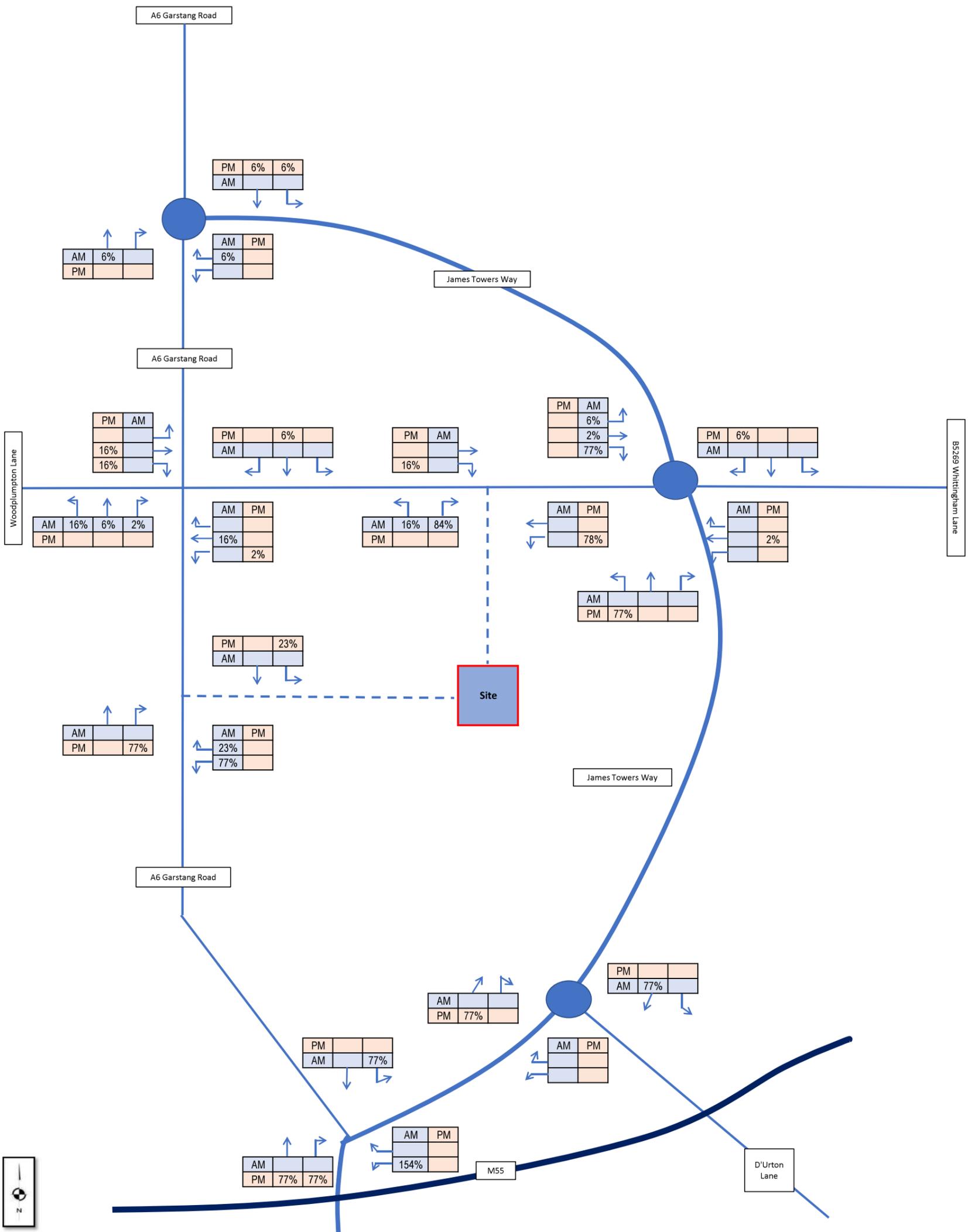


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APPENDIX 2



Distribution

Keyfold Farm Neighbourhood Plan Allocated Land, Broughton

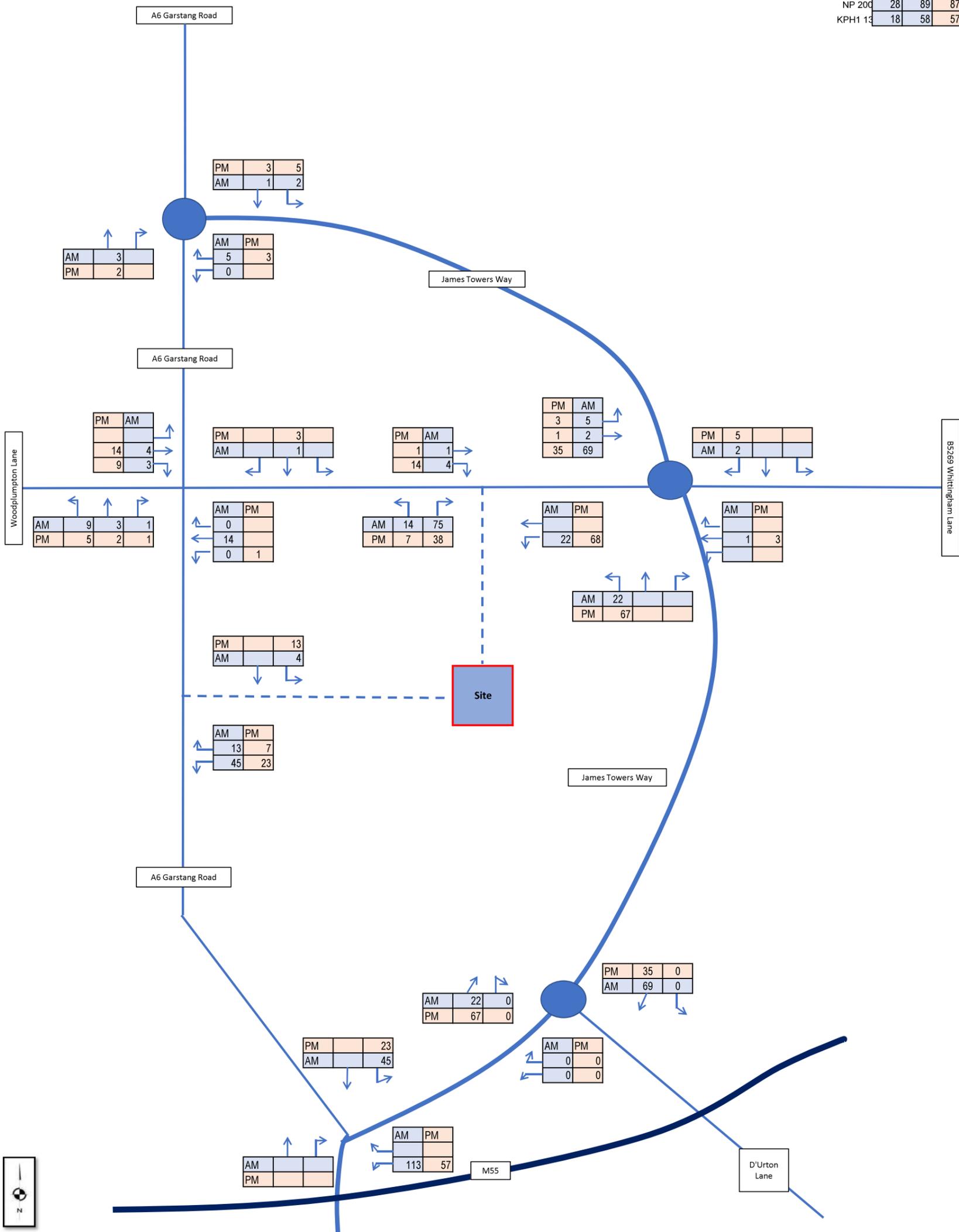


23 December 2021

Job Number - SCP/200590

Traffic Figure **

	AM		PM	
	ARR	DEP	ARR	DEP
NP 200	28	89	87	45
KPH1 13	18	58	57	29



330 Units (No connection)

Keyfold Farm Neighbourhood Plan Allocated Land, Broughton

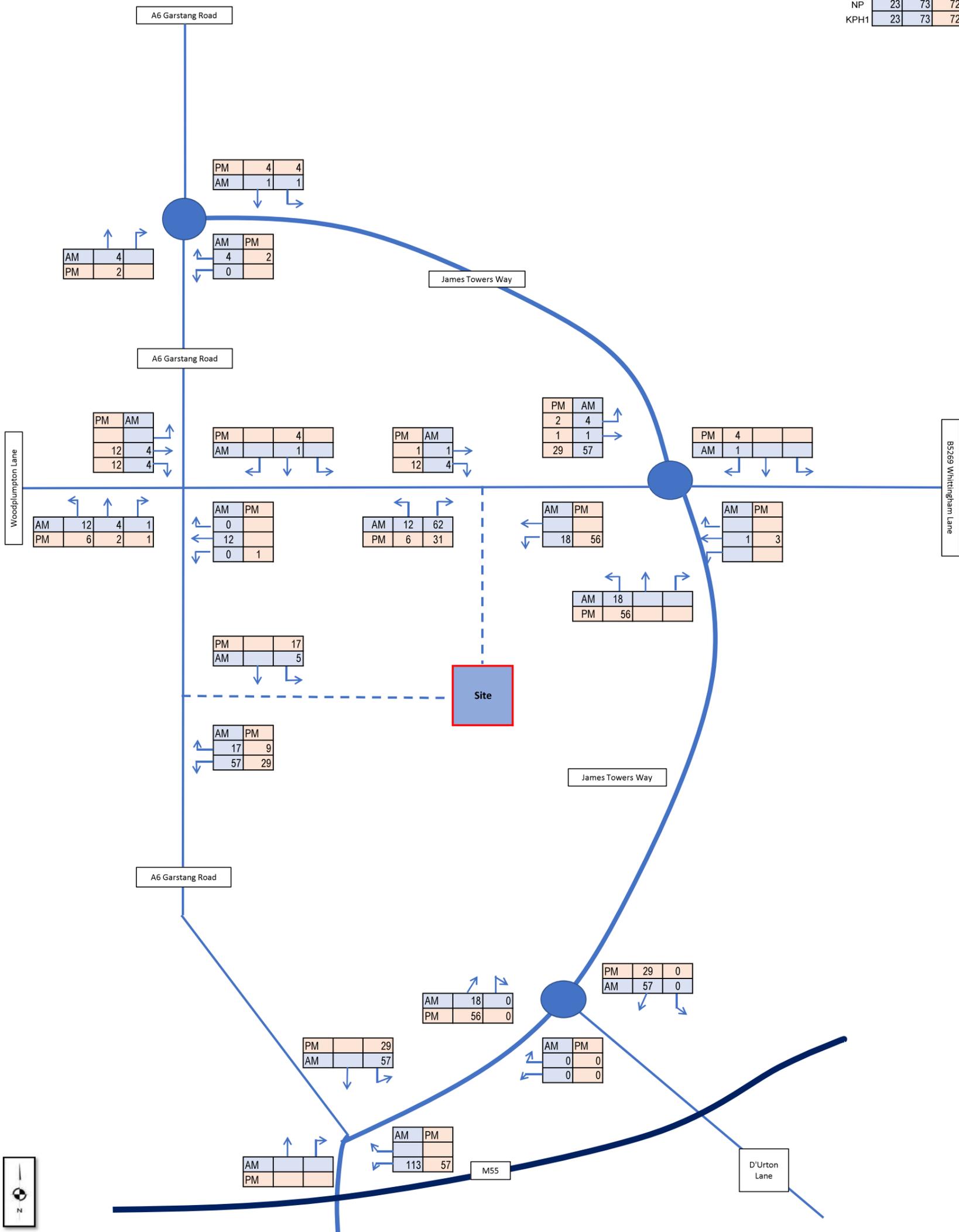


23 December 2021

Job Number - SCP/200590

Traffic Figure **

	AM		PM	
	ARR	DEP	ARR	DEP
NP	23	73	72	37
KPH1	23	73	72	37



330 Units (Internal Connection)

Keyfold Farm Neighbourhood Plan Allocated Land, Broughton

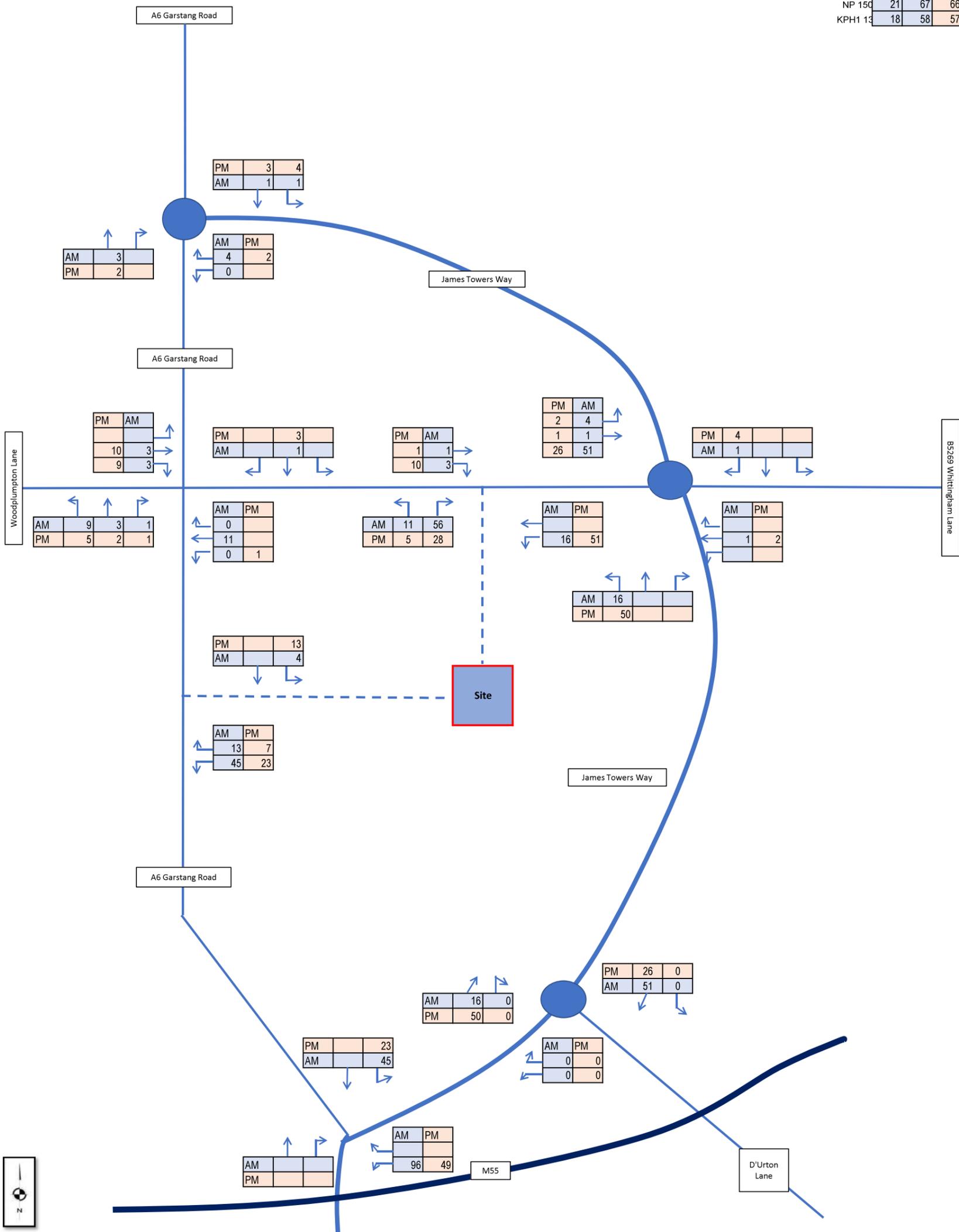


23 December 2021

Job Number - SCP/200590

Traffic Figure **

	AM		PM	
	ARR	DEP	ARR	DEP
NP 150	21	67	66	34
KPH1 13	18	58	57	29



280 Units (No connection)

Keyfold Farm Neighbourhood Plan Allocated Land, Broughton

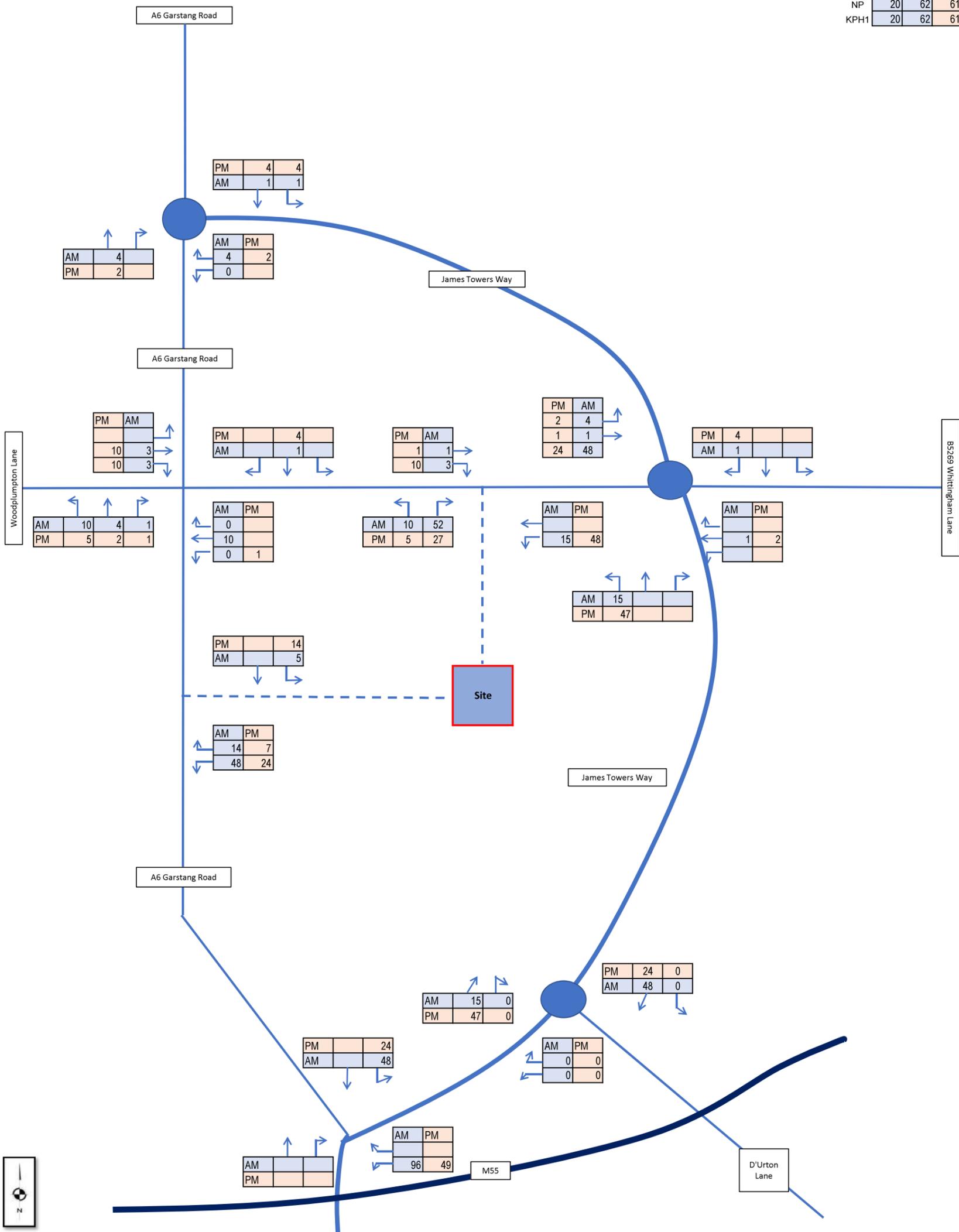


23 December 2021

Job Number - SCP/200590

Traffic Figure **

	AM		PM	
	ARR	DEP	ARR	DEP
NP	20	62	61	32
KPH1	20	62	61	32



280 Units (Internal Connection)

Keyfold Farm Neighbourhood Plan Allocated Land, Broughton

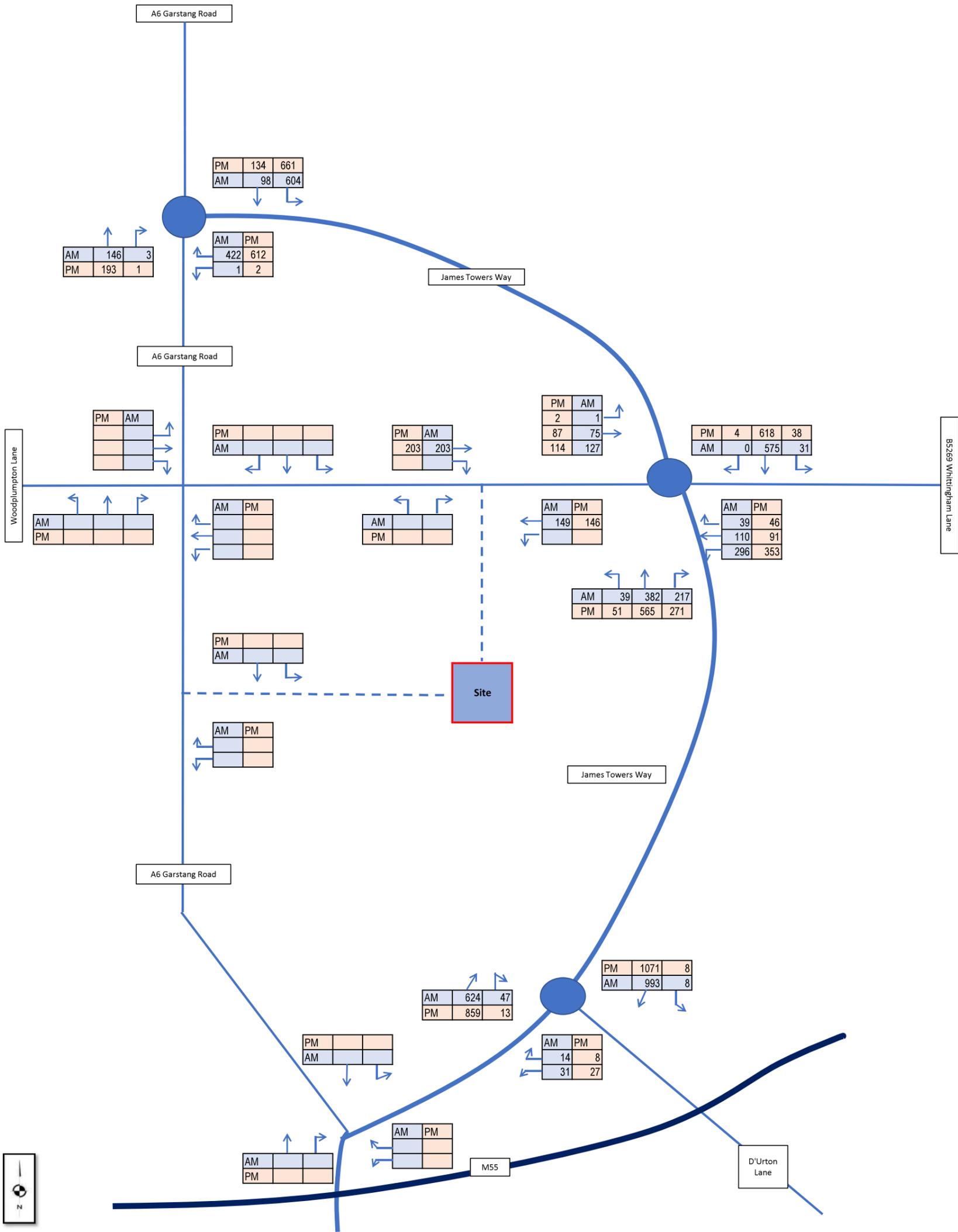


23 December 2021

Job Number - SCP/200590

Traffic Figure **

GF	
AM	1
PM	1



2031 Future Year

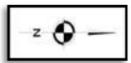
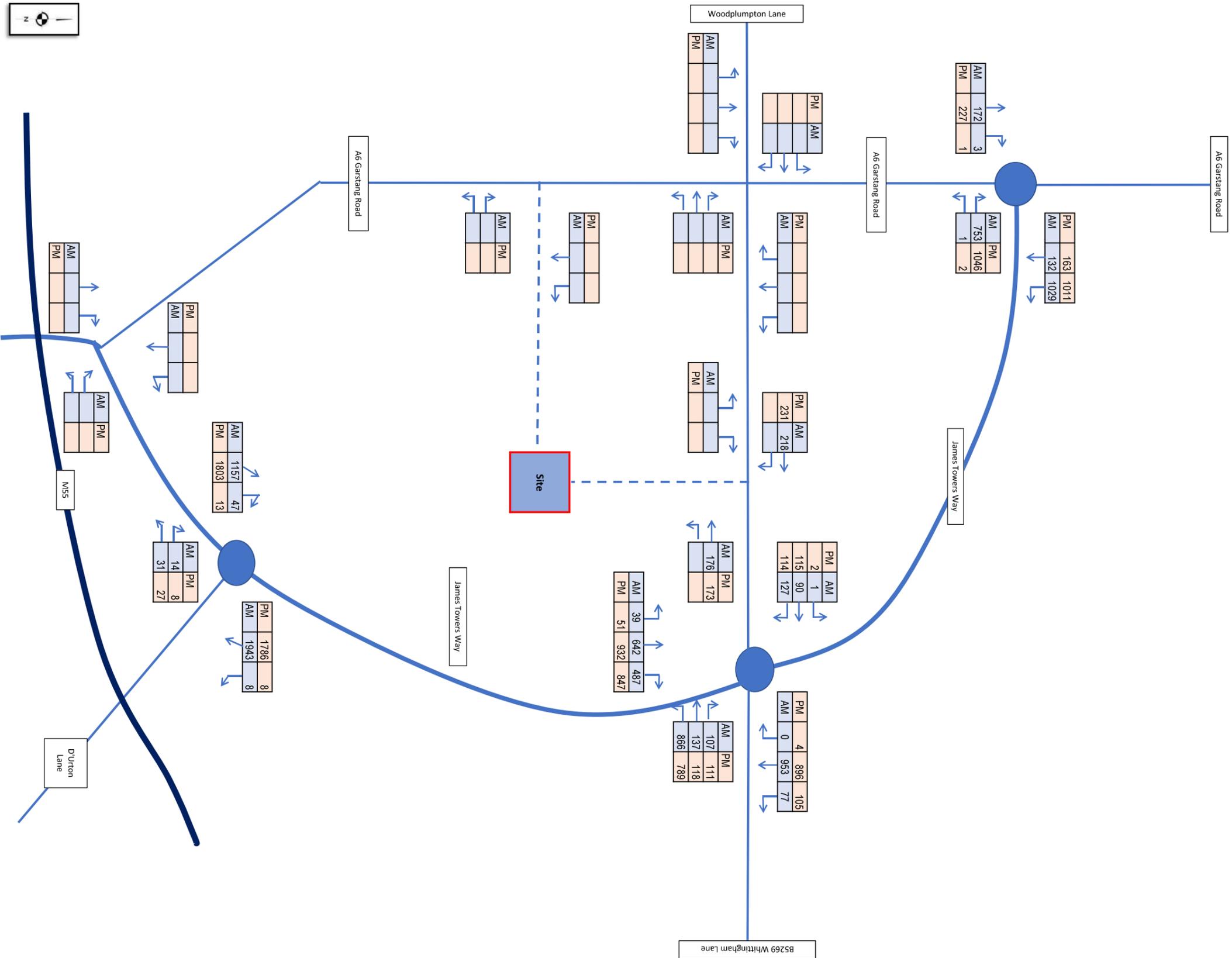
Keyfold Farm Neighbourhood Plan Allocated Land, Broughton



23 December 2021

Job Number - SCP/200590

Traffic Figure **



2031 Future Year + Committed

Keyfold Farm Neighbourhood Plan Allocated Land, Broughton

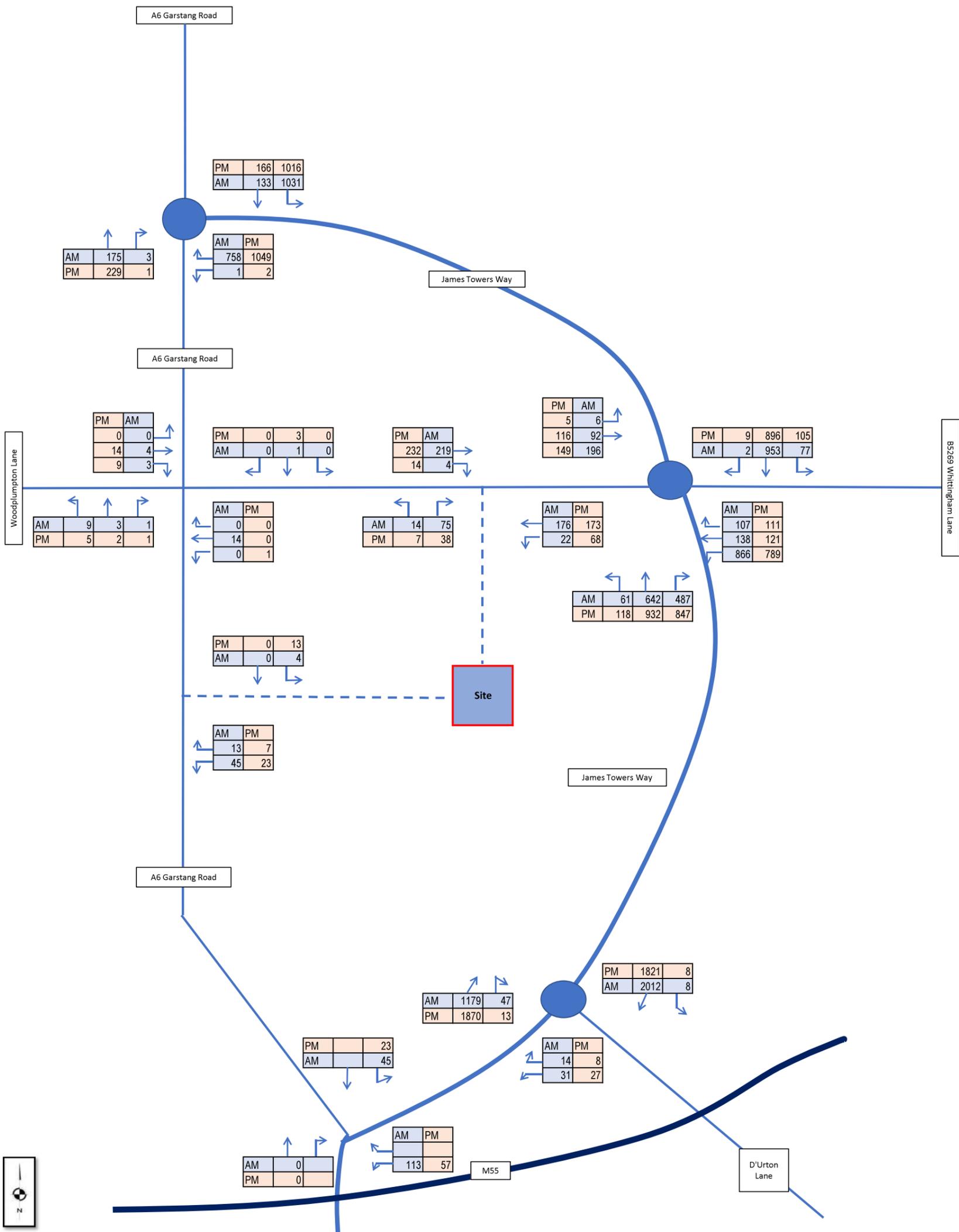


Transportation Planning : Infrastructure Design

23 December 2021

Job Number - SCP/200590

Traffic Figure **



2031 Future Year + Committed + 330 Units (No Link)

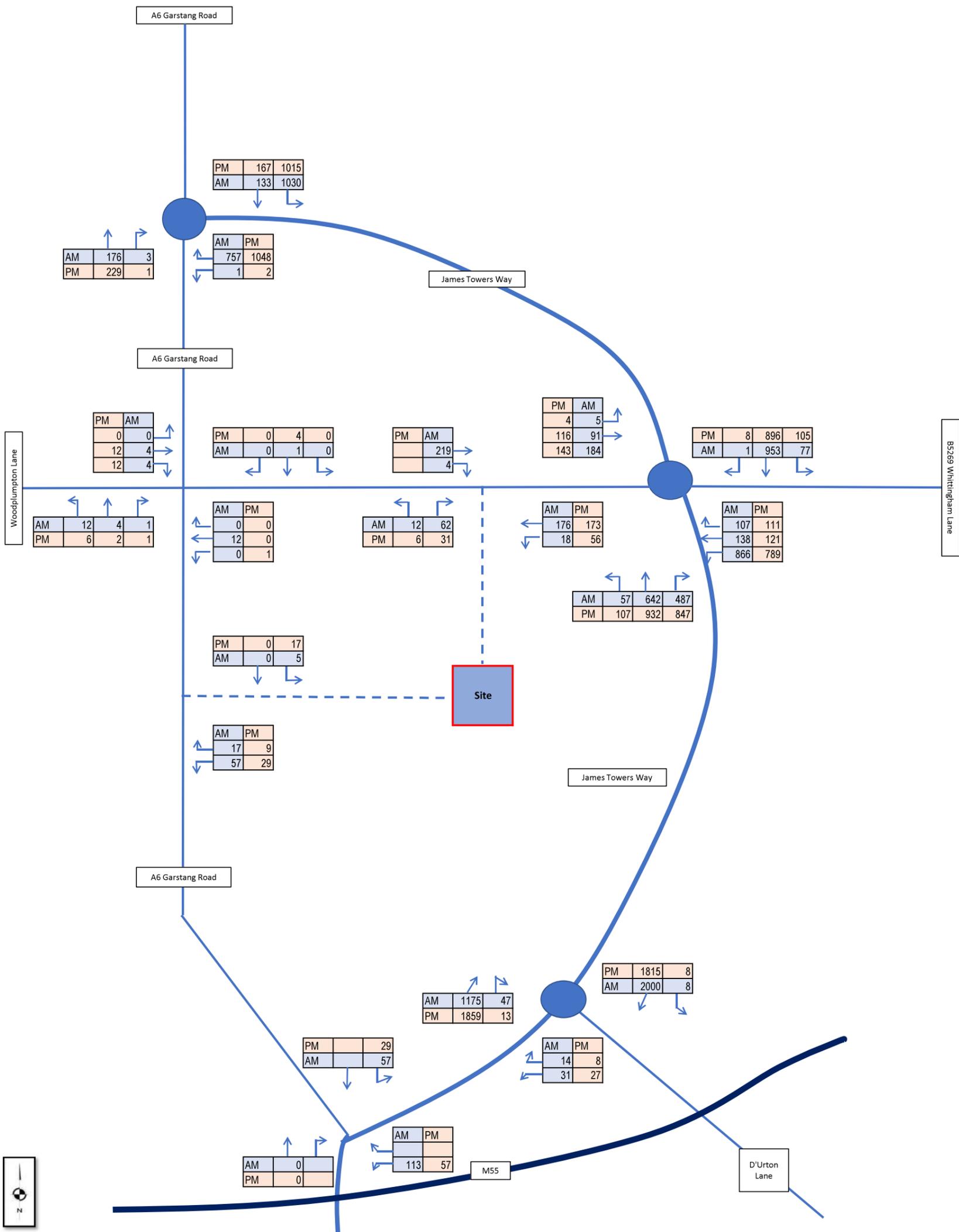
Keyfold Farm Neighbourhood Plan Allocated Land, Broughton



23 December 2021

Job Number - SCP/200590

Traffic Figure **



2031 Future Year + Committed + 330 Units (Internal Link)

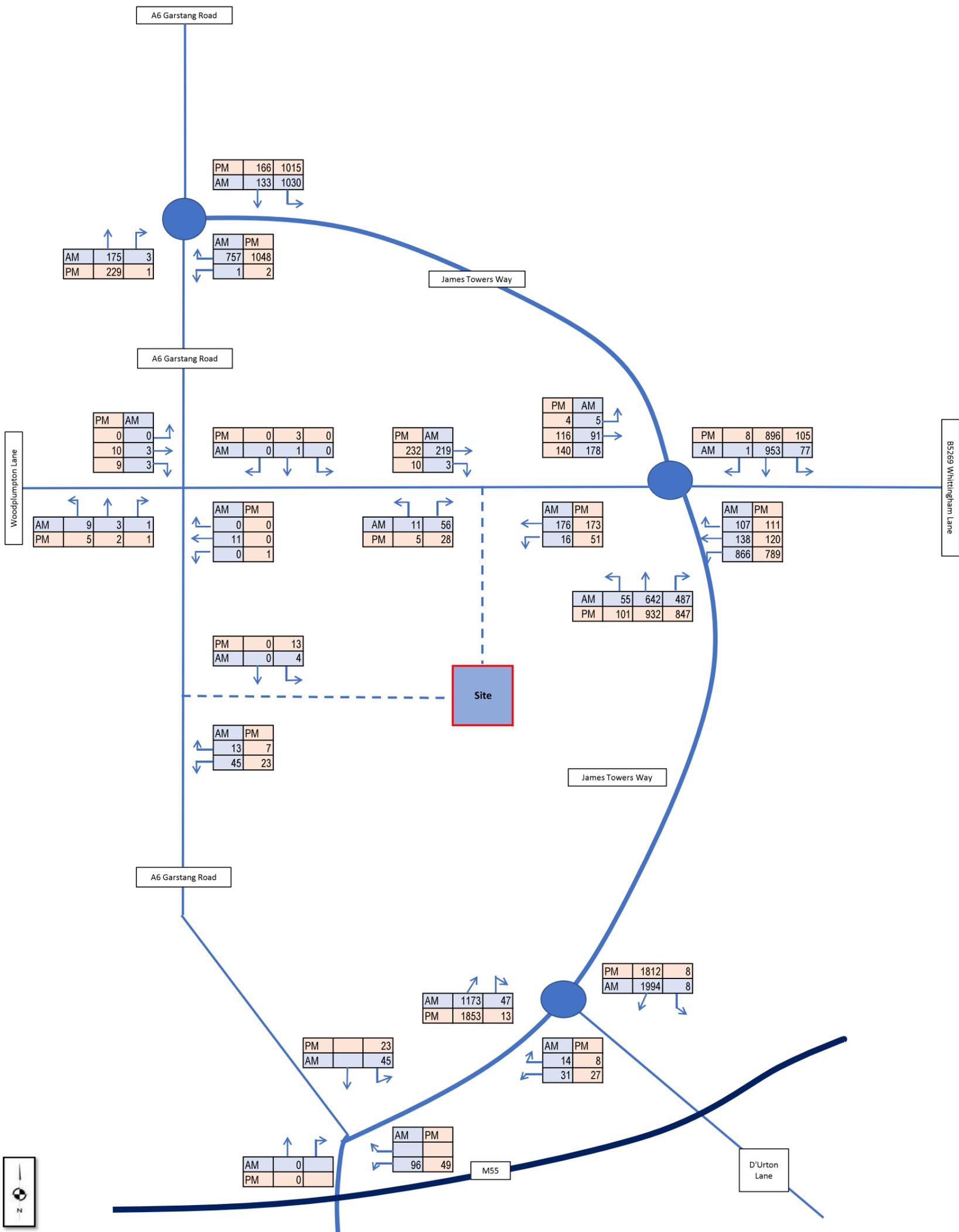
Keyfold Farm Neighbourhood Plan Allocated Land, Broughton



23 December 2021

Job Number - SCP/200590

Traffic Figure **



2031 Future Year + Committed + 280 Units (No Link)

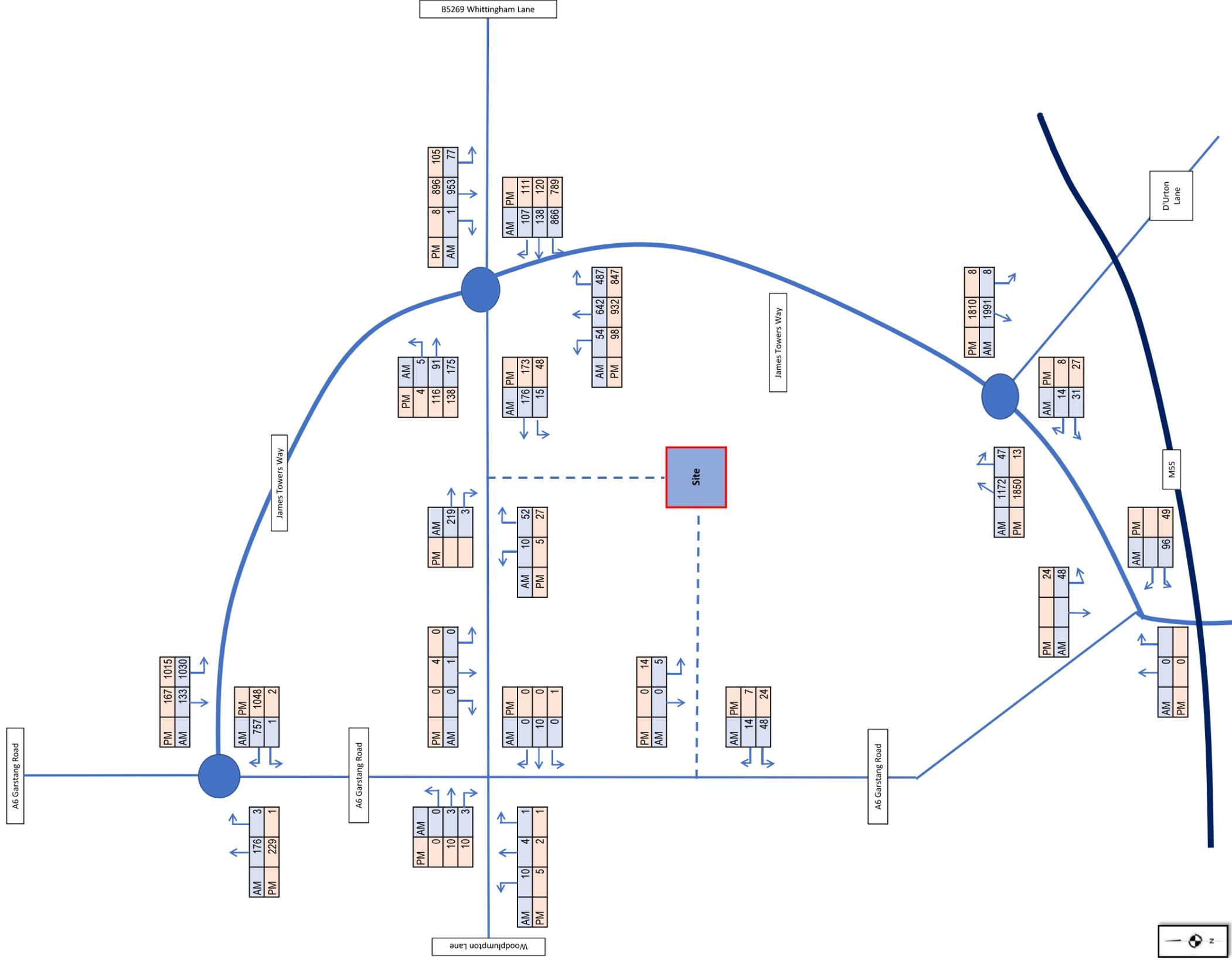
Keyfold Farm Neighbourhood Plan Allocated Land, Broughton



23 December 2021

Job Number - SCP/200590

Traffic Figure **



2031 Future Year + Committed + 280 Units (Internal Link)

Keyfold Farm Neighbourhood Plan Allocated Land, Broughton



23 December 2021

Job Number - SCP/200590

Traffic Figure **

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APPENDIX 3

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
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: Site Access Crossroad Test.j9
Path: Z:\Job Library\2020\200590 - Keyfold Farm Residential Development\Traffic Data\Junction Models
Report generation date: 23/12/2021 10:42:11

»2031 65% WL, AM
 »2031 65% WL, PM

Summary of junction performance

	AM					PM				
	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)
2031 65% WL										
Stream B-ACD	0.3	10.30	0.22	B	1.77	0.1	9.24	0.11	A	0.98
Stream A-BCD	0.0	0.00	0.00	A		0.0	5.10	0.01	A	
Stream D-ABC	0.0	7.60	0.01	A		0.0	0.00	0.00	A	
Stream C-ABD	0.0	5.22	0.01	A		0.0	5.31	0.03	A	

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

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

File summary

File Description

Title	
Location	
Site number	
Date	21/06/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	SCP\sam.chapman
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2031 65% WL	AM	ONE HOUR	08:00	09:30	15	✓
D2	2031 65% WL	PM	ONE HOUR	17:00	18:30	15	✓

Analysis Set Details

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

2031 65% WL, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		1.77	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Whittingham Lane E		Major
B	Site Access		Minor
C	Whittingham Lane W		Major
D	Housing Access		Minor

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)
A - Whittingham Lane E	7.50			90.0	✓	0.00
C - Whittingham Lane W	7.50			50.0	✓	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)
B - Site Access	One lane	2.75	50	75
D - Housing Access	One lane	2.20	0	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	626	-	-	-	-	-	-	0.227	0.324	0.227	-	-	-
1	B-A	518	0.088	0.223	0.223	-	-	-	0.140	0.318	-	0.223	0.223	0.111
1	B-C	654	0.094	0.237	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	518	0.088	0.223	0.223	-	-	-	0.140	0.318	0.140	-	-	-
1	B-D, offside lane	518	0.088	0.223	0.223	-	-	-	0.140	0.318	0.140	-	-	-
1	C-B	603	0.218	0.218	0.312	-	-	-	-	-	-	-	-	-
1	D-A	574	-	-	-	-	-	-	0.208	-	0.082	-	-	-
1	D-B, nearside lane	440	0.119	0.119	0.270	-	-	-	0.189	0.189	0.075	-	-	-
1	D-B, offside lane	440	0.119	0.119	0.270	-	-	-	0.189	0.189	0.075	-	-	-
1	D-C	440	-	0.119	0.270	0.095	0.189	0.189	0.189	0.189	0.075	-	-	-

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	2031 65% WL	AM	ONE HOUR	08:00	09:30	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	Average Demand (PCU/hr)	Scaling Factor (%)
A - Whittingham Lane E		ONE HOUR	✓	217	100.000
B - Site Access		ONE HOUR	✓	89	100.000
C - Whittingham Lane W		ONE HOUR	✓	249	100.000
D - Housing Access		ONE HOUR	✓	6	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Whittingham Lane E	B - Site Access	C - Whittingham Lane W	D - Housing Access
From	A - Whittingham Lane E	0	22	195	0
	B - Site Access	75	0	14	0
	C - Whittingham Lane W	245	4	0	0
	D - Housing Access	5	0	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Whittingham Lane E	B - Site Access	C - Whittingham Lane W	D - Housing Access
From	A - Whittingham Lane E	0	0	0	0
	B - Site Access	0	0	0	0
	C - Whittingham Lane W	0	0	0	0
	D - Housing Access	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.22	10.30	0.3	B	82	123
A-BCD	0.00	0.00	0.0	A	0	0
A-B					20	30
A-C					179	268
D-ABC	0.01	7.60	0.0	A	6	8
C-ABD	0.01	5.22	0.0	A	5	8
C-D					0	0
C-A					223	335

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	67	17	475	0.141	66	0.0	0.2	8.774	A
A-BCD	0	0	583	0.000	0	0.0	0.0	0.000	A
A-B	17	4			17				
A-C	147	37			147				
D-ABC	5	1	501	0.009	4	0.0	0.0	7.247	A
C-ABD	4	1	694	0.006	4	0.0	0.0	5.220	A
C-D	0	0			0				
C-A	183	46			183				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	80	20	464	0.173	80	0.2	0.2	9.374	A
A-BCD	0	0	575	0.000	0	0.0	0.0	0.000	A
A-B	20	5			20				
A-C	175	44			175				
D-ABC	5	1	492	0.011	5	0.0	0.0	7.392	A
C-ABD	5	1	712	0.007	5	0.0	0.0	5.092	A
C-D	0	0			0				
C-A	219	55			219				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	98	24	448	0.219	98	0.2	0.3	10.283	B
A-BCD	0	0	563	0.000	0	0.0	0.0	0.000	A
A-B	24	6			24				
A-C	215	54			215				
D-ABC	7	2	480	0.014	7	0.0	0.0	7.604	A
C-ABD	7	2	738	0.009	7	0.0	0.0	4.924	A
C-D	0	0			0				
C-A	267	67			267				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	98	24	448	0.219	98	0.3	0.3	10.299	B
A-BCD	0	0	563	0.000	0	0.0	0.0	0.000	A
A-B	24	6			24				
A-C	215	54			215				
D-ABC	7	2	480	0.014	7	0.0	0.0	7.604	A
C-ABD	7	2	738	0.009	7	0.0	0.0	4.926	A
C-D	0	0			0				
C-A	267	67			267				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	80	20	464	0.173	80	0.3	0.2	9.397	A
A-BCD	0	0	575	0.000	0	0.0	0.0	0.000	A
A-B	20	5			20				
A-C	175	44			175				
D-ABC	5	1	492	0.011	5	0.0	0.0	7.393	A
C-ABD	5	1	712	0.007	5	0.0	0.0	5.095	A
C-D	0	0			0				
C-A	219	55			219				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	67	17	475	0.141	67	0.2	0.2	8.822	A
A-BCD	0	0	583	0.000	0	0.0	0.0	0.000	A
A-B	17	4			17				
A-C	147	37			147				
D-ABC	5	1	501	0.009	5	0.0	0.0	7.250	A
C-ABD	4	1	694	0.006	4	0.0	0.0	5.221	A
C-D	0	0			0				
C-A	183	46			183				