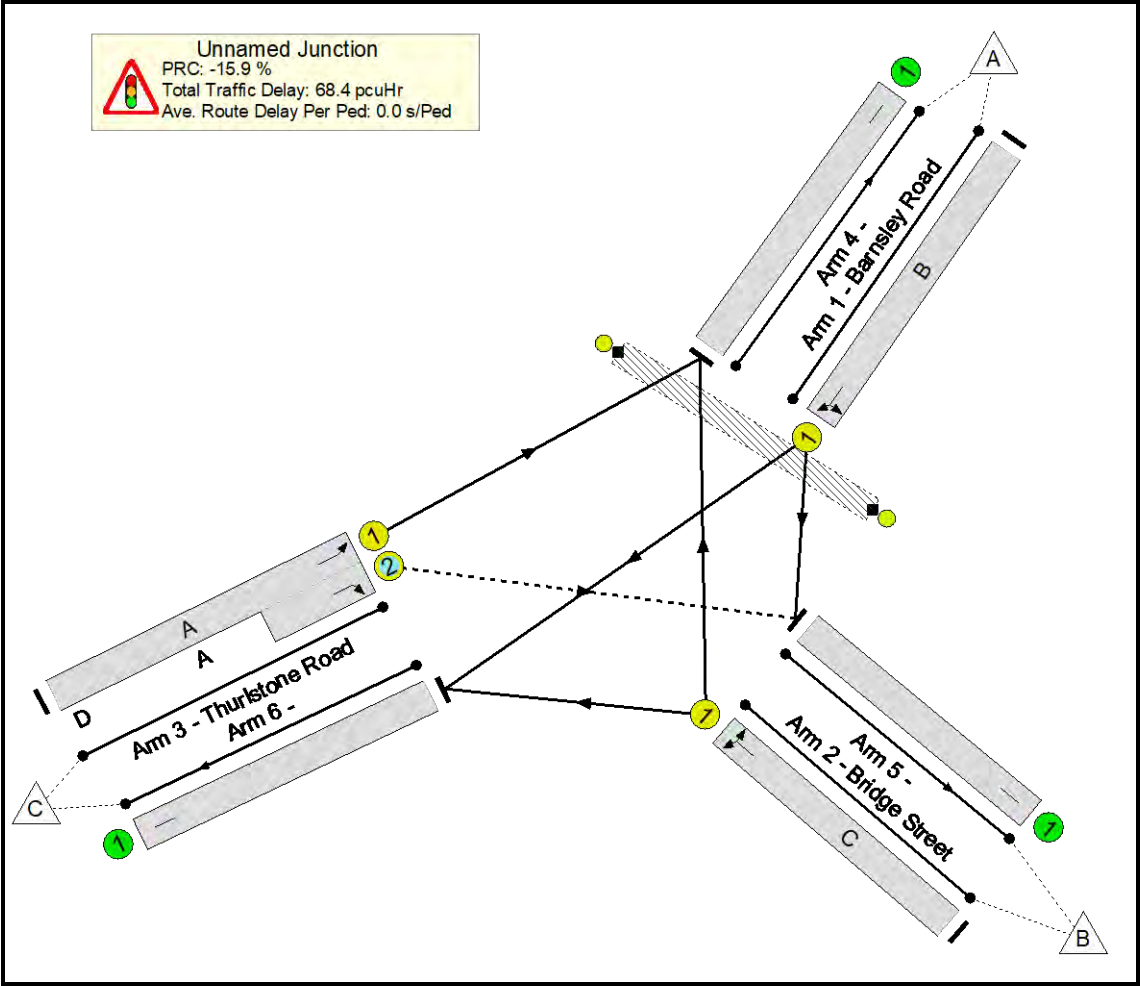
Stage	1	2	3	4
Duration	45	4	10	34
Change Point	0	52	62	78

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Network Results

Network Results

Junctions 9						
ARCADY 9 - Roundabout Module						
Version: 9.5.1.7462 © Copyright TRL Limited, 2019						
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk						
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution						

Filename: Hoylandswaine Roundabout.j9

Path: O:\Halifax Road, Penistone\ANALYSIS\CAPACITY\Roundabouts\Hoylandswaine Roundabout\200309

Report generation date: 10/03/2020 09:37:50

»2018 COUNT, AM

»2018 COUNT, PM

»2030 BASE, AM

»2030 BASE, PM

»2030 DESIGN, AM

»2030 DESIGN, PM

Summary of junction performance

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
2018 COUNT						
1 - A628 Barnsley Road (N)	0.8	5.00	0.42	1.4	6.33	0.56
2 - A629 High Lee Lane	0.6	5.11	0.37	0.6	5.57	0.35
3 - A628 Barnsley Road (S)	1.9	10.41	0.63	0.8	6.75	0.43
4 - A629 Halifax Road	1.4	7.93	0.56	0.5	4.55	0.31
2030 BASE						
1 - A628 Barnsley Road (N)	1.0	5.70	0.48	1.8	7.70	0.63
2 - A629 High Lee Lane	0.8	5.80	0.42	0.8	6.43	0.41
3 - A628 Barnsley Road (S)	2.9	14.50	0.73	1.1	7.85	0.49
4 - A629 Halifax Road	2.0	10.51	0.65	0.6	4.98	0.36
2030 DESIGN						
1 - A628 Barnsley Road (N)	1.2	6.52	0.53	2.7	10.08	0.71
2 - A629 High Lee Lane	0.9	6.42	0.46	1.1	7.98	0.49
3 - A628 Barnsley Road (S)	4.0	19.52	0.79	1.3	9.27	0.54
4 - A629 Halifax Road	3.4	15.74	0.76	0.7	5.32	0.39

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

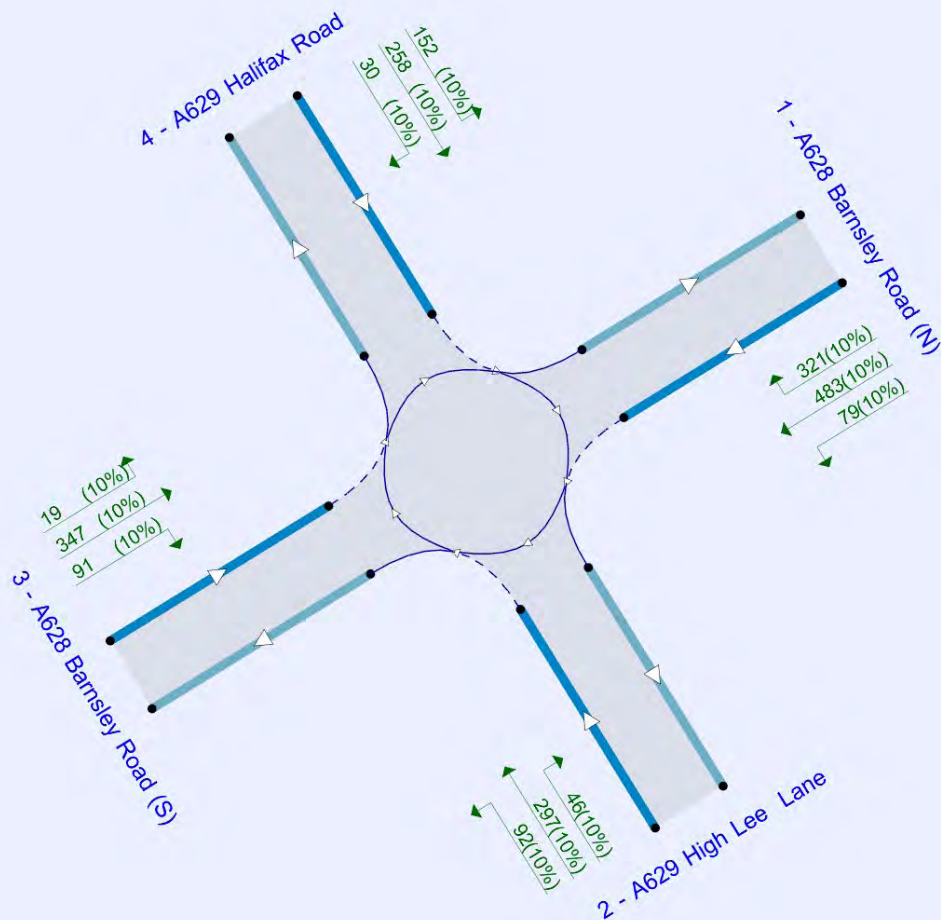
File summary

File Description

Title	Hoylandswaine Roundabout
Location	
Site number	
Date	14/11/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	UK
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



Flows show original traffic demand (PCU/hr).

The junction diagram reflects the last run of Junctions.

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		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)
D1	2018 COUNT	AM	ONE HOUR	07:15	08:45	15
D2	2018 COUNT	PM	ONE HOUR	16:45	18:15	15
D3	2030 BASE	AM	ONE HOUR	07:15	08:45	15
D4	2030 BASE	PM	ONE HOUR	16:45	18:15	15
D5	2030 DESIGN	AM	ONE HOUR	07:15	08:45	15
D6	2030 DESIGN	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2018 COUNT, 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	Hoylandswaine Roundabout	Standard Roundabout		1, 2, 3, 4	7.38	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A628 Barnsley Road (N)	
2	A629 High Lee Lane	
3	A628 Barnsley Road (S)	
4	A629 Halifax Road	

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 - A628 Barnsley Road (N)	5.10	6.10	1.6	11.0	38.0	19.8	
2 - A629 High Lee Lane	4.40	4.80	15.6	163.0	38.0	15.3	
3 - A628 Barnsley Road (S)	4.60	5.40	1.3	9.0	38.0	40.0	
4 - A629 Halifax Road	4.60	4.90	12.5	38.0	38.0	17.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A628 Barnsley Road (N)	0.633	1639
2 - A629 High Lee Lane	0.651	1581
3 - A628 Barnsley Road (S)	0.544	1336
4 - A629 Halifax Road	0.643	1579

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)
D1	2018 COUNT	AM	ONE HOUR	07:15	08:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A628 Barnsley Road (N)		✓	513	100.000
2 - A629 High Lee Lane		✓	407	100.000
3 - A628 Barnsley Road (S)		✓	599	100.000
4 - A629 Halifax Road		✓	575	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1 - A628 Barnsley Road (N)	2 - A629 High Lee Lane	3 - A628 Barnsley Road (S)	4 - A629 Halifax Road
From	1 - A628 Barnsley Road (N)	6	37	315	155
	2 - A629 High Lee Lane	39	1	73	294
	3 - A628 Barnsley Road (S)	475	109	2	13
	4 - A629 Halifax Road	282	271	22	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - A628 Barnsley Road (N)	2 - A629 High Lee Lane	3 - A628 Barnsley Road (S)	4 - A629 Halifax Road
From	1 - A628 Barnsley Road (N)	10	10	10	10
	2 - A629 High Lee Lane	10	10	10	10
	3 - A628 Barnsley Road (S)	10	10	10	10
	4 - A629 Halifax Road	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - A628 Barnsley Road (N)	0.42	5.00	0.8	A
2 - A629 High Lee Lane	0.37	5.11	0.6	A
3 - A628 Barnsley Road (S)	0.63	10.41	1.9	B
4 - A629 Halifax Road	0.56	7.93	1.4	A

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A628 Barnsley Road (N)	386	303	1447	0.267	385	0.4	3.723	A
2 - A629 High Lee Lane	306	375	1337	0.229	305	0.3	3.833	A
3 - A628 Barnsley Road (S)	451	371	1134	0.398	448	0.7	5.748	A
4 - A629 Halifax Road	433	473	1275	0.339	431	0.6	4.676	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A628 Barnsley Road (N)	461	363	1409	0.327	461	0.5	4.174	A
2 - A629 High Lee Lane	366	449	1289	0.284	365	0.4	4.287	A
3 - A628 Barnsley Road (S)	538	444	1094	0.492	537	1.1	7.092	A
4 - A629 Halifax Road	517	567	1215	0.426	516	0.8	5.657	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A628 Barnsley Road (N)	565	444	1358	0.416	564	0.8	4.981	A
2 - A629 High Lee Lane	448	550	1223	0.366	447	0.6	5.098	A
3 - A628 Barnsley Road (S)	660	544	1040	0.634	656	1.9	10.236	B
4 - A629 Halifax Road	633	693	1134	0.558	631	1.4	7.836	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A628 Barnsley Road (N)	565	446	1357	0.416	565	0.8	5.000	A
2 - A629 High Lee Lane	448	550	1223	0.367	448	0.6	5.112	A
3 - A628 Barnsley Road (S)	660	545	1039	0.635	659	1.9	10.413	B
4 - A629 Halifax Road	633	696	1132	0.559	633	1.4	7.934	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A628 Barnsley Road (N)	461	366	1407	0.328	462	0.5	4.195	A
2 - A629 High Lee Lane	366	450	1288	0.284	367	0.4	4.302	A
3 - A628 Barnsley Road (S)	538	446	1093	0.493	542	1.1	7.218	A
4 - A629 Halifax Road	517	571	1212	0.427	519	0.8	5.735	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A628 Barnsley Road (N)	386	306	1445	0.267	387	0.4	3.744	A
2 - A629 High Lee Lane	306	377	1336	0.229	307	0.3	3.852	A
3 - A628 Barnsley Road (S)	451	373	1133	0.398	452	0.7	5.832	A
4 - A629 Halifax Road	433	477	1272	0.340	434	0.6	4.729	A

2018 COUNT, 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	Hoylandswaine Roundabout	Standard Roundabout		1, 2, 3, 4	5.92	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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)
D2	2018 COUNT	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A628 Barnsley Road (N)		✓	710	100.000
2 - A629 High Lee Lane		✓	355	100.000
3 - A628 Barnsley Road (S)		✓	404	100.000
4 - A629 Halifax Road		✓	363	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
From		1 - A628 Barnsley Road (N)	2 - A629 High Lee Lane	3 - A628 Barnsley Road (S)	4 - A629 Halifax Road
	1 - A628 Barnsley Road (N)	6	71	412	221
	2 - A629 High Lee Lane	42	1	73	239
	3 - A628 Barnsley Road (S)	305	79	3	17
	4 - A629 Halifax Road	114	222	27	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1 - A628 Barnsley Road (N)	2 - A629 High Lee Lane	3 - A628 Barnsley Road (S)	4 - A629 Halifax Road
	1 - A628 Barnsley Road (N)	10	10	10	10
	2 - A629 High Lee Lane	10	10	10	10
	3 - A628 Barnsley Road (S)	10	10	10	10
	4 - A629 Halifax Road	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - A628 Barnsley Road (N)	0.56	6.33	1.4	A
2 - A629 High Lee Lane	0.35	5.57	0.6	A
3 - A628 Barnsley Road (S)	0.43	6.75	0.8	A
4 - A629 Halifax Road	0.31	4.55	0.5	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A628 Barnsley Road (N)	535	249	1481	0.361	532	0.6	4.161	A
2 - A629 High Lee Lane	267	501	1255	0.213	266	0.3	4.001	A
3 - A628 Barnsley Road (S)	304	381	1128	0.270	303	0.4	4.786	A
4 - A629 Halifax Road	273	327	1369	0.200	272	0.3	3.606	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A628 Barnsley Road (N)	638	298	1450	0.440	637	0.9	4.865	A
2 - A629 High Lee Lane	319	601	1190	0.268	319	0.4	4.543	A
3 - A628 Barnsley Road (S)	363	457	1087	0.334	363	0.5	5.459	A
4 - A629 Halifax Road	326	391	1328	0.246	326	0.4	3.953	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A628 Barnsley Road (N)	782	365	1408	0.555	780	1.4	6.283	A
2 - A629 High Lee Lane	391	735	1103	0.354	390	0.6	5.551	A
3 - A628 Barnsley Road (S)	445	559	1032	0.431	444	0.8	6.722	A
4 - A629 Halifax Road	400	479	1271	0.314	399	0.5	4.537	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A628 Barnsley Road (N)	782	366	1408	0.555	782	1.4	6.327	A
2 - A629 High Lee Lane	391	737	1102	0.355	391	0.6	5.571	A
3 - A628 Barnsley Road (S)	445	560	1031	0.431	445	0.8	6.754	A
4 - A629 Halifax Road	400	480	1271	0.315	400	0.5	4.546	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A628 Barnsley Road (N)	638	299	1450	0.440	640	0.9	4.904	A
2 - A629 High Lee Lane	319	603	1188	0.269	320	0.4	4.565	A
3 - A628 Barnsley Road (S)	363	459	1086	0.334	364	0.6	5.494	A
4 - A629 Halifax Road	326	393	1326	0.246	327	0.4	3.965	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A628 Barnsley Road (N)	535	250	1480	0.361	536	0.6	4.195	A
2 - A629 High Lee Lane	267	505	1252	0.213	268	0.3	4.022	A
3 - A628 Barnsley Road (S)	304	384	1127	0.270	305	0.4	4.820	A
4 - A629 Halifax Road	273	329	1368	0.200	274	0.3	3.622	A

2030 BASE, 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	Hoylandswaine Roundabout	Standard Roundabout		1, 2, 3, 4	9.55	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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)
D3	2030 BASE	AM	ONE HOUR	07:15	08:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A628 Barnsley Road (N)		✓	572	100.000
2 - A629 High Lee Lane		✓	453	100.000
3 - A628 Barnsley Road (S)		✓	666	100.000
4 - A629 Halifax Road		✓	641	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
From		1 - A628 Barnsley Road (N)	2 - A629 High Lee Lane	3 - A628 Barnsley Road (S)	4 - A629 Halifax Road
	1 - A628 Barnsley Road (N)	7	41	351	173
	2 - A629 High Lee Lane	43	1	81	328
	3 - A628 Barnsley Road (S)	529	121	2	14
	4 - A629 Halifax Road	314	302	25	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1 - A628 Barnsley Road (N)	2 - A629 High Lee Lane	3 - A628 Barnsley Road (S)	4 - A629 Halifax Road
	1 - A628 Barnsley Road (N)	10	10	10	10
	2 - A629 High Lee Lane	10	10	10	10
	3 - A628 Barnsley Road (S)	10	10	10	10
	4 - A629 Halifax Road	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - A628 Barnsley Road (N)	0.48	5.70	1.0	A
2 - A629 High Lee Lane	0.42	5.80	0.8	A
3 - A628 Barnsley Road (S)	0.73	14.50	2.9	B
4 - A629 Halifax Road	0.65	10.51	2.0	B

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A628 Barnsley Road (N)	431	337	1425	0.302	429	0.5	3.967	A
2 - A629 High Lee Lane	341	418	1309	0.261	340	0.4	4.079	A
3 - A628 Barnsley Road (S)	501	414	1111	0.451	498	0.9	6.423	A
4 - A629 Halifax Road	483	526	1241	0.389	480	0.7	5.181	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A628 Barnsley Road (N)	514	404	1383	0.372	514	0.6	4.550	A
2 - A629 High Lee Lane	407	501	1255	0.325	407	0.5	4.665	A
3 - A628 Barnsley Road (S)	599	496	1066	0.561	597	1.4	8.399	A
4 - A629 Halifax Road	576	630	1174	0.491	575	1.0	6.590	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A628 Barnsley Road (N)	630	494	1326	0.475	628	1.0	5.663	A
2 - A629 High Lee Lane	499	613	1182	0.422	498	0.8	5.777	A
3 - A628 Barnsley Road (S)	733	606	1006	0.729	728	2.8	13.943	B
4 - A629 Halifax Road	706	768	1085	0.650	702	2.0	10.231	B

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A628 Barnsley Road (N)	630	496	1325	0.475	630	1.0	5.697	A
2 - A629 High Lee Lane	499	614	1181	0.422	499	0.8	5.803	A
3 - A628 Barnsley Road (S)	733	608	1005	0.729	733	2.9	14.499	B
4 - A629 Halifax Road	706	774	1082	0.652	706	2.0	10.512	B

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A628 Barnsley Road (N)	514	408	1380	0.373	516	0.7	4.587	A
2 - A629 High Lee Lane	407	503	1254	0.325	408	0.5	4.690	A
3 - A628 Barnsley Road (S)	599	498	1065	0.562	604	1.4	8.699	A
4 - A629 Halifax Road	576	638	1169	0.493	580	1.1	6.762	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A628 Barnsley Road (N)	431	341	1423	0.303	431	0.5	3.996	A
2 - A629 High Lee Lane	341	421	1307	0.261	342	0.4	4.105	A
3 - A628 Barnsley Road (S)	501	416	1109	0.452	503	0.9	6.559	A
4 - A629 Halifax Road	483	531	1238	0.390	484	0.7	5.267	A

2030 BASE, 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	Hoylandswaine Roundabout	Standard Roundabout		1, 2, 3, 4	6.95	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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)
D4	2030 BASE	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A628 Barnsley Road (N)		✓	789	100.000
2 - A629 High Lee Lane		✓	393	100.000
3 - A628 Barnsley Road (S)		✓	448	100.000
4 - A629 Halifax Road		✓	402	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
From		1 - A628 Barnsley Road (N)	2 - A629 High Lee Lane	3 - A628 Barnsley Road (S)	4 - A629 Halifax Road
	1 - A628 Barnsley Road (N)	7	79	457	246
	2 - A629 High Lee Lane	46	1	81	265
	3 - A628 Barnsley Road (S)	338	88	3	19
	4 - A629 Halifax Road	126	246	30	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1 - A628 Barnsley Road (N)	2 - A629 High Lee Lane	3 - A628 Barnsley Road (S)	4 - A629 Halifax Road
	1 - A628 Barnsley Road (N)	10	10	10	10
	2 - A629 High Lee Lane	10	10	10	10
	3 - A628 Barnsley Road (S)	10	10	10	10
	4 - A629 Halifax Road	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - A628 Barnsley Road (N)	0.63	7.70	1.8	A
2 - A629 High Lee Lane	0.41	6.43	0.8	A
3 - A628 Barnsley Road (S)	0.49	7.85	1.1	A
4 - A629 Halifax Road	0.36	4.98	0.6	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A628 Barnsley Road (N)	594	276	1464	0.406	591	0.7	4.519	A
2 - A629 High Lee Lane	296	557	1219	0.243	294	0.4	4.279	A
3 - A628 Barnsley Road (S)	337	423	1106	0.305	335	0.5	5.129	A
4 - A629 Halifax Road	303	362	1347	0.225	301	0.3	3.782	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A628 Barnsley Road (N)	709	330	1430	0.496	708	1.1	5.476	A
2 - A629 High Lee Lane	353	667	1147	0.308	353	0.5	4.983	A
3 - A628 Barnsley Road (S)	403	507	1060	0.380	402	0.7	6.012	A
4 - A629 Halifax Road	361	433	1301	0.278	361	0.4	4.212	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A628 Barnsley Road (N)	869	404	1383	0.628	866	1.8	7.611	A
2 - A629 High Lee Lane	433	815	1050	0.412	432	0.8	6.389	A
3 - A628 Barnsley Road (S)	493	620	998	0.494	492	1.1	7.790	A
4 - A629 Halifax Road	443	530	1238	0.357	442	0.6	4.967	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A628 Barnsley Road (N)	869	405	1382	0.628	869	1.8	7.703	A
2 - A629 High Lee Lane	433	818	1049	0.413	433	0.8	6.429	A
3 - A628 Barnsley Road (S)	493	622	997	0.495	493	1.1	7.851	A
4 - A629 Halifax Road	443	532	1237	0.358	443	0.6	4.982	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A628 Barnsley Road (N)	709	332	1429	0.496	712	1.1	5.549	A
2 - A629 High Lee Lane	353	671	1144	0.309	354	0.5	5.019	A
3 - A628 Barnsley Road (S)	403	510	1059	0.380	404	0.7	6.065	A
4 - A629 Halifax Road	361	436	1299	0.278	362	0.4	4.229	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A628 Barnsley Road (N)	594	277	1463	0.406	595	0.8	4.571	A
2 - A629 High Lee Lane	296	561	1216	0.243	296	0.4	4.310	A
3 - A628 Barnsley Road (S)	337	426	1104	0.305	338	0.5	5.176	A
4 - A629 Halifax Road	303	364	1345	0.225	303	0.3	3.801	A

2030 DESIGN, 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	Hoylandswaine Roundabout	Standard Roundabout		1, 2, 3, 4	12.75	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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)
D5	2030 DESIGN	AM	ONE HOUR	07:15	08:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A628 Barnsley Road (N)		✓	627	100.000
2 - A629 High Lee Lane		✓	477	100.000
3 - A628 Barnsley Road (S)		✓	699	100.000
4 - A629 Halifax Road		✓	735	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
From		1 - A628 Barnsley Road (N)	2 - A629 High Lee Lane	3 - A628 Barnsley Road (S)	4 - A629 Halifax Road
	1 - A628 Barnsley Road (N)	7	41	365	214
	2 - A629 High Lee Lane	43	1	87	346
	3 - A628 Barnsley Road (S)	552	131	2	14
	4 - A629 Halifax Road	379	331	25	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1 - A628 Barnsley Road (N)	2 - A629 High Lee Lane	3 - A628 Barnsley Road (S)	4 - A629 Halifax Road
	1 - A628 Barnsley Road (N)	10	10	10	10
	2 - A629 High Lee Lane	10	10	10	10
	3 - A628 Barnsley Road (S)	10	10	10	10
	4 - A629 Halifax Road	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - A628 Barnsley Road (N)	0.53	6.52	1.2	A
2 - A629 High Lee Lane	0.46	6.42	0.9	A
3 - A628 Barnsley Road (S)	0.79	19.52	4.0	C
4 - A629 Halifax Road	0.76	15.74	3.4	C

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A628 Barnsley Road (N)	472	366	1407	0.336	470	0.6	4.217	A
2 - A629 High Lee Lane	359	459	1282	0.280	357	0.4	4.275	A
3 - A628 Barnsley Road (S)	526	458	1087	0.484	522	1.0	6.963	A
4 - A629 Halifax Road	553	550	1226	0.451	550	0.9	5.829	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A628 Barnsley Road (N)	564	439	1361	0.414	563	0.8	4.956	A
2 - A629 High Lee Lane	429	550	1223	0.351	428	0.6	4.979	A
3 - A628 Barnsley Road (S)	628	548	1038	0.606	626	1.6	9.559	A
4 - A629 Halifax Road	661	659	1156	0.572	659	1.4	7.933	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A628 Barnsley Road (N)	690	534	1301	0.531	689	1.2	6.448	A
2 - A629 High Lee Lane	525	673	1143	0.460	524	0.9	6.382	A
3 - A628 Barnsley Road (S)	770	671	971	0.793	761	3.8	18.135	C
4 - A629 Halifax Road	809	802	1064	0.761	802	3.3	14.714	B

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A628 Barnsley Road (N)	690	539	1298	0.532	690	1.2	6.518	A
2 - A629 High Lee Lane	525	675	1142	0.460	525	0.9	6.422	A
3 - A628 Barnsley Road (S)	770	673	970	0.793	769	4.0	19.523	C
4 - A629 Halifax Road	809	810	1059	0.764	809	3.4	15.744	C

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A628 Barnsley Road (N)	564	446	1357	0.415	565	0.8	5.017	A
2 - A629 High Lee Lane	429	553	1221	0.351	430	0.6	5.017	A
3 - A628 Barnsley Road (S)	628	551	1036	0.606	638	1.7	10.151	B
4 - A629 Halifax Road	661	671	1148	0.576	668	1.5	8.383	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A628 Barnsley Road (N)	472	371	1404	0.336	473	0.6	4.257	A
2 - A629 High Lee Lane	359	462	1280	0.281	360	0.4	4.308	A
3 - A628 Barnsley Road (S)	526	461	1085	0.485	529	1.1	7.153	A
4 - A629 Halifax Road	553	557	1221	0.453	556	0.9	5.973	A

2030 DESIGN, 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	Hoylandswaine Roundabout	Standard Roundabout		1, 2, 3, 4	8.56	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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)
D6	2030 DESIGN	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A628 Barnsley Road (N)		✓	890	100.000
2 - A629 High Lee Lane		✓	436	100.000
3 - A628 Barnsley Road (S)		✓	460	100.000
4 - A629 Halifax Road		✓	440	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
From		1 - A628 Barnsley Road (N)	2 - A629 High Lee Lane	3 - A628 Barnsley Road (S)	4 - A629 Halifax Road
	1 - A628 Barnsley Road (N)	7	79	483	321
	2 - A629 High Lee Lane	46	1	92	297
	3 - A628 Barnsley Road (S)	347	91	3	19
	4 - A629 Halifax Road	152	258	30	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1 - A628 Barnsley Road (N)	2 - A629 High Lee Lane	3 - A628 Barnsley Road (S)	4 - A629 Halifax Road
	1 - A628 Barnsley Road (N)	10	10	10	10
	2 - A629 High Lee Lane	10	10	10	10
	3 - A628 Barnsley Road (S)	10	10	10	10
	4 - A629 Halifax Road	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - A628 Barnsley Road (N)	0.71	10.08	2.7	B
2 - A629 High Lee Lane	0.49	7.98	1.1	A
3 - A628 Barnsley Road (S)	0.54	9.27	1.3	A
4 - A629 Halifax Road	0.39	5.32	0.7	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A628 Barnsley Road (N)	670	287	1457	0.460	666	0.9	4.985	A
2 - A629 High Lee Lane	328	632	1170	0.281	327	0.4	4.687	A
3 - A628 Barnsley Road (S)	346	503	1062	0.326	344	0.5	5.501	A
4 - A629 Halifax Road	331	370	1341	0.247	330	0.4	3.910	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A628 Barnsley Road (N)	800	344	1421	0.563	798	1.4	6.337	A
2 - A629 High Lee Lane	392	757	1088	0.360	391	0.6	5.675	A
3 - A628 Barnsley Road (S)	414	603	1008	0.410	413	0.8	6.652	A
4 - A629 Halifax Road	396	444	1294	0.306	395	0.5	4.405	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A628 Barnsley Road (N)	980	421	1373	0.714	975	2.6	9.833	A
2 - A629 High Lee Lane	480	925	979	0.490	478	1.0	7.880	A
3 - A628 Barnsley Road (S)	506	737	935	0.542	504	1.3	9.150	A
4 - A629 Halifax Road	484	543	1230	0.394	484	0.7	5.296	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A628 Barnsley Road (N)	980	422	1372	0.714	980	2.7	10.081	B
2 - A629 High Lee Lane	480	929	976	0.492	480	1.1	7.979	A
3 - A628 Barnsley Road (S)	506	740	933	0.543	506	1.3	9.271	A
4 - A629 Halifax Road	484	545	1229	0.394	484	0.7	5.318	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A628 Barnsley Road (N)	800	345	1420	0.563	805	1.4	6.490	A
2 - A629 High Lee Lane	392	763	1084	0.362	394	0.6	5.751	A
3 - A628 Barnsley Road (S)	414	607	1005	0.411	416	0.8	6.737	A
4 - A629 Halifax Road	396	447	1292	0.306	396	0.5	4.429	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A628 Barnsley Road (N)	670	289	1456	0.460	672	0.9	5.065	A
2 - A629 High Lee Lane	328	637	1166	0.281	329	0.4	4.734	A
3 - A628 Barnsley Road (S)	346	507	1060	0.327	347	0.5	5.565	A
4 - A629 Halifax Road	331	374	1339	0.247	332	0.4	3.934	A

Junctions 9						
PICADY 9 - Priority Intersection Module						
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Filename: A269 Halifax Road - Site Access.j9

Path: O:\Halifax Road, Penistone\ANALYSIS\CAPACITY\Priority Junctions\Halifax Road-Site Access

Report generation date: 20/03/2020 12:40:19

»2030 Design , AM

»2030 Design, PM

Summary of junction performance

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
2030 Design						
Stream B-C	0.0	7.01	0.03	0.0	6.37	0.01
Stream B-A	0.4	18.32	0.27	0.1	12.55	0.09
Stream C-B	0.0	6.79	0.02	0.0	6.89	0.03

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

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

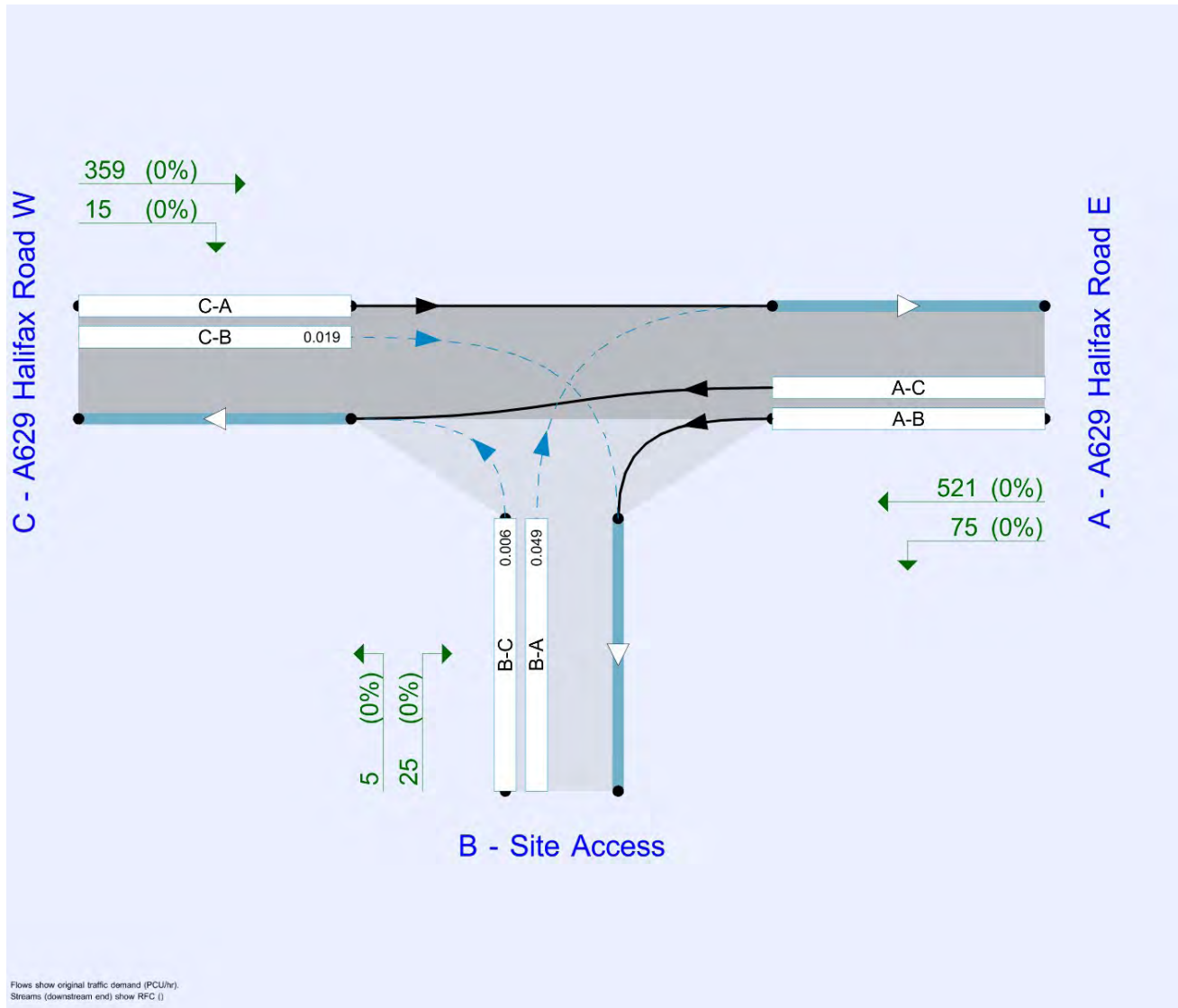
File summary

File Description

Title	
Location	
Site number	
Date	20/03/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	OPTIMA\Optima
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



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				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	2030 Design	AM	ONE HOUR	07:15	08:45	15	✓
D2	2030 Design	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2030 Design , AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Site Access - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A629 Halifax Road/Site Access	T-Junction	Two-way		1.03	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A629 Halifax Road E		Major
B	Site Access		Minor
C	A629 Halifax Road W		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 - A629 Halifax Road W	6.15		✓	3.00	155.0		-

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	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Site Access	One lane plus flare	10.00	4.30	3.00	3.00	3.00	✓	1.00	22	17

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	526	0.095	0.240	0.151	0.343
B-C	762	0.116	0.293	-	-
C-B	722	0.278	0.278	-	-

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	2030 Design	AM	ONE HOUR	07:15	08:45	15	✓

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 - A629 Halifax Road E		ONE HOUR	✓	596	100.000
B - Site Access		ONE HOUR	✓	78	100.000
C - A629 Halifax Road W		ONE HOUR	✓	629	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A629 Halifax Road E	B - Site Access	C - A629 Halifax Road W
From	A - A629 Halifax Road E	0	41	555
	B - Site Access	65	0	13
	C - A629 Halifax Road W	621	8	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A629 Halifax Road E	B - Site Access	C - A629 Halifax Road W
From	A - A629 Halifax Road E	0	0	0
	B - Site Access	0	0	0
	C - A629 Halifax Road W	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.03	7.01	0.0	A	12	18
B-A	0.27	18.32	0.4	C	60	89
C-A					570	855
C-B	0.02	6.79	0.0	A	7	11
A-B					38	56
A-C					509	764

Main Results for each time segment

07:15 - 07:30

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-C	10	2	612	0.016	10	0.0	0.0	5.978	A
B-A	49	12	349	0.140	48	0.0	0.2	11.928	B
C-A	468	117			468				
C-B	6	2	597	0.010	6	0.0	0.0	6.091	A
A-B	31	8			31				
A-C	418	104			418				

07:30 - 07:45

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-C	12	3	579	0.020	12	0.0	0.0	6.345	A
B-A	58	15	315	0.185	58	0.2	0.2	13.988	B
C-A	558	140			558				
C-B	7	2	573	0.013	7	0.0	0.0	6.365	A
A-B	37	9			37				
A-C	499	125			499				

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-C	14	4	528	0.027	14	0.0	0.0	7.001	A
B-A	72	18	268	0.267	71	0.2	0.4	18.231	C
C-A	684	171			684				
C-B	9	2	539	0.016	9	0.0	0.0	6.785	A
A-B	45	11			45				
A-C	611	153			611				

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-C	14	4	528	0.027	14	0.0	0.0	7.008	A
B-A	72	18	268	0.267	72	0.4	0.4	18.325	C
C-A	684	171			684				
C-B	9	2	539	0.016	9	0.0	0.0	6.785	A
A-B	45	11			45				
A-C	611	153			611				

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-C	12	3	578	0.020	12	0.0	0.0	6.351	A
B-A	58	15	315	0.185	59	0.4	0.2	14.072	B
C-A	558	140			558				
C-B	7	2	573	0.013	7	0.0	0.0	6.365	A
A-B	37	9			37				
A-C	499	125			499				

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-C	10	2	611	0.016	10	0.0	0.0	5.986	A
B-A	49	12	349	0.140	49	0.2	0.2	12.001	B
C-A	468	117			468				
C-B	6	2	597	0.010	6	0.0	0.0	6.094	A
A-B	31	8			31				
A-C	418	104			418				

2030 Design, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Site Access - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A629 Halifax Road/Site Access	T-Junction	Two-way		0.45	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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	2030 Design	PM	ONE HOUR	16:45	18:15	15	✓

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 - A629 Halifax Road E		ONE HOUR	✓	596	100.000
B - Site Access		ONE HOUR	✓	30	100.000
C - A629 Halifax Road W		ONE HOUR	✓	374	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A629 Halifax Road E	B - Site Access	C - A629 Halifax Road W
From	A - A629 Halifax Road E	0	75	521
	B - Site Access	25	0	5
	C - A629 Halifax Road W	359	15	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A629 Halifax Road E	B - Site Access	C - A629 Halifax Road W
From	A - A629 Halifax Road E	0	0	0
	B - Site Access	0	0	0
	C - A629 Halifax Road W	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.01	6.37	0.0	A	5	7
B-A	0.09	12.55	0.1	B	23	34
C-A					329	494
C-B	0.03	6.89	0.0	A	14	21
A-B					69	103
A-C					478	717

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-C	4	0.94	632	0.006	4	0.0	0.0	5.727	A
B-A	19	5	381	0.049	19	0.0	0.1	9.922	A
C-A	270	68			270				
C-B	11	3	597	0.019	11	0.0	0.0	6.146	A
A-B	56	14			56				
A-C	392	98			392				

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-C	4	1	607	0.007	4	0.0	0.0	5.979	A
B-A	22	6	353	0.064	22	0.1	0.1	10.879	B
C-A	323	81			323				
C-B	13	3	573	0.024	13	0.0	0.0	6.436	A
A-B	67	17			67				
A-C	468	117			468				

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-C	6	1	571	0.010	5	0.0	0.0	6.368	A
B-A	28	7	314	0.088	27	0.1	0.1	12.544	B
C-A	395	99			395				
C-B	17	4	539	0.031	16	0.0	0.0	6.885	A
A-B	83	21			83				
A-C	574	143			574				

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-C	6	1	571	0.010	6	0.0	0.0	6.369	A
B-A	28	7	314	0.088	28	0.1	0.1	12.548	B
C-A	395	99			395				
C-B	17	4	539	0.031	17	0.0	0.0	6.885	A
A-B	83	21			83				
A-C	574	143			574				

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-C	4	1	606	0.007	5	0.0	0.0	5.982	A
B-A	22	6	353	0.064	23	0.1	0.1	10.894	B
C-A	323	81			323				
C-B	13	3	573	0.024	14	0.0	0.0	6.437	A
A-B	67	17			67				
A-C	468	117			468				

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-C	4	0.94	632	0.006	4	0.0	0.0	5.731	A
B-A	19	5	381	0.049	19	0.1	0.1	9.937	A
C-A	270	68			270				
C-B	11	3	597	0.019	11	0.0	0.0	6.149	A
A-B	56	14			56				
A-C	392	98			392				

Junctions 9						
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Filename: Wellhouse Lane-Site Access.j9

Path: O:\Halifax Road, Penistone\ANALYSIS\CAPACITY\Priority Junctions\Wellhouse Lane-Site Access

Report generation date: 20/03/2020 12:57:59

»2030 Design , AM

»2030 Design , PM

Summary of junction performance

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
2030 Design						
Stream B-C	0.1	6.03	0.06	0.0	5.45	0.02
Stream B-A	0.2	9.71	0.16	0.1	8.63	0.06
Stream C-AB	0.1	6.58	0.04	0.1	6.25	0.08

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

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

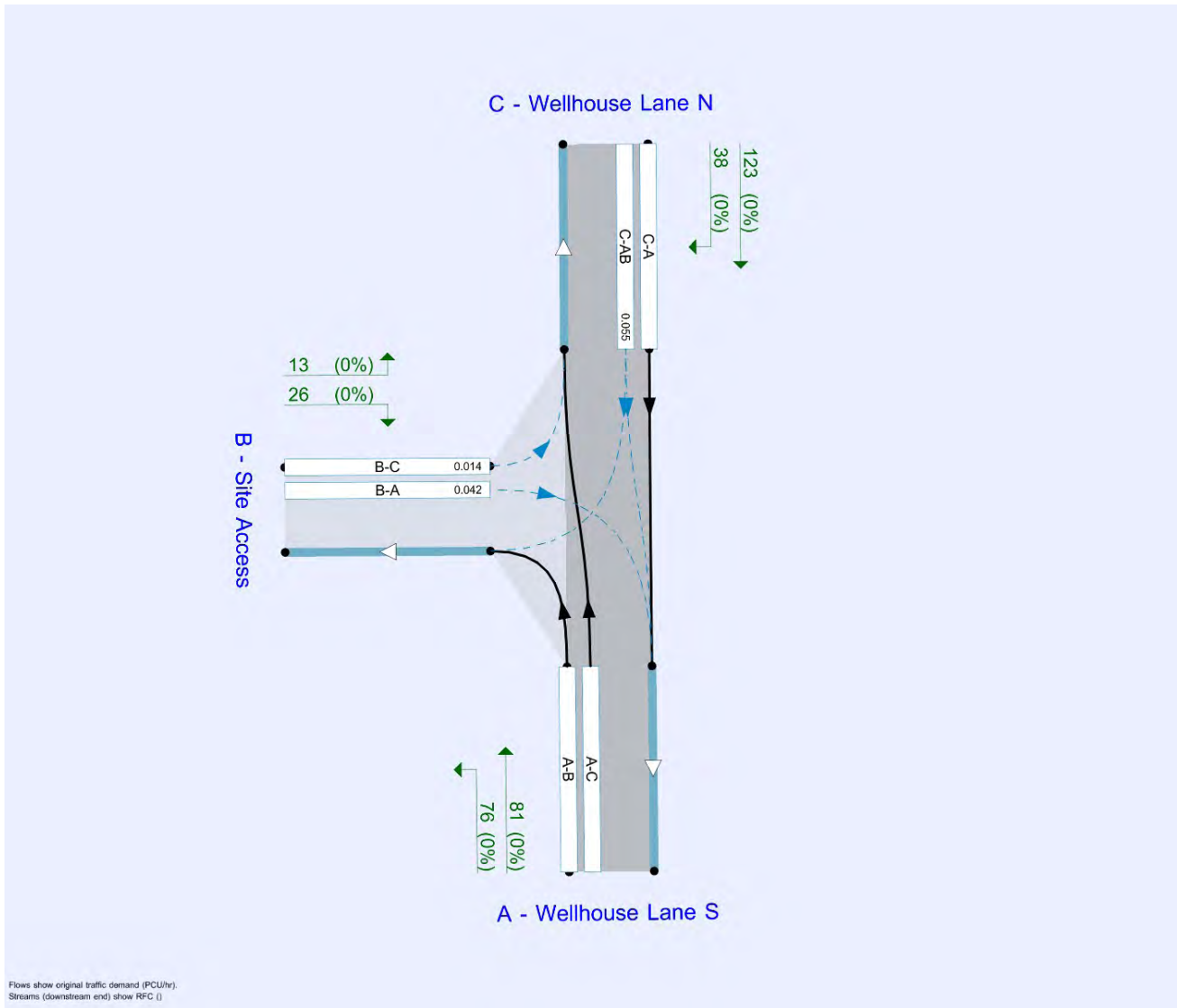
File summary

File Description

Title	
Location	
Site number	
Date	20/03/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	OPTIMA\Optima
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	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				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	2030 Design	AM	ONE HOUR	07:15	08:45	15	✓
D2	2030 Design	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2030 Design , AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Site Access - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Major arm width	C - Wellhouse Lane N - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Wellhouse Lane/Site Access	T-Junction	Two-way		2.53	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Wellhouse Lane S		Major
B	Site Access		Minor
C	Wellhouse Lane N		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Wellhouse Lane N	5.25			0.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Site Access	One lane plus flare	9.37	3.10	3.00	3.00	3.00	✓	1.00	14	16

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	511	0.096	0.243	0.153	0.347
B-C	721	0.114	0.288	-	-
C-B	574	0.230	0.230	-	-

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

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

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

Traffic 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	2030 Design	AM	ONE HOUR	07:15	08:45	15	✓

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 - Wellhouse Lane S		ONE HOUR	✓	206	100.000
B - Site Access		ONE HOUR	✓	99	100.000
C - Wellhouse Lane N		ONE HOUR	✓	85	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - Wellhouse Lane S	B - Site Access	C - Wellhouse Lane N
From	A - Wellhouse Lane S	0	41	165
	B - Site Access	66	0	33
	C - Wellhouse Lane N	65	20	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Wellhouse Lane S	B - Site Access	C - Wellhouse Lane N
From	A - Wellhouse Lane S	0	0	0
	B - Site Access	0	0	0
	C - Wellhouse Lane N	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.06	6.03	0.1	A	30	45
B-A	0.16	9.71	0.2	A	61	91
C-AB	0.04	6.58	0.1	A	21	31
C-A					57	86
A-B					38	56
A-C					151	227

Main Results for each time segment

07:15 - 07:30

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-C	25	6	663	0.037	25	0.0	0.0	5.641	A
B-A	50	12	465	0.107	49	0.0	0.1	8.653	A
C-AB	16	4	573	0.029	16	0.0	0.0	6.469	A
C-A	48	12			48				
A-B	31	8			31				
A-C	124	31			124				

07:30 - 07:45

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-C	30	7	651	0.046	30	0.0	0.0	5.797	A
B-A	59	15	456	0.130	59	0.1	0.1	9.074	A
C-AB	20	5	573	0.035	20	0.0	0.0	6.514	A
C-A	56	14			56				
A-B	37	9			37				
A-C	148	37			148				

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-C	36	9	634	0.057	36	0.0	0.1	6.027	A
B-A	73	18	443	0.164	72	0.1	0.2	9.701	A
C-AB	25	6	573	0.044	25	0.0	0.1	6.574	A
C-A	68	17			68				
A-B	45	11			45				
A-C	182	45			182				

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-C	36	9	633	0.057	36	0.1	0.1	6.028	A
B-A	73	18	443	0.164	73	0.2	0.2	9.711	A
C-AB	25	6	573	0.044	25	0.1	0.1	6.577	A
C-A	68	17			68				
A-B	45	11			45				
A-C	182	45			182				

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-C	30	7	650	0.046	30	0.1	0.0	5.801	A
B-A	59	15	456	0.130	60	0.2	0.2	9.090	A
C-AB	20	5	573	0.035	20	0.1	0.0	6.515	A
C-A	56	14			56				
A-B	37	9			37				
A-C	148	37			148				

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-C	25	6	662	0.038	25	0.0	0.0	5.648	A
B-A	50	12	465	0.107	50	0.2	0.1	8.678	A
C-AB	16	4	573	0.029	17	0.0	0.0	6.473	A
C-A	48	12			48				
A-B	31	8			31				
A-C	124	31			124				

2030 Design , PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Site Access - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Major arm width	C - Wellhouse Lane N - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Wellhouse Lane/Site Access	T-Junction	Two-way		1.65	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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	2030 Design	PM	ONE HOUR	16:45	18:15	15	✓

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 - Wellhouse Lane S		ONE HOUR	✓	157	100.000
B - Site Access		ONE HOUR	✓	39	100.000
C - Wellhouse Lane N		ONE HOUR	✓	161	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - Wellhouse Lane S	B - Site Access	C - Wellhouse Lane N
From	A - Wellhouse Lane S	0	76	81
	B - Site Access	26	0	13
	C - Wellhouse Lane N	123	38	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - Wellhouse Lane S	B - Site Access	C - Wellhouse Lane N
	A - Wellhouse Lane S	0	0	0
	B - Site Access	0	0	0
	C - Wellhouse Lane N	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.02	5.45	0.0	A	12	18
B-A	0.06	8.63	0.1	A	24	36
C-AB	0.08	6.25	0.1	A	43	64
C-A					105	157
A-B					70	105
A-C					74	111

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-C	10	2	689	0.014	10	0.0	0.0	5.295	A
B-A	20	5	466	0.042	19	0.0	0.0	8.056	A
C-AB	34	8	611	0.055	33	0.0	0.1	6.226	A
C-A	87	22			87				
A-B	57	14			57				
A-C	61	15			61				

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-C	12	3	683	0.017	12	0.0	0.0	5.360	A
B-A	23	6	458	0.051	23	0.0	0.1	8.290	A
C-AB	42	10	619	0.067	42	0.1	0.1	6.238	A
C-A	103	26			103				
A-B	68	17			68				
A-C	73	18			73				

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-C	14	4	674	0.021	14	0.0	0.0	5.452	A
B-A	29	7	446	0.064	29	0.1	0.1	8.630	A
C-AB	53	13	630	0.085	53	0.1	0.1	6.247	A
C-A	124	31			124				
A-B	84	21			84				
A-C	89	22			89				

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-C	14	4	674	0.021	14	0.0	0.0	5.453	A
B-A	29	7	446	0.064	29	0.1	0.1	8.633	A
C-AB	53	13	630	0.085	53	0.1	0.1	6.252	A
C-A	124	31			124				
A-B	84	21			84				
A-C	89	22			89				

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-C	12	3	683	0.017	12	0.0	0.0	5.363	A
B-A	23	6	458	0.051	23	0.1	0.1	8.295	A
C-AB	42	10	619	0.067	42	0.1	0.1	6.242	A
C-A	103	26			103				
A-B	68	17			68				
A-C	73	18			73				

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-C	10	2	689	0.014	10	0.0	0.0	5.296	A
B-A	20	5	466	0.042	20	0.1	0.0	8.063	A
C-AB	34	8	611	0.055	34	0.1	0.1	6.237	A
C-A	87	22			87				
A-B	57	14			57				
A-C	61	15			61				