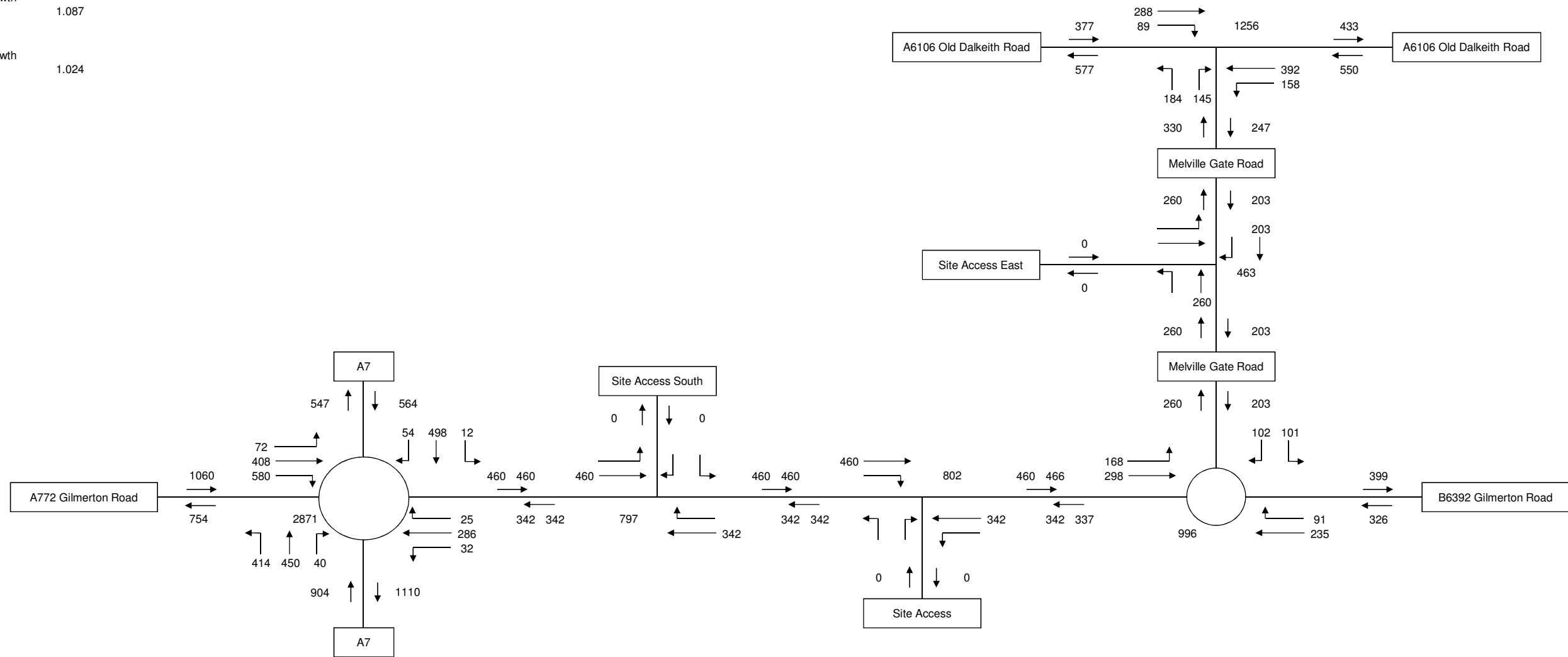




High Growth  
2023 1.087  
2017

High Growth  
2023 1.024  
2021

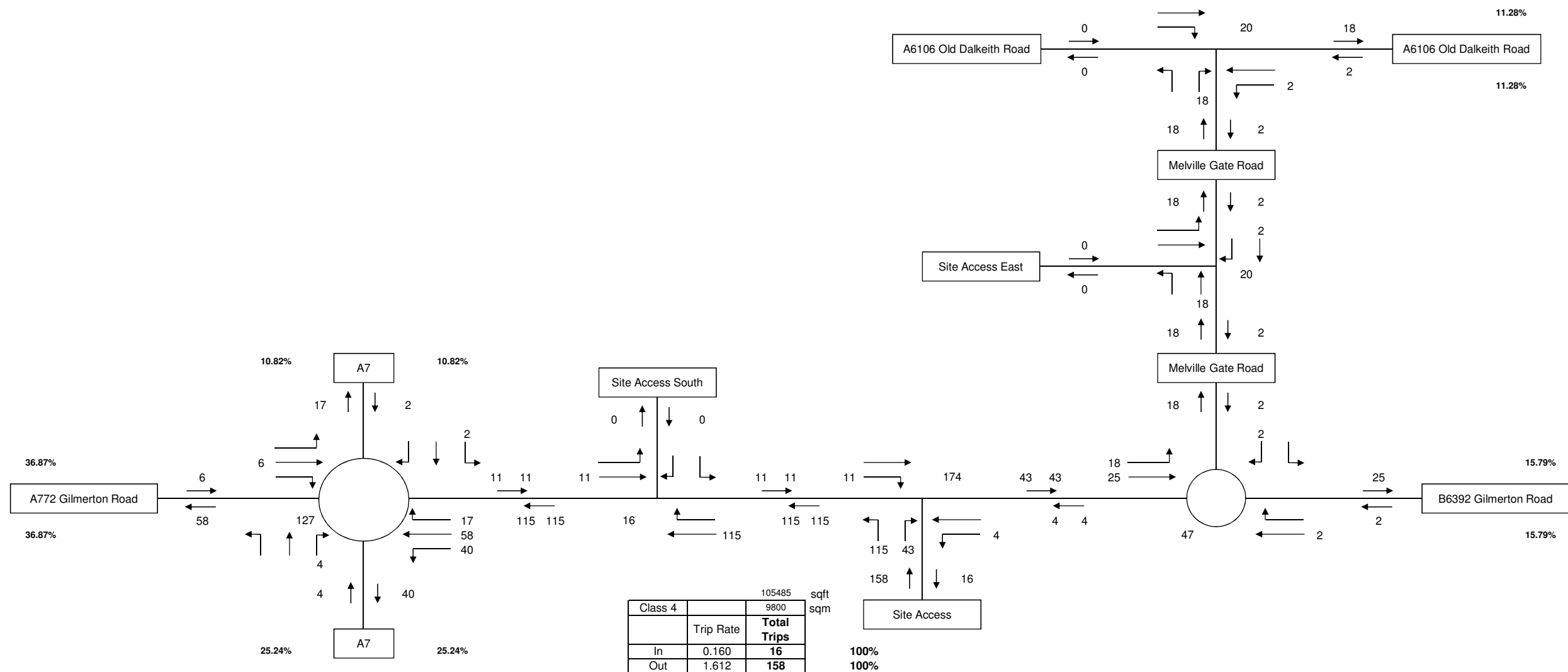


TITLE

Buccleuch Property  
Proposed Commercial Development, Sheriffhall South  
2023 Projected Traffic Flows  
Weekday PM Peak Hour (1545-1645)

Diagram

**2b**

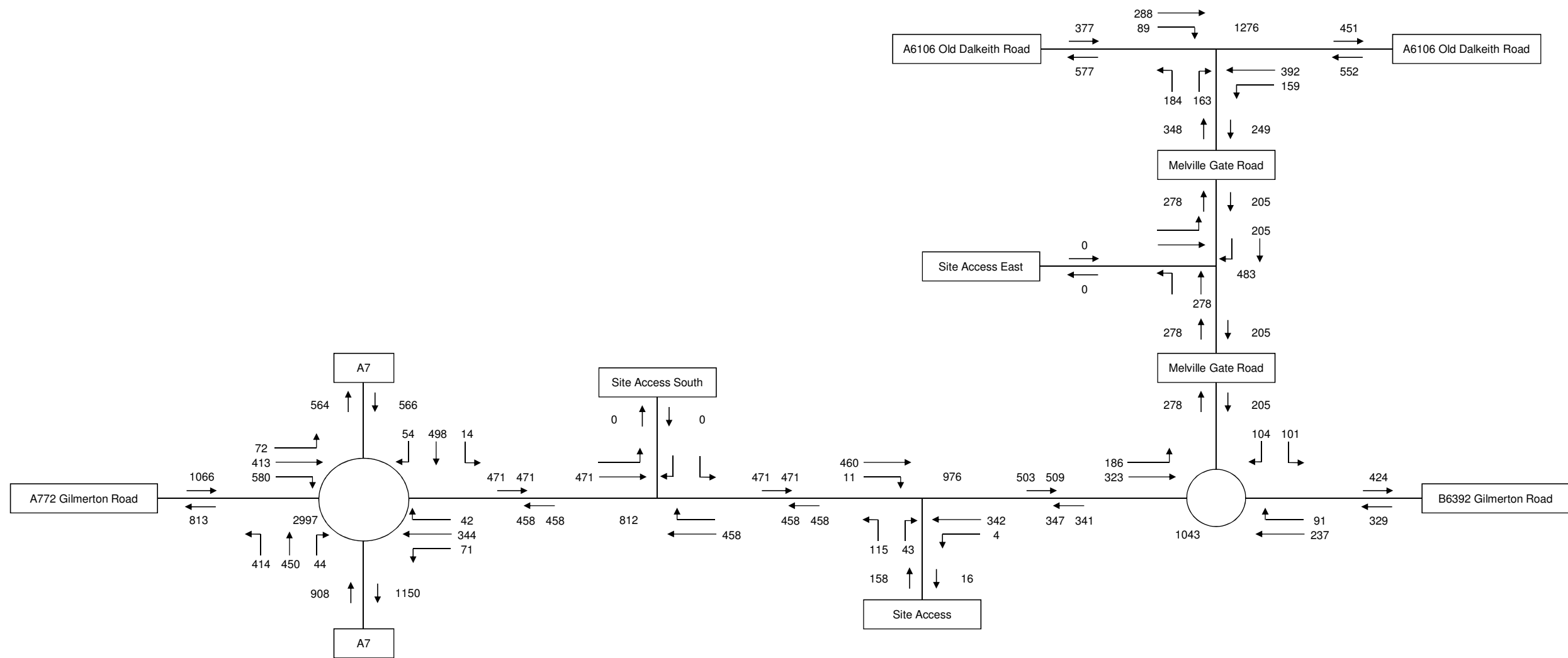


TITLE

Buccleuch Property  
Proposed Commercial Development, Sheriffhall South  
Committed Class 4 (Gilmerton Road South) Traffic Flows  
Weekday PM Peak Hour (1545-1645)

Diagram

**3b**



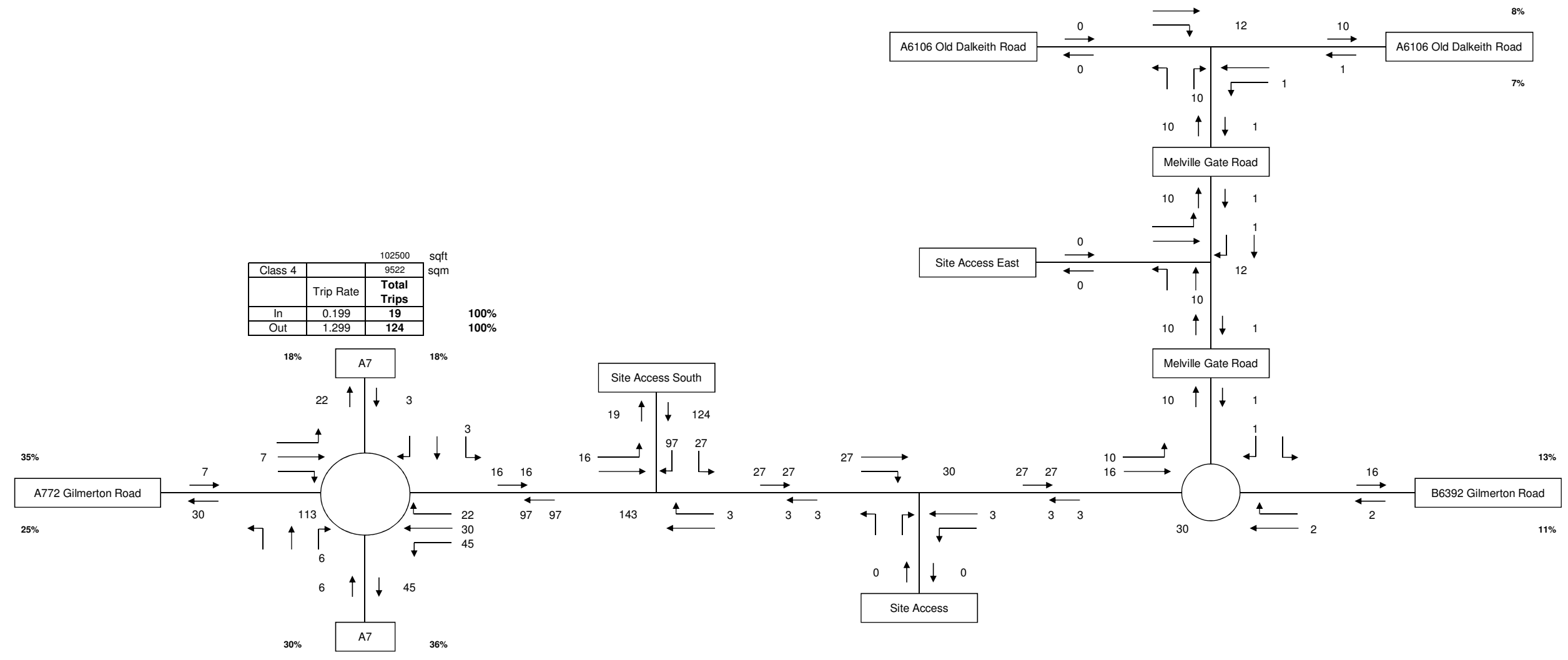
TITLE

Buccleuch Property  
 Proposed Commercial Development, Sheriffhall South  
 2023 Projected + Committed Development Traffic Flows  
 Weekday PM Peak Hour (1545-1645)

Diagram

**4b**

Class 4	Trip Rate	Total Trips	102500 sqft	9522 sqm
In	0.199	19	100%	100%
Out	1.299	124	100%	100%

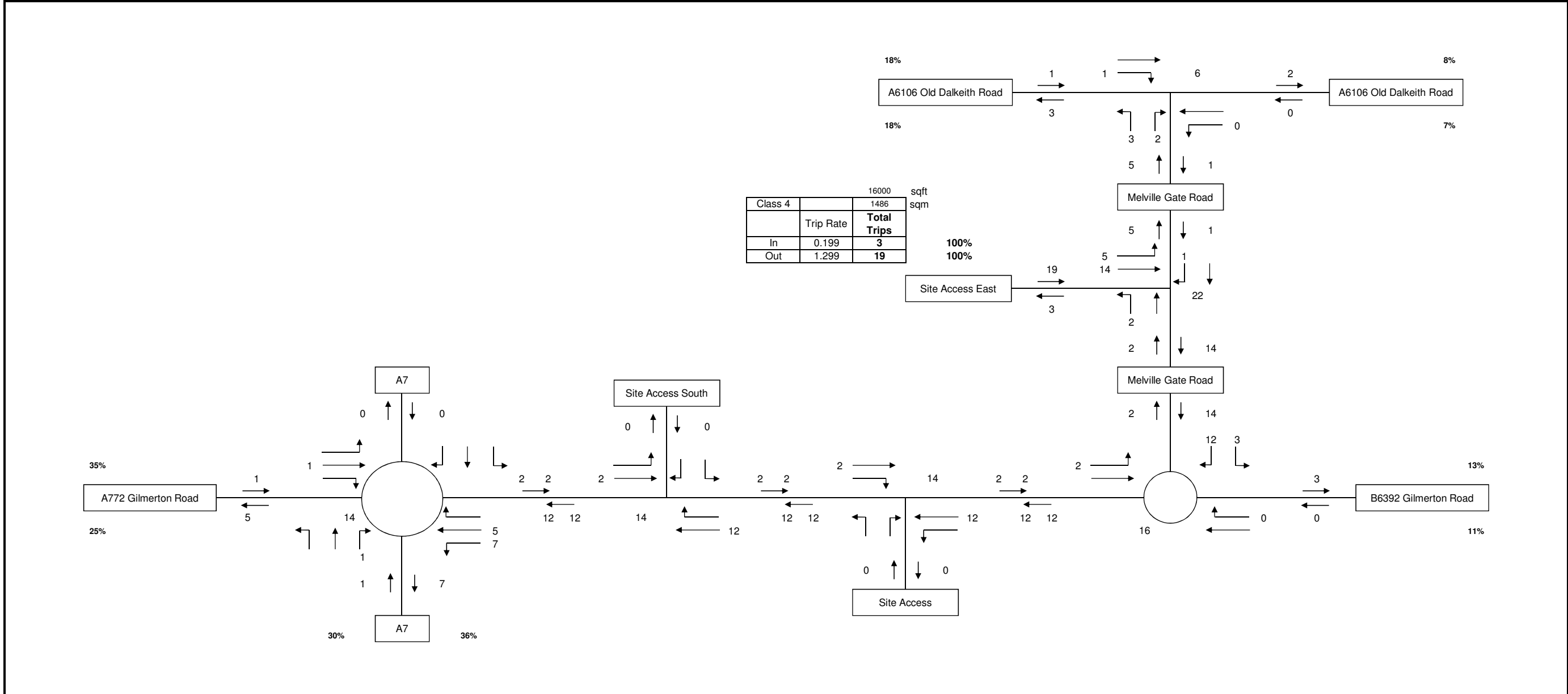


TITLE

Buccleuch Property  
 Proposed Commercial Development, Sheriffhall South  
 Proposed Class 4 (Gilmerton Road Access) Traffic Flows  
 Weekday PM Peak Hour (1545-1645)

Diagram

**5b**



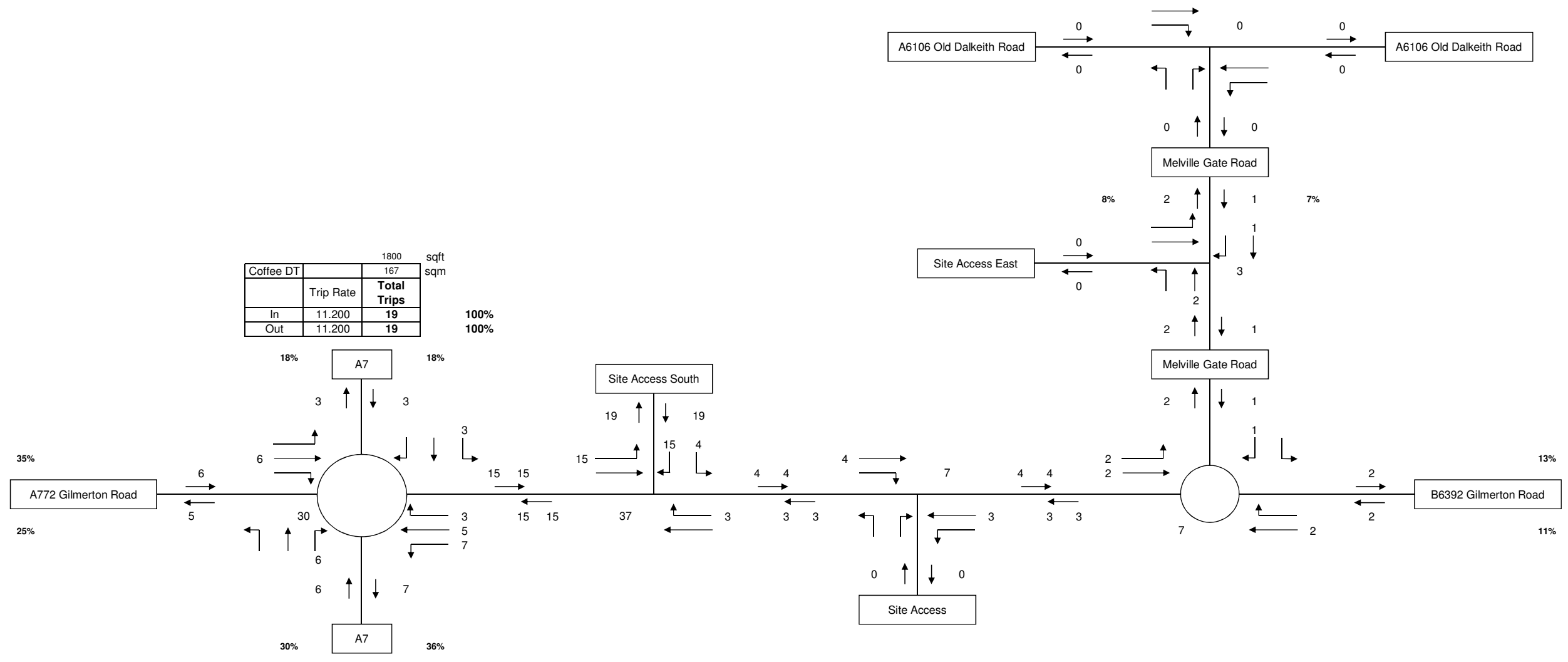
TITLE

Buccleuch Property  
 Proposed Commercial Development, Sheriffhall South  
 Proposed Class 4 (Melville Gate Road Access) Traffic Flows  
 Weekday PM Peak Hour (1545-1645)

Diagram

**6b**

Coffee DT	Trip Rate	Total Trips	1800 sqft	167 sqm
In	11.200	19	100%	100%
Out	11.200	19	100%	100%

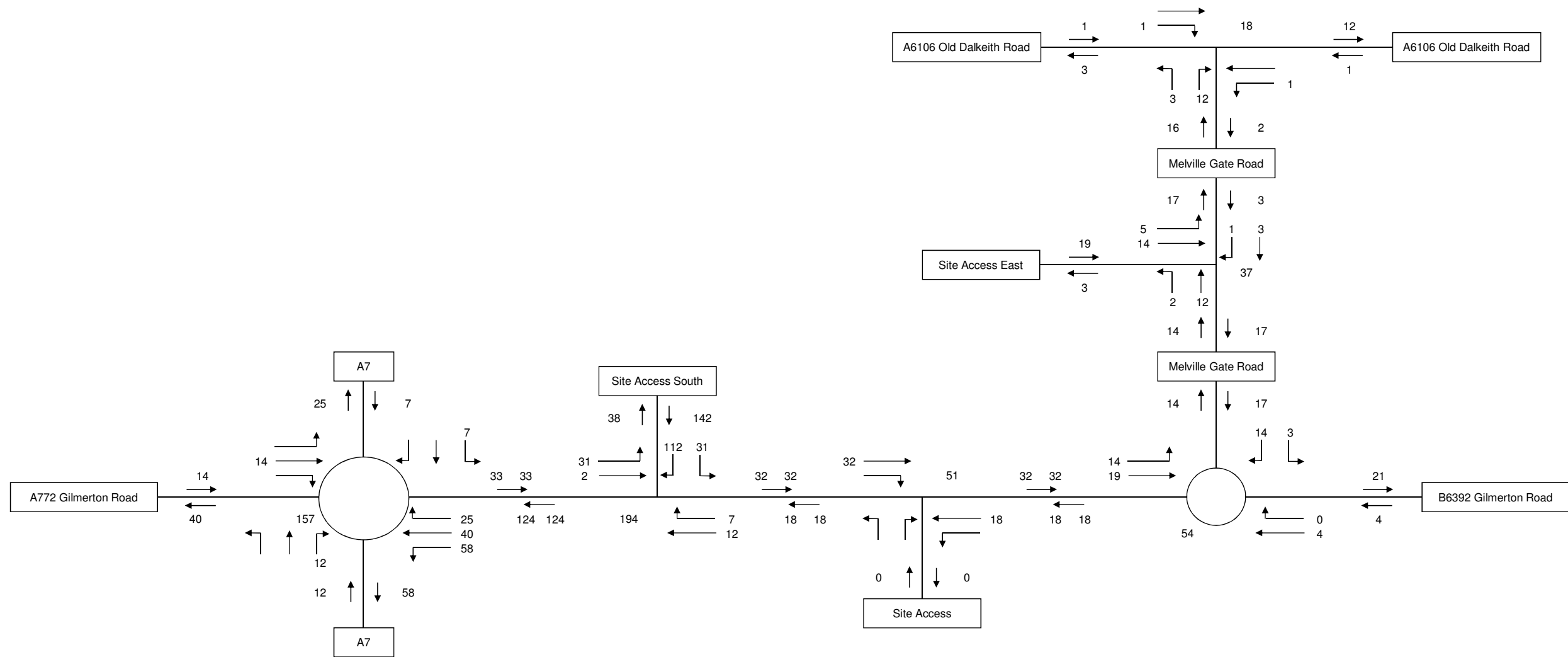


TITLE

Buccleuch Property  
 Proposed Commercial Development, Sheriffhall South  
 Proposed Coffee Shop Drive Thru Traffic Flows  
 Weekday PM Peak Hour (1545-1645)

Diagram

**7b**



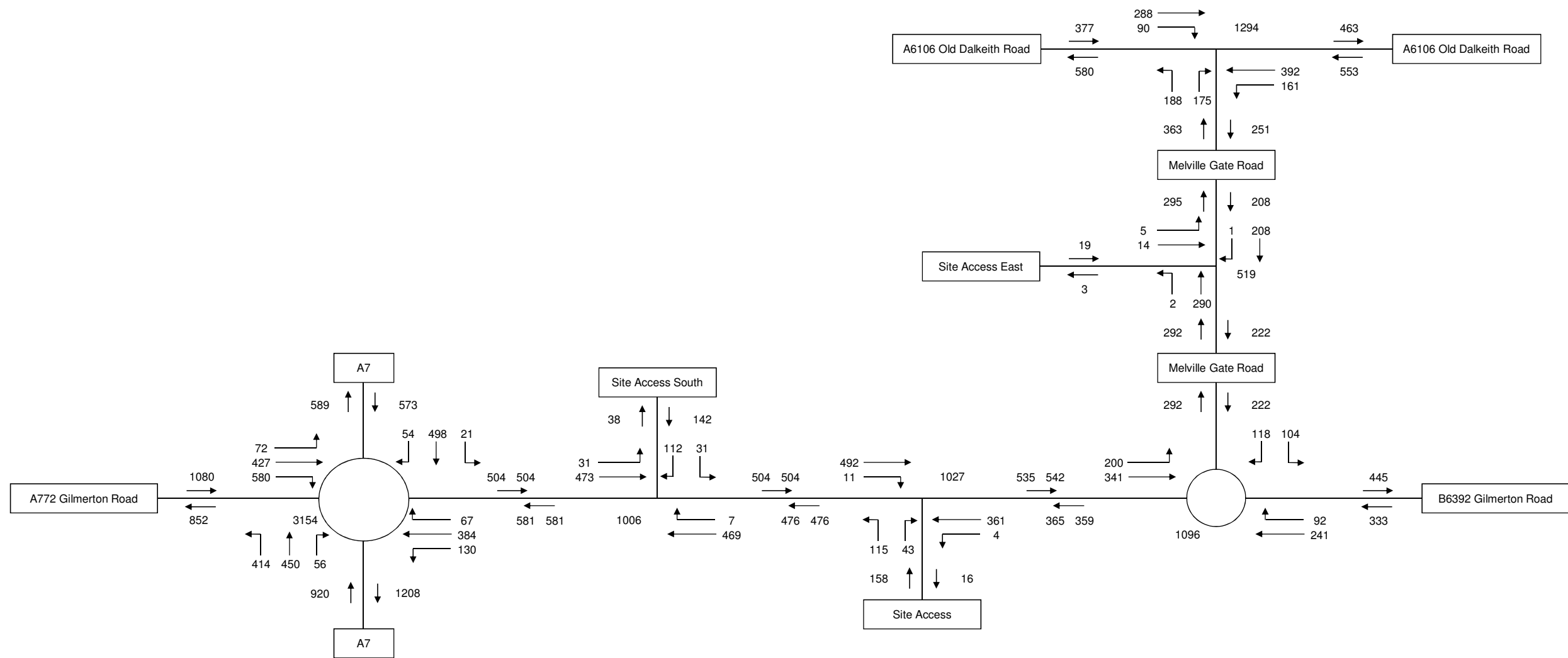
TITLE

Buccleuch Property  
 Proposed Commercial Development, Sheriffhall South  
 Total Proposed Commercial Development Traffic Flows  
 Weekday PM Peak Hour (1545-1645)

Diagram

**8b**



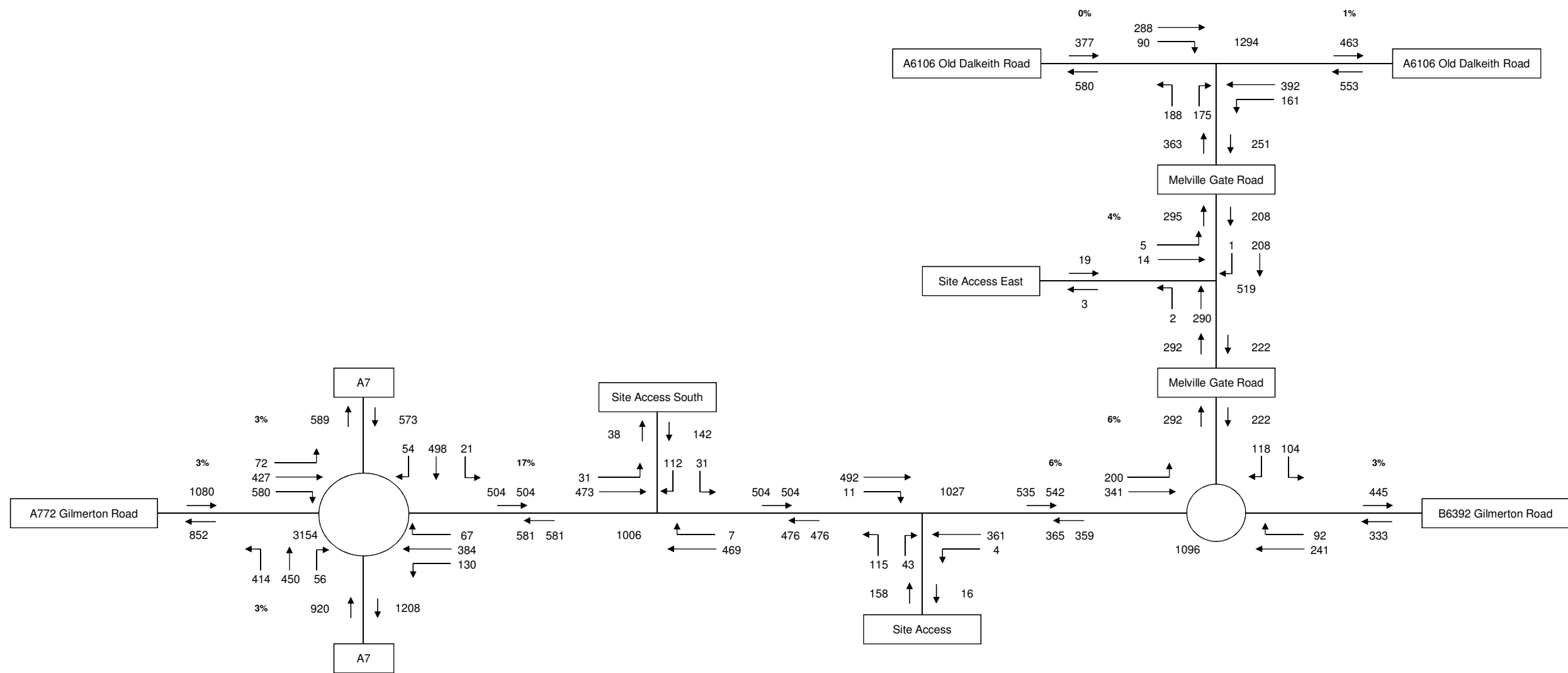


TITLE

Buccleuch Property  
 Proposed Commercial Development, Sheriffhall South  
 2023 Projected + Committed Development & Proposed Commercial Development Traffic Flows  
 Weekday PM Peak Hour (1545-1645)

Diagram

**9b**



TITLE

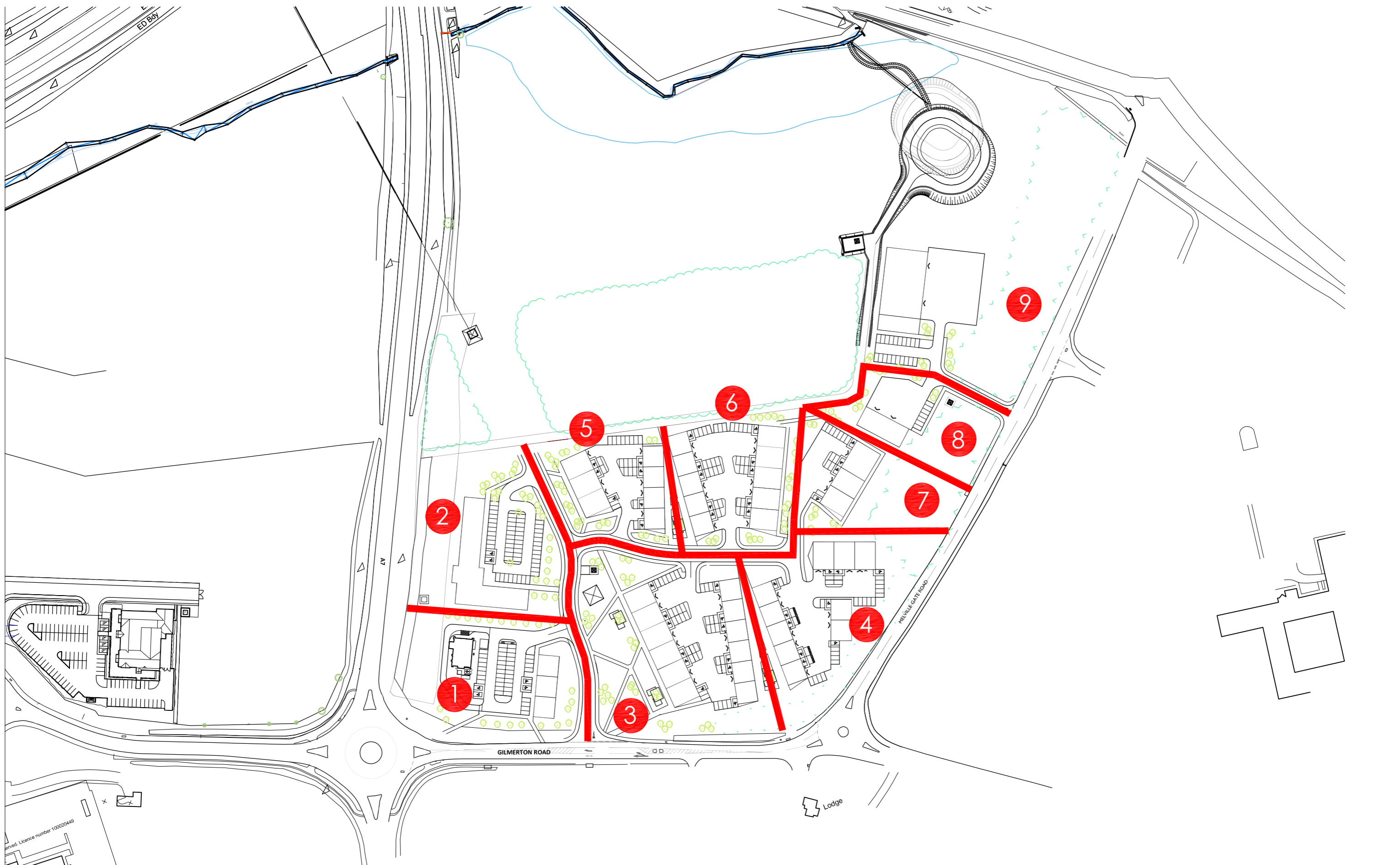
Bucleuch Property  
Proposed Commercial Development, Sheriffhall South

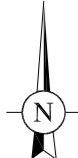
Percentage Impact  
Weekday PM Peak Hour (1545-1645)

Diagram

**10b**

**APPENDIX D**  
**SKETCHES**



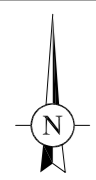
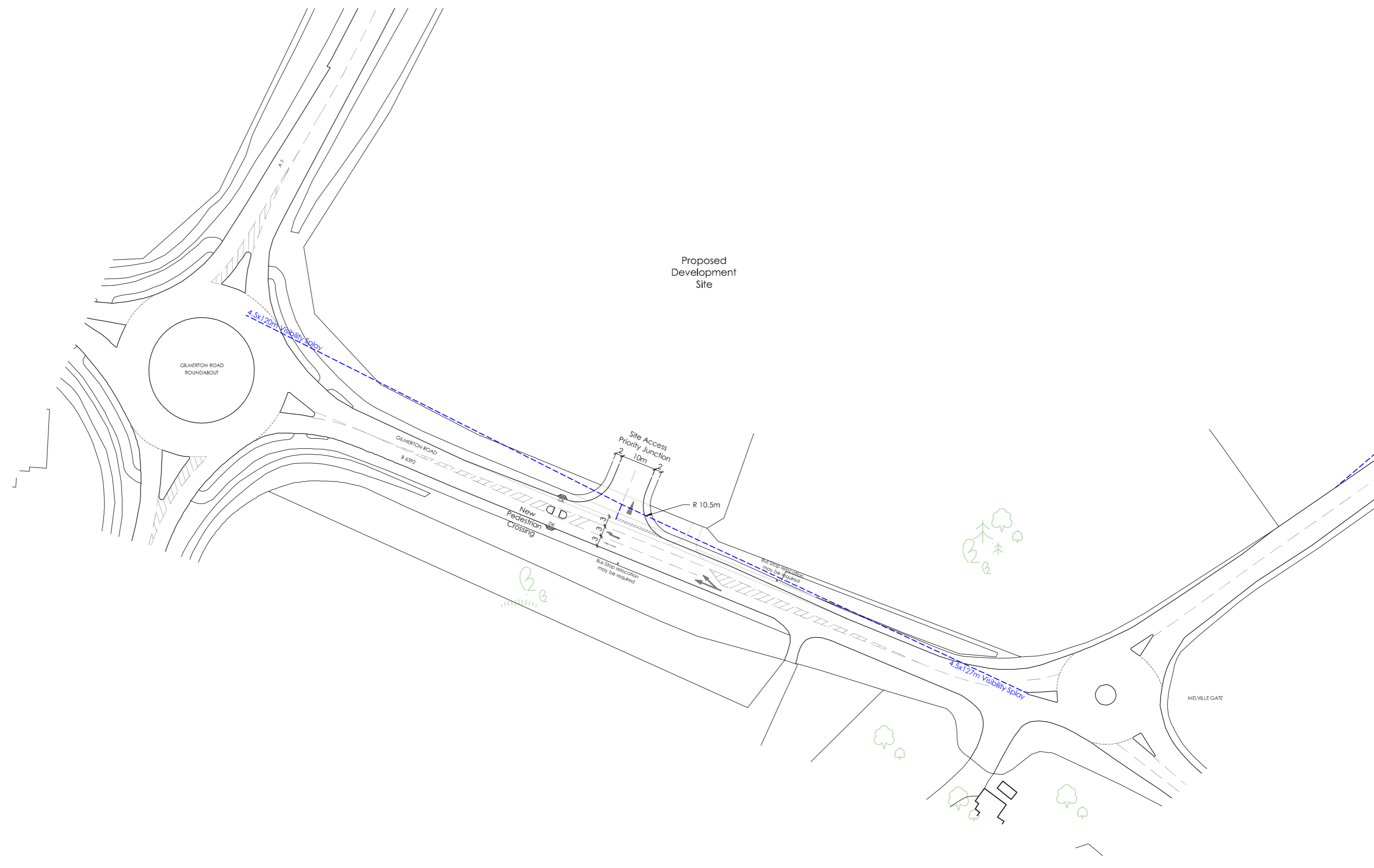
  
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Sheriffhall South, Midlothian  
 Zones for Parking Calculations

Buccleuch Properties  
 Drawing Number:  
 TP324/SK/004  
 Drawn by:  
 NW  
 Date:  
 Sept 2021  
 Scale:  
 1:2000 @ A3  
 Checked by:  
 AS



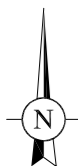
Proposed  
Development  
Site



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Sheriffhall South, Midlothian		Buccleuch Properties	
Potential Site Access - Gilmeron Road		Drawing Number: TP324/SK/001	Scale: 1:1000 @ A3
Drawn by: NW	Date: Aug 2021	Checked by: SL	





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Sherrifhall East, Midlothian

Buccleuch Properties

Potential Site Access - Melville Gate Road

Drawing Number:  
TP324/SK/002C

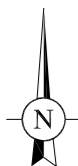
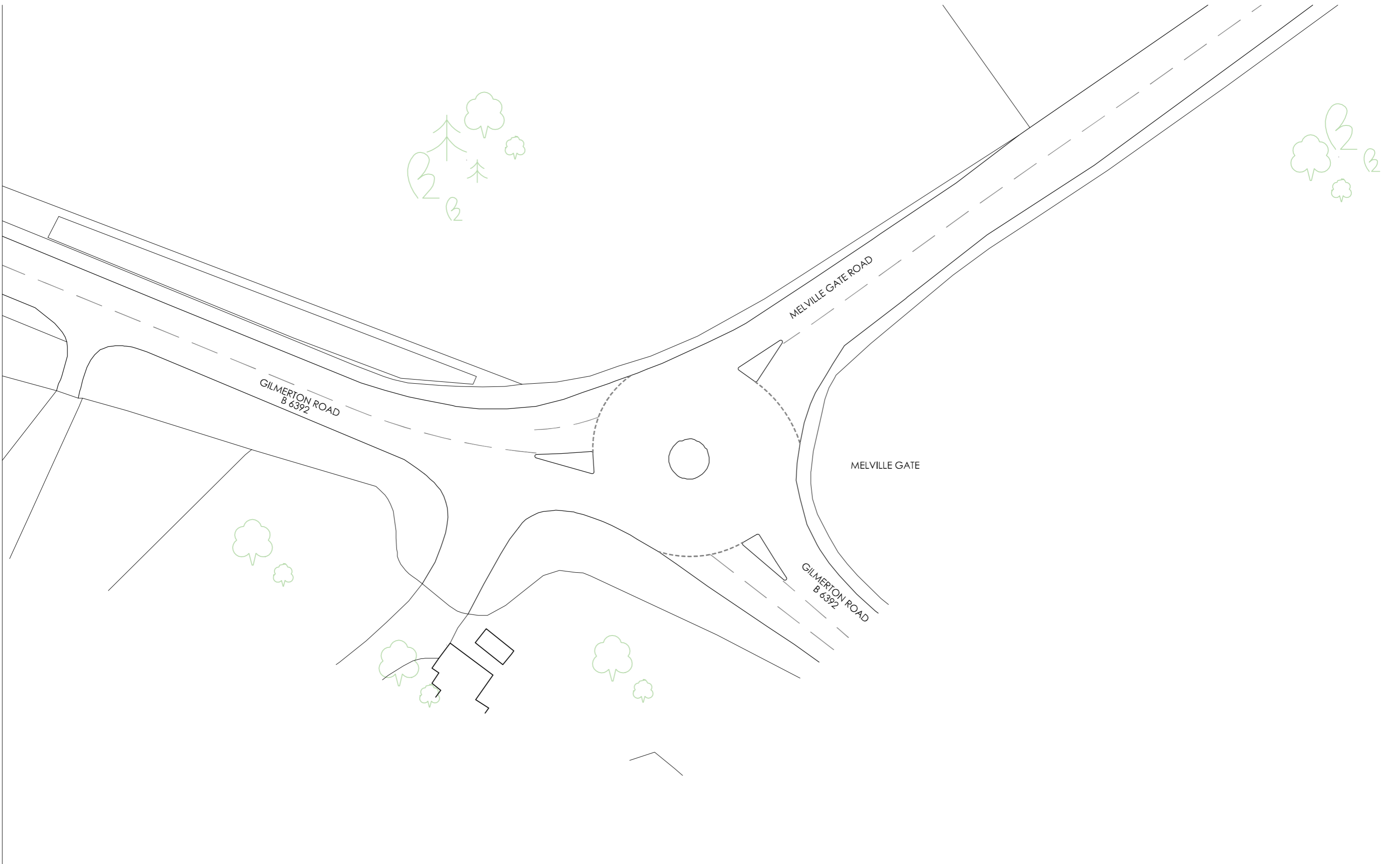
Scale:  
1:1000 @ A3

Drawn by:  
NW

Date:  
Sept 2021

Checked by:  
AS





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Sheriffhall South, Midlothian

Buccleuch Properties

B6392 Gilmerton Road/ Melville Gate Road  
 Existing Roundabout Junction Layout

Drawing Number:  
 TP324/SK/101

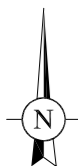
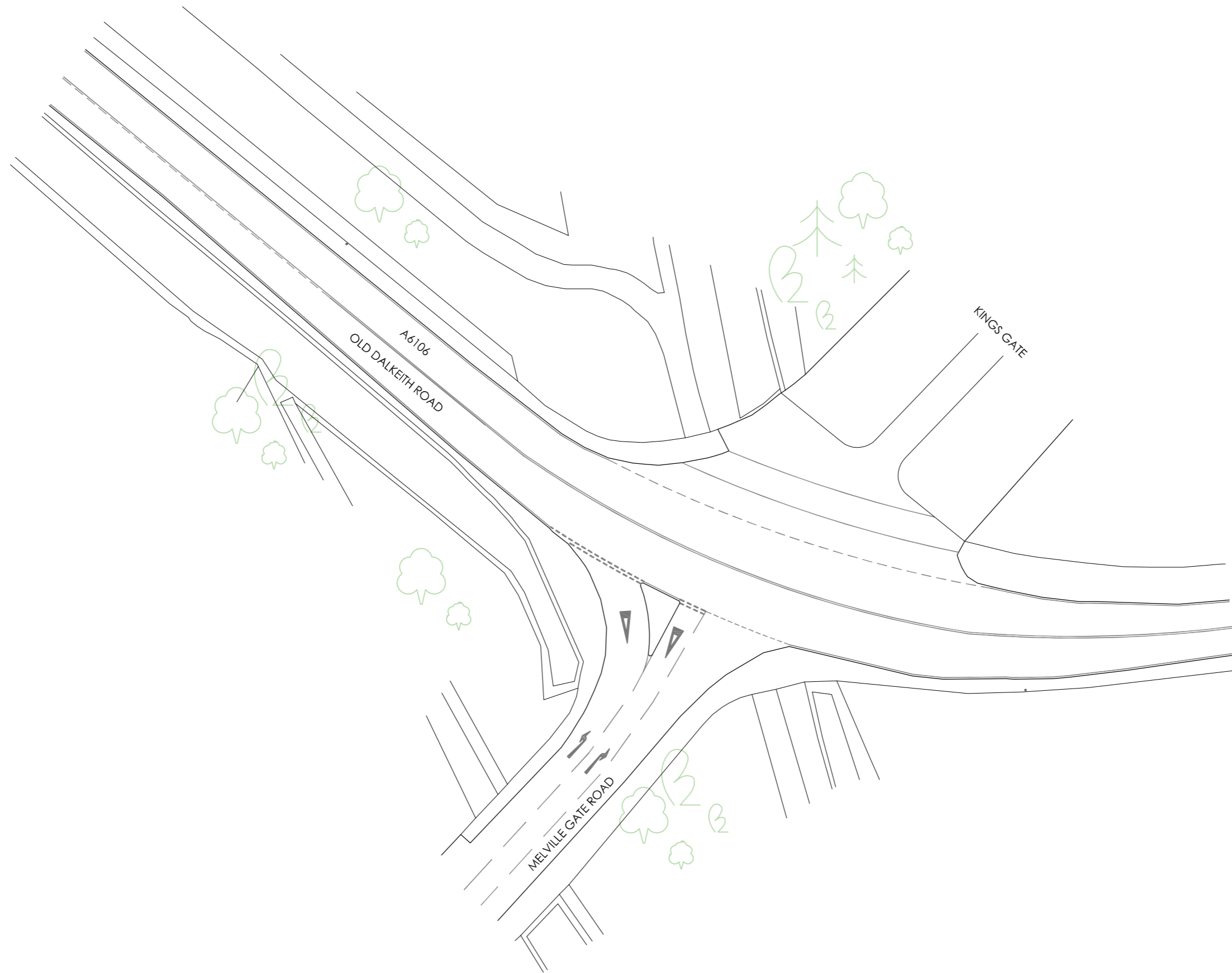
Scale:  
 1:500 @ A3

Drawn by:  
 NW

Date:  
 Aug 2021

Checked by:  
 SL





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Sheriffhall South, Midlothian

Buccleuch Properties

A6106 Old Dalkeith Rd/ Melville Gate Rd  
 Existing Priority Junction Layout

Drawing Number:  
 TP324/SK/103

Scale:  
 1:500 @ A3

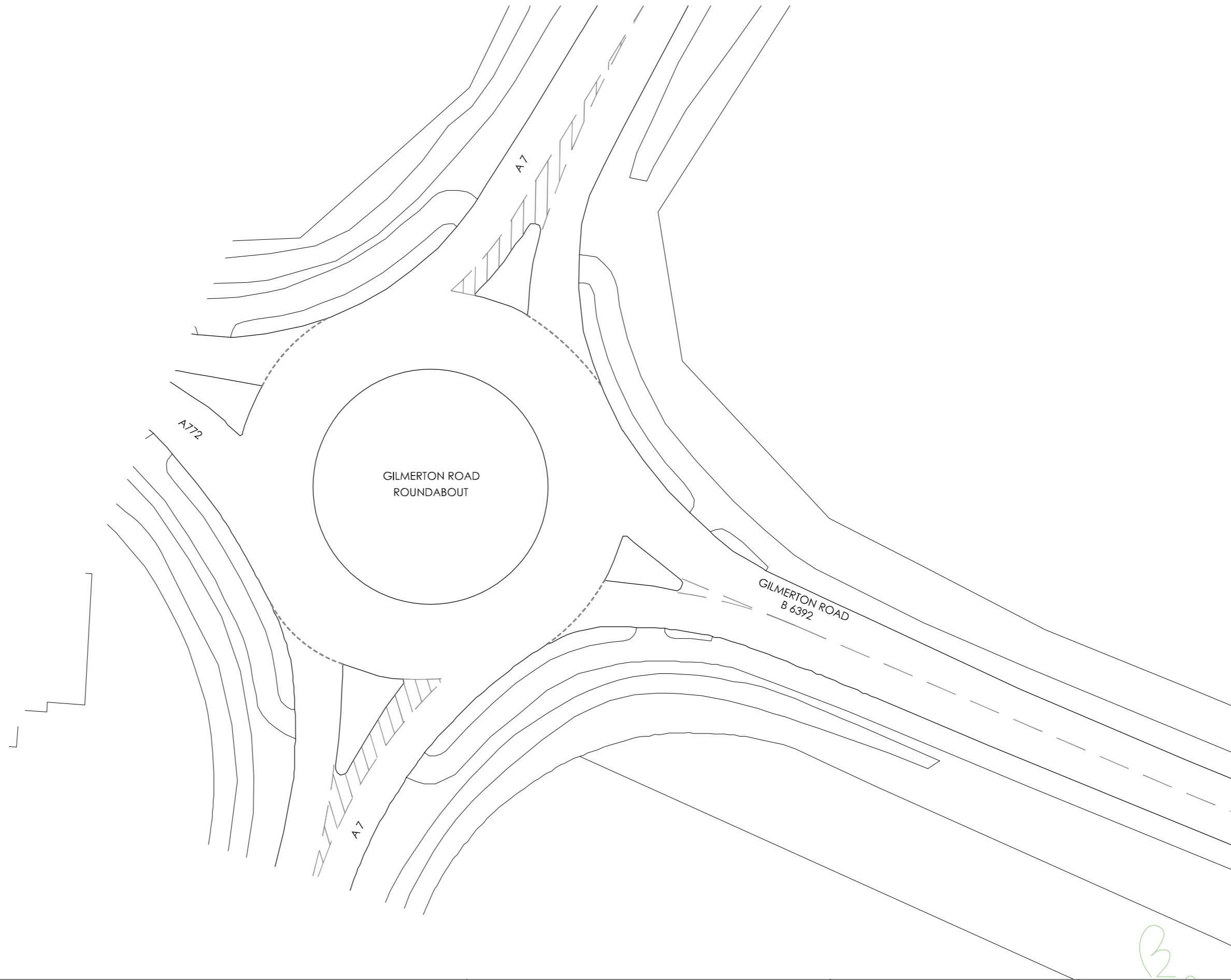
Drawn by:  
 NW

Date:  
 Aug 2021

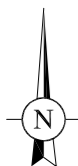
Checked by:  
 SL







B2



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Sheriffhall South, Midlothian

Buccleuch Properties

A7/ B6392 Gilmerton Road  
 Existing Roundabout Junction Layout

Drawing Number:  
 TP324/SK/102

Scale:  
 1:500 @ A3

Drawn by:  
 NW

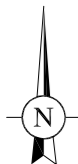
Date:  
 Aug 2021

Checked by:  
 SL





B2



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Sheriffhall South, Midlothian

Buccleuch Properties

A7/ B6392 Gilmerton Road  
 Potential Improvements to Roundabout  
 Junction Layout

Drawing Number:  
 TP324/SK/003

Scale:  
 1:500 @ A3

Drawn by:  
 NW

Date:  
 Sept 2021

Checked by:  
 SL



**APPENDIX E**  
**JUNCTION ANALYSIS**

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.5.0.6896 © Copyright TRL Limited, 2018
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk
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Filename: B6392 Gilmerton Rd\_Site Access 210913.j9  
 Path: C:\Users\Stuart\Documents\TPL\TP324\_Sheriffhall South\Junction Analysis\PICADY  
 Report generation date: 13/09/2021 16:20:05

- »2023 Projected + Comm & Prop Devs, Weekday AM
- »2023 Projected + Comm & Prop Devs, Weekday PM

**Summary of junction performance**

	Weekday AM					Weekday PM				
	Q (PCU)	Delay (min)	RFC	LOS	Res Cap	Q (PCU)	Delay (min)	RFC	LOS	Res Cap
2023 Projected + Comm & Prop Devs										
Stream B-AC	0.3	0.24	0.23	B	41 %	0.7	0.28	0.42	C	30 %
Stream C-AB	0.1	0.12	0.12	A	[Stream B-AC]	0.0	0.11	0.01	A	[Stream B-AC]

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

**File summary**

**File Description**

Title	B6392 Gilmerton Road/ Site Access
Location	Sheriffhall South
Site number	
Date	13/09/2021
Version	
Status	
Identifier	
Client	Buccleuch Property
Jobnumber	TP324
Enumerator	SL
Description	

**Units**

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Av. delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	min	-Min	perMin

**Analysis Options**

Vehicle length (m)	Calculate Q Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Av. Delay threshold (min)	Q threshold (PCU)
5.75			✓	Delay	0.85	0.60	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
D3	2023 Projected + Comm & Prop Devs	Weekday AM	ONE HOUR	07:00	08:30	15	✓
D6	2023 Projected + Comm & Prop Devs	Weekday PM	ONE HOUR	15:30	17:00	15	✓

### Analysis Set Details

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

# 2023 Projected + Comm & Prop Devs, Weekday AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (min)	Junction LOS
1	B6392 Gilmerton Road/ Site Access	T-Junction	Two-way		0.02	A

### Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	41	Stream B-AC

## Arms

### Arms

Arm	Name	Description	Arm type
A	B6392 Gilmerton Road (west)		Major
B	Site Access		Minor
C	B6392 Gilmerton Road (east)		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)
B6392 Gilmerton Road (east)	6.00		✓	3.00	100.0	✓	3.00

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)
Site Access	One lane	3.00	120	120

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	578	0.105	0.266	0.167	0.380
1	B-C	699	0.107	0.271	-	-
1	C-B	687	0.266	0.266	-	-

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
D3	2023 Projected + Comm & Prop Devs	Weekday AM	ONE HOUR	07:00	08:30	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	Av. Demand (PCU/hr)	Scaling Factor (%)
B6392 Gilmerton Road (west)		ONE HOUR	✓	446	100.000
Site Access		ONE HOUR	✓	66	100.000
B6392 Gilmerton Road (east)		ONE HOUR	✓	849	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		B6392 Gilmerton Road (west)	Site Access	B6392 Gilmerton Road (east)
From	B6392 Gilmerton Road (west)	0	125	321
	Site Access	56	0	10
	B6392 Gilmerton Road (east)	786	63	0

## Vehicle Mix

### HV %s

		To		
		B6392 Gilmerton Road (west)	Site Access	B6392 Gilmerton Road (east)
From	B6392 Gilmerton Road (west)	0	1	5
	Site Access	1	0	1
	B6392 Gilmerton Road (east)	0	1	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (min)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.23	0.24	0.3	B	61	91
C-AB	0.12	0.12	0.1	A	58	87
C-A					721	1082
A-B					115	172
A-C					295	442

### Main Results for each time segment

#### 07:00 - 07:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B-AC	50	12	410	0.121	49	0.0	0.1	0.168	B
C-AB	47	12	598	0.079	47	0.0	0.1	0.110	A
C-A	592	148			592				
A-B	94	24			94				
A-C	242	60			242				

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 (min)	Unsignalised level of service
B-AC	59	15	374	0.159	59	0.1	0.2	0.193	B
C-AB	57	14	581	0.098	57	0.1	0.1	0.116	A
C-A	707	177			707				
A-B	112	28			112				
A-C	289	72			289				

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 (min)	Unsignalised level of service
B-AC	73	18	322	0.226	72	0.2	0.3	0.242	B
C-AB	70	17	558	0.125	69	0.1	0.1	0.124	A
C-A	865	216			865				
A-B	138	34			138				
A-C	353	88			353				

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 (min)	Unsignalised level of service
B-AC	73	18	322	0.226	73	0.3	0.3	0.243	B
C-AB	70	17	558	0.125	70	0.1	0.1	0.124	A
C-A	865	216			865				
A-B	138	34			138				
A-C	353	88			353				

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 (min)	Unsignalised level of service
B-AC	59	15	374	0.159	60	0.3	0.2	0.193	B
C-AB	57	14	581	0.098	57	0.1	0.1	0.116	A
C-A	707	177			707				
A-B	112	28			112				
A-C	289	72			289				

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 (min)	Unsignalised level of service
B-AC	50	12	410	0.121	50	0.2	0.1	0.168	B
C-AB	47	12	598	0.079	48	0.1	0.1	0.110	A
C-A	592	148			592				
A-B	94	24			94				
A-C	242	60			242				



# 2023 Projected + Comm & Prop Devs, Weekday PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (min)	Junction LOS
1	B6392 Gilmerton Road/ Site Access	T-Junction	Two-way		0.04	A

### Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	30	Stream B-AC

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Projected + Comm & Prop Devs	Weekday PM	ONE HOUR	15:30	17:00	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	Av. Demand (PCU/hr)	Scaling Factor (%)
B6392 Gilmerton Road (west)		ONE HOUR	✓	504	100.000
Site Access		ONE HOUR	✓	143	100.000
B6392 Gilmerton Road (east)		ONE HOUR	✓	476	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		B6392 Gilmerton Road (west)	Site Access	B6392 Gilmerton Road (east)
From	B6392 Gilmerton Road (west)	0	31	473
	Site Access	112	0	31
	B6392 Gilmerton Road (east)	469	7	0

## Vehicle Mix

### HV %s

		To		
		B6392 Gilmerton Road (west)	Site Access	B6392 Gilmerton Road (east)
From	B6392 Gilmerton Road (west)	0	1	5
	Site Access	1	0	1
	B6392 Gilmerton Road (east)	5	1	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (min)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.42	0.28	0.7	C	131	197
C-AB	0.01	0.11	0.0	A	6	10
C-A					430	646
A-B					28	43
A-C					434	651

### Main Results for each time segment

#### 15:30 - 15:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B-AC	108	27	449	0.240	106	0.0	0.3	0.176	B
C-AB	5	1	586	0.009	5	0.0	0.0	0.104	A
C-A	353	88			353				
A-B	23	6			23				
A-C	356	89			356				

#### 15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B-AC	129	32	419	0.307	128	0.3	0.4	0.208	B
C-AB	6	2	566	0.011	6	0.0	0.0	0.108	A
C-A	422	105			422				
A-B	28	7			28				
A-C	425	106			425				

#### 16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B-AC	157	39	377	0.417	156	0.4	0.7	0.273	C
C-AB	8	2	539	0.014	8	0.0	0.0	0.114	A
C-A	516	129			516				
A-B	34	9			34				
A-C	521	130			521				

#### 16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B-AC	157	39	377	0.417	157	0.7	0.7	0.276	C
C-AB	8	2	539	0.014	8	0.0	0.0	0.114	A
C-A	516	129			516				
A-B	34	9			34				
A-C	521	130			521				

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B-AC	129	32	419	0.307	130	0.7	0.5	0.210	B
C-AB	6	2	566	0.011	6	0.0	0.0	0.108	A
C-A	422	105			422				
A-B	28	7			28				
A-C	425	106			425				

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 (min)	Unsignalised level of service
B-AC	108	27	449	0.240	108	0.5	0.3	0.178	B
C-AB	5	1	586	0.009	5	0.0	0.0	0.104	A
C-A	353	88			353				
A-B	23	6			23				
A-C	356	89			356				

Junctions 9
PICADY 9 - Priority Intersection Module
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Filename: Melville Gate Rd\_Site Access 210913.j9  
 Path: C:\Users\Stuart\Documents\TPL\TP324\_Sheriffhall South\Junction Analysis\PICADY  
 Report generation date: 13/09/2021 16:21:52

- »2023 Projected + Comm & Prop Devs, Weekday AM
- »2023 Projected + Comm & Prop Devs, Weekday PM

**Summary of junction performance**

	Weekday AM					Weekday PM				
	Q (PCU)	Delay (min)	RFC	LOS	Res Cap	Q (PCU)	Delay (min)	RFC	LOS	Res Cap
2023 Projected + Comm & Prop Devs										
Stream B-AC	0.0	0.00	0.00	A	374 %	0.0	0.13	0.04	A	267 %
Stream C-AB	0.0	0.09	0.02	A	[Stream C-AB]	0.0	0.09	0.00	A	[Stream B-AC]

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

**File summary**

**File Description**

Title	Melville Gate Road/ Site Access
Location	Sheriffhall South
Site number	
Date	13/09/2021
Version	
Status	
Identifier	
Client	Buccleuch Property
Jobnumber	TP324
Enumerator	SL
Description	

**Units**

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Av. delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	min	-Min	perMin

**Analysis Options**

Vehicle length (m)	Calculate Q Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Av. Delay threshold (min)	Q threshold (PCU)
5.75			✓	Delay	0.85	0.60	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
D3	2023 Projected + Comm & Prop Devs	Weekday AM	ONE HOUR	07:00	08:30	15	✓
D6	2023 Projected + Comm & Prop Devs	Weekday PM	ONE HOUR	15:30	17:00	15	✓

### Analysis Set Details

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

# 2023 Projected + Comm & Prop Devs, Weekday AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (min)	Junction LOS
1	Melville Gate Road/ Site Access	T-Junction	Two-way		0.00	A

### Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	374	Stream C-AB

## Arms

### Arms

Arm	Name	Description	Arm type
A	Melville Gate Road (southwest)		Major
B	Site Access		Minor
C	Melville Gate Road (northeast)		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)
Melville Gate Road (northeast)	7.30			100.0	✓	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	Lane width (m)	Visibility to left (m)	Visibility to right (m)
Site Access	One lane	3.00	120	120

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	578	0.099	0.251	0.158	0.359
1	B-C	699	0.101	0.256	-	-
1	C-B	632	0.231	0.231	-	-

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
D3	2023 Projected + Comm & Prop Devs	Weekday AM	ONE HOUR	07:00	08:30	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	Av. Demand (PCU/hr)	Scaling Factor (%)
Melville Gate Road (southwest)		ONE HOUR	✓	308	100.000
Site Access		ONE HOUR	✓	4	100.000
Melville Gate Road (northeast)		ONE HOUR	✓	289	100.000

## Origin-Destination Data

### Demand (PCU/hr)

From	To			
	Melville Gate Road (southwest)	Site Access	Melville Gate Road (northeast)	
Melville Gate Road (southwest)	0	16	292	
Site Access	3	0	1	
Melville Gate Road (northeast)	282	7	0	

## Vehicle Mix

### HV %s

From	To			
	Melville Gate Road (southwest)	Site Access	Melville Gate Road (northeast)	
Melville Gate Road (southwest)	0	5	1	
Site Access	5	0	5	
Melville Gate Road (northeast)	1	5	0	

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (min)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.00	0.00	0.0	A	0	0
C-AB	0.02	0.09	0.0	A	10	15
C-A					255	383
A-B					15	22
A-C					268	402

### Main Results for each time segment

#### 07:00 - 07:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B-AC	0	0	553	0.000	0	0.0	0.0	0.000	A
C-AB	7	2	722	0.010	7	0.0	0.0	0.087	A
C-A	210	53			210				
A-B	12	3			12				
A-C	220	55			220				

**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 (min)	Unsignalised level of service
B-AC	0	0	538	0.000	0	0.0	0.0	0.000	A
C-AB	10	2	741	0.013	10	0.0	0.0	0.085	A
C-A	250	63			250				
A-B	14	4			14				
A-C	263	66			263				

**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 (min)	Unsignalised level of service
B-AC	0	0	516	0.000	0	0.0	0.0	0.000	A
C-AB	13	3	769	0.017	13	0.0	0.0	0.082	A
C-A	305	76			305				
A-B	18	4			18				
A-C	321	80			321				

**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 (min)	Unsignalised level of service
B-AC	0	0	516	0.000	0	0.0	0.0	0.000	A
C-AB	13	3	769	0.017	13	0.0	0.0	0.082	A
C-A	305	76			305				
A-B	18	4			18				
A-C	321	80			321				

**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 (min)	Unsignalised level of service
B-AC	0	0	538	0.000	0	0.0	0.0	0.000	A
C-AB	10	2	741	0.013	10	0.0	0.0	0.085	A
C-A	250	63			250				
A-B	14	4			14				
A-C	263	66			263				

**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 (min)	Unsignalised level of service
B-AC	0	0	553	0.000	0	0.0	0.0	0.000	A
C-AB	7	2	722	0.010	7	0.0	0.0	0.087	A
C-A	210	53			210				
A-B	12	3			12				
A-C	220	55			220				



# 2023 Projected + Comm & Prop Devs, Weekday PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (min)	Junction LOS
1	Melville Gate Road/ Site Access	T-Junction	Two-way		0.00	A

### Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	267	Stream B-AC

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Projected + Comm & Prop Devs	Weekday PM	ONE HOUR	15:30	17:00	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	Av. Demand (PCU/hr)	Scaling Factor (%)
Melville Gate Road (southwest)		ONE HOUR	✓	292	100.000
Site Access		ONE HOUR	✓	19	100.000
Melville Gate Road (northeast)		ONE HOUR	✓	209	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		Melville Gate Road (southwest)	Site Access	Melville Gate Road (northeast)
From	Melville Gate Road (southwest)	0	2	290
	Site Access	14	0	5
	Melville Gate Road (northeast)	208	1	0

## Vehicle Mix

### HV %s

		To		
		Melville Gate Road (southwest)	Site Access	Melville Gate Road (northeast)
From	Melville Gate Road (southwest)	0	1	5
	Site Access	1	0	1
	Melville Gate Road (northeast)	5	1	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (min)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.04	0.13	0.0	A	17	26
C-AB	0.00	0.09	0.0	A	1	2
C-A					191	286
A-B					2	3
A-C					266	399

### Main Results for each time segment

#### 15:30 - 15:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B-AC	14	4	530	0.027	14	0.0	0.0	0.118	A
C-AB	0.98	0.24	687	0.001	0.97	0.0	0.0	0.089	A
C-A	156	39			156				
A-B	2	0.38			2				
A-C	218	55			218				

#### 15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B-AC	17	4	515	0.033	17	0.0	0.0	0.122	A
C-AB	1	0.31	699	0.002	1	0.0	0.0	0.088	A
C-A	187	47			187				
A-B	2	0.45			2				
A-C	261	65			261				

#### 16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B-AC	21	5	494	0.042	21	0.0	0.0	0.128	A
C-AB	2	0.41	716	0.002	2	0.0	0.0	0.086	A
C-A	228	57			228				
A-B	2	0.55			2				
A-C	319	80			319				

#### 16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B-AC	21	5	494	0.042	21	0.0	0.0	0.128	A
C-AB	2	0.41	716	0.002	2	0.0	0.0	0.086	A
C-A	228	57			228				
A-B	2	0.55			2				
A-C	319	80			319				

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B-AC	17	4	515	0.033	17	0.0	0.0	0.122	A
C-AB	1	0.31	699	0.002	1	0.0	0.0	0.088	A
C-A	187	47			187				
A-B	2	0.45			2				
A-C	261	65			261				

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 (min)	Unsignalised level of service
B-AC	14	4	530	0.027	14	0.0	0.0	0.118	A
C-AB	0.98	0.24	687	0.001	0.98	0.0	0.0	0.089	A
C-A	156	39			156				
A-B	2	0.38			2				
A-C	218	55			218				

Junctions 9
PICADY 9 - Priority Intersection Module
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**Filename:** A6106\_Melville Gate Rd 210913.j9  
**Path:** C:\Users\Stuart\Documents\TPL\TP324\_Sheriffhall South\Junction Analysis\PICADY  
**Report generation date:** 13/09/2021 16:24:41

- »2021 Surveyed, Weekday AM
- »2023 Projected + Comm Dev, Weekday AM
- »2023 Projected + Comm & Prop Devs, Weekday AM
- »2021 Surveyed, Weekday PM
- »2023 Projected + Comm Dev, Weekday PM
- »2023 Projected + Comm & Prop Devs, Weekday PM

**Summary of junction performance**

	Weekday AM					Weekday PM				
	Q (PCU)	Delay (min)	RFC	LOS	Res Cap	Q (PCU)	Delay (min)	RFC	LOS	Res Cap
<b>2021 Surveyed</b>										
Stream B-C	0.8	0.20	0.46	B	48 % [Stream B-C]	0.6	0.18	0.36	B	43 % [Stream B-A]
Stream B-A	0.5	0.22	0.31	B		0.7	0.26	0.41	C	
Stream C-AB	0.2	0.10	0.12	A		0.5	0.11	0.24	A	
<b>2023 Projected + Comm Dev</b>										
Stream B-C	0.9	0.21	0.48	B	44 % [Stream B-C]	0.6	0.18	0.38	B	31 % [Stream B-A]
Stream B-A	0.5	0.23	0.33	B		0.9	0.30	0.47	C	
Stream C-AB	0.2	0.10	0.12	A		0.5	0.11	0.24	A	
<b>2023 Projected + Comm &amp; Prop Devs</b>										
Stream B-C	0.9	0.21	0.48	B	42 % [Stream B-C]	0.6	0.19	0.39	B	26 % [Stream B-A]
Stream B-A	0.5	0.24	0.35	B		1.0	0.32	0.51	C	
Stream C-AB	0.3	0.11	0.14	A		0.5	0.11	0.25	A	

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

## File summary

### File Description

<b>Title</b>	A6016 Old Dalkeith Road/ Melville Gate Road
<b>Location</b>	Sheriffhall South
<b>Site number</b>	
<b>Date</b>	13/09/2021
<b>Version</b>	
<b>Status</b>	
<b>Identifier</b>	
<b>Client</b>	Buccleuch Property
<b>Jobnumber</b>	TP324
<b>Enumerator</b>	SL
<b>Description</b>	

### Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Av. delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	min	-Min	perMin

### Analysis Options

Vehicle length (m)	Calculate Q Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Av. Delay threshold (min)	Q threshold (PCU)
5.75			✓	Delay	0.85	0.60	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	2021 Surveyed	Weekday AM	ONE HOUR	07:00	08:30	15	✓
D2	2023 Projected + Comm Dev	Weekday AM	ONE HOUR	07:00	08:30	15	✓
D3	2023 Projected + Comm & Prop Devs	Weekday AM	ONE HOUR	07:00	08:30	15	✓
D4	2021 Surveyed	Weekday PM	ONE HOUR	15:30	17:00	15	✓
D5	2023 Projected + Comm Dev	Weekday PM	ONE HOUR	15:30	17:00	15	✓
D6	2023 Projected + Comm & Prop Devs	Weekday PM	ONE HOUR	15:30	17:00	15	✓

### Analysis Set Details

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

# 2021 Surveyed, Weekday AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (min)	Junction LOS
1	A6106 Old Dalkeith Road/ Melville Gate Road	T-Junction	Two-way		0.07	A

### Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	48	Stream B-C

## Arms

### Arms

Arm	Name	Description	Arm type
A	A6016 Old Dalkeith Road (east)		Major
B	Melville Gate Road		Minor
C	A6016 Old Dalkeith Road (northwest)		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)
A6016 Old Dalkeith Road (northwest)	12.50			30.0	✓	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	Lane Width (Left) (m)	Lane Width (Right) (m)	Visibility to left (m)	Visibility to right (m)
Melville Gate Road	Two lanes	3.70	3.20	50	50

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	529	0.069	0.175	0.110	0.249
1	B-C	701	0.077	0.195	-	-
1	C-B	591	0.164	0.164	-	-

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	2021 Surveyed	Weekday AM	ONE HOUR	07:00	08:30	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	Av. Demand (PCU/hr)	Scaling Factor (%)
A6016 Old Dalkeith Road (east)		ONE HOUR	✓	495	100.000
Melville Gate Road		ONE HOUR	✓	345	100.000
A6016 Old Dalkeith Road (northwest)		ONE HOUR	✓	281	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A6016 Old Dalkeith Road (east)	Melville Gate Road	A6016 Old Dalkeith Road (northwest)
From	A6016 Old Dalkeith Road (east)	0	58	437
	Melville Gate Road	114	0	231
	A6016 Old Dalkeith Road (northwest)	235	46	0

## Vehicle Mix

### HV %s

		To		
		A6016 Old Dalkeith Road (east)	Melville Gate Road	A6016 Old Dalkeith Road (northwest)
From	A6016 Old Dalkeith Road (east)	0	0	4
	Melville Gate Road	1	0	1
	A6016 Old Dalkeith Road (northwest)	6	2	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (min)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.46	0.20	0.8	B	212	318
B-A	0.31	0.22	0.5	B	105	157
C-AB	0.12	0.10	0.2	A	63	95
C-A					195	292
A-B					53	80
A-C					401	601

### Main Results for each time segment

#### 07:00 - 07:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B-C	174	43	603	0.288	172	0.0	0.4	0.140	A
B-A	86	21	440	0.195	85	0.0	0.2	0.170	B
C-AB	47	12	655	0.072	47	0.0	0.1	0.102	A
C-A	164	41			164				
A-B	44	11			44				
A-C	329	82			329				

**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 (min)	Unsignalised level of service
B-C	208	52	583	0.356	207	0.4	0.6	0.161	A
B-A	102	26	423	0.242	102	0.2	0.3	0.189	B
C-AB	61	15	669	0.091	60	0.1	0.2	0.102	A
C-A	192	48			192				
A-B	52	13			52				
A-C	393	98			393				

**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 (min)	Unsignalised level of service
B-C	254	64	555	0.458	253	0.6	0.8	0.200	B
B-A	126	31	399	0.314	125	0.3	0.5	0.220	B
C-AB	81	20	689	0.118	81	0.2	0.2	0.102	A
C-A	228	57			228				
A-B	64	16			64				
A-C	481	120			481				

**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 (min)	Unsignalised level of service
B-C	254	64	555	0.459	254	0.8	0.8	0.202	B
B-A	126	31	399	0.314	125	0.5	0.5	0.221	B
C-AB	81	20	689	0.118	81	0.2	0.2	0.102	A
C-A	228	57			228				
A-B	64	16			64				
A-C	481	120			481				

**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 (min)	Unsignalised level of service
B-C	208	52	582	0.357	209	0.8	0.6	0.163	A
B-A	102	26	423	0.242	103	0.5	0.3	0.190	B
C-AB	61	15	669	0.091	61	0.2	0.2	0.102	A
C-A	192	48			192				
A-B	52	13			52				
A-C	393	98			393				

**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 (min)	Unsignalised level of service
B-C	174	43	602	0.289	175	0.6	0.4	0.142	A
B-A	86	21	440	0.195	86	0.3	0.2	0.171	B
C-AB	48	12	655	0.073	48	0.2	0.1	0.102	A
C-A	164	41			164				
A-B	44	11			44				
A-C	329	82			329				



# 2023 Projected + Comm Dev, Weekday AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (min)	Junction LOS
1	A6106 Old Dalkeith Road/ Melville Gate Road	T-Junction	Two-way		0.07	A

### Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	44	Stream B-C

## 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	2023 Projected + Comm Dev	Weekday AM	ONE HOUR	07:00	08:30	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	Av. Demand (PCU/hr)	Scaling Factor (%)
A6016 Old Dalkeith Road (east)		ONE HOUR	✓	526	100.000
Melville Gate Road		ONE HOUR	✓	356	100.000
A6016 Old Dalkeith Road (northwest)		ONE HOUR	✓	288	100.000

## Origin-Destination Data

### Demand (PCU/hr)

From	To		
	A6016 Old Dalkeith Road (east)	Melville Gate Road	A6016 Old Dalkeith Road (northwest)
A6016 Old Dalkeith Road (east)	0	79	447
Melville Gate Road	119	0	237
A6016 Old Dalkeith Road (northwest)	241	47	0

## Vehicle Mix

### HV %s

From	To		
	A6016 Old Dalkeith Road (east)	Melville Gate Road	A6016 Old Dalkeith Road (northwest)
A6016 Old Dalkeith Road (east)	0	0	4
Melville Gate Road	1	0	1
A6016 Old Dalkeith Road (northwest)	6	2	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (min)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.48	0.21	0.9	B	217	326
B-A	0.33	0.23	0.5	B	109	164
C-AB	0.12	0.10	0.2	A	65	98
C-A					199	298
A-B					72	109
A-C					410	615

### Main Results for each time segment

#### 07:00 - 07:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B-C	178	45	599	0.298	177	0.0	0.4	0.143	A
B-A	90	22	437	0.205	89	0.0	0.3	0.173	B
C-AB	49	12	655	0.075	48	0.0	0.1	0.102	A
C-A	168	42			168				
A-B	59	15			59				
A-C	337	84			337				

#### 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 (min)	Unsignalised level of service
B-C	213	53	578	0.369	212	0.4	0.6	0.166	A
B-A	107	27	419	0.255	107	0.3	0.3	0.194	B
C-AB	63	16	669	0.094	63	0.1	0.2	0.102	A
C-A	196	49			196				
A-B	71	18			71				
A-C	402	100			402				

#### 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 (min)	Unsignalised level of service
B-C	261	65	549	0.476	260	0.6	0.9	0.209	B
B-A	131	33	395	0.332	130	0.3	0.5	0.229	B
C-AB	84	21	689	0.123	84	0.2	0.2	0.103	A
C-A	233	58			233				
A-B	87	22			87				
A-C	492	123			492				

#### 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 (min)	Unsignalised level of service
B-C	261	65	548	0.476	261	0.9	0.9	0.211	B
B-A	131	33	395	0.332	131	0.5	0.5	0.230	B
C-AB	85	21	689	0.123	85	0.2	0.2	0.103	A
C-A	233	58			233				
A-B	87	22			87				
A-C	492	123			492				

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 (min)	Unsignalised level of service
B-C	213	53	577	0.369	214	0.9	0.6	0.167	B
B-A	107	27	419	0.255	108	0.5	0.4	0.195	B
C-AB	63	16	669	0.094	63	0.2	0.2	0.103	A
C-A	196	49			196				
A-B	71	18			71				
A-C	402	100			402				

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 (min)	Unsignalised level of service
B-C	178	45	598	0.298	179	0.6	0.4	0.145	A
B-A	90	22	437	0.205	90	0.4	0.3	0.175	B
C-AB	49	12	655	0.075	49	0.2	0.1	0.102	A
C-A	168	42			168				
A-B	59	15			59				
A-C	337	84			337				

# 2023 Projected + Comm & Prop Devs, Weekday AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (min)	Junction LOS
1	A6106 Old Dalkeith Road/ Melville Gate Road	T-Junction	Two-way		0.07	A

### Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	42	Stream B-C

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2023 Projected + Comm & Prop Devs	Weekday AM	ONE HOUR	07:00	08:30	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	Av. Demand (PCU/hr)	Scaling Factor (%)
A6016 Old Dalkeith Road (east)		ONE HOUR	✓	543	100.000
Melville Gate Road		ONE HOUR	✓	363	100.000
A6016 Old Dalkeith Road (northwest)		ONE HOUR	✓	293	100.000

## Origin-Destination Data

### Demand (PCU/hr)

From	To		
	A6016 Old Dalkeith Road (east)	Melville Gate Road	A6016 Old Dalkeith Road (northwest)
A6016 Old Dalkeith Road (east)	0	96	447
Melville Gate Road	126	0	237
A6016 Old Dalkeith Road (northwest)	241	52	0

## Vehicle Mix

### HV %s

From	To		
	A6016 Old Dalkeith Road (east)	Melville Gate Road	A6016 Old Dalkeith Road (northwest)
A6016 Old Dalkeith Road (east)	0	0	4
Melville Gate Road	1	0	1
A6016 Old Dalkeith Road (northwest)	6	2	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (min)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.48	0.21	0.9	B	217	326
B-A	0.35	0.24	0.5	B	116	173
C-AB	0.14	0.11	0.3	A	73	109
C-A					196	294
A-B					88	132
A-C					410	615

### Main Results for each time segment

#### 07:00 - 07:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B-C	178	45	596	0.299	177	0.0	0.4	0.144	A
B-A	95	24	435	0.218	94	0.0	0.3	0.177	B
C-AB	54	14	653	0.083	54	0.0	0.1	0.103	A
C-A	166	42			166				
A-B	72	18			72				
A-C	337	84			337				

#### 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 (min)	Unsignalised level of service
B-C	213	53	574	0.371	212	0.4	0.6	0.167	B
B-A	113	28	417	0.272	113	0.3	0.4	0.199	B
C-AB	69	17	666	0.104	69	0.1	0.2	0.104	A
C-A	194	48			194				
A-B	86	22			86				
A-C	402	100			402				

#### 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 (min)	Unsignalised level of service
B-C	261	65	544	0.480	260	0.6	0.9	0.212	B
B-A	139	35	392	0.354	138	0.4	0.5	0.238	B
C-AB	94	23	686	0.137	93	0.2	0.3	0.105	A
C-A	229	57			229				
A-B	106	26			106				
A-C	492	123			492				

#### 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 (min)	Unsignalised level of service
B-C	261	65	544	0.480	261	0.9	0.9	0.214	B
B-A	139	35	392	0.354	139	0.5	0.5	0.239	B
C-AB	94	23	686	0.137	94	0.3	0.3	0.105	A
C-A	229	57			229				
A-B	106	26			106				
A-C	492	123			492				

**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 (min)	Unsignalised level of service
B-C	213	53	574	0.371	214	0.9	0.6	0.169	B
B-A	113	28	417	0.272	114	0.5	0.4	0.200	B
C-AB	70	17	667	0.104	70	0.3	0.2	0.104	A
C-A	194	48			194				
A-B	86	22			86				
A-C	402	100			402				

**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 (min)	Unsignalised level of service
B-C	178	45	595	0.300	179	0.6	0.4	0.146	A
B-A	95	24	435	0.218	95	0.4	0.3	0.178	B
C-AB	54	14	653	0.083	55	0.2	0.1	0.104	A
C-A	166	42			166				
A-B	72	18			72				
A-C	337	84			337				

# 2021 Surveyed, Weekday PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (min)	Junction LOS
1	A6106 Old Dalkeith Road/ Melville Gate Road	T-Junction	Two-way		0.07	A

### Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	43	Stream B-A

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2021 Surveyed	Weekday PM	ONE HOUR	15:30	17:00	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	Av. Demand (PCU/hr)	Scaling Factor (%)
A6016 Old Dalkeith Road (east)		ONE HOUR	✓	537	100.000
Melville Gate Road		ONE HOUR	✓	322	100.000
A6016 Old Dalkeith Road (northwest)		ONE HOUR	✓	368	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A6016 Old Dalkeith Road (east)	Melville Gate Road	A6016 Old Dalkeith Road (northwest)
From	A6016 Old Dalkeith Road (east)	0	154	383
	Melville Gate Road	142	0	180
	A6016 Old Dalkeith Road (northwest)	281	87	0

## Vehicle Mix

### HV %s

		To		
		A6016 Old Dalkeith Road (east)	Melville Gate Road	A6016 Old Dalkeith Road (northwest)
From	A6016 Old Dalkeith Road (east)	0	1	4
	Melville Gate Road	1	0	1
	A6016 Old Dalkeith Road (northwest)	3	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (min)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.36	0.18	0.6	B	165	248
B-A	0.41	0.26	0.7	C	130	195
C-AB	0.24	0.11	0.5	A	129	194
C-A					208	312
A-B					141	212
A-C					351	527

### Main Results for each time segment

#### 15:30 - 15:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B-C	136	34	597	0.227	134	0.0	0.3	0.131	A
B-A	107	27	431	0.248	106	0.0	0.3	0.185	B
C-AB	95	24	675	0.141	94	0.0	0.2	0.104	A
C-A	182	45			182				
A-B	116	29			116				
A-C	288	72			288				

#### 15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B-C	162	40	575	0.282	161	0.3	0.4	0.147	A
B-A	128	32	412	0.310	127	0.3	0.4	0.212	B
C-AB	123	31	693	0.178	123	0.2	0.3	0.106	A
C-A	207	52			207				
A-B	138	35			138				
A-C	344	86			344				

#### 16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B-C	198	50	544	0.364	197	0.4	0.6	0.175	B
B-A	156	39	385	0.406	155	0.4	0.7	0.262	C
C-AB	169	42	719	0.235	168	0.3	0.5	0.110	A
C-A	236	59			236				
A-B	170	42			170				
A-C	422	105			422				

#### 16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B-C	198	50	544	0.365	198	0.6	0.6	0.176	B
B-A	156	39	385	0.406	156	0.7	0.7	0.264	C
C-AB	169	42	719	0.235	169	0.5	0.5	0.111	A
C-A	236	59			236				
A-B	170	42			170				
A-C	422	105			422				



16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B-C	162	40	574	0.282	163	0.6	0.4	0.148	A
B-A	128	32	412	0.310	129	0.7	0.5	0.214	B
C-AB	124	31	693	0.178	124	0.5	0.3	0.107	A
C-A	207	52			207				
A-B	138	35			138				
A-C	344	86			344				

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 (min)	Unsignalised level of service
B-C	136	34	596	0.227	136	0.4	0.3	0.132	A
B-A	107	27	431	0.248	107	0.5	0.3	0.187	B
C-AB	96	24	675	0.142	96	0.3	0.2	0.105	A
C-A	181	45			181				
A-B	116	29			116				
A-C	288	72			288				

# 2023 Projected + Comm Dev, Weekday PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (min)	Junction LOS
1	A6106 Old Dalkeith Road/ Melville Gate Road	T-Junction	Two-way		0.08	A

### Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	31	Stream B-A

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2023 Projected + Comm Dev	Weekday PM	ONE HOUR	15:30	17:00	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	Av. Demand (PCU/hr)	Scaling Factor (%)
A6016 Old Dalkeith Road (east)		ONE HOUR	✓	551	100.000
Melville Gate Road		ONE HOUR	✓	347	100.000
A6016 Old Dalkeith Road (northwest)		ONE HOUR	✓	377	100.000

## Origin-Destination Data

### Demand (PCU/hr)

From	To		
	A6016 Old Dalkeith Road (east)	Melville Gate Road	A6016 Old Dalkeith Road (northwest)
A6016 Old Dalkeith Road (east)	0	159	392
Melville Gate Road	163	0	184
A6016 Old Dalkeith Road (northwest)	288	89	0

## Vehicle Mix

### HV %s

From	To		
	A6016 Old Dalkeith Road (east)	Melville Gate Road	A6016 Old Dalkeith Road (northwest)
A6016 Old Dalkeith Road (east)	0	1	4
Melville Gate Road	1	0	1
A6016 Old Dalkeith Road (northwest)	3	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (min)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.38	0.18	0.6	B	169	253
B-A	0.47	0.30	0.9	C	150	224
C-AB	0.24	0.11	0.5	A	134	201
C-A					212	318
A-B					146	219
A-C					360	540

### Main Results for each time segment

#### 15:30 - 15:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B-C	139	35	589	0.235	137	0.0	0.3	0.134	A
B-A	123	31	429	0.286	121	0.0	0.4	0.196	B
C-AB	99	25	677	0.146	98	0.0	0.2	0.104	A
C-A	185	46			185				
A-B	120	30			120				
A-C	295	74			295				

#### 15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B-C	165	41	565	0.293	165	0.3	0.4	0.151	A
B-A	147	37	409	0.358	146	0.4	0.6	0.229	B
C-AB	128	32	696	0.184	127	0.2	0.3	0.107	A
C-A	211	53			211				
A-B	143	36			143				
A-C	352	88			352				

#### 16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B-C	203	51	532	0.381	202	0.4	0.6	0.183	B
B-A	179	45	382	0.470	178	0.6	0.9	0.295	C
C-AB	175	44	723	0.243	175	0.3	0.5	0.111	A
C-A	240	60			240				
A-B	175	44			175				
A-C	432	108			432				

#### 16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B-C	203	51	531	0.381	203	0.6	0.6	0.184	B
B-A	179	45	382	0.470	179	0.9	0.9	0.298	C
C-AB	176	44	723	0.243	176	0.5	0.5	0.111	A
C-A	239	60			239				
A-B	175	44			175				
A-C	432	108			432				

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B-C	165	41	565	0.293	166	0.6	0.4	0.153	A
B-A	147	37	409	0.359	148	0.9	0.6	0.233	B
C-AB	128	32	696	0.184	129	0.5	0.4	0.107	A
C-A	211	53			211				
A-B	143	36			143				
A-C	352	88			352				

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 (min)	Unsignalised level of service
B-C	139	35	588	0.235	139	0.4	0.3	0.135	A
B-A	123	31	428	0.287	123	0.6	0.4	0.199	B
C-AB	99	25	677	0.146	99	0.4	0.3	0.105	A
C-A	185	46			185				
A-B	120	30			120				
A-C	295	74			295				

# 2023 Projected + Comm & Prop Devs, Weekday PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (min)	Junction LOS
1	A6106 Old Dalkeith Road/ Melville Gate Road	T-Junction	Two-way		0.08	A

### Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	26	Stream B-A

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Projected + Comm & Prop Devs	Weekday PM	ONE HOUR	15:30	17:00	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	Av. Demand (PCU/hr)	Scaling Factor (%)
A6016 Old Dalkeith Road (east)		ONE HOUR	✓	553	100.000
Melville Gate Road		ONE HOUR	✓	363	100.000
A6016 Old Dalkeith Road (northwest)		ONE HOUR	✓	378	100.000

## Origin-Destination Data

### Demand (PCU/hr)

From	To		
	A6016 Old Dalkeith Road (east)	Melville Gate Road	A6016 Old Dalkeith Road (northwest)
A6016 Old Dalkeith Road (east)	0	161	392
Melville Gate Road	175	0	188
A6016 Old Dalkeith Road (northwest)	288	90	0

## Vehicle Mix

### HV %s

From	To		
	A6016 Old Dalkeith Road (east)	Melville Gate Road	A6016 Old Dalkeith Road (northwest)
A6016 Old Dalkeith Road (east)	0	1	4
Melville Gate Road	1	0	1
A6016 Old Dalkeith Road (northwest)	3	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (min)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.39	0.19	0.6	B	173	259
B-A	0.51	0.32	1.0	C	161	241
C-AB	0.25	0.11	0.5	A	136	203
C-A					211	317
A-B					148	222
A-C					360	540

### Main Results for each time segment

#### 15:30 - 15:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B-C	142	35	586	0.242	140	0.0	0.3	0.136	A
B-A	132	33	428	0.308	130	0.0	0.4	0.201	B
C-AB	100	25	677	0.147	99	0.0	0.3	0.105	A
C-A	185	46			185				
A-B	121	30			121				
A-C	295	74			295				

#### 15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B-C	169	42	561	0.301	169	0.3	0.4	0.154	A
B-A	157	39	409	0.385	157	0.4	0.6	0.239	B
C-AB	129	32	695	0.186	129	0.3	0.3	0.107	A
C-A	210	53			210				
A-B	145	36			145				
A-C	352	88			352				

#### 16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B-C	207	52	526	0.393	206	0.4	0.6	0.189	B
B-A	193	48	381	0.505	191	0.6	1.0	0.315	C
C-AB	177	44	722	0.246	177	0.3	0.5	0.111	A
C-A	239	60			239				
A-B	177	44			177				
A-C	432	108			432				

#### 16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B-C	207	52	526	0.394	207	0.6	0.6	0.190	B
B-A	193	48	381	0.505	193	1.0	1.0	0.320	C
C-AB	178	44	722	0.246	178	0.5	0.5	0.112	A
C-A	239	60			239				
A-B	177	44			177				
A-C	432	108			432				

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B-C	169	42	560	0.302	170	0.6	0.4	0.156	A
B-A	157	39	408	0.385	159	1.0	0.6	0.243	B
C-AB	130	32	696	0.186	130	0.5	0.4	0.107	A
C-A	210	53			210				
A-B	145	36			145				
A-C	352	88			352				

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 (min)	Unsignalised level of service
B-C	142	35	585	0.242	142	0.4	0.3	0.137	A
B-A	132	33	428	0.308	133	0.6	0.5	0.205	B
C-AB	100	25	677	0.148	101	0.4	0.3	0.105	A
C-A	184	46			184				
A-B	121	30			121				
A-C	295	74			295				

Junctions 9
ARCADY 9 - Roundabout Module
Version: 9.5.0.6896 © Copyright TRL Limited, 2018
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**Filename:** B6392\_Melville Gate Rd r'bt 210913.j9  
**Path:** C:\Users\Stuart\Documents\TPL\TP324\_Sheriffhall South\Junction Analysis\ARCADY  
**Report generation date:** 13/09/2021 21:40:47

- »(Default Analysis Set) - 2017 Surveyed, weekday AM
- »(Default Analysis Set) - 2023 Projected + Comm Dev, weekday AM
- »(Default Analysis Set) - 2023 Projected + Comm & Prop Devs, weekday AM
- »(Default Analysis Set) - 2017 Surveyed, weekday PM
- »(Default Analysis Set) - 2023 Projected + Comm Dev, weekday PM
- »(Default Analysis Set) - 2023 Projected + Comm & Prop Devs, weekday PM

**Summary of junction performance**

	weekday AM					weekday PM				
	Q (PCU)	Delay (min)	RFC	LOS	Res Cap	Q (PCU)	Delay (min)	RFC	LOS	Res Cap
A1 - 2017 Surveyed										
B6392 Gilmerton Road (west)	0.1	0.05	0.12	A	86 % [B6392 Gilmerton Road (east)]	0.4	0.06	0.29	A	197 % [B6392 Gilmerton Road (west)]
Melville Gate Road	0.2	0.04	0.14	A		0.2	0.04	0.13	A	
B6392 Gilmerton Road (east)	0.9	0.07	0.47	A		0.2	0.04	0.19	A	
A1 - 2023 Projected + Comm Dev										
B6392 Gilmerton Road (west)	0.2	0.05	0.14	A	64 % [B6392 Gilmerton Road (east)]	0.6	0.06	0.35	A	153 % [B6392 Gilmerton Road (west)]
Melville Gate Road	0.2	0.04	0.17	A		0.2	0.05	0.14	A	
B6392 Gilmerton Road (east)	1.2	0.08	0.54	A		0.3	0.05	0.21	A	
A1 - 2023 Projected + Comm & Prop Devs										
B6392 Gilmerton Road (west)	0.2	0.05	0.15	A	53 % [B6392 Gilmerton Road (east)]	0.6	0.06	0.37	A	139 % [B6392 Gilmerton Road (west)]
Melville Gate Road	0.2	0.04	0.18	A		0.2	0.05	0.15	A	
B6392 Gilmerton Road (east)	1.4	0.09	0.58	A		0.3	0.05	0.21	A	

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



## File summary

### File Description

<b>Title</b>	B6392 Gilmerton Road/ Melville Gate Road roundabout
<b>Location</b>	Sheriffhall South
<b>Site number</b>	
<b>Date</b>	13/09/2021
<b>Version</b>	
<b>Status</b>	
<b>Identifier</b>	
<b>Client</b>	Buccleuch Property
<b>Jobnumber</b>	TP324
<b>Enumerator</b>	SL
<b>Description</b>	

### Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Av. delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	min	-Min	perMin

### Analysis Options

Vehicle length (m)	Calculate Q Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Av. Delay threshold (min)	Q threshold (PCU)
5.75			✓	Delay	0.85	0.60	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	2017 Surveyed	weekday AM	ONE HOUR	07:00	08:30	15	✓
D2	2023 Projected + Comm Dev	weekday AM	ONE HOUR	07:00	08:30	15	✓
D3	2023 Projected + Comm & Prop Devs	weekday AM	ONE HOUR	07:00	08:30	15	✓
D4	2017 Surveyed	weekday PM	ONE HOUR	15:30	17:00	15	✓
D5	2023 Projected + Comm Dev	weekday PM	ONE HOUR	15:30	17:00	15	✓
D6	2023 Projected + Comm & Prop Devs	weekday PM	ONE HOUR	15:30	17:00	15	✓

### Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	(Default Analysis Set)	✓	100.000	100.000

# (Default Analysis Set) - 2017 Surveyed, weekday AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (min)	Junction LOS
1	B6392 Gilmerton Road/ Melville Gate Road Roundabout	Standard Roundabout		1, 2, 3	0.06	A

### Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	86	B6392 Gilmerton Road (east)

## Arms

### Arms

Arm	Name	Description
1	B6392 Gilmerton Road (west)	
2	Melville Gate Road	
3	B6392 Gilmerton Road (east)	

### Roundabout Geometry

Arm	V (m)	E (m)	I' (m)	R (m)	D (m)	PHI (deg)	Exit only
B6392 Gilmerton Road (west)	3.65	8.40	8.0	40.0	31.0	24.0	
Melville Gate Road	4.50	7.50	9.0	30.0	31.0	28.0	
B6392 Gilmerton Road (east)	3.65	7.70	15.0	100.0	31.0	33.0	

### Slope / Intercept / Capacity

#### Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
B6392 Gilmerton Road (west)	0.666	1675
Melville Gate Road	0.694	1845
B6392 Gilmerton Road (east)	0.689	1815

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

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2017 Surveyed	weekday AM	ONE HOUR	07:00	08:30	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	Av. Demand (PCU/hr)	Scaling Factor (%)
B6392 Gilmerton Road (west)		ONE HOUR	✓	171	100.000
Melville Gate Road		ONE HOUR	✓	227	100.000
B6392 Gilmerton Road (east)		ONE HOUR	✓	713	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		B6392 Gilmerton Road (west)	Melville Gate Road	B6392 Gilmerton Road (east)
From	B6392 Gilmerton Road (west)	0	56	115
	Melville Gate Road	189	0	38
	B6392 Gilmerton Road (east)	508	205	0

## Vehicle Mix

### HV %s

		To		
		B6392 Gilmerton Road (west)	Melville Gate Road	B6392 Gilmerton Road (east)
From	B6392 Gilmerton Road (west)	0	5	5
	Melville Gate Road	5	0	5
	B6392 Gilmerton Road (east)	5	5	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (min)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B6392 Gilmerton Road (west)	0.12	0.05	0.1	A	157	235
Melville Gate Road	0.14	0.04	0.2	A	208	312
B6392 Gilmerton Road (east)	0.47	0.07	0.9	A	654	981

### Main Results for each time segment

#### 07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B6392 Gilmerton Road (west)	129	32	154	1572	0.082	128	523	0.0	0.1	0.044	A
Melville Gate Road	171	43	86	1785	0.096	170	196	0.0	0.1	0.039	A
B6392 Gilmerton Road (east)	537	134	142	1717	0.313	535	115	0.0	0.5	0.053	A

#### 07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B6392 Gilmerton Road (west)	154	38	184	1552	0.099	154	626	0.1	0.1	0.045	A
Melville Gate Road	204	51	103	1774	0.115	204	234	0.1	0.1	0.040	A
B6392 Gilmerton Road (east)	641	160	170	1698	0.378	640	137	0.5	0.6	0.060	A

**07:30 - 07:45**

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B6392 Gilmerton Road (west)	188	47	225	1525	0.123	188	766	0.1	0.1	0.047	A
Melville Gate Road	250	62	127	1757	0.142	250	287	0.1	0.2	0.042	A
B6392 Gilmerton Road (east)	785	196	208	1672	0.470	784	168	0.6	0.9	0.071	A

**07:45 - 08:00**

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B6392 Gilmerton Road (west)	188	47	226	1525	0.124	188	767	0.1	0.1	0.047	A
Melville Gate Road	250	62	127	1757	0.142	250	287	0.2	0.2	0.042	A
B6392 Gilmerton Road (east)	785	196	208	1672	0.470	785	168	0.9	0.9	0.071	A

**08:00 - 08:15**

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B6392 Gilmerton Road (west)	154	38	185	1552	0.099	154	628	0.1	0.1	0.045	A
Melville Gate Road	204	51	103	1773	0.115	204	235	0.2	0.1	0.040	A
B6392 Gilmerton Road (east)	641	160	170	1698	0.378	642	138	0.9	0.6	0.060	A

**08:15 - 08:30**

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B6392 Gilmerton Road (west)	129	32	155	1572	0.082	129	525	0.1	0.1	0.044	A
Melville Gate Road	171	43	87	1785	0.096	171	197	0.1	0.1	0.039	A
B6392 Gilmerton Road (east)	537	134	142	1717	0.313	537	115	0.6	0.5	0.053	A

# (Default Analysis Set) - 2023 Projected + Comm Dev, weekday AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (min)	Junction LOS
1	B6392 Gilmerton Road/ Melville Gate Road Roundabout	Standard Roundabout		1, 2, 3	0.07	A

### Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	64	B6392 Gilmerton Road (east)

## 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	2023 Projected + Comm Dev	weekday AM	ONE HOUR	07:00	08:30	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	Av. Demand (PCU/hr)	Scaling Factor (%)
B6392 Gilmerton Road (west)		ONE HOUR	✓	191	100.000
Melville Gate Road		ONE HOUR	✓	266	100.000
B6392 Gilmerton Road (east)		ONE HOUR	✓	803	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		B6392 Gilmerton Road (west)	Melville Gate Road	B6392 Gilmerton Road (east)
From	B6392 Gilmerton Road (west)	0	63	128
	Melville Gate Road	225	0	41
	B6392 Gilmerton Road (east)	580	223	0

## Vehicle Mix

### HV %s

		To		
		B6392 Gilmerton Road (west)	Melville Gate Road	B6392 Gilmerton Road (east)
From	B6392 Gilmerton Road (west)	0	5	5
	Melville Gate Road	5	0	5
	B6392 Gilmerton Road (east)	5	5	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (min)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B6392 Gilmerton Road (west)	0.14	0.05	0.2	A	175	263
Melville Gate Road	0.17	0.04	0.2	A	244	366
B6392 Gilmerton Road (east)	0.54	0.08	1.2	A	737	1105

### Main Results for each time segment

#### 07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B6392 Gilmerton Road (west)	144	36	167	1563	0.092	143	604	0.0	0.1	0.044	A
Melville Gate Road	200	50	96	1779	0.113	200	215	0.0	0.1	0.040	A
B6392 Gilmerton Road (east)	605	151	169	1699	0.356	602	127	0.0	0.6	0.057	A

#### 07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B6392 Gilmerton Road (west)	172	43	200	1541	0.111	172	723	0.1	0.1	0.046	A
Melville Gate Road	239	60	115	1765	0.135	239	257	0.1	0.2	0.041	A
B6392 Gilmerton Road (east)	722	180	202	1676	0.431	721	152	0.6	0.8	0.066	A

#### 07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B6392 Gilmerton Road (west)	210	53	245	1512	0.139	210	885	0.1	0.2	0.048	A
Melville Gate Road	293	73	141	1748	0.168	293	314	0.2	0.2	0.043	A
B6392 Gilmerton Road (east)	884	221	248	1644	0.538	882	186	0.8	1.2	0.083	A

#### 07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B6392 Gilmerton Road (west)	210	53	246	1511	0.139	210	886	0.2	0.2	0.048	A
Melville Gate Road	293	73	141	1747	0.168	293	315	0.2	0.2	0.043	A
B6392 Gilmerton Road (east)	884	221	248	1644	0.538	884	186	1.2	1.2	0.083	A

#### 08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B6392 Gilmerton Road (west)	172	43	201	1541	0.111	172	725	0.2	0.1	0.046	A
Melville Gate Road	239	60	115	1765	0.135	239	258	0.2	0.2	0.041	A
B6392 Gilmerton Road (east)	722	180	202	1675	0.431	724	152	1.2	0.8	0.066	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B6392 Gilmerton Road (west)	144	36	168	1563	0.092	144	607	0.1	0.1	0.044	A
Melville Gate Road	200	50	96	1778	0.113	200	216	0.2	0.1	0.040	A
B6392 Gilmerton Road (east)	605	151	169	1698	0.356	605	127	0.8	0.6	0.058	A

# (Default Analysis Set) - 2023 Projected + Comm & Prop Devs, weekday AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (min)	Junction LOS
1	B6392 Gilmerton Road/ Melville Gate Road Roundabout	Standard Roundabout		1, 2, 3	0.08	A

### Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	53	B6392 Gilmerton Road (east)

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2023 Projected + Comm & Prop Devs	weekday AM	ONE HOUR	07:00	08:30	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	Av. Demand (PCU/hr)	Scaling Factor (%)
B6392 Gilmerton Road (west)		ONE HOUR	✓	211	100.000
Melville Gate Road		ONE HOUR	✓	285	100.000
B6392 Gilmerton Road (east)		ONE HOUR	✓	857	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		B6392 Gilmerton Road (west)	Melville Gate Road	B6392 Gilmerton Road (east)
From	B6392 Gilmerton Road (west)	0	79	132
	Melville Gate Road	243	0	42
	B6392 Gilmerton Road (east)	628	229	0

## Vehicle Mix

### HV %s

		To		
		B6392 Gilmerton Road (west)	Melville Gate Road	B6392 Gilmerton Road (east)
From	B6392 Gilmerton Road (west)	0	5	5
	Melville Gate Road	5	0	5
	B6392 Gilmerton Road (east)	5	5	0



## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (min)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B6392 Gilmerton Road (west)	0.15	0.05	0.2	A	194	290
Melville Gate Road	0.18	0.04	0.2	A	262	392
B6392 Gilmerton Road (east)	0.58	0.09	1.4	A	786	1180

### Main Results for each time segment

#### 07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B6392 Gilmerton Road (west)	159	40	172	1560	0.102	158	653	0.0	0.1	0.045	A
Melville Gate Road	215	54	99	1777	0.121	214	231	0.0	0.1	0.040	A
B6392 Gilmerton Road (east)	645	161	182	1689	0.382	643	131	0.0	0.6	0.060	A

#### 07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B6392 Gilmerton Road (west)	190	47	206	1538	0.123	190	782	0.1	0.1	0.047	A
Melville Gate Road	256	64	119	1763	0.145	256	277	0.1	0.2	0.042	A
B6392 Gilmerton Road (east)	770	193	218	1664	0.463	769	156	0.6	0.9	0.070	A

#### 07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B6392 Gilmerton Road (west)	232	58	252	1507	0.154	232	957	0.1	0.2	0.049	A
Melville Gate Road	314	78	145	1745	0.180	314	338	0.2	0.2	0.044	A
B6392 Gilmerton Road (east)	944	236	267	1631	0.579	941	191	0.9	1.4	0.091	A

#### 07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B6392 Gilmerton Road (west)	232	58	252	1507	0.154	232	959	0.2	0.2	0.049	A
Melville Gate Road	314	78	145	1744	0.180	314	339	0.2	0.2	0.044	A
B6392 Gilmerton Road (east)	944	236	268	1631	0.579	944	192	1.4	1.4	0.092	A

#### 08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B6392 Gilmerton Road (west)	190	47	206	1537	0.123	190	785	0.2	0.1	0.047	A
Melville Gate Road	256	64	119	1763	0.145	256	278	0.2	0.2	0.042	A
B6392 Gilmerton Road (east)	770	193	219	1664	0.463	773	157	1.4	0.9	0.071	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B6392 Gilmerton Road (west)	159	40	173	1560	0.102	159	657	0.1	0.1	0.045	A
Melville Gate Road	215	54	99	1776	0.121	215	232	0.2	0.1	0.040	A
B6392 Gilmerton Road (east)	645	161	183	1689	0.382	646	131	0.9	0.7	0.060	A

# (Default Analysis Set) - 2017 Surveyed, weekday PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (min)	Junction LOS
1	B6392 Gilmerton Road/ Melville Gate Road Roundabout	Standard Roundabout		1, 2, 3	0.05	A

### Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	197	B6392 Gilmerton Road (west)

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2017 Surveyed	weekday PM	ONE HOUR	15:30	17:00	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	Av. Demand (PCU/hr)	Scaling Factor (%)
B6392 Gilmerton Road (west)		ONE HOUR	✓	429	100.000
Melville Gate Road		ONE HOUR	✓	187	100.000
B6392 Gilmerton Road (east)		ONE HOUR	✓	300	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		B6392 Gilmerton Road (west)	Melville Gate Road	B6392 Gilmerton Road (east)
From	B6392 Gilmerton Road (west)	0	155	274
	Melville Gate Road	94	0	93
	B6392 Gilmerton Road (east)	216	84	0

## Vehicle Mix

### HV %s

		To		
		B6392 Gilmerton Road (west)	Melville Gate Road	B6392 Gilmerton Road (east)
From	B6392 Gilmerton Road (west)	0	5	5
	Melville Gate Road	5	0	5
	B6392 Gilmerton Road (east)	5	5	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (min)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B6392 Gilmerton Road (west)	0.29	0.06	0.4	A	394	590
Melville Gate Road	0.13	0.04	0.2	A	172	257
B6392 Gilmerton Road (east)	0.19	0.04	0.2	A	275	413

### Main Results for each time segment

#### 15:30 - 15:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B6392 Gilmerton Road (west)	323	81	63	1633	0.198	322	233	0.0	0.3	0.048	A
Melville Gate Road	141	35	206	1703	0.083	140	179	0.0	0.1	0.040	A
B6392 Gilmerton Road (east)	226	56	71	1766	0.128	225	275	0.0	0.2	0.041	A

#### 15:45 - 16:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B6392 Gilmerton Road (west)	386	96	75	1625	0.237	385	279	0.3	0.3	0.051	A
Melville Gate Road	168	42	246	1674	0.100	168	215	0.1	0.1	0.042	A
B6392 Gilmerton Road (east)	270	67	84	1757	0.154	270	330	0.2	0.2	0.042	A

#### 16:00 - 16:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B6392 Gilmerton Road (west)	472	118	92	1613	0.293	472	341	0.3	0.4	0.055	A
Melville Gate Road	206	51	301	1636	0.126	206	263	0.1	0.2	0.044	A
B6392 Gilmerton Road (east)	330	83	103	1744	0.189	330	404	0.2	0.2	0.045	A

#### 16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B6392 Gilmerton Road (west)	472	118	92	1613	0.293	472	341	0.4	0.4	0.055	A
Melville Gate Road	206	51	302	1636	0.126	206	263	0.2	0.2	0.044	A
B6392 Gilmerton Road (east)	330	83	103	1744	0.189	330	404	0.2	0.2	0.045	A

#### 16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B6392 Gilmerton Road (west)	386	96	76	1624	0.237	386	279	0.4	0.3	0.051	A
Melville Gate Road	168	42	247	1674	0.100	168	215	0.2	0.1	0.042	A
B6392 Gilmerton Road (east)	270	67	85	1757	0.154	270	330	0.2	0.2	0.042	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B6392 Gilmerton Road (west)	323	81	63	1633	0.198	323	234	0.3	0.3	0.048	A
Melville Gate Road	141	35	206	1702	0.083	141	180	0.1	0.1	0.040	A
B6392 Gilmerton Road (east)	226	56	71	1766	0.128	226	277	0.2	0.2	0.041	A

# (Default Analysis Set) - 2023 Projected + Comm Dev, weekday PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (min)	Junction LOS
1	B6392 Gilmerton Road/ Melville Gate Road Roundabout	Standard Roundabout		1, 2, 3	0.05	A

### Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	153	B6392 Gilmerton Road (west)

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2023 Projected + Comm Dev	weekday PM	ONE HOUR	15:30	17:00	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	Av. Demand (PCU/hr)	Scaling Factor (%)
B6392 Gilmerton Road (west)		ONE HOUR	✓	509	100.000
Melville Gate Road		ONE HOUR	✓	205	100.000
B6392 Gilmerton Road (east)		ONE HOUR	✓	328	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		B6392 Gilmerton Road (west)	Melville Gate Road	B6392 Gilmerton Road (east)
From	B6392 Gilmerton Road (west)	0	186	323
	Melville Gate Road	104	0	101
	B6392 Gilmerton Road (east)	237	91	0

## Vehicle Mix

### HV %s

		To		
		B6392 Gilmerton Road (west)	Melville Gate Road	B6392 Gilmerton Road (east)
From	B6392 Gilmerton Road (west)	0	5	5
	Melville Gate Road	5	0	5
	B6392 Gilmerton Road (east)	5	5	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (min)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B6392 Gilmerton Road (west)	0.35	0.06	0.6	A	467	701
Melville Gate Road	0.14	0.05	0.2	A	188	282
B6392 Gilmerton Road (east)	0.21	0.05	0.3	A	301	451

### Main Results for each time segment

#### 15:30 - 15:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B6392 Gilmerton Road (west)	383	96	68	1629	0.235	382	256	0.0	0.3	0.050	A
Melville Gate Road	154	39	242	1677	0.092	154	208	0.0	0.1	0.041	A
B6392 Gilmerton Road (east)	247	62	78	1761	0.140	246	318	0.0	0.2	0.042	A

#### 15:45 - 16:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B6392 Gilmerton Road (west)	458	114	82	1620	0.282	457	306	0.3	0.4	0.054	A
Melville Gate Road	184	46	290	1644	0.112	184	249	0.1	0.1	0.043	A
B6392 Gilmerton Road (east)	295	74	93	1751	0.168	295	381	0.2	0.2	0.043	A

#### 16:00 - 16:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B6392 Gilmerton Road (west)	560	140	100	1608	0.348	560	375	0.4	0.6	0.060	A
Melville Gate Road	226	56	355	1599	0.141	226	305	0.1	0.2	0.046	A
B6392 Gilmerton Road (east)	361	90	114	1736	0.208	361	466	0.2	0.3	0.046	A

#### 16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B6392 Gilmerton Road (west)	560	140	100	1608	0.349	560	375	0.6	0.6	0.060	A
Melville Gate Road	226	56	356	1599	0.141	226	305	0.2	0.2	0.046	A
B6392 Gilmerton Road (east)	361	90	115	1736	0.208	361	467	0.3	0.3	0.046	A

#### 16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B6392 Gilmerton Road (west)	458	114	82	1620	0.282	458	307	0.6	0.4	0.054	A
Melville Gate Road	184	46	291	1644	0.112	184	249	0.2	0.1	0.043	A
B6392 Gilmerton Road (east)	295	74	94	1750	0.168	295	382	0.3	0.2	0.043	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B6392 Gilmerton Road (west)	383	96	69	1629	0.235	384	257	0.4	0.3	0.051	A
Melville Gate Road	154	39	243	1676	0.092	154	209	0.1	0.1	0.041	A
B6392 Gilmerton Road (east)	247	62	78	1761	0.140	247	319	0.2	0.2	0.042	A



# (Default Analysis Set) - 2023 Projected + Comm & Prop Devs, weekday PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (min)	Junction LOS
1	B6392 Gilmerton Road/ Melville Gate Road Roundabout	Standard Roundabout		1, 2, 3	0.05	A

### Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	139	B6392 Gilmerton Road (west)

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Projected + Comm & Prop Devs	weekday PM	ONE HOUR	15:30	17:00	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	Av. Demand (PCU/hr)	Scaling Factor (%)
B6392 Gilmerton Road (west)		ONE HOUR	✓	541	100.000
Melville Gate Road		ONE HOUR	✓	222	100.000
B6392 Gilmerton Road (east)		ONE HOUR	✓	333	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		B6392 Gilmerton Road (west)	Melville Gate Road	B6392 Gilmerton Road (east)
From	B6392 Gilmerton Road (west)	0	200	341
	Melville Gate Road	118	0	104
	B6392 Gilmerton Road (east)	241	92	0

## Vehicle Mix

### HV %s

		To		
		B6392 Gilmerton Road (west)	Melville Gate Road	B6392 Gilmerton Road (east)
From	B6392 Gilmerton Road (west)	0	5	5
	Melville Gate Road	5	0	5
	B6392 Gilmerton Road (east)	5	5	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (min)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B6392 Gilmerton Road (west)	0.37	0.06	0.6	A	496	745
Melville Gate Road	0.15	0.05	0.2	A	204	306
B6392 Gilmerton Road (east)	0.21	0.05	0.3	A	306	458

### Main Results for each time segment

#### 15:30 - 15:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B6392 Gilmerton Road (west)	407	102	69	1629	0.250	406	270	0.0	0.3	0.051	A
Melville Gate Road	167	42	256	1668	0.100	167	219	0.0	0.1	0.042	A
B6392 Gilmerton Road (east)	251	63	89	1754	0.143	250	334	0.0	0.2	0.042	A

#### 15:45 - 16:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B6392 Gilmerton Road (west)	486	122	83	1620	0.300	486	323	0.3	0.4	0.056	A
Melville Gate Road	200	50	306	1633	0.122	199	262	0.1	0.1	0.044	A
B6392 Gilmerton Road (east)	299	75	106	1742	0.172	299	400	0.2	0.2	0.044	A

#### 16:00 - 16:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B6392 Gilmerton Road (west)	596	149	101	1607	0.371	595	395	0.4	0.6	0.062	A
Melville Gate Road	244	61	375	1585	0.154	244	321	0.1	0.2	0.047	A
B6392 Gilmerton Road (east)	367	92	130	1725	0.212	366	489	0.2	0.3	0.046	A

#### 16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B6392 Gilmerton Road (west)	596	149	101	1607	0.371	596	395	0.6	0.6	0.062	A
Melville Gate Road	244	61	375	1585	0.154	244	321	0.2	0.2	0.047	A
B6392 Gilmerton Road (east)	367	92	130	1725	0.213	367	490	0.3	0.3	0.046	A

#### 16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B6392 Gilmerton Road (west)	486	122	83	1620	0.300	487	323	0.6	0.5	0.056	A
Melville Gate Road	200	50	307	1632	0.122	200	263	0.2	0.1	0.044	A
B6392 Gilmerton Road (east)	299	75	106	1742	0.172	300	401	0.3	0.2	0.044	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
B6392 Gilmerton Road (west)	407	102	69	1629	0.250	408	270	0.5	0.4	0.052	A
Melville Gate Road	167	42	257	1667	0.100	167	220	0.1	0.1	0.042	A
B6392 Gilmerton Road (east)	251	63	89	1754	0.143	251	335	0.2	0.2	0.042	A

Junctions 9
ARCADY 9 - Roundabout Module
Version: 9.5.0.6896 © Copyright TRL Limited, 2018
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Filename: A7\_B6392\_A772 r'bt 210913.j9  
 Path: C:\Users\Stuart\Documents\TPL\TP324\_Sheriffhall South\Junction Analysis\ARCADY  
 Report generation date: 13/09/2021 22:38:19

- »(Default Analysis Set) - 2017 Surveyed, weekday AM
- »(Default Analysis Set) - 2023 Projected + Comm Dev, weekday AM
- »(Default Analysis Set) - 2023 Projected + Comm & Prop Devs, weekday AM
- »(Default Analysis Set) - 2017 Surveyed, weekday PM
- »(Default Analysis Set) - 2023 Projected + Comm Dev, weekday PM
- »(Default Analysis Set) - 2023 Projected + Comm & Prop Devs, weekday PM

**Summary of junction performance**

	weekday AM					weekday PM				
	Q (PCU)	Delay (min)	RFC	LOS	Res Cap	Q (PCU)	Delay (min)	RFC	LOS	Res Cap
A1 - 2017 Surveyed										
A7 (north)	1.2	0.10	0.53	A	2 % [B6392 Gilmerton Road]	1.4	0.15	0.57	A	0 % [A772 Gilmerton Road]
B6392 Gilmerton Road	5.9	0.48	0.86	D		0.7	0.13	0.41	A	
A7 (south)	3.9	0.30	0.80	C		1.9	0.13	0.65	A	
A772 Gilmerton Road	1.0	0.10	0.48	A		9.9	0.59	0.92	E	
A1 - 2023 Projected + Comm Dev										
A7 (north)	1.8	0.14	0.64	A	-8 % [B6392 Gilmerton Road]	1.9	0.18	0.64	B	-10 % [A772 Gilmerton Road]
B6392 Gilmerton Road	23.8	1.63	1.01	F		1.7	0.21	0.63	B	
A7 (south)	13.1	0.89	0.96	F		2.9	0.18	0.74	B	
A772 Gilmerton Road	1.6	0.14	0.61	A		38.6	1.86	1.04	F	
A1 - 2023 Projected + Comm & Prop Devs										
A7 (north)	2.5	0.19	0.71	B	-11 % [B6392 Gilmerton Road]	1.9	0.19	0.65	B	-12 % [A772 Gilmerton Road]
B6392 Gilmerton Road	47.3	2.80	1.09	F		3.7	0.36	0.79	C	
A7 (south)	26.1	1.55	1.02	F		3.5	0.21	0.78	B	
A772 Gilmerton Road	2.0	0.17	0.66	B		54.0	2.49	1.08	F	

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

## File summary

### File Description

<b>Title</b>	A7/ B6392/ A772 Gilmerton Road roundabout
<b>Location</b>	Sheriffhall South
<b>Site number</b>	
<b>Date</b>	13/09/2021
<b>Version</b>	
<b>Status</b>	
<b>Identifier</b>	
<b>Client</b>	Buccleuch Property
<b>Jobnumber</b>	TP324
<b>Enumerator</b>	SL
<b>Description</b>	

### Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Av. delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	min	-Min	perMin

### Analysis Options

Vehicle length (m)	Calculate Q Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Av. Delay threshold (min)	Q threshold (PCU)
5.75			✓	Delay	0.85	0.60	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	2017 Surveyed	weekday AM	ONE HOUR	07:00	08:30	15	✓
D2	2023 Projected + Comm Dev	weekday AM	ONE HOUR	07:00	08:30	15	✓
D3	2023 Projected + Comm & Prop Devs	weekday AM	ONE HOUR	07:00	08:30	15	✓
D4	2017 Surveyed	weekday PM	ONE HOUR	15:30	17:00	15	✓
D5	2023 Projected + Comm Dev	weekday PM	ONE HOUR	15:30	17:00	15	✓
D6	2023 Projected + Comm & Prop Devs	weekday PM	ONE HOUR	15:30	17:00	15	✓

### Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	(Default Analysis Set)	✓	100.000	100.000

# (Default Analysis Set) - 2017 Surveyed, weekday AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (min)	Junction LOS
1	A7/ B6392 Gilmerton Road/ A772 Gilmerton Road Roundabout	Standard Roundabout		1, 2, 3, 4	0.26	C

### Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	2	B6392 Gilmerton Road

## Arms

### Arms

Arm	Name	Description
1	A7 (north)	
2	B6392 Gilmerton Road	
3	A7 (south)	
4	A772 Gilmerton Road	

### Roundabout Geometry

Arm	V (m)	E (m)	I' (m)	R (m)	D (m)	PHI (deg)	Exit only
A7 (north)	3.65	6.70	9.5	35.0	50.0	24.0	
B6392 Gilmerton Road	3.65	5.80	9.0	25.0	50.0	28.0	
A7 (south)	3.65	6.40	12.0	40.0	50.0	27.0	
A772 Gilmerton Road	3.50	6.20	6.5	40.0	50.0	26.0	

### Slope / Intercept / Capacity

#### Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A7 (north)	0.607	1627
B6392 Gilmerton Road	0.575	1500
A7 (south)	0.608	1642
A772 Gilmerton Road	0.575	1466

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

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2017 Surveyed	weekday AM	ONE HOUR	07:00	08:30	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	Av. Demand (PCU/hr)	Scaling Factor (%)
A7 (north)		ONE HOUR	✓	621	100.000
B6392 Gilmerton Road		ONE HOUR	✓	707	100.000
A7 (south)		ONE HOUR	✓	734	100.000
A772 Gilmerton Road		ONE HOUR	✓	512	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A7 (north)	B6392 Gilmerton Road	A7 (south)	A772 Gilmerton Road
From	A7 (north)	0	15	367	239
	B6392 Gilmerton Road	86	0	7	614
	A7 (south)	364	3	0	367
	A772 Gilmerton Road	28	149	335	0

## Vehicle Mix

### HV %s

		To			
		A7 (north)	B6392 Gilmerton Road	A7 (south)	A772 Gilmerton Road
From	A7 (north)	0	5	5	5
	B6392 Gilmerton Road	5	0	5	5
	A7 (south)	5	5	0	5
	A772 Gilmerton Road	5	5	5	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (min)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
A7 (north)	0.53	0.10	1.2	A	570	855
B6392 Gilmerton Road	0.86	0.48	5.9	D	649	973
A7 (south)	0.80	0.30	3.9	C	674	1010
A772 Gilmerton Road	0.48	0.10	1.0	A	470	705

### Main Results for each time segment

#### 07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
A7 (north)	468	117	365	1406	0.333	465	358	0.0	0.5	0.067	A
B6392 Gilmerton Road	532	133	705	1094	0.487	528	125	0.0	1.0	0.111	A
A7 (south)	553	138	702	1215	0.455	549	531	0.0	0.9	0.094	A
A772 Gilmerton Road	385	96	339	1271	0.303	384	913	0.0	0.5	0.071	A

**07:15 - 07:30**

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
A7 (north)	558	140	437	1362	0.410	557	428	0.5	0.7	0.078	A
B6392 Gilmerton Road	636	159	845	1014	0.627	633	150	1.0	1.7	0.164	A
A7 (south)	660	165	841	1131	0.583	658	636	0.9	1.4	0.132	A
A772 Gilmerton Road	460	115	406	1232	0.373	460	1093	0.5	0.6	0.081	A

**07:30 - 07:45**

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
A7 (north)	684	171	535	1302	0.525	682	520	0.7	1.1	0.101	A
B6392 Gilmerton Road	778	195	1034	905	0.860	764	183	1.7	5.4	0.409	C
A7 (south)	808	202	1019	1023	0.790	799	779	1.4	3.6	0.272	C
A772 Gilmerton Road	564	141	493	1183	0.477	562	1325	0.6	0.9	0.101	A

**07:45 - 08:00**

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
A7 (north)	684	171	536	1302	0.525	684	526	1.1	1.2	0.102	A
B6392 Gilmerton Road	778	195	1036	904	0.861	777	184	5.4	5.9	0.479	D
A7 (south)	808	202	1032	1015	0.796	807	781	3.6	3.9	0.300	C
A772 Gilmerton Road	564	141	498	1179	0.478	564	1341	0.9	1.0	0.102	A

**08:00 - 08:15**

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
A7 (north)	558	140	439	1361	0.410	560	436	1.2	0.7	0.079	A
B6392 Gilmerton Road	636	159	848	1012	0.628	652	151	5.9	1.8	0.182	B
A7 (south)	660	165	861	1119	0.590	669	639	3.9	1.5	0.143	A
A772 Gilmerton Road	460	115	414	1228	0.375	462	1116	1.0	0.6	0.082	A

**08:15 - 08:30**

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
A7 (north)	468	117	367	1404	0.333	468	362	0.7	0.5	0.067	A
B6392 Gilmerton Road	532	133	710	1091	0.488	536	126	1.8	1.0	0.114	A
A7 (south)	553	138	710	1210	0.457	555	535	1.5	0.9	0.097	A
A772 Gilmerton Road	385	96	343	1269	0.304	386	923	0.6	0.5	0.071	A



# (Default Analysis Set) - 2023 Projected + Comm Dev, weekday AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (min)	Junction LOS
1	A7/ B6392 Gilmerton Road/ A772 Gilmerton Road Roundabout	Standard Roundabout		1, 2, 3, 4	0.75	E

### Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	-8	B6392 Gilmerton Road

## 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	2023 Projected + Comm Dev	weekday AM	ONE HOUR	07:00	08:30	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	Av. Demand (PCU/hr)	Scaling Factor (%)
A7 (north)		ONE HOUR	✓	694	100.000
B6392 Gilmerton Road		ONE HOUR	✓	784	100.000
A7 (south)		ONE HOUR	✓	843	100.000
A772 Gilmerton Road		ONE HOUR	✓	621	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A7 (north)	B6392 Gilmerton Road	A7 (south)	A772 Gilmerton Road
From	A7 (north)	0	35	399	260
	B6392 Gilmerton Road	96	0	13	675
	A7 (south)	396	48	0	399
	A772 Gilmerton Road	30	227	364	0

## Vehicle Mix

**HV %s**

		To			
From		A7 (north)	B6392 Gilmerton Road	A7 (south)	A772 Gilmerton Road
	A7 (north)	0	5	5	5
	B6392 Gilmerton Road	5	0	5	5
	A7 (south)	5	5	0	5
	A772 Gilmerton Road	5	5	5	0

## Results

**Results Summary for whole modelled period**

Arm	Max RFC	Max Delay (min)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
A7 (north)	0.64	0.14	1.8	A	637	955
B6392 Gilmerton Road	1.01	1.63	23.8	F	719	1079
A7 (south)	0.96	0.89	13.1	F	774	1160
A772 Gilmerton Road	0.61	0.14	1.6	A	570	855

**Main Results for each time segment**
**07:00 - 07:15**

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
A7 (north)	522	131	478	1337	0.391	520	390	0.0	0.7	0.077	A
B6392 Gilmerton Road	590	148	766	1059	0.557	585	232	0.0	1.3	0.132	A
A7 (south)	635	159	770	1174	0.541	630	581	0.0	1.2	0.115	A
A772 Gilmerton Road	468	117	403	1234	0.379	465	997	0.0	0.6	0.082	A

**07:15 - 07:30**

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
A7 (north)	624	156	573	1279	0.488	623	466	0.7	1.0	0.096	A
B6392 Gilmerton Road	705	176	918	972	0.725	699	278	1.3	2.6	0.227	B
A7 (south)	758	189	921	1082	0.700	753	696	1.2	2.4	0.189	B
A772 Gilmerton Road	558	140	482	1188	0.470	557	1192	0.6	0.9	0.100	A

**07:30 - 07:45**

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
A7 (north)	764	191	699	1203	0.635	761	554	1.0	1.8	0.142	A
B6392 Gilmerton Road	863	216	1122	854	1.010	810	339	2.6	16.0	0.931	F
A7 (south)	928	232	1081	985	0.942	898	850	2.4	9.9	0.589	E
A772 Gilmerton Road	684	171	572	1137	0.602	681	1407	0.9	1.6	0.138	A

**07:45 - 08:00**

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
A7 (north)	764	191	703	1201	0.636	764	565	1.8	1.8	0.144	A
B6392 Gilmerton Road	863	216	1126	852	1.013	832	341	16.0	23.8	1.627	F
A7 (south)	928	232	1105	971	0.956	915	854	9.9	13.1	0.889	F
A772 Gilmerton Road	684	171	584	1130	0.605	684	1436	1.6	1.6	0.141	A

**08:00 - 08:15**

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
A7 (north)	624	156	579	1276	0.489	627	498	1.8	1.0	0.098	A
B6392 Gilmerton Road	705	176	924	968	0.728	788	282	23.8	3.0	0.492	D
A7 (south)	758	189	1010	1029	0.737	798	702	13.1	3.1	0.314	C
A772 Gilmerton Road	558	140	517	1169	0.478	561	1291	1.6	1.0	0.104	A

**08:15 - 08:30**

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
A7 (north)	522	131	483	1334	0.392	524	397	1.0	0.7	0.078	A
B6392 Gilmerton Road	590	148	772	1055	0.559	597	234	3.0	1.4	0.139	A
A7 (south)	635	159	783	1166	0.544	642	586	3.1	1.3	0.122	A
A772 Gilmerton Road	468	117	411	1229	0.380	469	1014	1.0	0.7	0.083	A

# (Default Analysis Set) - 2023 Projected + Comm & Prop Devs, weekday AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (min)	Junction LOS
1	A7/ B6392 Gilmerton Road/ A772 Gilmerton Road Roundabout	Standard Roundabout		1, 2, 3, 4	1.28	F

### Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	-11	B6392 Gilmerton Road

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2023 Projected + Comm & Prop Devs	weekday AM	ONE HOUR	07:00	08:30	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	Av. Demand (PCU/hr)	Scaling Factor (%)
A7 (north)		ONE HOUR	✓	736	100.000
B6392 Gilmerton Road		ONE HOUR	✓	842	100.000
A7 (south)		ONE HOUR	✓	898	100.000
A772 Gilmerton Road		ONE HOUR	✓	660	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A7 (north)	B6392 Gilmerton Road	A7 (south)	A772 Gilmerton Road
From	A7 (north)	0	77	399	260
	B6392 Gilmerton Road	107	0	30	705
	A7 (south)	396	103	0	399
	A772 Gilmerton Road	30	266	364	0

## Vehicle Mix

**HV %s**

		To			
From		A7 (north)	B6392 Gilmerton Road	A7 (south)	A772 Gilmerton Road
	A7 (north)	0	5	5	5
	B6392 Gilmerton Road	5	0	5	5
	A7 (south)	5	5	0	5
	A772 Gilmerton Road	5	5	5	0

## Results

**Results Summary for whole modelled period**

Arm	Max RFC	Max Delay (min)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
A7 (north)	0.71	0.19	2.5	B	675	1013
B6392 Gilmerton Road	1.09	2.80	47.3	F	773	1159
A7 (south)	1.02	1.55	26.1	F	824	1236
A772 Gilmerton Road	0.66	0.17	2.0	B	606	908

**Main Results for each time segment**
**07:00 - 07:15**

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
A7 (north)	554	139	548	1294	0.428	551	398	0.0	0.8	0.084	A
B6392 Gilmerton Road	634	158	766	1059	0.598	628	334	0.0	1.5	0.144	A
A7 (south)	676	169	800	1156	0.585	670	593	0.0	1.4	0.128	A
A772 Gilmerton Road	497	124	452	1206	0.412	494	1018	0.0	0.7	0.088	A

**07:15 - 07:30**

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
A7 (north)	662	165	657	1229	0.539	660	475	0.8	1.2	0.110	A
B6392 Gilmerton Road	757	189	917	972	0.779	749	399	1.5	3.4	0.274	C
A7 (south)	807	202	956	1061	0.761	801	711	1.4	3.1	0.236	B
A772 Gilmerton Road	593	148	540	1155	0.514	592	1216	0.7	1.1	0.112	A

**07:30 - 07:45**

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
A7 (north)	810	203	797	1143	0.709	805	550	1.2	2.5	0.184	B
B6392 Gilmerton Road	927	232	1120	855	1.084	832	483	3.4	27.2	1.352	F
A7 (south)	989	247	1087	982	1.007	934	865	3.1	16.9	0.866	F
A772 Gilmerton Road	727	182	625	1107	0.657	723	1396	1.1	1.9	0.163	A

**07:45 - 08:00**

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
A7 (north)	810	203	803	1140	0.711	810	560	2.5	2.5	0.191	B
B6392 Gilmerton Road	927	232	1126	852	1.088	847	487	27.2	47.3	2.799	F
A7 (south)	989	247	1103	972	1.017	952	870	16.9	26.1	1.553	F
A772 Gilmerton Road	727	182	637	1100	0.661	726	1418	1.9	2.0	0.169	B

**08:00 - 08:15**

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
A7 (north)	662	165	671	1220	0.542	667	534	2.5	1.3	0.115	A
B6392 Gilmerton Road	757	189	926	967	0.783	926	411	47.3	4.9	1.662	F
A7 (south)	807	202	1129	956	0.844	884	723	26.1	7.0	1.019	F
A772 Gilmerton Road	593	148	609	1116	0.532	596	1404	2.0	1.2	0.122	A

**08:15 - 08:30**

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
A7 (north)	554	139	556	1290	0.430	556	413	1.3	0.8	0.086	A
B6392 Gilmerton Road	634	158	773	1055	0.601	647	339	4.9	1.6	0.159	A
A7 (south)	676	169	821	1143	0.591	698	600	7.0	1.6	0.148	A
A772 Gilmerton Road	497	124	470	1195	0.416	499	1048	1.2	0.8	0.091	A

# (Default Analysis Set) - 2017 Surveyed, weekday PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (min)	Junction LOS
1	A7/ B6392 Gilmerton Road/ A772 Gilmerton Road Roundabout	Standard Roundabout		1, 2, 3, 4	0.30	C

### Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	0	A772 Gilmerton Road

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2017 Surveyed	weekday PM	ONE HOUR	15:30	17:00	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	Av. Demand (PCU/hr)	Scaling Factor (%)
A7 (north)		ONE HOUR	✓	519	100.000
B6392 Gilmerton Road		ONE HOUR	✓	315	100.000
A7 (south)		ONE HOUR	✓	832	100.000
A772 Gilmerton Road		ONE HOUR	✓	975	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A7 (north)	B6392 Gilmerton Road	A7 (south)	A772 Gilmerton Road
From	A7 (north)	0	11	458	50
	B6392 Gilmerton Road	23	0	29	263
	A7 (south)	414	37	0	381
	A772 Gilmerton Road	66	375	534	0

## Vehicle Mix

### HV %s

		To			
		A7 (north)	B6392 Gilmerton Road	A7 (south)	A772 Gilmerton Road
From	A7 (north)	0	5	5	5
	B6392 Gilmerton Road	5	0	5	5
	A7 (south)	5	5	0	5
	A772 Gilmerton Road	5	5	5	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (min)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
A7 (north)	0.57	0.15	1.4	A	476	714
B6392 Gilmerton Road	0.41	0.13	0.7	A	289	434
A7 (south)	0.65	0.13	1.9	A	763	1145
A772 Gilmerton Road	0.92	0.59	9.9	E	895	1342

### Main Results for each time segment

#### 15:30 - 15:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
A7 (north)	391	98	707	1198	0.326	389	377	0.0	0.5	0.078	A
B6392 Gilmerton Road	237	59	779	1051	0.226	236	316	0.0	0.3	0.077	A
A7 (south)	626	157	252	1489	0.421	623	764	0.0	0.8	0.073	A
A772 Gilmerton Road	734	184	355	1262	0.582	728	520	0.0	1.4	0.117	A

#### 15:45 - 16:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
A7 (north)	467	117	846	1114	0.419	466	451	0.5	0.7	0.097	A
B6392 Gilmerton Road	283	71	933	963	0.294	283	378	0.3	0.4	0.093	A
A7 (south)	748	187	301	1459	0.513	747	914	0.8	1.1	0.088	A
A772 Gilmerton Road	877	219	425	1221	0.718	872	623	1.4	2.6	0.178	B

#### 16:00 - 16:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
A7 (north)	571	143	1019	1009	0.566	569	551	0.7	1.3	0.142	A
B6392 Gilmerton Road	347	87	1132	849	0.409	346	456	0.4	0.7	0.125	A
A7 (south)	916	229	369	1418	0.646	913	1109	1.1	1.9	0.124	A
A772 Gilmerton Road	1073	268	520	1167	0.920	1049	762	2.6	8.6	0.463	D

#### 16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
A7 (north)	571	143	1037	998	0.573	571	553	1.3	1.4	0.148	A
B6392 Gilmerton Road	347	87	1144	841	0.412	347	464	0.7	0.7	0.127	A
A7 (south)	916	229	370	1417	0.646	916	1121	1.9	1.9	0.126	A
A772 Gilmerton Road	1073	268	522	1166	0.921	1068	764	8.6	9.9	0.591	E



16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
A7 (north)	467	117	877	1095	0.426	469	456	1.4	0.8	0.101	A
B6392 Gilmerton Road	283	71	955	950	0.298	284	391	0.7	0.4	0.095	A
A7 (south)	748	187	303	1458	0.513	751	936	1.9	1.1	0.090	A
A772 Gilmerton Road	877	219	428	1220	0.719	905	626	9.9	2.8	0.217	B

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
A7 (north)	391	98	717	1192	0.328	392	380	0.8	0.5	0.079	A
B6392 Gilmerton Road	237	59	788	1046	0.227	238	321	0.4	0.3	0.078	A
A7 (south)	626	157	254	1488	0.421	628	773	1.1	0.8	0.073	A
A772 Gilmerton Road	734	184	358	1260	0.583	739	524	2.8	1.5	0.122	A

# (Default Analysis Set) - 2023 Projected + Comm Dev, weekday PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (min)	Junction LOS
1	A7/ B6392 Gilmerton Road/ A772 Gilmerton Road Roundabout	Standard Roundabout		1, 2, 3, 4	0.78	E

### Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	-10	A772 Gilmerton Road

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2023 Projected + Comm Dev	weekday PM	ONE HOUR	15:30	17:00	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	Av. Demand (PCU/hr)	Scaling Factor (%)
A7 (north)		ONE HOUR	✓	566	100.000
B6392 Gilmerton Road		ONE HOUR	✓	457	100.000
A7 (south)		ONE HOUR	✓	908	100.000
A772 Gilmerton Road		ONE HOUR	✓	1065	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A7 (north)	B6392 Gilmerton Road	A7 (south)	A772 Gilmerton Road
From	A7 (north)	0	14	498	54
	B6392 Gilmerton Road	42	0	71	344
	A7 (south)	450	44	0	414
	A772 Gilmerton Road	72	413	580	0

## Vehicle Mix

**HV %s**

		To			
From		A7 (north)	B6392 Gilmerton Road	A7 (south)	A772 Gilmerton Road
	A7 (north)	0	5	5	5
	B6392 Gilmerton Road	5	0	5	5
	A7 (south)	5	5	0	5
	A772 Gilmerton Road	5	5	5	0

## Results

**Results Summary for whole modelled period**

Arm	Max RFC	Max Delay (min)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
A7 (north)	0.64	0.18	1.9	B	519	779
B6392 Gilmerton Road	0.63	0.21	1.7	B	419	629
A7 (south)	0.74	0.18	2.9	B	833	1250
A772 Gilmerton Road	1.04	1.86	38.6	F	977	1466

**Main Results for each time segment**
**15:30 - 15:45**

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
A7 (north)	426	107	773	1158	0.368	424	422	0.0	0.6	0.086	A
B6392 Gilmerton Road	344	86	846	1013	0.340	342	351	0.0	0.5	0.094	A
A7 (south)	684	171	329	1442	0.474	680	858	0.0	0.9	0.082	A
A772 Gilmerton Road	802	200	401	1235	0.649	794	608	0.0	1.9	0.141	A

**15:45 - 16:00**

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
A7 (north)	509	127	924	1066	0.477	507	505	0.6	0.9	0.112	A
B6392 Gilmerton Road	411	103	1012	918	0.448	410	420	0.5	0.8	0.124	A
A7 (south)	816	204	394	1402	0.582	814	1027	0.9	1.4	0.107	A
A772 Gilmerton Road	957	239	481	1189	0.805	949	728	1.9	4.0	0.253	C

**16:00 - 16:15**

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
A7 (north)	623	156	1066	980	0.636	620	612	0.9	1.8	0.173	B
B6392 Gilmerton Road	503	126	1199	810	0.621	500	487	0.8	1.7	0.201	B
A7 (south)	1000	250	481	1350	0.741	994	1218	1.4	2.9	0.174	B
A772 Gilmerton Road	1173	293	587	1128	1.039	1092	889	4.0	24.1	0.987	F

**16:15 - 16:30**

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
A7 (north)	623	156	1088	967	0.644	623	617	1.8	1.9	0.183	B
B6392 Gilmerton Road	503	126	1214	801	0.628	503	496	1.7	1.7	0.211	B
A7 (south)	1000	250	484	1348	0.742	999	1233	2.9	2.9	0.180	B
A772 Gilmerton Road	1173	293	590	1126	1.041	1115	894	24.1	38.6	1.864	F

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
A7 (north)	509	127	1058	985	0.516	512	519	1.9	1.1	0.134	A
B6392 Gilmerton Road	411	103	1093	871	0.472	414	476	1.7	1.0	0.139	A
A7 (south)	816	204	398	1400	0.583	822	1109	2.9	1.5	0.110	A
A772 Gilmerton Road	957	239	485	1187	0.807	1091	735	38.6	5.1	0.969	F

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
A7 (north)	426	107	792	1146	0.372	428	427	1.1	0.6	0.088	A
B6392 Gilmerton Road	344	86	861	1004	0.343	346	360	1.0	0.6	0.096	A
A7 (south)	684	171	333	1440	0.475	686	874	1.5	1.0	0.084	A
A772 Gilmerton Road	802	200	405	1233	0.650	814	614	5.1	2.0	0.155	A

# (Default Analysis Set) - 2023 Projected + Comm & Prop Devs, weekday PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (min)	Junction LOS
1	A7/ B6392 Gilmerton Road/ A772 Gilmerton Road Roundabout	Standard Roundabout		1, 2, 3, 4	1.02	F

### Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	-12	A772 Gilmerton Road

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Projected + Comm & Prop Devs	weekday PM	ONE HOUR	15:30	17:00	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	Av. Demand (PCU/hr)	Scaling Factor (%)
A7 (north)		ONE HOUR	✓	573	100.000
B6392 Gilmerton Road		ONE HOUR	✓	581	100.000
A7 (south)		ONE HOUR	✓	920	100.000
A772 Gilmerton Road		ONE HOUR	✓	1079	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A7 (north)	B6392 Gilmerton Road	A7 (south)	A772 Gilmerton Road
From	A7 (north)	0	21	498	54
	B6392 Gilmerton Road	67	0	130	384
	A7 (south)	450	56	0	414
	A772 Gilmerton Road	72	427	580	0

## Vehicle Mix

**HV %s**

		To			
From		A7 (north)	B6392 Gilmerton Road	A7 (south)	A772 Gilmerton Road
	A7 (north)	0	5	5	5
	B6392 Gilmerton Road	5	0	5	5
	A7 (south)	5	5	0	5
	A772 Gilmerton Road	5	5	5	0

## Results

**Results Summary for whole modelled period**

Arm	Max RFC	Max Delay (min)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
A7 (north)	0.65	0.19	1.9	B	526	789
B6392 Gilmerton Road	0.79	0.36	3.7	C	533	800
A7 (south)	0.78	0.21	3.5	B	844	1266
A772 Gilmerton Road	1.08	2.49	54.0	F	990	1485

**Main Results for each time segment**
**15:30 - 15:45**

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
A7 (north)	431	108	792	1146	0.376	429	441	0.0	0.6	0.088	A
B6392 Gilmerton Road	437	109	845	1013	0.432	434	376	0.0	0.8	0.108	A
A7 (south)	693	173	378	1413	0.490	689	902	0.0	1.0	0.087	A
A772 Gilmerton Road	812	203	429	1219	0.666	804	637	0.0	2.0	0.149	A

**15:45 - 16:00**

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
A7 (north)	515	129	946	1053	0.489	514	527	0.6	1.0	0.116	A
B6392 Gilmerton Road	522	131	1011	918	0.569	520	449	0.8	1.4	0.157	A
A7 (south)	827	207	452	1367	0.605	825	1079	1.0	1.6	0.116	A
A772 Gilmerton Road	970	242	514	1170	0.829	960	763	2.0	4.6	0.286	C

**16:00 - 16:15**

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
A7 (north)	631	158	1070	978	0.645	627	637	1.0	1.8	0.178	B
B6392 Gilmerton Road	640	160	1185	818	0.782	631	512	1.4	3.4	0.325	C
A7 (south)	1013	253	549	1308	0.774	1006	1268	1.6	3.4	0.203	B
A772 Gilmerton Road	1188	297	626	1106	1.074	1081	929	4.6	31.4	1.215	F

**16:15 - 16:30**

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
A7 (north)	631	158	1086	968	0.652	631	642	1.8	1.9	0.186	B
B6392 Gilmerton Road	640	160	1197	811	0.789	639	519	3.4	3.7	0.362	C
A7 (south)	1013	253	555	1305	0.776	1012	1281	3.4	3.5	0.215	B
A772 Gilmerton Road	1188	297	630	1103	1.077	1097	937	31.4	54.0	2.494	F

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
A7 (north)	515	129	1119	948	0.543	518	546	1.9	1.3	0.147	A
B6392 Gilmerton Road	522	131	1114	859	0.608	530	523	3.7	1.7	0.196	B
A7 (south)	827	207	460	1362	0.607	835	1184	3.5	1.7	0.121	A
A772 Gilmerton Road	970	242	520	1167	0.831	1144	775	54.0	10.4	1.793	F

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
A7 (north)	431	108	831	1123	0.384	434	447	1.3	0.7	0.092	A
B6392 Gilmerton Road	437	109	872	998	0.438	441	393	1.7	0.8	0.114	A
A7 (south)	693	173	383	1409	0.491	695	930	1.7	1.0	0.089	A
A772 Gilmerton Road	812	203	433	1217	0.668	845	645	10.4	2.2	0.184	B

<b>Junctions 9</b>
<b>ARCADY 9 - Roundabout Module</b>
Version: 9.5.0.6896 © Copyright TRL Limited, 2018
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**Filename:** A7\_B6392\_A772 r'bt imp 210913.j9  
**Path:** C:\Users\Stuart\Documents\TPL\TP324\_Sheriffhall South\Junction Analysis\ARCADY  
**Report generation date:** 13/09/2021 22:45:56

»(Default Analysis Set) - 2023 Projected + Comm & Prop Devs, weekday AM  
»(Default Analysis Set) - 2023 Projected + Comm & Prop Devs, weekday PM

### Summary of junction performance

	weekday AM					weekday PM				
	Q (PCU)	Delay (min)	RFC	LOS	Res Cap	Q (PCU)	Delay (min)	RFC	LOS	Res Cap
<b>A1 - 2023 Projected + Comm &amp; Prop Devs</b>										
A7 (north)	2.4	0.18	0.70	B		1.9	0.19	0.65	B	
B6392 Gilmerton Road	21.5	1.39	1.00	F	-7 %	2.7	0.27	0.73	C	-10 %
A7 (south)	22.1	1.33	1.00	F	[A7 (south)]	3.0	0.18	0.75	B	[A772 Gilmerton Road]
A772 Gilmerton Road	1.9	0.16	0.64	A		40.1	1.90	1.04	F	

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

### File summary

#### File Description

<b>Title</b>	A7/ B6392/ A772 Gilmerton Road roundabout
<b>Location</b>	Sheriffhall South
<b>Site number</b>	
<b>Date</b>	13/09/2021
<b>Version</b>	Improvement
<b>Status</b>	
<b>Identifier</b>	
<b>Client</b>	Buccleuch Property
<b>Jobnumber</b>	TP324
<b>Enumerator</b>	SL
<b>Description</b>	

### Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Av. delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	min	-Min	perMin

### Analysis Options

Vehicle length (m)	Calculate Q Percentiles	Calculate detailed queuing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Av. Delay threshold (min)	Q threshold (PCU)
5.75			✓	Delay	0.85	0.60	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
D3	2023 Projected + Comm & Prop Devs	weekday AM	ONE HOUR	07:00	08:30	15	✓
D6	2023 Projected + Comm & Prop Devs	weekday PM	ONE HOUR	15:30	17:00	15	✓

### Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	(Default Analysis Set)	✓	100.000	100.000

# (Default Analysis Set) - 2023 Projected + Comm & Prop Devs, weekday AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (min)	Junction LOS
1	A7/ B6392 Gilmerton Road/ A772 Gilmerton Road Roundabout	Standard Roundabout		1, 2, 3, 4	0.83	E

### Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	-7	A7 (south)

## Arms

### Arms

Arm	Name	Description
1	A7 (north)	
2	B6392 Gilmerton Road	
3	A7 (south)	
4	A772 Gilmerton Road	

### Roundabout Geometry

Arm	V (m)	E (m)	I' (m)	R (m)	D (m)	PHI (deg)	Exit only
A7 (north)	3.65	7.00	9.5	35.0	50.0	24.0	
B6392 Gilmerton Road	3.65	7.00	9.0	25.0	50.0	28.0	
A7 (south)	3.65	7.00	12.0	40.0	50.0	27.0	
A772 Gilmerton Road	3.50	7.00	6.5	40.0	50.0	26.0	

### Slope / Intercept / Capacity

#### Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A7 (north)	0.611	1649
B6392 Gilmerton Road	0.594	1595
A7 (south)	0.618	1699
A772 Gilmerton Road	0.583	1506

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

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2023 Projected + Comm & Prop Devs	weekday AM	ONE HOUR	07:00	08:30	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	Av. Demand (PCU/hr)	Scaling Factor (%)
A7 (north)		ONE HOUR	✓	736	100.000
B6392 Gilmerton Road		ONE HOUR	✓	842	100.000
A7 (south)		ONE HOUR	✓	898	100.000
A772 Gilmerton Road		ONE HOUR	✓	660	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A7 (north)	B6392 Gilmerton Road	A7 (south)	A772 Gilmerton Road
From	A7 (north)	0	77	399	260
	B6392 Gilmerton Road	107	0	30	705
	A7 (south)	396	103	0	399
	A772 Gilmerton Road	30	266	364	0

## Vehicle Mix

### HV %s

		To			
		A7 (north)	B6392 Gilmerton Road	A7 (south)	A772 Gilmerton Road
From	A7 (north)	0	5	5	5
	B6392 Gilmerton Road	5	0	5	5
	A7 (south)	5	5	0	5
	A772 Gilmerton Road	5	5	5	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (min)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
A7 (north)	0.70	0.18	2.4	B	675	1013
B6392 Gilmerton Road	1.00	1.39	21.5	F	773	1159
A7 (south)	1.00	1.33	22.1	F	824	1236
A772 Gilmerton Road	0.64	0.16	1.9	A	606	908

### Main Results for each time segment

#### 07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
A7 (north)	554	139	549	1314	0.422	551	398	0.0	0.8	0.082	A
B6392 Gilmerton Road	634	158	766	1141	0.556	629	334	0.0	1.3	0.122	A
A7 (south)	676	169	801	1204	0.562	671	594	0.0	1.3	0.117	A
A772 Gilmerton Road	497	124	453	1242	0.400	494	1019	0.0	0.7	0.084	A

**07:15 - 07:30**

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
A7 (north)	662	165	657	1248	0.530	660	476	0.8	1.2	0.107	A
B6392 Gilmerton Road	757	189	917	1051	0.720	752	400	1.3	2.6	0.207	B
A7 (south)	807	202	958	1107	0.729	802	711	1.3	2.7	0.203	B
A772 Gilmerton Road	593	148	541	1190	0.498	592	1219	0.7	1.0	0.105	A

**07:30 - 07:45**

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
A7 (north)	810	203	799	1161	0.698	806	559	1.2	2.3	0.175	B
B6392 Gilmerton Road	927	232	1120	930	0.996	878	484	2.6	15.0	0.824	E
A7 (south)	989	247	1131	1000	0.989	941	867	2.7	14.6	0.762	E
A772 Gilmerton Road	727	182	635	1136	0.640	724	1438	1.0	1.8	0.152	A

**07:45 - 08:00**

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
A7 (north)	810	203	803	1158	0.700	810	570	2.3	2.4	0.181	B
B6392 Gilmerton Road	927	232	1126	927	1.000	901	487	15.0	21.5	1.391	F
A7 (south)	989	247	1155	985	1.004	958	872	14.6	22.1	1.333	F
A772 Gilmerton Road	727	182	647	1128	0.644	726	1467	1.8	1.9	0.156	A

**08:00 - 08:15**

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
A7 (north)	662	165	670	1240	0.534	666	521	2.4	1.2	0.111	A
B6392 Gilmerton Road	757	189	926	1046	0.724	831	411	21.5	2.9	0.386	C
A7 (south)	807	202	1037	1058	0.763	881	720	22.1	3.7	0.476	D
A772 Gilmerton Road	593	148	595	1159	0.512	596	1323	1.9	1.1	0.113	A

**08:15 - 08:30**

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
A7 (north)	554	139	554	1310	0.423	556	406	1.2	0.8	0.084	A
B6392 Gilmerton Road	634	158	773	1137	0.558	640	338	2.9	1.3	0.128	A
A7 (south)	676	169	814	1196	0.565	685	599	3.7	1.4	0.125	A
A772 Gilmerton Road	497	124	462	1236	0.402	499	1037	1.1	0.7	0.086	A

# (Default Analysis Set) - 2023 Projected + Comm & Prop Devs, weekday PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (min)	Junction LOS
1	A7/ B6392 Gilmerton Road/ A772 Gilmerton Road Roundabout	Standard Roundabout		1, 2, 3, 4	0.79	E

### Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	-10	A772 Gilmerton Road

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Projected + Comm & Prop Devs	weekday PM	ONE HOUR	15:30	17:00	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	Av. Demand (PCU/hr)	Scaling Factor (%)
A7 (north)		ONE HOUR	✓	573	100.000
B6392 Gilmerton Road		ONE HOUR	✓	581	100.000
A7 (south)		ONE HOUR	✓	920	100.000
A772 Gilmerton Road		ONE HOUR	✓	1079	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A7 (north)	B6392 Gilmerton Road	A7 (south)	A772 Gilmerton Road
From	A7 (north)	0	21	498	54
	B6392 Gilmerton Road	67	0	130	384
	A7 (south)	450	56	0	414
	A772 Gilmerton Road	72	427	580	0

## Vehicle Mix

**HV %s**

		To			
From		A7 (north)	B6392 Gilmerton Road	A7 (south)	A772 Gilmerton Road
	A7 (north)	0	5	5	5
	B6392 Gilmerton Road	5	0	5	5
	A7 (south)	5	5	0	5
	A772 Gilmerton Road	5	5	5	0

## Results

**Results Summary for whole modelled period**

Arm	Max RFC	Max Delay (min)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
A7 (north)	0.65	0.19	1.9	B	526	789
B6392 Gilmerton Road	0.73	0.27	2.7	C	533	800
A7 (south)	0.75	0.18	3.0	B	844	1266
A772 Gilmerton Road	1.04	1.90	40.1	F	990	1485

**Main Results for each time segment**
**15:30 - 15:45**

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
A7 (north)	431	108	793	1165	0.370	429	441	0.0	0.6	0.085	A
B6392 Gilmerton Road	437	109	846	1093	0.400	435	376	0.0	0.7	0.095	A
A7 (south)	693	173	378	1466	0.473	689	903	0.0	0.9	0.081	A
A772 Gilmerton Road	812	203	429	1256	0.647	805	638	0.0	1.9	0.138	A

**15:45 - 16:00**

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
A7 (north)	515	129	948	1070	0.481	514	528	0.6	1.0	0.113	A
B6392 Gilmerton Road	522	131	1012	995	0.525	521	450	0.7	1.1	0.132	A
A7 (south)	827	207	452	1420	0.583	825	1080	0.9	1.4	0.106	A
A772 Gilmerton Road	970	242	514	1206	0.804	962	764	1.9	4.0	0.249	B

**16:00 - 16:15**

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
A7 (north)	631	158	1092	982	0.643	627	639	1.0	1.8	0.176	B
B6392 Gilmerton Road	640	160	1198	884	0.723	634	521	1.1	2.6	0.246	B
A7 (south)	1013	253	551	1358	0.746	1007	1281	1.4	2.9	0.176	B
A772 Gilmerton Road	1188	297	627	1140	1.042	1105	931	4.0	24.8	0.996	F

**16:15 - 16:30**

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
A7 (north)	631	158	1113	969	0.651	631	644	1.8	1.9	0.186	B
B6392 Gilmerton Road	640	160	1213	875	0.731	639	531	2.6	2.7	0.265	C
A7 (south)	1013	253	556	1356	0.747	1013	1297	2.9	3.0	0.183	B
A772 Gilmerton Road	1188	297	631	1138	1.044	1127	938	24.8	40.1	1.902	F

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
A7 (north)	515	129	1087	985	0.523	518	542	1.9	1.2	0.136	A
B6392 Gilmerton Road	522	131	1096	945	0.553	528	509	2.7	1.3	0.153	A
A7 (south)	827	207	459	1416	0.584	833	1165	3.0	1.5	0.109	A
A772 Gilmerton Road	970	242	519	1203	0.806	1110	773	40.1	5.1	0.996	F

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	Unsignalised level of service
A7 (north)	431	108	812	1153	0.374	434	446	1.2	0.6	0.088	A
B6392 Gilmerton Road	437	109	861	1084	0.403	440	385	1.3	0.7	0.098	A
A7 (south)	693	173	382	1463	0.473	695	919	1.5	1.0	0.082	A
A772 Gilmerton Road	812	203	433	1253	0.648	825	644	5.1	2.0	0.151	A