

PARLEY CROSS, EAST DORSET

POTENTIAL JUNCTION IMPROVEMENTS SUMMARY

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1.1 INTRODUCTION & BACKGROUND

1.1.1 Parley Cross is a major, signal controlled, crossroads at the junction of the B3073 and the A347 in East Dorset. Both routes carry high volumes of traffic and the convergence of these flows is understood to result in significant traffic congestion especially in the peak hours. West Parley Village Centre is located to the south west of the junction, and currently offers a poor road and traffic dominated urban environment that, in combination with existing congestion issues at the junction, is likely to discourage journeys to be made by walking and cycling.

1.1.2 It is understood that Dorset County Council (DCC) has investigated various options to improve capacity at the junction previously, including the construction of a gyratory system using land to the south east. However, concerns have been raised that such a solution would not be suitable for accommodating pedestrians and cyclists, creating capacity for car travel and providing an attractive route for bus services travelling along both roads. DCC officers are concerned that both the current layout, and the gyratory option, could also lead to community severance between the proposed residential site to the south east of the crossroads.

1.1.3 Policies FWP5, FWP6 and FWP7 of the draft East Dorset Core Strategy Pre-Submission April 2012 provides for changes to the Parley Cross junction and the associated service roads, taking advantage of new link roads that could be provided through adjacent land allocated for development. This in turn could allow for a reduction in the total road area at the existing junction and provide an opportunity to significantly enhance the public realm around Parley Cross, improve accessibility for pedestrians, cyclists and public transport and reduce congestion for vehicles. The draft Core Strategy has been subject to public consultation although the adoption of these policies is yet to be resolved.

1.1.4 The B3073 Corridor Study completed in June 2011 by Buro Happold examined the potential traffic impacts of future development in the Bournemouth Airport Aviation Business Park on Parley Cross and other junctions in the area. The study considered the benefits of providing a link road through development land to the south east of the junction which would facilitate the removal of left turning traffic from the Christchurch Road (E) approach and right turning traffic from New Road (S) approach. As well as background traffic growth to 2020, the study also considered the potential impacts of residential

development on land to the south east and south west of Parley Cross. The Buro Happold report concluded that the expected traffic generated from the proposed West Parley housing developments could be accommodated in both the 2020 AM and PM peak periods.

1.1.5 This Technical Note summarises the subsequent work that has been completed to examine the benefits of introducing a link road through the development site to the south west of Parley Cross, and the subsequent improvements for sustainable modes resulting from the removal of further turning traffic from the junction. This includes the following:

- Traffic modelling to determine the impact of removing diverted traffic from Parley Cross and establish the capacity benefits that could be created by diverting traffic along the development link roads and the potential for traffic lanes to be reduced at the junction.
- Developing a preliminary highway layout for improvements to the junction appreciating the following aims:
 - Increased priority for cyclists and pedestrians
 - Introduction of new cycleways
 - Introduction of increased footway provision.
 - Introduction of new bus lanes/priority measures to facilitate express high frequency bus services
 - Provision of high quality bus waiting facilities
 - Improved links across the New Road carriageway between the development and the existing shopping parade to reduce community severance.
 - Provision of a high quality public realm.

1.2 TRAFFIC MODELLING

Traffic Inputs

1.2.1 The LINSIG traffic model established by Buro Happold for the B3073 Corridor Study was used as the basis for the 2012 modelling detailed in this Technical Note. This included the residential trip generation for both the east and west development sites, as well as assumed layouts for the Parley Cross junction and the auxiliary junctions at either end of the eastern link road on Christchurch Road (E) and New Road (S).

1.2.2 Following a review of the Buro Happold Report, it was established that the LINSIG model built and tested to assess the residential development and associated link road through the eastern site had not made any allowance for development at the airport. Amended baseline traffic flows were therefore calculated appreciating additional traffic from the committed development of 42,000sqm of employment. In terms of additional movements through Parley Cross, this equates to an additional 96 movements in the AM peak and 101 movements in the PM peak.

1.2.3 Estimated trip generation for the proposed 3000sqm food store on the east site was also included in the analysis. Using a TRICS based assessment, and allowing for 30% of journeys to be pass-by trips from existing traffic on the network, this equates to an additional 142 movements in the AM and 326 in the PM.

1.2.4 In total, this equates to an additional 238 movements in the AM and 427 in the PM peak over and above the levels of traffic analysed in the Buro Happold Study. Copies of the calculations are attached to this report for information.

Highway Network & Model

1.2.5 An initial review of the Buro Happold LINSIG model for the Parley Cross network identified an issue with the representation of the southbound approach to the junction. This involved the right turn into Christchurch Road [E] being modelled as an unopposed movement, despite the signal staging having both the northbound and southbound approaches running concurrently. Under this staging, right turning traffic would be required to give way and therefore the original model is likely to have over-estimated the capacity at the junction. An amended version of the LINSIG model updated to appreciate these movements was therefore constructed, with further changes to the signal staging also incorporated to maximise the capacity of the resulting arrangement. Table 1 below summarises the results of the updated model, together with the original results reported in the B3073 Study (Table 6.3):

Scenario	AM		PM	
	Lowest Practical Reserve Capacity (PRC) %		Lowest Practical Reserve Capacity (PRC) %	
	Original BH Results	Corrected Results	Original BH Results	Corrected Results
2020 Base + Committed Dev	+9.6%	n/c	+7.8%	+4.7%
2020 Base + Committed + 110,000sqm development	+7.7%	+3.3%	+3.1%	-2.9%
2020 Base + Committed + 137,000sqm development	+5.0%	-1.7%	+2.1%	-5.6%
2020 Base + Committed + 208,000sqm development	-0.7%	-5.6%	-6.9%	-22.6%

1.2.6 Discussions with Matthew Williams of DCC's traffic signal team established that that in this case it would be appropriate to use RR67 as a point of reference in order to calculate saturation flows for the various approaches to the junctions rather than the generic factor applied throughout the original B3073 study model. This enables a better reflection of the effects of lane width, turning radii etc to be appreciated in order to obtain a more realistic representation of the capacity of the junction. The application of this alternative methodology resulted in an improvement in the modelling results for the junction.

1.2.7 The LINSIG model was then adapted further to include a link road through the western residential site and remove the associated turning traffic from the Parley Cross junction (i.e. the right turn from Christchurch Road [W] to New Road [S] and vice versa). For the purposes of this exercise it was assumed that the junctions at either end of the additional link road replicate the auxiliary junctions included in the Buro Happold Report for the eastern link road.

1.2.8 During the verification process, a second issue was identified with the original study model relating to the routing of traffic through the combined network and the relative attractiveness of travelling along the new link roads through the site. This resulted in some traffic travelling from Christchurch Road [E] to New Road [N] that historically would simply turn right at the Parley Cross junction (and be likely to continue to do so in the future), instead being routed through the eastern residential site to New Road [S] and then north straight on through Parley Cross to New Road [N]. Clearly this lengthy diversion route is unlikely to reflect the future travel patterns, and results in an over-inflated traffic flow on the New Road [S] approach whilst potentially underestimating right turning movements from the

Christchurch [E] approach (which would have a significant influence on the capacity results). This issue also appeared to be replicated in the reverse direction.

1.2.9 An amended network model was therefore created to remove this routing option and re-assign the traffic flows across the amended network. It was then necessary to extract the Parley Cross junction from the combined network for testing in a stand-alone junction model so that the left/right turning movements at Parley Cross that it is known could be re-routed via the new link roads could be excluded from the modelling manually.

Results

- Scenario 1 – Buro Happold Proposed Layout for Parley Cross + eastern resi link road + western resi link road:

1.2.10 The results of the new stand-alone model for Parley Cross confirm that the introduction of the link roads improves the performance in capacity terms. The increases in saturation flows that were introduced also improve capacity further. However, the addition of committed development from the airport (only some of which benefits from the new link roads), new development trips from the food store (which is a significant factor), and the amendment of the original model to appreciate the blocking of right turning traffic on the southbound approach offsets some of the improvements to capacity that are gained. The Practical Reserve Capacity in this scenario is around +12% in the AM and +7% in the PM.

- Scenario 2 – Single Lane Approaches on New Road North & South

1.2.11 Opportunities were then examined to reduce traffic lanes on each approach whilst maintaining the junction working within reasonable operational criteria. The results from Scenario 1 indicate that the demand from the New Road [S] approach (adjacent to the existing neighbourhood centre) does not have a critical impact on the operation of the junction and so this has been the starting point when looking at options to reduce lanes.

1.2.12 An iterative process was followed to examine various options, but the solution emerging from this exercise that fully utilises the Practical Reserve Capacity is set out in Table 2 as follows:

Table 2: Updated LINSIG Results – Revised Junction Layout					
	Before (Buro Happold Study)		After (WSP Results)		Change
	Entry	No. Lanes	Entry	No. Lanes	
Christchurch Road [E]	<ul style="list-style-type: none"> • Ahead • Ahead • Right 	3	<ul style="list-style-type: none"> • Ahead • Ahead • Right 	3	n/c
New Road [S]	<ul style="list-style-type: none"> • Ahead/left • Ahead 	2	<ul style="list-style-type: none"> • Ahead 	1	-1
Christchurch Road [W]	<ul style="list-style-type: none"> • Ahead/left • Ahead/Right 	2	<ul style="list-style-type: none"> • Ahead/left • Ahead 	2	n/c
New Road [N]	<ul style="list-style-type: none"> • Ahead/left • Ahead/Right 	2	<ul style="list-style-type: none"> • Ahead/left/right 	1	-1
Exit					
	Exit	No. Lanes	Exit	No. Lanes	
Christchurch Road [E]	Merge/ahead	2	Merge/ahead	2	n/c
New Road [S]	Ahead/merge	2	Ahead	1	-1
Christchurch Road [W]	Ahead/merge	2	Ahead/merge	2	n/c
New Road [N]	Ahead/merge	2	Ahead	1	-1

1.2.13 The resulting layout therefore comprises a reduction in lanes on both of the New Road approaches from 4 to 2 (i.e. one on each entry and one on each exit). This would therefore enable the pedestrian realm to be extended and the crossing distance on the south approach (near the shops) to be reduced. It was found that the arrangement of traffic lanes on the Christchurch Road approaches needs to replicate the proposed arrangement included in the B3073 Study. The Practical Reserve Capacity in this scenario is +1% in the AM and +0.5% in the PM.

1.2.14 During this process it was found that slightly different signal staging for the AM and PM peak periods enabled the throughput of traffic at the junction to be maximised in order to achieve these results. The worst-case queuing in this scenario occurs during the PM peak on the New Road [N] approach, with 27 vehicles in a single file queue in the one approach lane remaining. However, this was found to clear every cycle. A copy of the LINSIG report for this scenario is attached to this Technical Note for information.

- Scenario 3 – Single Lane Approach on New Road [S] and Dual Lane Approach on New Road [N]

1.2.15 A refinement of Scenario 2 was tested by re-introducing a dedicated left turn lane on the New Road [N] approach to increase the capacity, reduce the length of queuing, and provide more space to accommodate that queuing over a shorter distance. This would limit the potential for improved public realm on the approach, but as this arm does not currently have pedestrian crossing facilities (and the signal staging makes it difficult to introduce new ones) this may not be an issue. When this additional option was tested (with the same cycle time as Scenario 2) it was confirmed that the Practical Reserve Capacity in this scenario is +18.5% in the AM and +14.4% in the PM, with the maximum queue on the north approach reduced to 16 in the PM peak. Therefore Scenario 3 was found to provide more theoretical capacity, slightly less queuing, but less scope to improve pedestrian conditions on the north arm. Simplified signal staging in this scenario also provides an improvement to the operation of the junction. A copy of the LINSIG report for this option is also attached to this Technical Note.

- Scenario 4 – As Scenario 3, but with Single Lane Approach for Christchurch Rd [W]

1.2.16 Scenario 4 was created to test the impacts of reducing the number of traffic lanes on the Christchurch Road [W] approach to reduce the distance pedestrians are required to cross the road. The results found that if the two lanes are reduced to one, capacity is reduced to around -7% and queuing is increased to over 25 vehicles in a single lane.

- Scenario 5 – As Scenario 3; but with All-red Phase for Pedestrian Movements

1.2.17 As an alternative method of improving pedestrian accessibility at Christchurch Road, two further options were tested to improve pedestrian movements within the signalling of the junction as it stands. The proposed junction arrangement supplied examined in the B3073 Study includes staggered pedestrian crossings for the Christchurch Road approaches, with separate staging of each leg of the crossing within each cycle. From the perspective of a pedestrian, it might be considered more desirable to cross an arm of the junction in one movement, rather than having to stop and wait within a pedestrian refuge at the half way point.

1.2.18 Given this, the impacts of simplifying the staging of the pedestrian crossings and removing the lost time associated with each individual inter-green were tested by introducing a new all-red stage where all vehicular traffic is stopped and all pedestrian crossings run together. As well as allowing pedestrians to cross each arm in one movement, it would also open up the opportunity to provide new diagonal pedestrian crossings (similar to the recent improvement scheme at Oxford Circus in London) enabling some pedestrian

movements to be combined into one passage across the junction rather than two, thereby minimising pedestrian delay and reducing the perception of severance.

1.2.19 The results for Scenario 5 suggest that a Practical Reserve Capacity of -4.3% is achievable in the AM peak and +0.2%. In terms of queuing, the results suggest this could be in the order of 23 in the AM peak and 27 in the PM peak, split across the two approach lanes. Although the AM result presented a negative figure for PRC, it should be noted that the utilisation of the junction remains below 100% with the greatest saturation on the Christchurch Road approaches at 93.8% in the AM peak (with queuing on the west and east approaches of 26 and 24 respectively – again split across two lanes). Given this, and the benefits made to pedestrian accessibility in this scenario, it is considered that the results for traffic capacity could be acceptable.

■ Combined Network Results

1.2.20 As described above, during the modelling process it was necessary to extract the Parley Cross junction from the combined network for testing in a stand-alone junction model to remove the possibility of inaccurate routing through the wider network encompassing the four auxiliary junctions. In order to assess the performance of the auxiliary junctions, an adapted version of the original wider area model was also tested. This adaptation removed the constraint at Parley Cross to ensure that the model did not automatically assign flows inappropriately on a delay basis via the development link roads. For the purposes of this exercise the adapted model does not, therefore, contain the same layout as that included in scenario 5.

1.2.21 Given the distance of the auxiliary junctions from Parley Cross, the interaction of traffic flows and the potential impacts of platooning are considered to be low, and the methodology of testing the auxiliary junctions in isolation without the preferred Parley Cross scenario is considered to provide a reasonable representation of their potential performance.

1.2.22 The layouts assumed for the auxiliary junctions during this modelling process broadly replicate those considered in the B3073 Study, although it has been necessary to include a second ahead lane on the Christchurch Road (E) approach to Junction 2. The configurations and results for Practical Reserve Capacity are summarised in the Tables below:

Auxiliary Junction 2 - East of Parley Cross			
	Christchurch Road (W)	Development Link Road	Christchurch Road (E)
Lanes	<ul style="list-style-type: none"> ■ Ahead ■ Right 	<ul style="list-style-type: none"> ■ Left ■ Right 	<ul style="list-style-type: none"> ■ Ahead ■ Ahead ■ Left
AM PRC = -5.6%		PM PRC = +10.0%	

Auxiliary Junction 3 - South of Parley Cross (Eastern Development Link Road)			
	New Road (N)	Development Link Road	New Road (S)
Lanes	<ul style="list-style-type: none"> ■ Ahead/left 	<ul style="list-style-type: none"> ■ Left ■ Right 	<ul style="list-style-type: none"> ■ Ahead ■ Right
AM PRC = +37.6%		PM PRC = +8.1%	

Auxiliary Junction 4 - West of Parley Cross			
	Christchurch Road (W)	Development Link Road	Christchurch Road (E)
Lanes	<ul style="list-style-type: none"> ■ Ahead ■ Right 	<ul style="list-style-type: none"> ■ Left/right 	<ul style="list-style-type: none"> ■ Ahead/left
AM PRC = +21.9%		PM PRC = +5.1%	

Auxiliary Junction 5 - South of Parley Cross (Western Development Link Road)			
	New Road (N)	Development Link Road	New Road (S)
Lanes	<ul style="list-style-type: none"> ■ Ahead ■ Right 	<ul style="list-style-type: none"> ■ Left/right 	<ul style="list-style-type: none"> ■ Ahead ■ Left
AM PRC = -0.2%		PM PRC = -3.5%	

1.2.23 As summarised above, the assumed layouts for the auxiliary junctions are anticipated to operate below 100% utilisation. Although at this feasibility stage the results for some junctions suggest small negative values of PRC, it is considered likely that the small change required to achieve a positive PRC could be achieved through the detailed design and modelling process for each site.

1.2.24 Increases in capacity could also be achieved through the introduction of a MOVA system (Microprocessor Optimised Vehicle Actuation) at the junctions. The system generates optimised signal timings cycle-by-cycle, varying continuously with traffic conditions and the volume of vehicles that are detected arriving at the junction. TRL/Department of Transport (DOT) trials have shown that the use of MOVA reduces delays by an average of 13%.

1.2.25 Given the results of this initial feasibility assessment, it is considered likely that the network as a whole would operate within reasonable performance criteria. It should be noted that this assessment of the auxiliary junctions focusses on potential capacity only given the anticipated traffic flows at this time. Final design solutions would need to be investigated in detail by the respective developers as part of the planning process, both in terms of geometry and capacity, given the development mix that is ultimately pursued.

Summary

1.2.26 As explained above, Scenario 2 provides the greatest scope for reducing vehicle lanes (to leave a single entry and exit on each New Road arm), and although it achieves Practical Reserve Capacity results within criteria normally considered to be acceptable it was found to generate some potentially significant vehicle queuing on the New Road (N) approach. This could be mitigated by re-introducing a left turn lane on the approach (Scenario 3), although this would then reduce the scope of improvements that could be made for pedestrians at this location.

1.2.27 An adaptation of Scenario 3 would be to include an all-red phase at the junction to allow pedestrians to cross each arm in one movement. This Scenario 5 would also provide the option of introducing diagonal crossings to enhance pedestrian accessibility in the neighbourhood. Although this would result in greater lost time at the junction for vehicle movements and reduce reserve capacity when compared with Scenario 3, the benefits to sustainable modes could potentially outweigh the decrease in traffic capacity.

1.3 PRELIMINARY HIGHWAY LAYOUT

1.3.1 Following the completion of the traffic modelling stage, a design workshop was held on Friday 10 February 2012 with Dorset County Council officers to discuss the constraints and opportunities associated with delivering highway improvements at the Parley Cross junction. Following that meeting, a preliminary highway layout was produced based on the reduced carriageway space defined through the modelling exercise (Scenario 5) and the aspiration for improvements to sustainable transport infrastructure discussed at the workshop session.

1.3.2 The layout is shown on Figure 31567/SK-01/B which is attached to this report. The indicative scheme shown for the eastern development site was produced by Wyatt Homes and provided by Dorset County Council to provide context to the Parley Cross works. The main features of the proposed highway scheme are summarised below:

- Two vehicle lanes on the Christchurch Road [E] approach, with left turns banned.
- Two vehicle lanes on the Christchurch Road [W] approach, with right turns banned.
- Two vehicle lanes on the New Road [N] approach, with all movements permitted.
- Single vehicle lane on the New Road [S] approach, with left and right turns banned.
- Kerb line brought forward at north-east corner to create additional footway space where it is currently fairly tight for pedestrians. The new position has been defined by the swept path of an HGV/bus turning left from New Road to Christchurch Road.
- Stop lines on all approaches brought forward to reduce lost time within each cycle of the traffic signals.
- Diagonal pedestrian crossings introduced, with fixed bollards provided at the New Road [N] approach where there is a significant length of dropped kerbs at the junction radii and there could be a potential risk to waiting pedestrians from larger vehicles overrunning.
- All crossings shown are 3m wide and intended to be toucan crossings (i.e. for pedestrians and cyclists)
- 3m shared footway cycleway on the south side of Christchurch Road [E].
- Cycle “off-slip” from the carriageway on each approach to the adjacent shared footway/cycleway.
- 3m shared footway/cycleways on either side of New Road [S]
- The existing exit only junction with the service road to the west of New Road [S] (by “The Lighting Studio”) closed, and new half lay-by bus stop provided instead close to the main shops.
- New half lay-by bus stop on the east/southbound side of New Road [S] approximately in the same location as existing.
- The bus lay-bys shown are 2m wide with 3m bus cage markings. Although there should still be sufficient space for two cars to pass along New Road if both bus stops are occupied, there is a risk that through traffic could be obstructed for a short period of time. However, this arrangement should afford better priority to buses pulling out into the stream of traffic.
- At least 4m of pedestrian realm adjacent to each bus stop to accommodate bus shelters without blocking through pedestrian/cycle movements.

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- New uncontrolled pedestrian crossing with central refuge island on New Road [S] approx. 35m north of retained access into service road at Parley Cross Pharmacy.
 - Existing service road north of retained access/egress converted to shared space. Colours shown on the drawing show where different surfacing materials could be employed to break up the shared space into a series of defined areas, as well as highlight linkages from the key pedestrian, cycle and public transport connections surrounding the local centre. A 3m zone immediately adjacent to the building frontages is demarcated either with parking bays or a row of road marking studs to subtly discourage traffic whilst still retaining the visual appearance of shared space through the use of the same surfacing materials. As well as creating a zone for pedestrians to safely emerge from the shop units, this could also aid the visually impaired to navigate through the space.
 - The alignment of New Road [S] has been amended to create more space within the neighbourhood centre shared space. The existing parking configuration at the neighbourhood centre has been revised to create a varied alignment for traffic passing through the area to heighten driver awareness/risk compensation and reduce speeds. The rows of parking bays are broken up with some areas of landscaping to try and reduce its dominance. The revised car park accommodates 32 parking bays and therefore retains the existing capacity.
 - Potential locations for cycle parking within the neighbourhood centre are also indicated, which could be useful as a “park & ride” facility for cyclists when bus services along the corridor are improved in the future.
 - The northern end of the service road (near the co-op) has been arranged to allow a large car and 4.6T light van to perform a three-point turn, although to improve the quality of the space this is not demarcated on the ground as a formal turning head. It would, however, provide a facility for any “lost” traffic (or vehicles using the parking bays that are not arranged at 90 degrees) to turn around and return to the vehicle egress.
 - It has been assumed that the existing vehicular route through the adjacent private car park (near the public conveniences) would be closed to through traffic as discussed at the workshop. However, this could be retained if required with the loss of one parking bay.

1.4 SUMMARY & CONCLUSIONS

1.4.1 Parley Cross is a major signal controlled crossroads at the junction of the B3073 and the A347 in East Dorset. West Parley Village Centre is located to the south west of the junction, and currently offers a poor road and traffic dominated urban environment that, in combination with existing congestion issues at the junction, is likely to discourage journeys to be made by walking and cycling. It is understood that DCC officers are concerned that both the current layout, and the potential traffic based solutions that have been investigated to date, could also lead to greater community severance.

1.4.2 Land to the east and west of Parley Cross is allocated in the draft East Dorset Core Strategy for predominantly residential development which could provide the opportunity for new link roads to be delivered, enabling the removal of existing traffic movements from Parley Cross to help alleviate the congestion issues. This in turn could allow for a reduction in the total road area at the existing junction and provide an opportunity to significantly enhance the public realm.

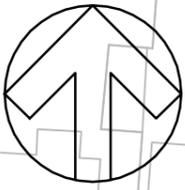
1.4.3 Traffic modelling of the junction and eastern link road was undertaken as part of the B3073 study, and this 2012 study builds upon that earlier work to assess the impact of providing a new link road through the western development site. Refinements to the LINSIG model structure and development traffic flows have been made during this exercise.

1.4.4 An iterative process was followed to examine various options, but the solution emerging from the modelling exercise that provides the greatest scope for reducing vehicle lanes and fully utilising the Practical Reserve Capacity results in a single entry on the New Road [S] arm and two lane entries on the other approaches. An adaptation of this scenario would be to include an all-red phase at the junction to allow pedestrians to cross each arm in one movement. This would also provide the option of introducing diagonal crossings to enhance pedestrian accessibility in the neighbourhood. Although the add-red phase would result in greater lost time at the junction for vehicle movements, the benefits to sustainable modes could potentially outweigh the decrease in traffic capacity.

1.4.5 Following the completion of the traffic modelling stage, a design workshop was held with Dorset County Council officers to discuss the constraints and opportunities associated with delivering highway improvements at the Parley Cross junction. A preliminary highway layout was then produced based on the reduced carriageway space defined through the modelling exercise and the aspiration for improvements to sustainable transport infrastructure discussed at the workshop session. The potential scheme, shown on Figure 31567/SK-01/B, was presented at the public consultation event on 24 April 2012 by Dorset County Council.

1.4.6 In summary, the results of the additional traffic modelling work completed in connection with Parley Cross established that the introduction of new link roads through the proposed development sites could allow the removal of several traffic movements and associated carriageway space at the existing junction which in turn could allow significant improvements to the public realm and pedestrian accessibility to be made. As well as Parley Cross itself, the results of the modelling suggest that the assumed layouts for the auxiliary signal junctions required to connect the development link roads to the highway network at Christchurch Road and New Road (S) are likely to operate within acceptable performance criteria. Based on the results of the modelling exercise, a preliminary highway layout for improvements to Parley Cross has been prepared which takes advantage of the reductions in carriageway space that could be made available to provide a series of improvements for pedestrians, cyclists and public transport.

1.4.7 In conclusion, it is considered that a scheme to introduce link roads through development land to the east and west of Parley Cross has the potential to facilitate improvements to sustainable transport infrastructure at the junction and enhance pedestrian accessibility in the neighbourhood. The feasibility of the indicative highway solutions assumed in this study should be considered at the next level of detail through the planning process to confirm final solutions in terms of geometry and capacity based on the masterplans and development mix that are ultimately pursued.



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ELM TREE WALK

Parley Cross Pharmacy

Co-Op

The Lighting Studio

BUS SHELTER
BUS STOP

BUS SHELTER
BUS STOP

BUILDING SITE

ENTRANCE

STORE

GARDEN

SHOPS

SHOPS



TITLE
**Parley Cross
Potential Highway Layout**

FIGURE No:
31567/SK-01/B

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ELM TREE WALK

Co-Op

The Lighting Studio

Parley Cross Pharmacy

BUS SHELTER
BUS STOP

CYCLE PARKING

ENTRANCE

STORE

GARDEN

SHOPS

SHOPS



TITLE:

Parley Cross
Potential Highway Layout

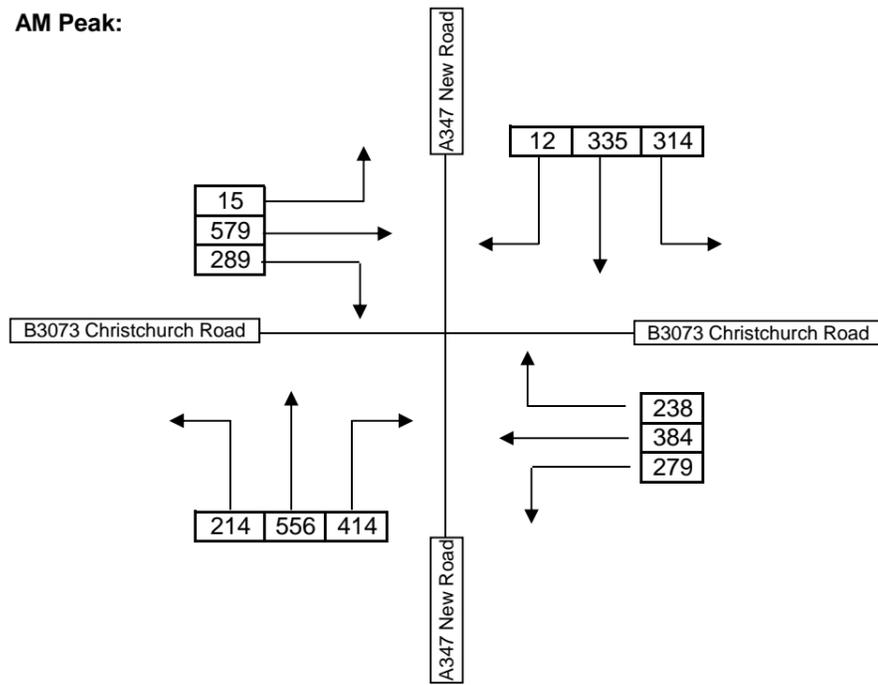
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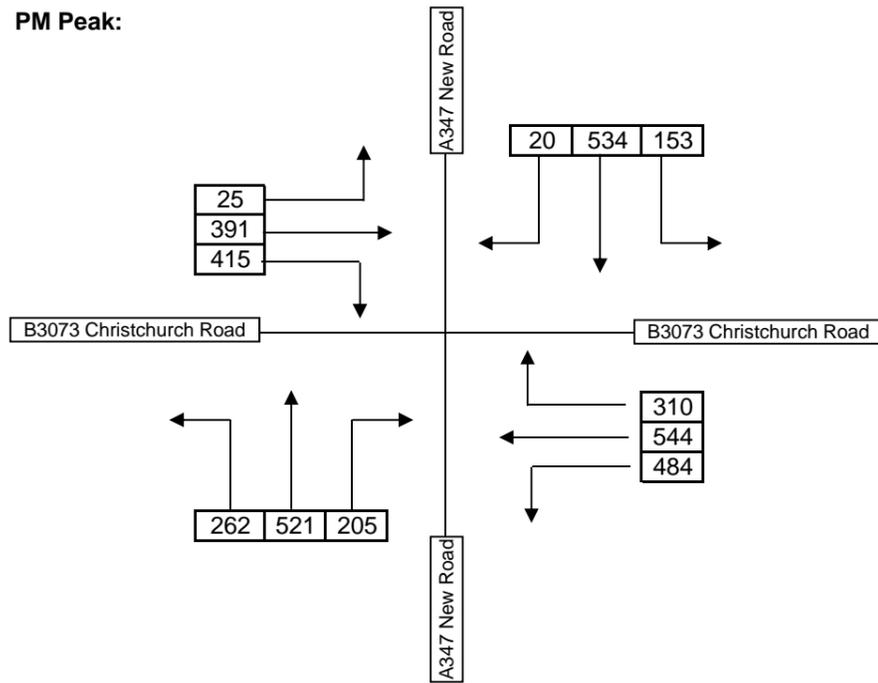
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Predicted 2020 baseline + committed flows:

AM Peak:



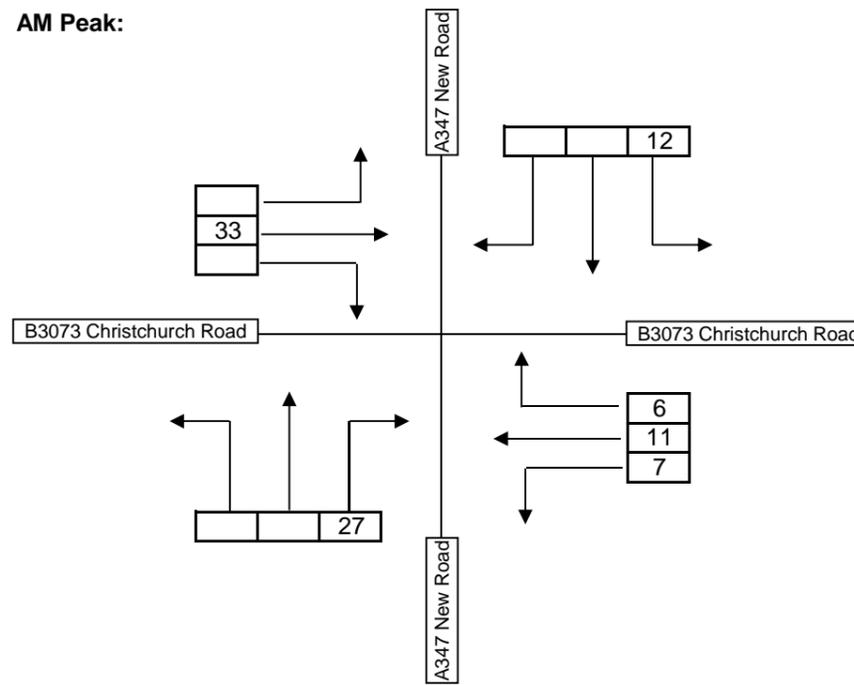
PM Peak:



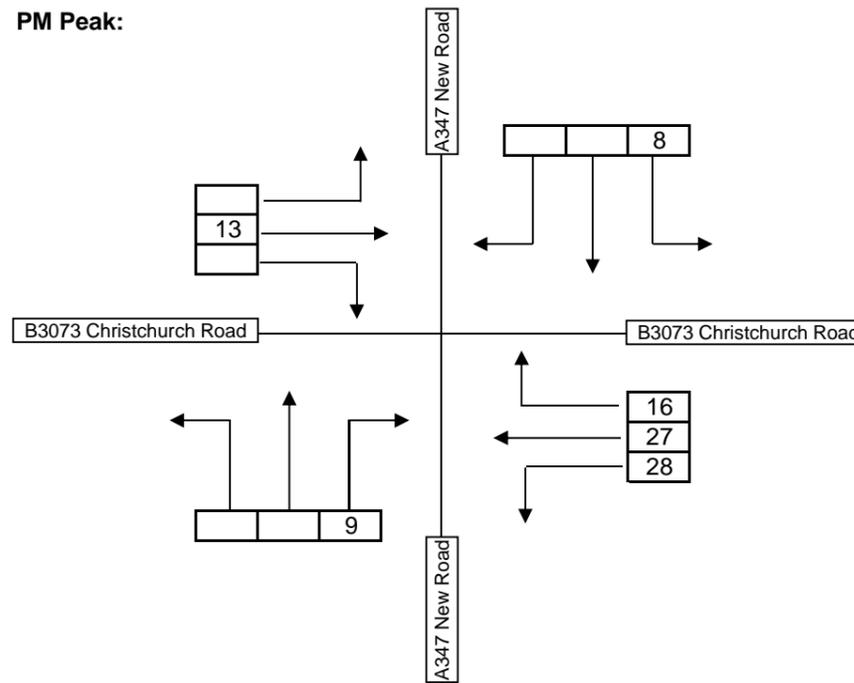
Source: Buro Happold 025497 B3073 Corridor Study (June 2011); Figure 6.2

Additional Airport Committed Development (42,000sqm employment)

AM Peak:



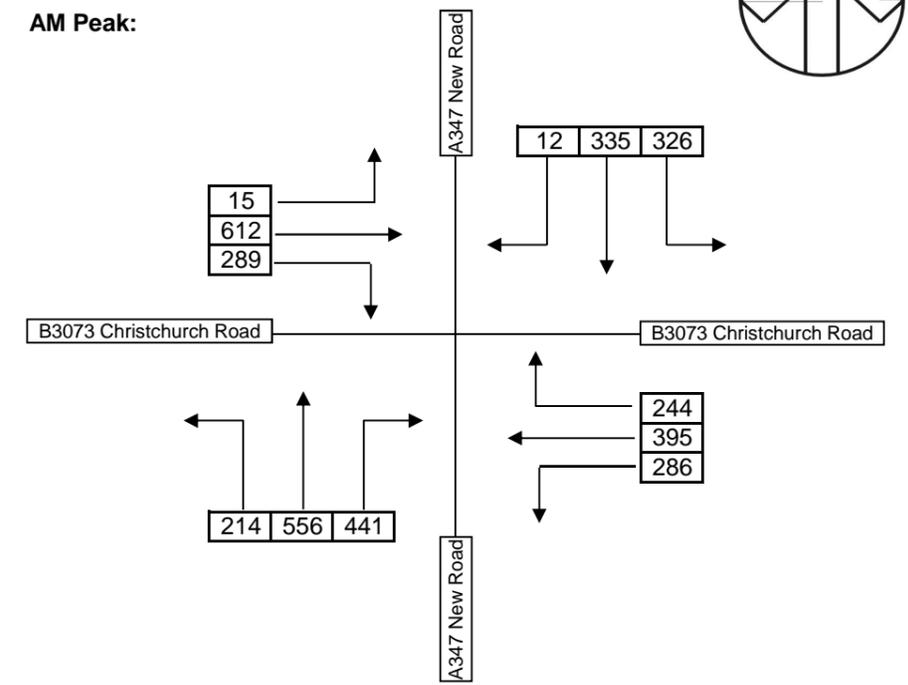
PM Peak:



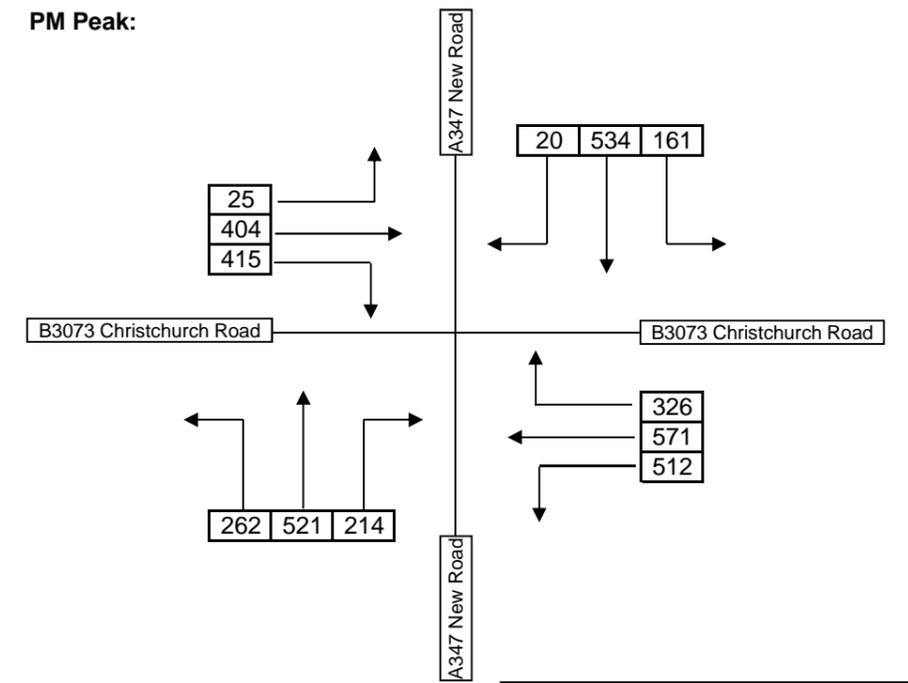
Source: Peter Brett Transport Assessment 2011; Figures 5.29 & 5.30

Updated 2020 Baseline

AM Peak:



PM Peak:



TITLE:
Baseline Traffic Flows

FIGURE No:

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE

Calculation Factor: 100 sqm

Count Type: VEHICLES

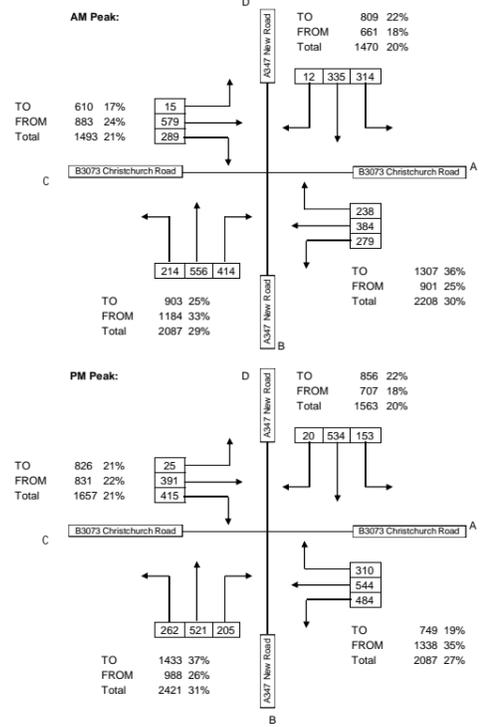
GFA= 3000 sqm

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00-01:0	0	0	0	0	0	0	0	0	0
01:00-02:0	0	0	0	0	0	0	0	0	0
02:00-03:0	0	0	0	0	0	0	0	0	0
03:00-04:0	0	0	0	0	0	0	0	0	0
04:00-05:0	0	0	0	0	0	0	0	0	0
05:00-06:0	0	0	0	0	0	0	0	0	0
06:00-07:0	2	4788	0.501	2	4788	0.167	2	4788	0.668
07:00-08:0	9	3530	1.737	9	3530	1.023	9	3530	2.76
08:00-09:0	9	3530	4.029	9	3530	2.741	9	3530	6.77
09:00-10:0	9	3530	6.115	9	3530	4.683	9	3530	10.798
10:00-11:0	9	3530	7.107	9	3530	6.115	9	3530	13.222
11:00-12:0	9	3530	7.362	9	3530	7.258	9	3530	14.62
12:00-13:0	9	3530	7.308	9	3530	7.636	9	3530	14.944
13:00-14:0	9	3530	7.23	9	3530	7.249	9	3530	14.479
14:00-15:0	9	3530	7.236	9	3530	7.245	9	3530	14.481
15:00-16:0	9	3530	7.05	9	3530	7.327	9	3530	14.377
16:00-17:0	9	3530	7.154	9	3530	7.041	9	3530	14.195
17:00-18:0	9	3530	7.56	9	3530	7.972	9	3530	15.532
18:00-19:0	9	3530	5.955	9	3530	7.075	9	3530	13.03
19:00-20:0	9	3530	4.482	9	3530	5.426	9	3530	9.908
20:00-21:0	8	3710	2.419	8	3710	3.134	8	3710	5.553
21:00-22:0	7	3880	1.219	7	3880	2.017	7	3880	3.236
22:00-23:0	2	4479	0.033	2	4479	0.201	2	4479	0.234
23:00-24:0	0	0	0	0	0	0	0	0	0
Daily Trip Rates:			84.497			84.31			168.807

	Arrivals	Departures	Total
AM	4.029	2.741	6.77
PM	7.56	7.972	15.532

	Arrivals	Departures	Total
AM	121	82	203
PM	227	239	466

Predicted 2020 baseline + committed flows:



Source: Buro Happold 025497 B3073 Corridor Study (June 2011); Figure 6.2

From inspection of split of existing traffic flows:

Food Store Trip Distribution:

- A= Christchurch Road [E]
- B= New Road [S]
- C= Christchurch Road [W]
- D= New Road [N]
- E= Area 3 (eastern) Resi
- F= Area 4 (western) Resi

	A	B	C	D	E	F	Total
A					30%		30%
B					30%		30%
C					20%		20%
D					20%		20%
E	30%	30%	20%	20%	0	0	100%
F					0	0	0%
Total	30%	30%	20%	20%	100%	0%	

Food Store Trip Assignment (AM):

- A= Christchurch Road [E]
- B= New Road [S]
- C= Christchurch Road [W]
- D= New Road [N]
- E= Area 3 (eastern) Resi
- F= Area 4 (western) Resi

	A	B	C	D	E	F	Total
A					36		36
B					36		36
C					24		24
D					24		24
E	25	25	16	16	0	0	82
F					0	0	0
Total	25	25	16	16	121	0	203

Food Store Trip Assignment (PM):

- A= Christchurch Road [E]
- B= New Road [S]
- C= Christchurch Road [W]
- D= New Road [N]
- E= Area 3 (eastern) Resi
- F= Area 4 (western) Resi

	A	B	C	D	E	F	Total
A					68		68
B					68		68
C					45		45
D					45		45
E	72	72	48	48	0	0	239
F					0	0	0
Total	72	72	48	48	227	0	466

Pass-by Calculations=

30%

Food Store Trip Assignment (AM):

- A= Christchurch Road [E]
- B= New Road [S]
- C= Christchurch Road [W]
- D= New Road [N]
- E= Area 3 (eastern) Resi
- F= Area 4 (western) Resi

	A	B	C	D	E	F	Total
A					11		11
B					11		11
C					7		7
D					7		7
E	7	7	5	5	0	0	25
F					0	0	0
Total	7	7	5	5	36	0	61

Food Store Trip Assignment (PM):

- A= Christchurch Road [E]
- B= New Road [S]
- C= Christchurch Road [W]
- D= New Road [N]
- E= Area 3 (eastern) Resi
- F= Area 4 (western) Resi

	A	B	C	D	E	F	Total
A					20		20
B					20		20
C					14		14
D					14		14
E	22	22	14	14	0	0	72
F					0	0	0
Total	22	22	14	14	68	0	140

Residual Food Store Trips

Food Store Trip Assignment (AM):

- A= Christchurch Road [E]
- B= New Road [S]
- C= Christchurch Road [W]
- D= New Road [N]
- E= Area 3 (eastern) Resi
- F= Area 4 (western) Resi

	A	B	C	D	E	F	Total
A					25		25
B					25		25
C					17		17
D					17		17
E	17	17	12	12	0	0	58
F					0	0	0
Total	17	17	12	12	85	0	142

Food Store Trip Assignment (PM):

- A= Christchurch Road [E]
- B= New Road [S]
- C= Christchurch Road [W]
- D= New Road [N]
- E= Area 3 (eastern) Resi
- F= Area 4 (western) Resi

	A	B	C	D	E	F	Total
A					48		48
B					48		48
C					32		32
D					32		32
E	50	50	33	33	0	0	167
F					0	0	0
Total	50	50	33	33	159	0	326

Original matrices from LINSIG outputs
 (which assumed all Area 4 western Resi accessed via Christchurch Road)
 AM Peak Area 3 (400 units)

- A= Christchurch Road [E]
- B= New Road [S]
- C= Christchurch Road [W]
- D= New Road [N]
- E= Area 3 (eastern) Resi

	A	B	C	D	E	Total
A	0	0	0	0	17	17
B	0	0	0	0	23	23
C	0	0	0	0	17	17
D	0	0	0	0	13	13
E	60	45	30	40	0	175
Total	60	45	30	40	70	245

AM Peak Area 4 (210 units)

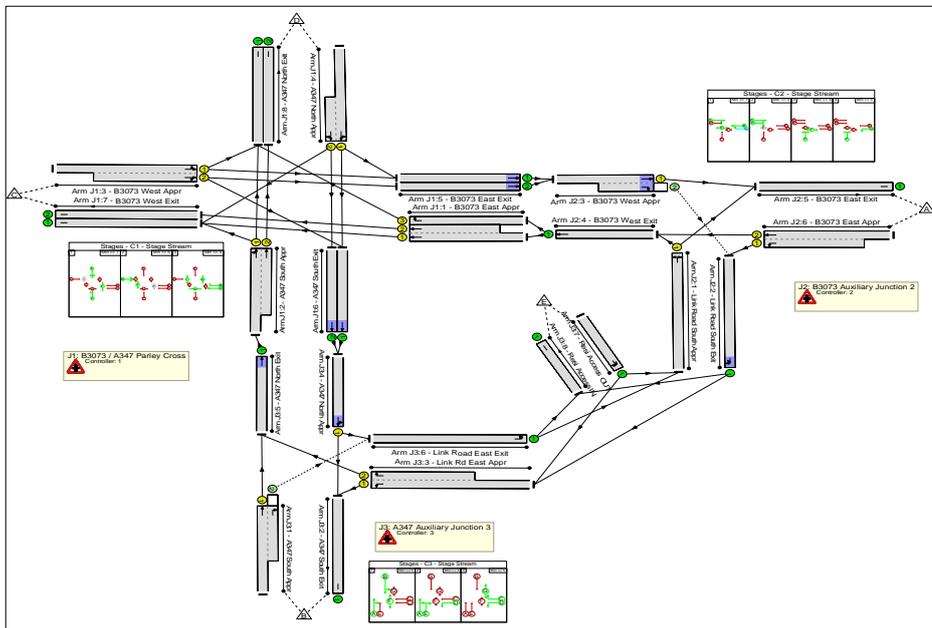
	A	B	C	D	E	Total
A	0	0	9	0	0	9
B	0	0	12	0	0	12
C	31	23	0	21	0	75
D	0	0	7	0	0	7
E	0	0	0	0	0	0
Total	31	23	28	21	0	103

PM Peak Area 3 (400 units)

	A	B	C	D	E	Total
A	0	0	0	0	42	42
B	0	0	0	0	55	55
C	0	0	0	0	41	41
D	0	0	0	0	31	31
E	33	25	17	22	0	97
Total	33	25	17	22	169	266

PM Peak Area 4 (210 units)

	A	B	C	D	E	Total
A	0	0	22	0	0	22
B	0	0	29	0	0	29
C	17	13	0	12	0	42
D	0	0	17	0	0	17
E	0	0	0	0	0	0
Total	17	13	68	12	0	110



Amended Resi Development Matrices

AM Peak Area 3 (400 units)

- A= Christchurch Road [E]
- B= New Road [S]
- C= Christchurch Road [W]
- D= New Road [N]
- E= Area 3 (eastern) Resi
- F= Area 4 (western) Resi

	A	B	C	D	E	F	Total
A					17		17
B					23		23
C					17		17
D					13		13
E	60	45	30	40	0	0	175
F					0		0
Total	60	45	30	40	70	0	245

AM Peak Area 4 (210 units)

	A	B	C	D	E	F	Total
A						9	9
B						12	12
C						9	9
D						7	7
E						0	0
F	31	23	17	21	0	0	92
Total	0	0	0	0	0	37	129

Resi Trip Gen for Area 4 (Western Parcel = 210 Units)
Rates from Table 2.2 of Buro Happold Report

Resi	AM		PM	
	Arr	Dep	Arr	Dep
Units	0.176	0.437	0.424	0.243
210	37	92	89	51

 = net traffic assigned to Christchurch Road East
Back calculated from total trip gen

PM Peak Area 3 (400 units)

	A	B	C	D	E	F	Total
A					42		42
B					55		55
C					41		41
D					31		31
E	33	25	17	22	0	0	97
F					0		0
Total	33	25	17	22	169	0	266

PM Peak Area 4 (210 units)

	A	B	C	D	E	F	Total
A						22	22
B						29	29
C						21	21
D						17	17
E						0	0
F	17	13	9	12	0	0	51
Total	17	13	0	12	0	89	140

Updated Baseline Trip Matrices

AM Peak

	A	B	C	D	E	F	Total
A= Christchurch Road [E]		286	395	244			925
B= New Road [S]	441		214	556			1211
C= Christchurch Road [W]	612	289		15			916
D= New Road [N]	326	335	12				673
E= Area 3 (eastern) Resi							0
F= Area 4 (western) Resi							0
Total	1379	910	621	815	0	0	3725

AM Peak - IN

	A	B	C	D	E	F	Total
A= Christchurch Road [E]		31%	43%	26%			100%
B= New Road [S]	36%		18%	46%			100%
C= Christchurch Road [W]	67%	32%		2%			100%
D= New Road [N]	48%	50%	2%				100%
E= Area 3 (eastern) Resi							
F= Area 4 (western) Resi							
Total							

AM Peak - OUT

	A	B	C	D	E	F	Total
A= Christchurch Road [E]		31%	64%	30%			
B= New Road [S]	32%		34%	68%			
C= Christchurch Road [W]	44%	32%		2%			
D= New Road [N]	24%	37%	2%				
E= Area 3 (eastern) Resi							
F= Area 4 (western) Resi							
Total	100%	100%	100%	100%			

PM Peak

	A	B	C	D	E	F	Total
A= Christchurch Road [E]		512	571	326			1409
B= New Road [S]	214		262	521			997
C= Christchurch Road [W]	404	415		25			844
D= New Road [N]	161	534	20				715
E= Area 3 (eastern) Resi							0
F= Area 4 (western) Resi							0
Total	779	1461	853	872	0	0	3965

PM Peak - IN

	A	B	C	D	E	F	Total
A= Christchurch Road [E]		36%	41%	23%			1
B= New Road [S]	21%		26%	52%			1
C= Christchurch Road [W]	48%	49%		3%			1
D= New Road [N]	23%	75%	3%				1
E= Area 3 (eastern) Resi							
F= Area 4 (western) Resi							
Total							

PM Peak -OUT

	A	B	C	D	E	F	Total
A= Christchurch Road [E]		35%	67%	37%			
B= New Road [S]	27%		31%	60%			
C= Christchurch Road [W]	52%	28%		3%			
D= New Road [N]	21%	37%	2%				
E= Area 3 (eastern) Resi							
F= Area 4 (western) Resi							
Total	1	1	1	1			

Updated Baseline Trip Matrices

AM Peak

	A	B	C	D	E	F	Total
A= Christchurch Road [E]	A	286	395	244			925
B= New Road [S]	B	441		214	556		1211
C= Christchurch Road [W]	C	612	289		15		916
D= New Road [N]	D	326	335	12			673
E= Area 3 (eastern) Resi	E						0
F= Area 4 (western) Resi	F						0
Total	1379	910	621	815	0	0	3725

AM Peak - IN

	A	B	C	D	E	F	Total
A= Christchurch Road [E]	A		31%	43%	26%		100%
B= New Road [S]	B	36%		18%	46%		100%
C= Christchurch Road [W]	C	67%	32%		2%		100%
D= New Road [N]	D	48%	50%	2%			100%
E= Area 3 (eastern) Resi	E						
F= Area 4 (western) Resi	F						
Total							

AM Peak - OUT

	A	B	C	D	E	F	Total
A= Christchurch Road [E]	A		31%	64%	30%		
B= New Road [S]	B	32%		34%	68%		
C= Christchurch Road [W]	C	44%	32%		2%		
D= New Road [N]	D	24%	37%	2%			
E= Area 3 (eastern) Resi	E						
F= Area 4 (western) Resi	F						
Total	100%	100%	100%	100%			

PM Peak

	A	B	C	D	E	F	Total
A= Christchurch Road [E]	A	512	571	326			1409
B= New Road [S]	B	214		262	521		997
C= Christchurch Road [W]	C	404	415		25		844
D= New Road [N]	D	161	534	20			715
E= Area 3 (eastern) Resi	E						0
F= Area 4 (western) Resi	F						0
Total	779	1461	853	872	0	0	3965

PM Peak - IN

	A	B	C	D	E	F	Total
A= Christchurch Road [E]	A		36%	41%	23%		1
B= New Road [S]	B	21%		26%	52%		1
C= Christchurch Road [W]	C	48%	49%		3%		1
D= New Road [N]	D	23%	75%	3%			1
E= Area 3 (eastern) Resi	E						
F= Area 4 (western) Resi	F						
Total							

PM Peak - OUT

	A	B	C	D	E	F	Total
A= Christchurch Road [E]	A		35%	67%	37%		
B= New Road [S]	B	27%		31%	60%		
C= Christchurch Road [W]	C	52%	28%		3%		
D= New Road [N]	D	21%	37%	2%			
E= Area 3 (eastern) Resi	E						
F= Area 4 (western) Resi	F						
Total	1	1	1	1			

Food Store - Pass-by Trips

A= Christchurch Road [E]	
B= New Road [S]	
C= Christchurch Road [W]	
D= New Road [N]	
E= Area 3 (eastern) Resi	
F= Area 4 (western) Resi	

A= Christchurch Road [E]	
B= New Road [S]	
C= Christchurch Road [W]	
D= New Road [N]	
E= Area 3 (eastern) Resi	
F= Area 4 (western) Resi	

A= Christchurch Road [E]	
B= New Road [S]	
C= Christchurch Road [W]	
D= New Road [N]	
E= Area 3 (eastern) Resi	
F= Area 4 (western) Resi	

A= Christchurch Road [E]	
B= New Road [S]	
C= Christchurch Road [W]	
D= New Road [N]	
E= Area 3 (eastern) Resi	
F= Area 4 (western) Resi	

AM Peak - IN

	A	B	C	D	E	F	Total
A= Christchurch Road [E]	A		-3	-5	-3	11	0
B= New Road [S]	B	-4		-2	-5	11	0
C= Christchurch Road [W]	C	-5	-2		0	7	0
D= New Road [N]	D	-4	-4	0		7	0
E= Area 3 (eastern) Resi	E						
F= Area 4 (western) Resi	F						
Total							0

AM Peak - OUT

	A	B	C	D	E	F	Total
A= Christchurch Road [E]	A		-2	-3	-1		
B= New Road [S]	B	-2		-2	-3		
C= Christchurch Road [W]	C	-3	-2		0		
D= New Road [N]	D	-2	-3	0			
E= Area 3 (eastern) Resi	E	7	7	5	5		
F= Area 4 (western) Resi	F						
Total	0						

PM Peak - IN

	A	B	C	D	E	F	Total
A= Christchurch Road [E]	A		-7	-8	-5	20	0
B= New Road [S]	B	-4		-5	-11	20	0
C= Christchurch Road [W]	C	-7	-7		0	14	0
D= New Road [N]	D	-3	-10	0		14	0
E= Area 3 (eastern) Resi	E						
F= Area 4 (western) Resi	F						
Total							

PM Peak - OUT

	A	B	C	D	E	F	Total
A= Christchurch Road [E]	A		-8	-10	-5		
B= New Road [S]	B	-6		-4	-9		
C= Christchurch Road [W]	C	-11	-6		0		
D= New Road [N]	D	-4	-8	0			
E= Area 3 (eastern) Resi	E	22	22	14	14		
F= Area 4 (western) Resi	F						
Total	0	0	0	0			

Residual Food Store Trips

A= Christchurch Road [E]	
B= New Road [S]	
C= Christchurch Road [W]	
D= New Road [N]	
E= Area 3 (eastern) Resi	
F= Area 4 (western) Resi	

A= Christchurch Road [E]	
B= New Road [S]	
C= Christchurch Road [W]	
D= New Road [N]	
E= Area 3 (eastern) Resi	
F= Area 4 (western) Resi	

A= Christchurch Road [E]	
B= New Road [S]	
C= Christchurch Road [W]	
D= New Road [N]	
E= Area 3 (eastern) Resi	
F= Area 4 (western) Resi	

A= Christchurch Road [E]	
B= New Road [S]	
C= Christchurch Road [W]	
D= New Road [N]	
E= Area 3 (eastern) Resi	
F= Area 4 (western) Resi	

A= Christchurch Road [E]	
B= New Road [S]	
C= Christchurch Road [W]	
D= New Road [N]	
E= Area 3 (eastern) Resi	
F= Area 4 (western) Resi	

AM Peak

	A	B	C	D	E	F	Total
A= Christchurch Road [E]	A				25		25
B= New Road [S]	B				25		25
C= Christchurch Road [W]	C				17		17
D= New Road [N]	D				17		17
E= Area 3 (eastern) Resi	E	17	17	12	12	0	58
F= Area 4 (western) Resi	F				0	0	0
Total	17	17	12	12	85	0	142

PM Peak

	A	B	C	D	E	F	Total
A= Christchurch Road [E]	A				48		48
B= New Road [S]	B				48		48
C= Christchurch Road [W]	C				32		32
D= New Road [N]	D				32		32
E= Area 3 (eastern) Resi	E	50	50	33	33	0	167
F= Area 4 (western) Resi	F				0	0	0
Total	50	50	33	33	159	0	326

Base + Development Matrices

AM Peak

A= Christchurch Road [E]	
B= New Road [S]	
C= Christchurch Road [W]	
D= New Road [N]	
E= Area 3 (eastern) Resi	
F= Area 4 (western) Resi	

A= Christchurch Road [E]	
B= New Road [S]	
C= Christchurch Road [W]	
D= New Road [N]	
E= Area 3 (eastern) Resi	
F= Area 4 (western) Resi	

A= Christchurch Road [E]	
B= New Road [S]	
C= Christchurch Road [W]	
D= New Road [N]	
E= Area 3 (eastern) Resi	
F= Area 4 (western) Resi	

A= Christchurch Road [E]	
B= New Road [S]	
C= Christchurch Road [W]	
D= New Road [N]	
E= Area 3 (eastern) Resi	
F= Area 4 (western) Resi	

A= Christchurch Road [E]	
B= New Road [S]	
C= Christchurch Road [W]	
D= New Road [N]	
E= Area 3 (eastern) Resi	
F= Area 4 (western) Resi	

	A	B	C	D	E	F	Total	
A= Christchurch Road [E]	A	0	280	387	240	53	9	969
B= New Road [S]	B	435	0	210	548	59	12	1264
C= Christchurch Road [W]	C	604	284	0	15	41	9	953
D= New Road [N]	D	321	329	12	0	37	7	705
E= Area 3 (eastern) Resi	E	85	70	46	56	0	0	257
F= Area 4 (western) Resi	F	31	23	17	21	0	0	92
Total	1475	963	656	859	191	37	4241	

PM Peak

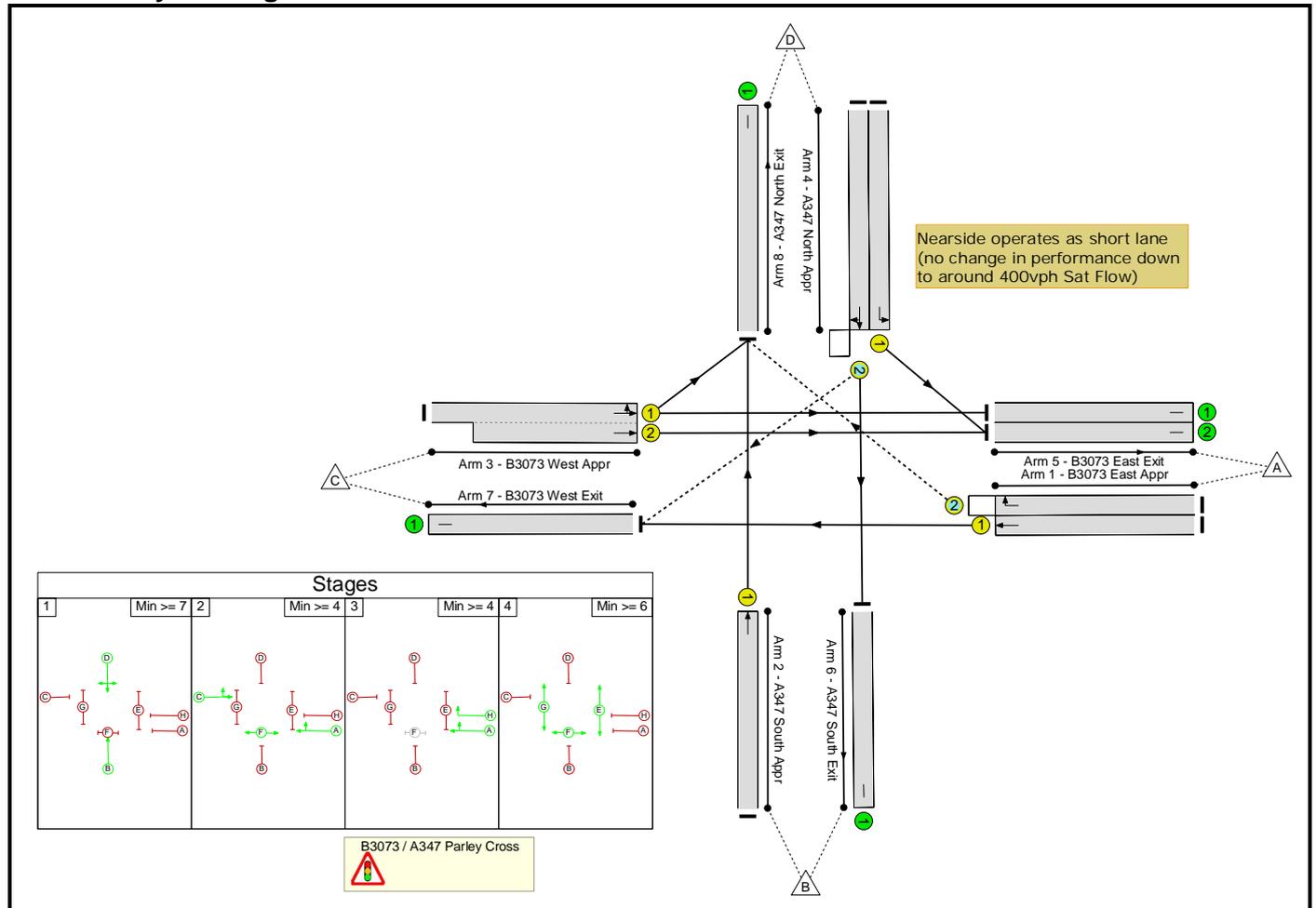
	A	B	C	D	E	F	Total	
A= Christchurch Road [E]	A	0	497	553	316	110	22	1498
B= New Road [S]	B	204	0	252	502	123	29	1110
C= Christchurch Road [W]	C	386	402	0	24	86	21	920
D= New Road [N]	D	153	516	19	0	76	17	782
E= Area 3 (eastern) Resi	E	105	97	65	70	0	0	336
F= Area 4 (western) Resi	F	17	13	9	12	0	0	51
Total	848	1512	889	912	396	89	4697	

Full Input Data And Results
Full Input Data And Results

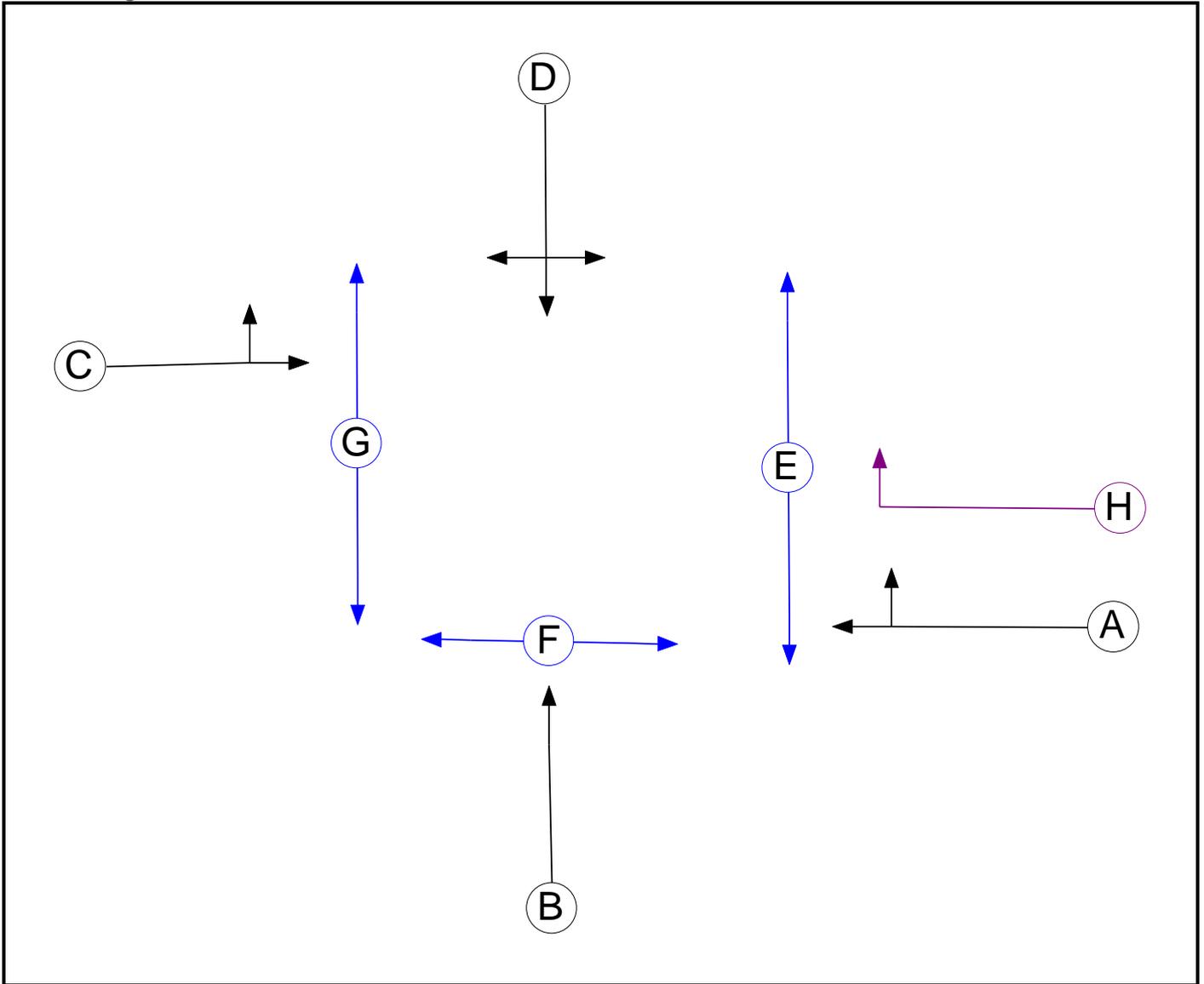
User and Project Details

Project:	025497 B3073 Corridor Study
Title:	Proposed Parley Cross Junction - Option 1
Location:	West Parley
File name:	110609 AL Parley Cross & Junctions Option 1 + Resi ISOLATED JUNCTION corrected flows LEFT TURN LANE ALL RED.lsg3x
Author:	AL
Company:	
Address:	
Notes:	

Network Layout Diagram



Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7
E	Pedestrian		6	6
F	Pedestrian		4	4
G	Pedestrian		7	7
H	Ind. Arrow	A	4	4

Full Input Data And Results

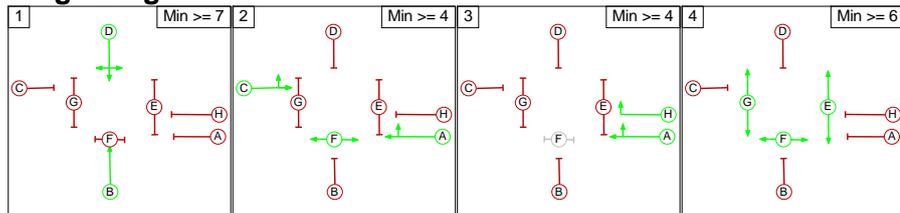
Phase Intergrens Matrix

		Starting Phase							
		A	B	C	D	E	F	G	H
Terminating Phase	A		6	-	5	5	-	8	-
	B	5		5	-	-	5	-	5
	C	-	5		6	9	-	5	5
	D	6	-	5		8	8	11	6
	E	12	-	12	12		-	-	12
	F	-	7	-	7	-		-	-
	G	10	-	10	10	-	-		-
	H	-	5	5	5	5	-	-	

Phases in Stage

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

Stage Diagram



Phase Delays

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

Prohibited Stage Change

		To Stage			
		1	2	3	4
From Stage	1		8	6	11
	2	7		5	9
	3	6	5		8
	4	12	12	12	

Full Input Data And Results

Give-Way Lane Input Data

Junction: B3073 / A347 Parley Cross										
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
1/2 (B3073 East Appr)	8/1 (Right)	1440	3/1	1.09	3/1	2.00	-	0.50	2	2.00
			3/2	1.09	3/2					
4/2 (A347 North Appr)	7/1 (Right)	1440	2/1	1.09	2/1	2.00	2.00	0.50	2	2.00

Full Input Data And Results

Lane Input Data

Junction: B3073 / A347 Parley Cross												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (B3073 East Appr)	U	A	2	3	60.0	Geom	-	3.00	0.00	N	Arm 7 Ahead	Inf
1/2 (B3073 East Appr)	O	A H	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 8 Right	19.70
2/1 (A347 South Appr)	U	B	2	3	15.0	Geom	-	3.00	0.00	Y	Arm 8 Ahead	Inf
3/1 (B3073 West Appr)	U	C	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 5 Ahead Arm 8 Left	Inf 15.10
3/2 (B3073 West Appr)	U	C	2	3	15.0	Geom	-	3.00	0.00	N	Arm 5 Ahead	Inf
4/1 (A347 North Appr)	U	D	2	3	8.0	Geom	-	3.00	0.00	Y	Arm 5 Left	15.00
4/2 (A347 North Appr)	O	D	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 6 Ahead Arm 7 Right	Inf Inf
5/1 (B3073 East Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
5/2 (B3073 East Exit)	U		2	3	8.0	Inf	-	-	-	-	-	-
6/1 (A347 South Exit)	U		2	3	8.0	Inf	-	-	-	-	-	-
7/1 (B3073 West Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1 (A347 North Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2020 AM peak Base + Dev Model Dist'	08:00	09:00	01:00	
2: '2020 PM peak Base + Dev Model Dist'	17:00	18:00	01:00	
3: '2020 AM peak Base + Dev NO FOODSTORE'	08:00	09:00	01:00	
4: '2020 PM peak Base + Dev NO FOODSTORE'	17:00	18:00	01:00	
5: '2020 AM peak Base + Dev Manual Dist'	08:00	09:00	01:00	
6: '2020 PM peak Base + Dev Manual Dist'	17:00	18:00	01:00	

Full Input Data And Results

Scenario 1: 'AM peak model distribution' (FG1: '2020 AM peak Base + Dev Model Dist', Plan 3: 'Staging Plan No. 3')

Traffic Flows, Desired

Desired Flow :

Origin	Destination				
	A	B	C	D	Tot.
A	0	0	442	240	682
B	0	0	0	618	618
C	676	0	0	22	698
D	321	366	19	0	706
Tot.	997	366	461	880	2704

Traffic Lane Flows

Lane	Scenario 1: AM peak model distribution
Junction: B3073 / A347 Parley Cross	
1/1	442
1/2	240
2/1	618
3/1 (with short)	698(In) 203(Out)
3/2 (short)	495
4/1	321
4/2	385
5/1	181
5/2	816
6/1	366
7/1	461
8/1	880

Full Input Data And Results

Lane Saturation Flows

Junction: B3073 / A347 Parley Cross								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B3073 East Appr)	3.00	0.00	N	Arm 7 Ahead	Inf	100.0 %	2055	2055
1/2 (B3073 East Appr)	3.00	0.00	Y	Arm 8 Right	19.70	100.0 %	1780	1780
2/1 (A347 South Appr)	3.00	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1915	1915
3/1 (B3073 West Appr)	3.00	0.00	Y	Arm 5 Ahead	Inf	89.2 %	1895	1895
				Arm 8 Left	15.10	10.8 %		
3/2 (B3073 West Appr)	3.00	0.00	N	Arm 5 Ahead	Inf	100.0 %	2055	2055
4/1 (A347 North Appr)	3.00	0.00	Y	Arm 5 Left	15.00	100.0 %	1741	1741
4/2 (A347 North Appr)	3.00	0.00	Y	Arm 6 Ahead	Inf	95.1 %	1915	1915
				Arm 7 Right	Inf	4.9 %		
5/1 (B3073 East Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (B3073 East Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (A347 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (B3073 West Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (A347 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 2: 'PM peak model distribution' (FG2: '2020 PM peak Base + Dev Model Dist', Plan 3: 'Staging Plan No. 3')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
	A	B	C	D	Tot.	
A	0	0	640	316	956	
B	0	0	0	576	576	
C	489	0	0	32	521	
D	153	592	36	0	781	
Tot.	642	592	676	924	2834	

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: PM peak model distribution
Junction: B3073 / A347 Parley Cross	
1/1	640
1/2	316
2/1	576
3/1 (with short)	521(In) 121(Out)
3/2 (short)	400
4/1	153
4/2	628
5/1	89
5/2	553
6/1	592
7/1	676
8/1	924

Lane Saturation Flows

Junction: B3073 / A347 Parley Cross								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B3073 East Appr)	3.00	0.00	N	Arm 7 Ahead	Inf	100.0 %	2055	2055
1/2 (B3073 East Appr)	3.00	0.00	Y	Arm 8 Right	19.70	100.0 %	1780	1780
2/1 (A347 South Appr)	3.00	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1915	1915
3/1 (B3073 West Appr)	3.00	0.00	Y	Arm 5 Ahead Arm 8 Left	Inf 15.10	73.6 % 26.4 %	1866	1866
3/2 (B3073 West Appr)	3.00	0.00	N	Arm 5 Ahead	Inf	100.0 %	2055	2055
4/1 (A347 North Appr)	3.00	0.00	Y	Arm 5 Left	15.00	100.0 %	1741	1741
4/2 (A347 North Appr)	3.00	0.00	Y	Arm 6 Ahead Arm 7 Right	Inf Inf	94.3 % 5.7 %	1915	1915
5/1 (B3073 East Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (B3073 East Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (A347 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (B3073 West Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (A347 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 3: 'AM peak NO FOODSTORE' (FG3: '2020 AM peak Base + Dev NO FOODSTORE', Plan 3: 'Staging Plan No. 3')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	0	414	264	678
	B	0	0	0	587	587
	C	636	0	0	26	662
	D	333	346	16	0	695
	Tot.	969	346	430	877	2622

Traffic Lane Flows

Lane	Scenario 3: AM peak NO FOODSTORE
Junction: B3073 / A347 Parley Cross	
1/1	414
1/2	264
2/1	587
3/1 (with short)	662(In) 155(Out)
3/2 (short)	507
4/1	333
4/2	362
5/1	129
5/2	840
6/1	346
7/1	430
8/1	877

Full Input Data And Results

Lane Saturation Flows

Junction: B3073 / A347 Parley Cross								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B3073 East Apr)	3.00	0.00	N	Arm 7 Ahead	Inf	100.0 %	2055	2055
1/2 (B3073 East Apr)	3.00	0.00	Y	Arm 8 Right	19.70	100.0 %	1780	1780
2/1 (A347 South Apr)	3.00	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1915	1915
3/1 (B3073 West Apr)	3.00	0.00	Y	Arm 5 Ahead	Inf	83.2 %	1884	1884
				Arm 8 Left	15.10	16.8 %		
3/2 (B3073 West Apr)	3.00	0.00	N	Arm 5 Ahead	Inf	100.0 %	2055	2055
4/1 (A347 North Apr)	3.00	0.00	Y	Arm 5 Left	15.00	100.0 %	1741	1741
4/2 (A347 North Apr)	3.00	0.00	Y	Arm 6 Ahead	Inf	95.6 %	1915	1915
				Arm 7 Right	Inf	4.4 %		
5/1 (B3073 East Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (B3073 East Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (A347 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (B3073 West Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (A347 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 4: 'PM peak NO FOODSTORE' (FG4: '2020 PM peak Base + Dev NO FOODSTORE', Plan 3: 'Staging Plan No. 3')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					Tot.
	A	B	C	D	Tot.	
A	0	0	591	337	928	
B	0	0	0	538	538	
C	434	0	0	31	465	
D	177	559	29	0	765	
Tot.	611	559	620	906	2696	

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: PM peak NO FOODSTORE
Junction: B3073 / A347 Parley Cross	
1/1	591
1/2	337
2/1	538
3/1 (with short)	465(In) 86(Out)
3/2 (short)	379
4/1	177
4/2	588
5/1	55
5/2	556
6/1	559
7/1	620
8/1	906

Lane Saturation Flows

Junction: B3073 / A347 Parley Cross								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B3073 East Appr)	3.00	0.00	N	Arm 7 Ahead	Inf	100.0 %	2055	2055
1/2 (B3073 East Appr)	3.00	0.00	Y	Arm 8 Right	19.70	100.0 %	1780	1780
2/1 (A347 South Appr)	3.00	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1915	1915
3/1 (B3073 West Appr)	3.00	0.00	Y	Arm 5 Ahead Arm 8 Left	Inf 15.10	64.0 % 36.0 %	1849	1849
3/2 (B3073 West Appr)	3.00	0.00	N	Arm 5 Ahead	Inf	100.0 %	2055	2055
4/1 (A347 North Appr)	3.00	0.00	Y	Arm 5 Left	15.00	100.0 %	1741	1741
4/2 (A347 North Appr)	3.00	0.00	Y	Arm 6 Ahead Arm 7 Right	Inf Inf	95.1 % 4.9 %	1915	1915
5/1 (B3073 East Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (B3073 East Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (A347 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (B3073 West Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (A347 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 5: 'AM peak manual distribution' (FG5: '2020 AM peak Base + Dev Manual Dist', Plan 3: 'Staging Plan No. 3')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	0	414	268	682
	B	0	0	0	587	587
	C	641	0	0	26	667
	D	340	352	16	0	708
	Tot.	981	352	430	881	2644

Traffic Lane Flows

Lane	Scenario 5: AM peak manual distribution
Junction: B3073 / A347 Parley Cross	
1/1	414
1/2	268
2/1	587
3/1 (with short)	667(In) 55(Out)
3/2 (short)	612
4/1	340
4/2	368
5/1	29
5/2	952
6/1	352
7/1	430
8/1	881

Lane Saturation Flows

Junction: B3073 / A347 Parley Cross								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B3073 East Appr)	3.00	0.00	N	Arm 7 Ahead	Inf	100.0 %	2055	2055
1/2 (B3073 East Appr)	3.00	0.00	Y	Arm 8 Right	19.70	100.0 %	1780	1780
2/1 (A347 South Appr)	3.00	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1915	1915
3/1 (B3073 West Appr)	3.00	0.00	Y	Arm 5 Ahead	Inf	52.7 %	1829	1829
				Arm 8 Left	15.10	47.3 %		
3/2 (B3073 West Appr)	3.00	0.00	N	Arm 5 Ahead	Inf	100.0 %	2055	2055
4/1 (A347 North Appr)	3.00	0.00	Y	Arm 5 Left	15.00	100.0 %	1741	1741
4/2 (A347 North Appr)	3.00	0.00	Y	Arm 6 Ahead	Inf	95.7 %	1915	1915
				Arm 7 Right	Inf	4.3 %		
5/1 (B3073 East Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (B3073 East Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (A347 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (B3073 West Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (A347 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 6: 'PM peak manual distribution' (FG6: '2020 PM peak Base + Dev Manual Dist', Plan 3: 'Staging Plan No. 3')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					Tot.
	A	B	C	D	Tot.	
A	0	0	597	351	948	
B	0	0	0	543	543	
C	438	0	0	30	468	
D	191	563	28	0	782	
Tot.	629	563	625	924	2741	

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 6: PM peak manual distribution
Junction: B3073 / A347 Parley Cross	
1/1	597
1/2	351
2/1	543
3/1 (with short)	468(In) 86(Out)
3/2 (short)	382
4/1	191
4/2	591
5/1	56
5/2	573
6/1	563
7/1	625
8/1	924

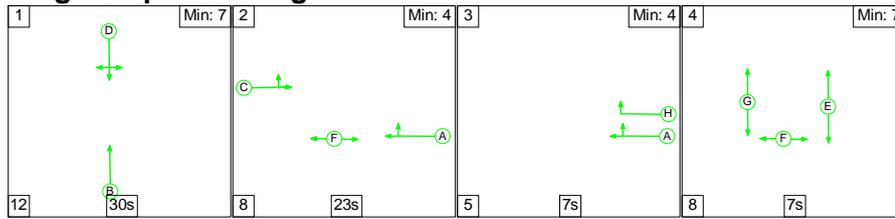
Lane Saturation Flows

Junction: B3073 / A347 Parley Cross								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B3073 East Appr)	3.00	0.00	N	Arm 7 Ahead	Inf	100.0 %	2055	2055
1/2 (B3073 East Appr)	3.00	0.00	Y	Arm 8 Right	19.70	100.0 %	1780	1780
2/1 (A347 South Appr)	3.00	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1915	1915
3/1 (B3073 West Appr)	3.00	0.00	Y	Arm 5 Ahead Arm 8 Left	Inf 15.10	65.1 % 34.9 %	1851	1851
3/2 (B3073 West Appr)	3.00	0.00	N	Arm 5 Ahead	Inf	100.0 %	2055	2055
4/1 (A347 North Appr)	3.00	0.00	Y	Arm 5 Left	15.00	100.0 %	1741	1741
4/2 (A347 North Appr)	3.00	0.00	Y	Arm 6 Ahead Arm 7 Right	Inf Inf	95.3 % 4.7 %	1915	1915
5/1 (B3073 East Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (B3073 East Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (A347 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (B3073 West Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (A347 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 1: 'AM peak model distribution' (FG1: '2020 AM peak Base + Dev Model Dist', Plan 3: 'Staging Plan No. 3')

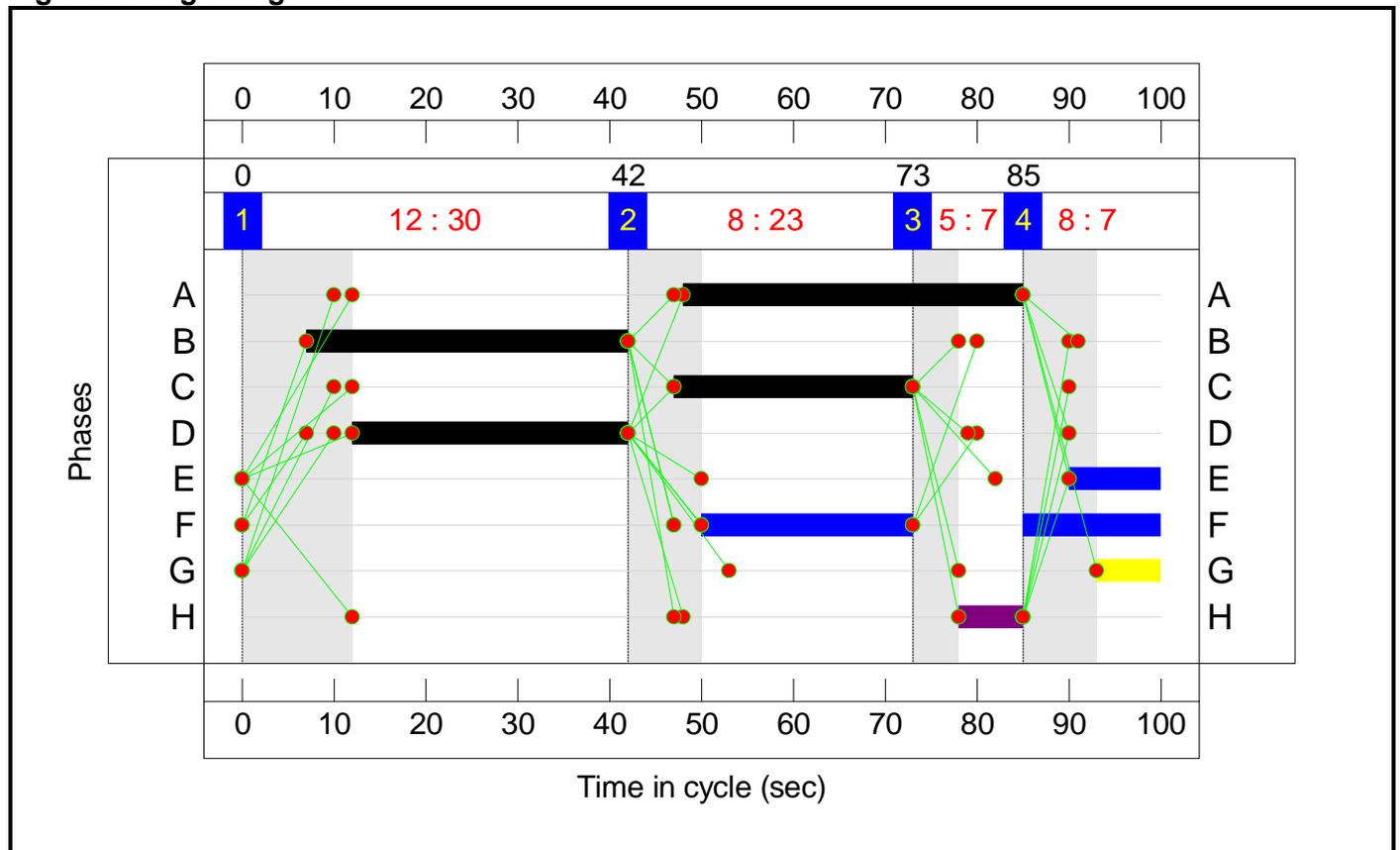
Stage Sequence Diagram



Stage Timings

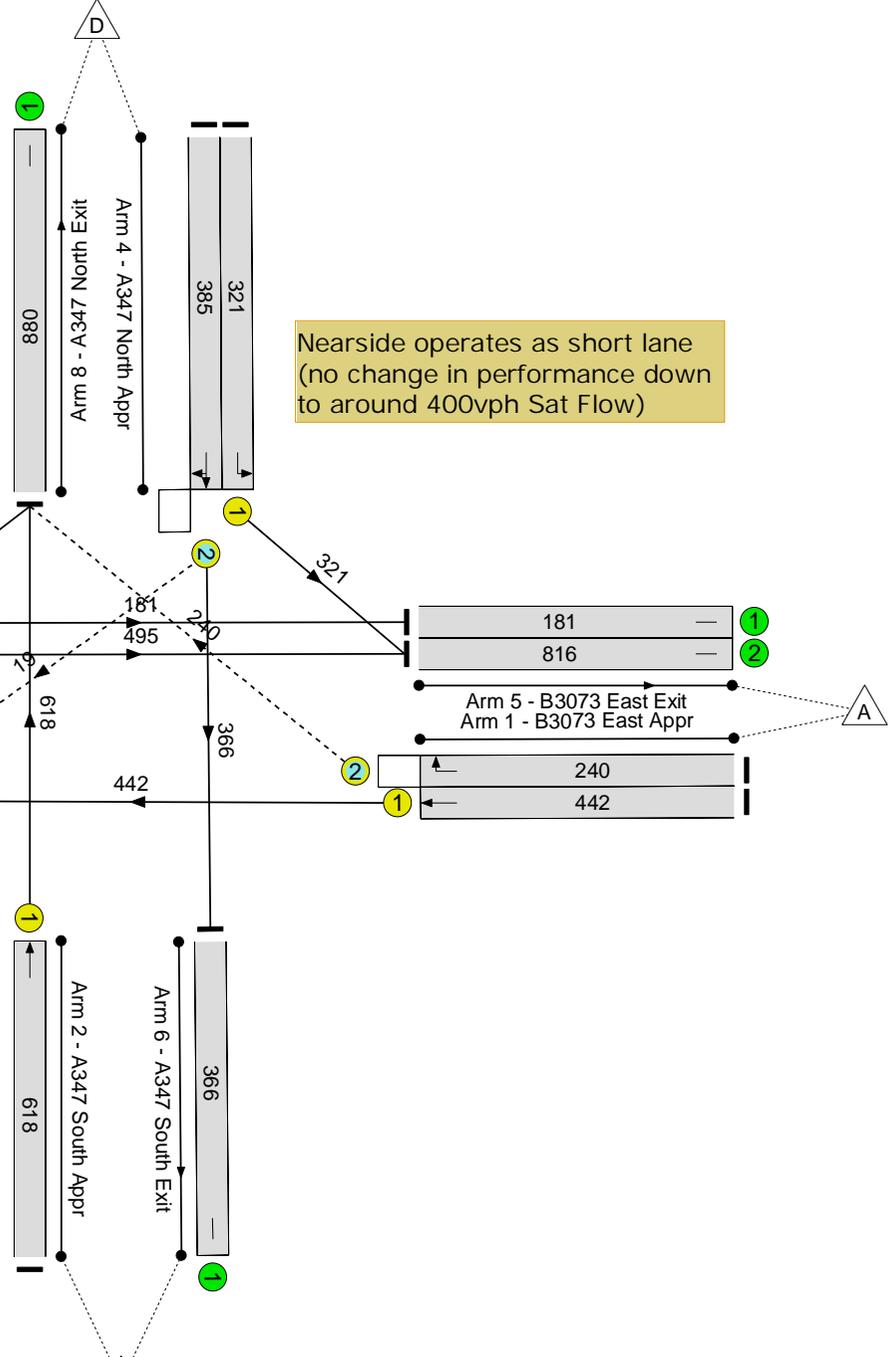
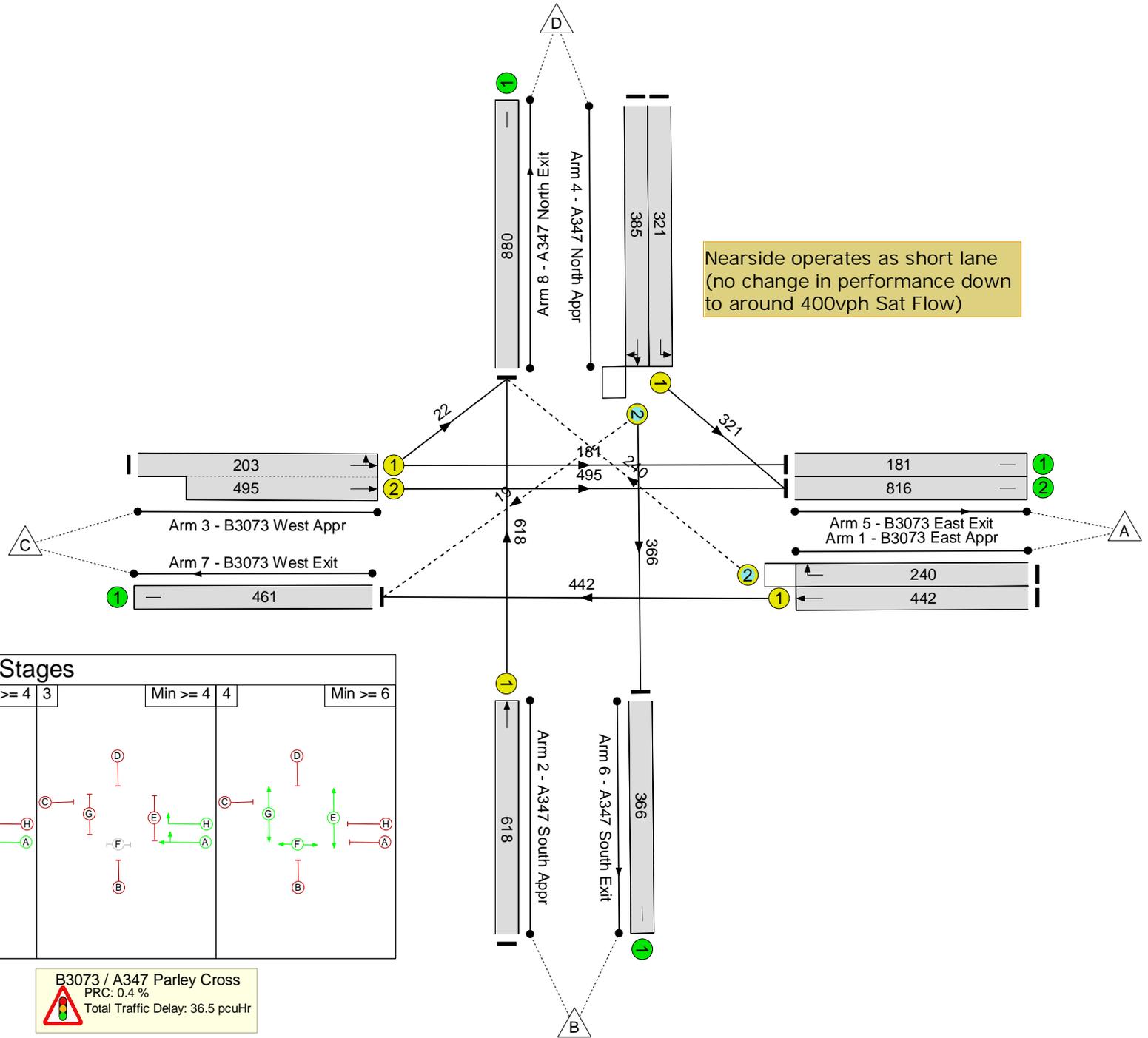
Stage	1	2	3	4
Duration	30	23	7	7
Change Point	0	42	73	85

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Proposed Parley Cross Junction - Option 1	-	-	N/A	-	-		-	-	-	-	-	-	89.6%
B3073 / A347 Parley Cross	-	-	N/A	-	-		-	-	-	-	-	-	89.6%
1/1	B3073 East Appr Ahead	U	N/A	N/A	A		1	37	-	442	2055	781	56.6%
1/2	B3073 East Appr Right	O	N/A	N/A	A	H	1	37	7	240	1780	274	87.5%
2/1	A347 South Appr Ahead	U	N/A	N/A	B		1	35	-	618	1915	689	89.6%
3/1+3/2	B3073 West Appr Ahead Left	U	N/A	N/A	C		1	26	-	698	1895:2055	782	89.3%
4/1	A347 North Appr Left	U	N/A	N/A	D		1	30	-	321	1741	540	59.5%
4/2	A347 North Appr Ahead Right	O	N/A	N/A	D		1	30	-	385	1915	594	64.9%
5/1	B3073 East Exit	U	N/A	N/A	-		-	-	-	181	Inf	Inf	0.0%
5/2	B3073 East Exit	U	N/A	N/A	-		-	-	-	816	Inf	Inf	0.0%
6/1	A347 South Exit	U	N/A	N/A	-		-	-	-	366	Inf	Inf	0.0%
7/1	B3073 West Exit	U	N/A	N/A	-		-	-	-	461	Inf	Inf	0.0%
8/1	A347 North Exit	U	N/A	N/A	-		-	-	-	880	Inf	Inf	0.0%

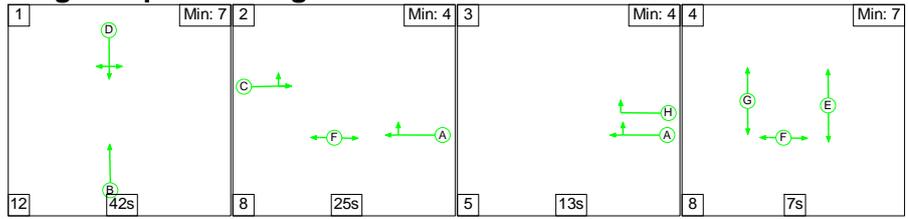
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Proposed Parley Cross Junction - Option 1	-	-	43	178	38	22.8	13.0	0.7	36.5	-	-	-	-
B3073 / A347 Parley Cross	-	-	43	178	38	22.8	13.0	0.7	36.5	-	-	-	-
1/1	442	442	-	-	-	3.0	0.6	-	3.7	29.8	9.6	0.6	10.2
1/2	240	240	24	178	38	2.3	3.0	0.6	5.9	87.9	6.5	3.0	9.4
2/1	618	618	-	-	-	5.2	3.9	-	9.1	53.0	16.1	3.9	20.0
3/1+3/2	698	698	-	-	-	6.5	3.8	-	10.3	53.3	13.2	3.8	17.0
4/1	321	321	-	-	-	2.6	0.7	-	3.3	37.4	7.5	0.7	8.2
4/2	385	385	19	0	0	3.2	0.9	0.1	4.2	39.2	9.2	0.9	10.1
5/1	181	181	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	816	816	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	366	366	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	461	461	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	880	880	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
<p>C1 PRC for Signalled Lanes (%): 0.4 Total Delay for Signalled Lanes (pcuHr): 36.47 Cycle Time (s): 100 PRC Over All Lanes (%): 0.4 Total Delay Over All Lanes(pcuHr): 36.47</p>													

Full Input Data And Results

Scenario 2: 'PM peak model distribution' (FG2: '2020 PM peak Base + Dev Model Dist', Plan 3: 'Staging Plan No. 3')

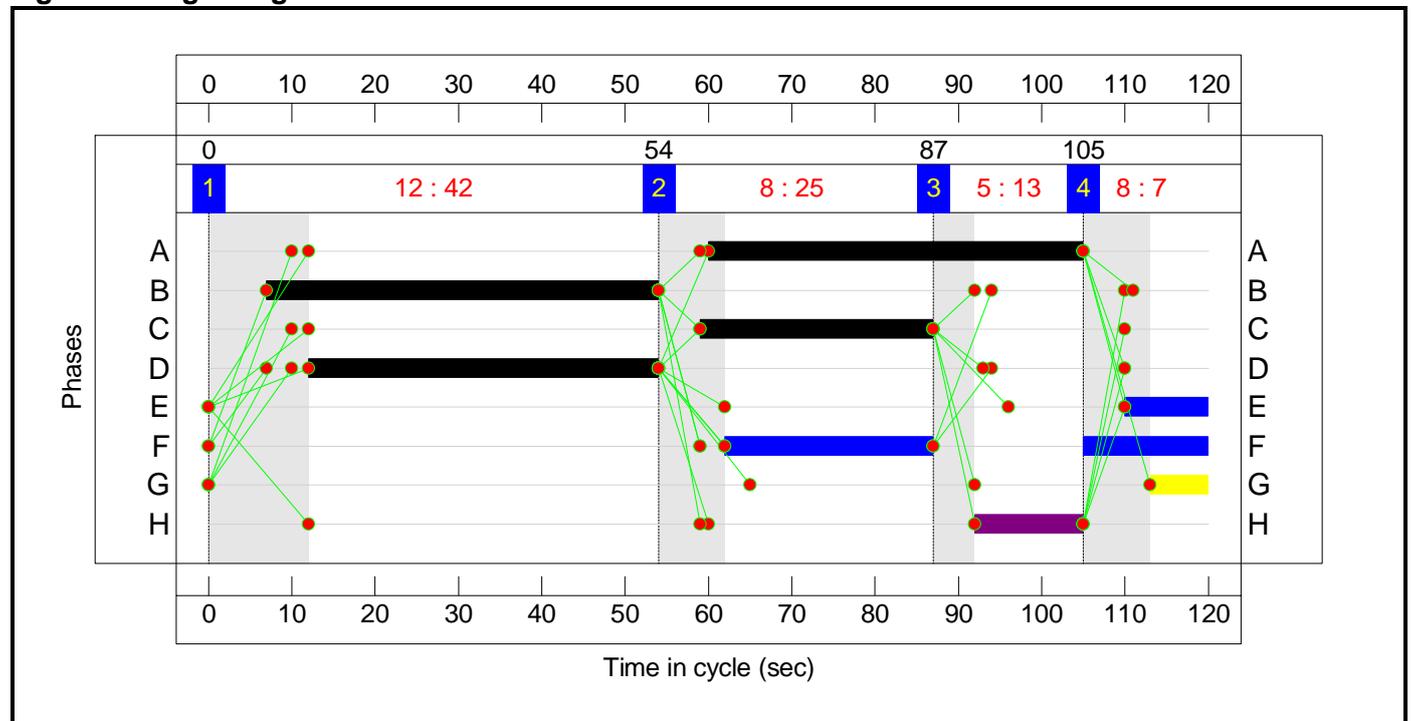
Stage Sequence Diagram



Stage Timings

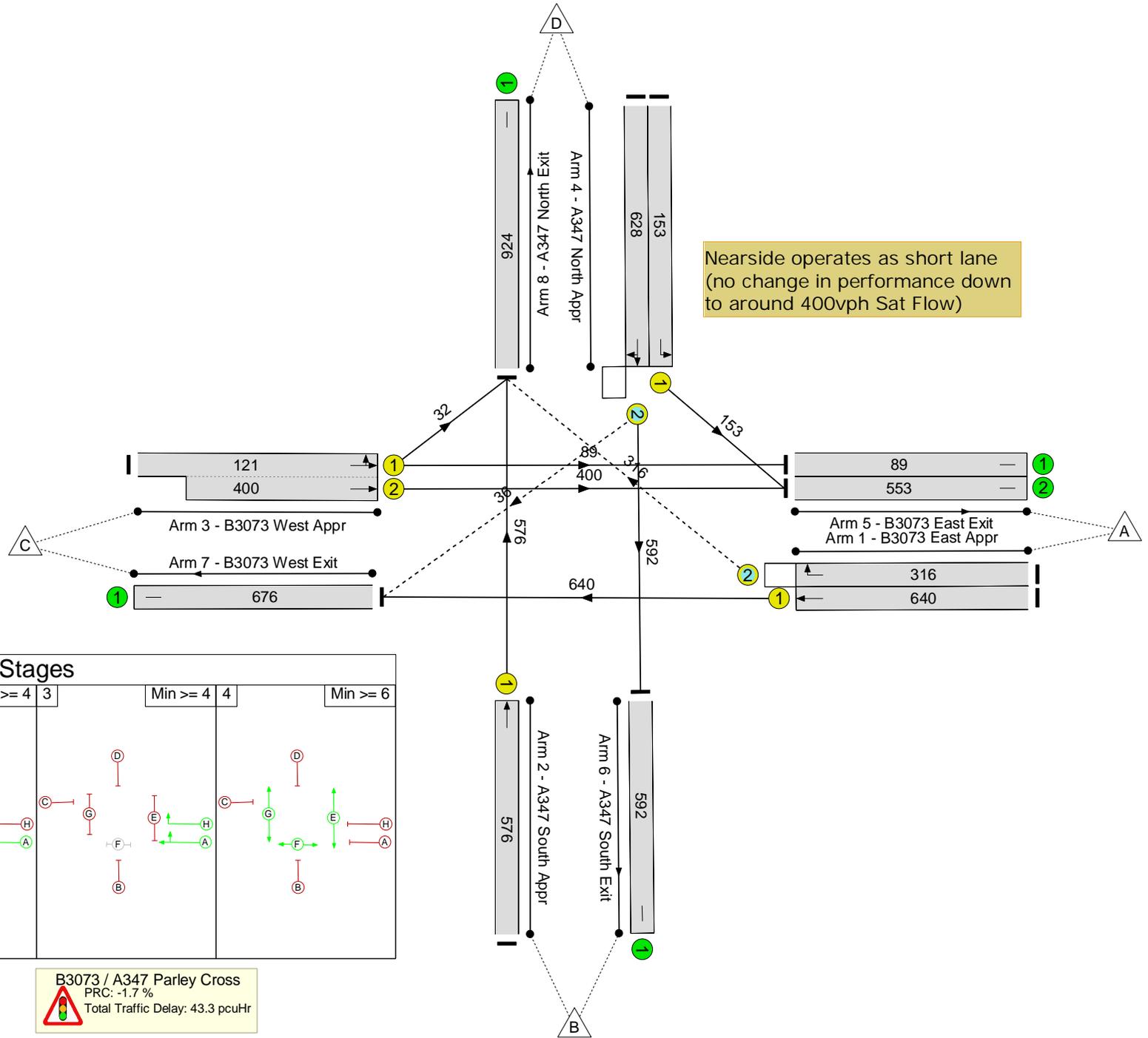
Stage	1	2	3	4
Duration	42	25	13	7
Change Point	0	54	87	105

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results



Nearside operates as short lane
(no change in performance down to around 400vph Sat Flow)

Stages				
1	Min >= 7	2	Min >= 4	3
Min >= 4	4	Min >= 6	4	Min >= 6

B3073 / A347 Parley Cross
 PRC: -1.7 %
 Total Traffic Delay: 43.3 pcuHr

Full Input Data And Results

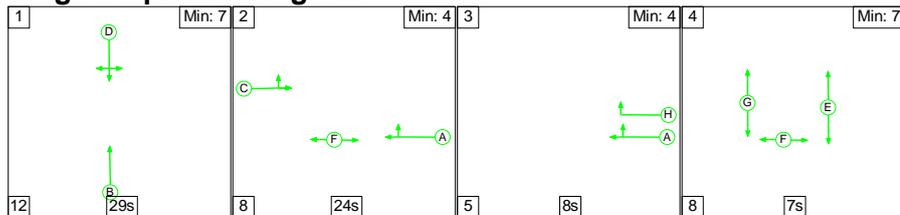
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Proposed Parley Cross Junction - Option 1	-	-	N/A	-	-		-	-	-	-	-	-	91.5%
B3073 / A347 Parley Cross	-	-	N/A	-	-		-	-	-	-	-	-	91.5%
1/1	B3073 East Appr Ahead	U	N/A	N/A	A		1	45	-	640	2055	788	81.2%
1/2	B3073 East Appr Right	O	N/A	N/A	A	H	1	45	13	316	1780	348	90.8%
2/1	A347 South Appr Ahead	U	N/A	N/A	B		1	47	-	576	1915	766	75.2%
3/1+3/2	B3073 West Appr Ahead Left	U	N/A	N/A	C		1	28	-	521	1866:2055	636	81.9%
4/1	A347 North Appr Left	U	N/A	N/A	D		1	42	-	153	1741	624	24.5%
4/2	A347 North Appr Ahead Right	O	N/A	N/A	D		1	42	-	628	1915	686	91.5%
5/1	B3073 East Exit	U	N/A	N/A	-		-	-	-	89	Inf	Inf	0.0%
5/2	B3073 East Exit	U	N/A	N/A	-		-	-	-	553	Inf	Inf	0.0%
6/1	A347 South Exit	U	N/A	N/A	-		-	-	-	592	Inf	Inf	0.0%
7/1	B3073 West Exit	U	N/A	N/A	-		-	-	-	676	Inf	Inf	0.0%
8/1	A347 North Exit	U	N/A	N/A	-		-	-	-	924	Inf	Inf	0.0%

Full Input Data And Results

Scenario 3: 'AM peak NO FOODSTORE' (FG3: '2020 AM peak Base + Dev NO FOODSTORE', Plan 3: 'Staging Plan No. 3')

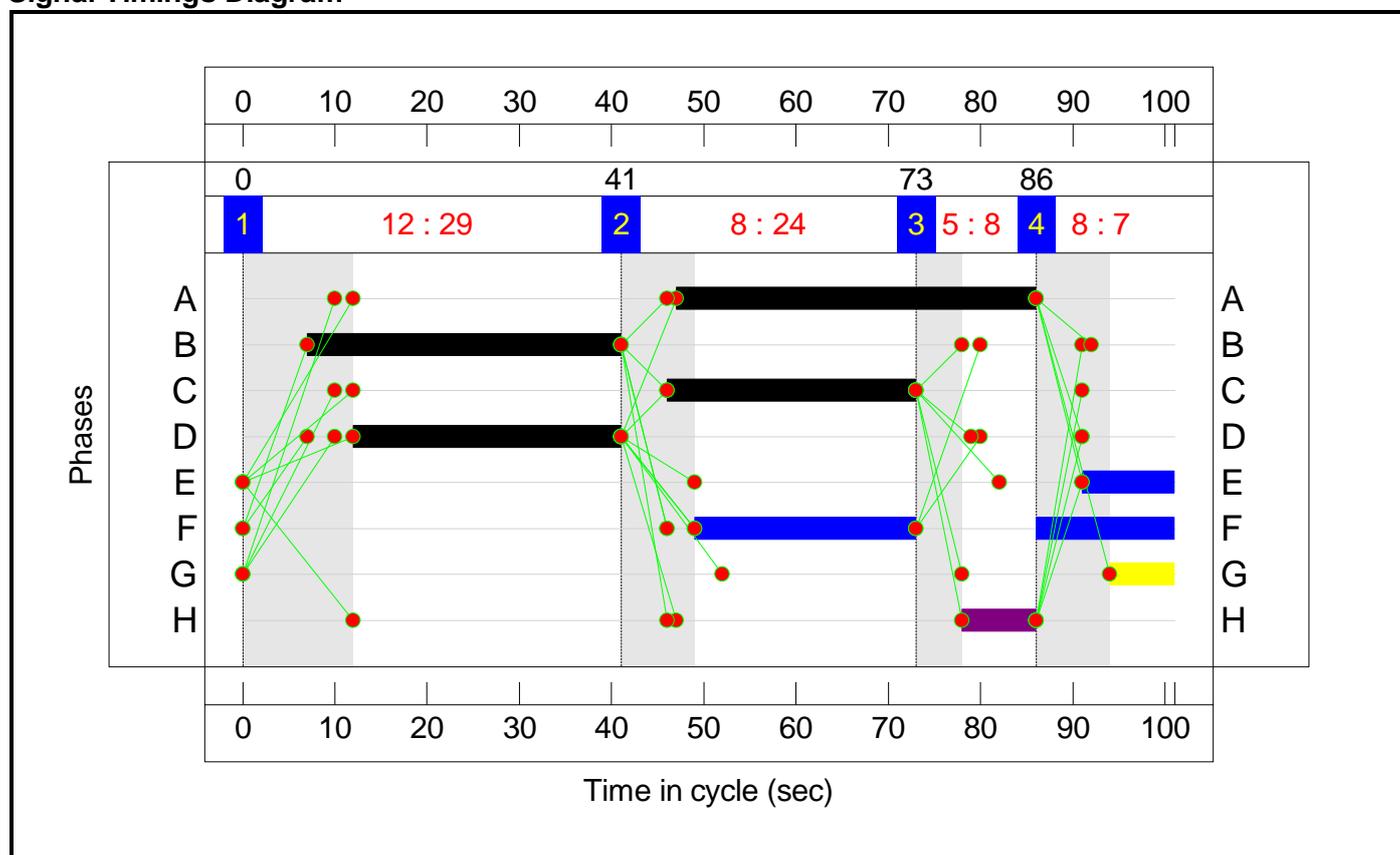
Stage Sequence Diagram



Stage Timings

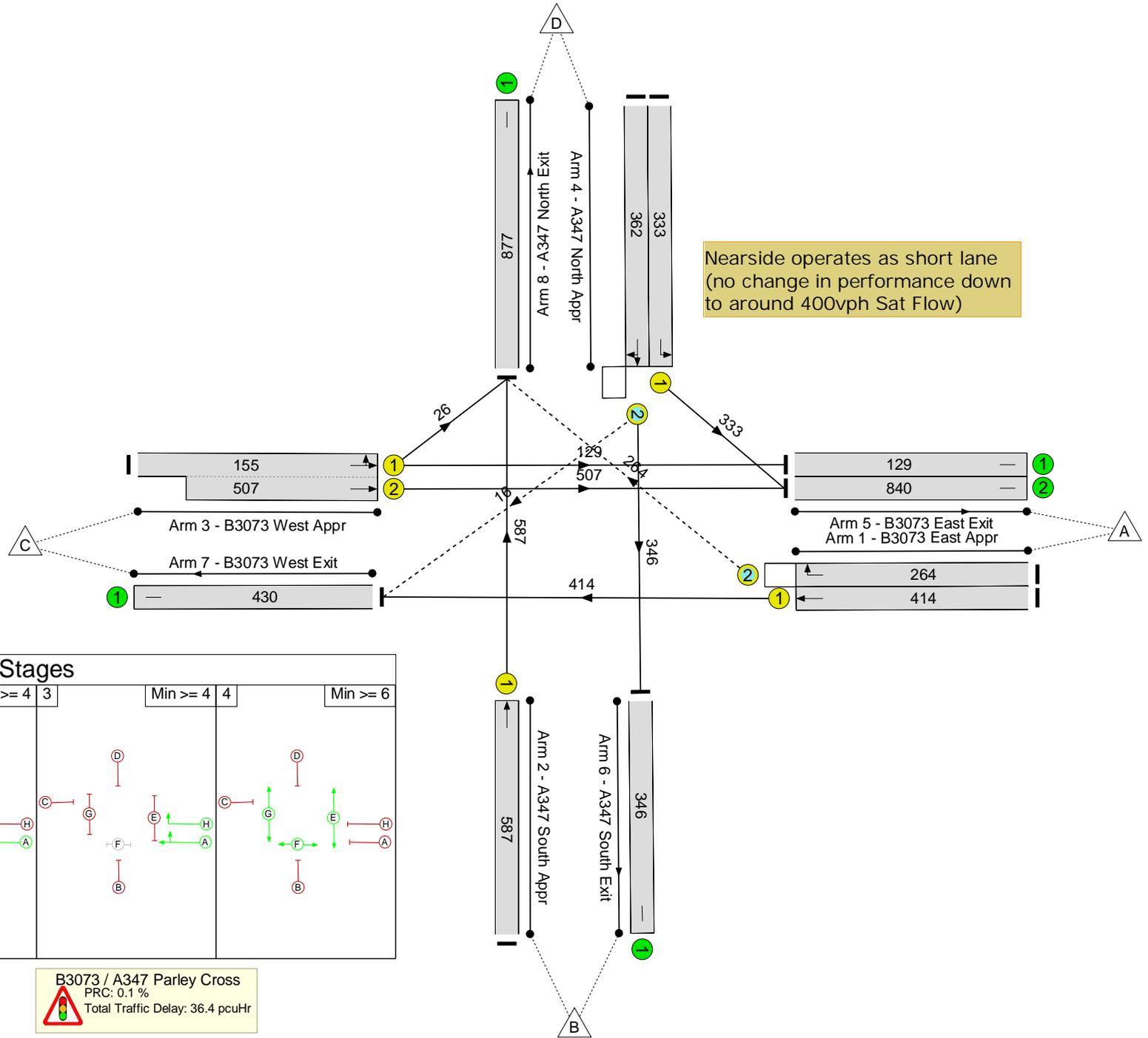
Stage	1	2	3	4
Duration	29	24	8	7
Change Point	0	41	73	86

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Proposed Parley Cross Junction - Option 1	-	-	N/A	-	-		-	-	-	-	-	-	89.9%
B3073 / A347 Parley Cross	-	-	N/A	-	-		-	-	-	-	-	-	89.9%
1/1	B3073 East Appr Ahead	U	N/A	N/A	A		1	39	-	414	2055	814	50.9%
1/2	B3073 East Appr Right	O	N/A	N/A	A	H	1	39	8	264	1780	294	89.9%
2/1	A347 South Appr Ahead	U	N/A	N/A	B		1	34	-	587	1915	664	88.5%
3/1+3/2	B3073 West Appr Ahead Left	U	N/A	N/A	C		1	27	-	662	1884:2055	738	89.7%
4/1	A347 North Appr Left	U	N/A	N/A	D		1	29	-	333	1741	517	64.4%
4/2	A347 North Appr Ahead Right	O	N/A	N/A	D		1	29	-	362	1915	569	63.6%
5/1	B3073 East Exit	U	N/A	N/A	-		-	-	-	129	Inf	Inf	0.0%
5/2	B3073 East Exit	U	N/A	N/A	-		-	-	-	840	Inf	Inf	0.0%
6/1	A347 South Exit	U	N/A	N/A	-		-	-	-	346	Inf	Inf	0.0%
7/1	B3073 West Exit	U	N/A	N/A	-		-	-	-	430	Inf	Inf	0.0%
8/1	A347 North Exit	U	N/A	N/A	-		-	-	-	877	Inf	Inf	0.0%

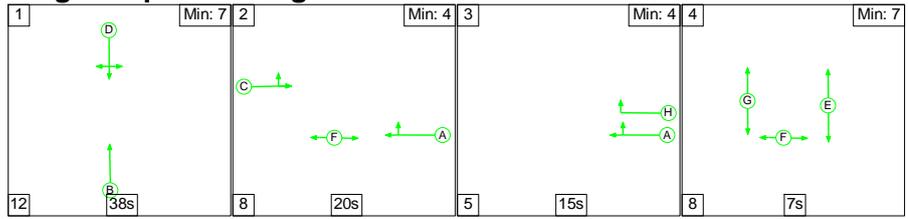
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Proposed Parley Cross Junction - Option 1	-	-	44	194	42	22.4	13.3	0.7	36.4	-	-	-	-
B3073 / A347 Parley Cross	-	-	44	194	42	22.4	13.3	0.7	36.4	-	-	-	-
1/1	414	414	-	-	-	2.7	0.5	-	3.2	27.6	8.7	0.5	9.3
1/2	264	264	28	194	42	2.6	3.6	0.6	6.8	92.2	7.3	3.6	10.8
2/1	587	587	-	-	-	5.1	3.5	-	8.6	52.6	15.5	3.5	19.0
3/1+3/2	662	662	-	-	-	6.2	3.9	-	10.1	55.0	13.5	3.9	17.5
4/1	333	333	-	-	-	2.9	0.9	-	3.8	40.5	8.0	0.9	8.9
4/2	362	362	16	0	0	3.1	0.9	0.1	4.0	40.1	8.7	0.9	9.6
5/1	129	129	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	840	840	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	346	346	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	430	430	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	877	877	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%):	0.1	Total Delay for Signalled Lanes (pcuHr):			36.41	Cycle Time (s): 101				
			PRC Over All Lanes (%):	0.1	Total Delay Over All Lanes(pcuHr):			36.41					

Full Input Data And Results

Scenario 4: 'PM peak NO FOODSTORE' (FG4: '2020 PM peak Base + Dev NO FOODSTORE', Plan 3: 'Staging Plan No. 3')

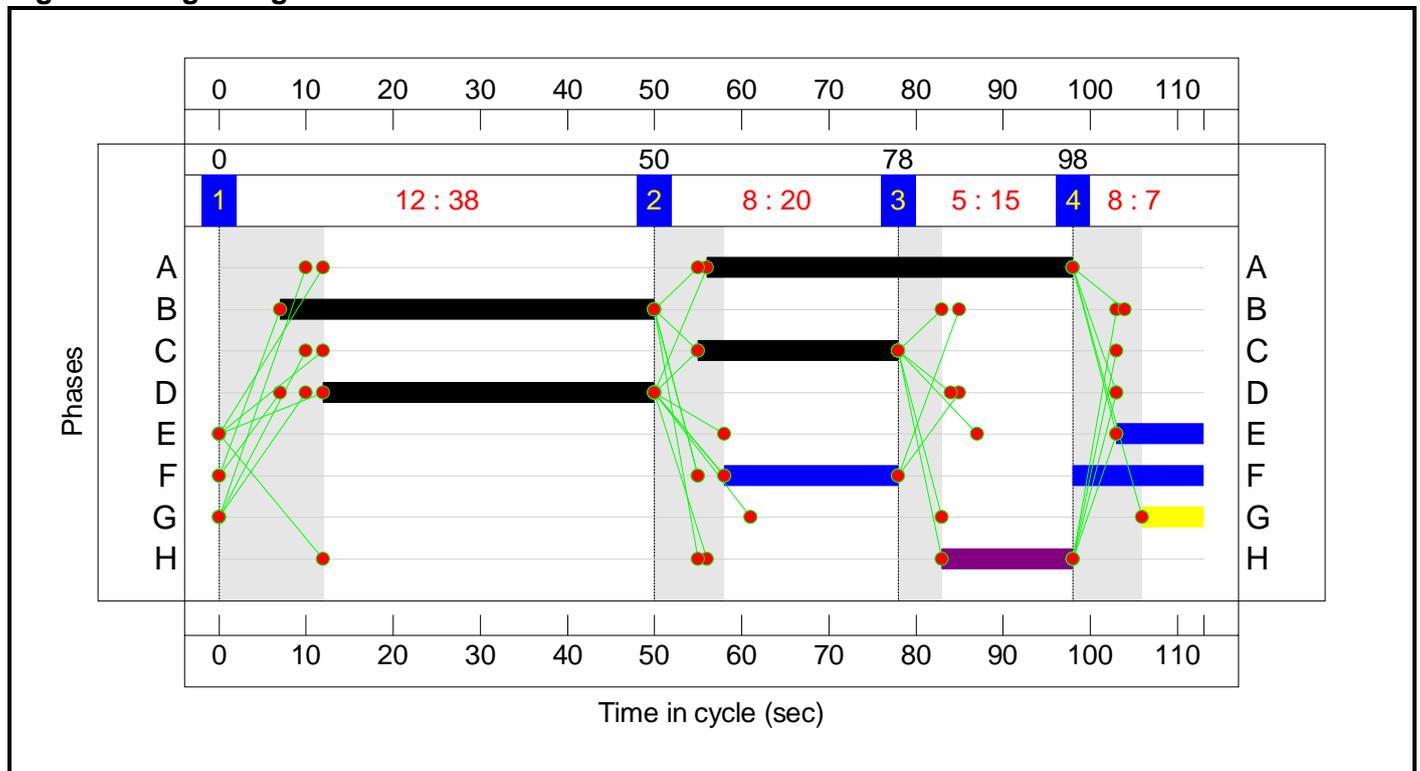
Stage Sequence Diagram



Stage Timings

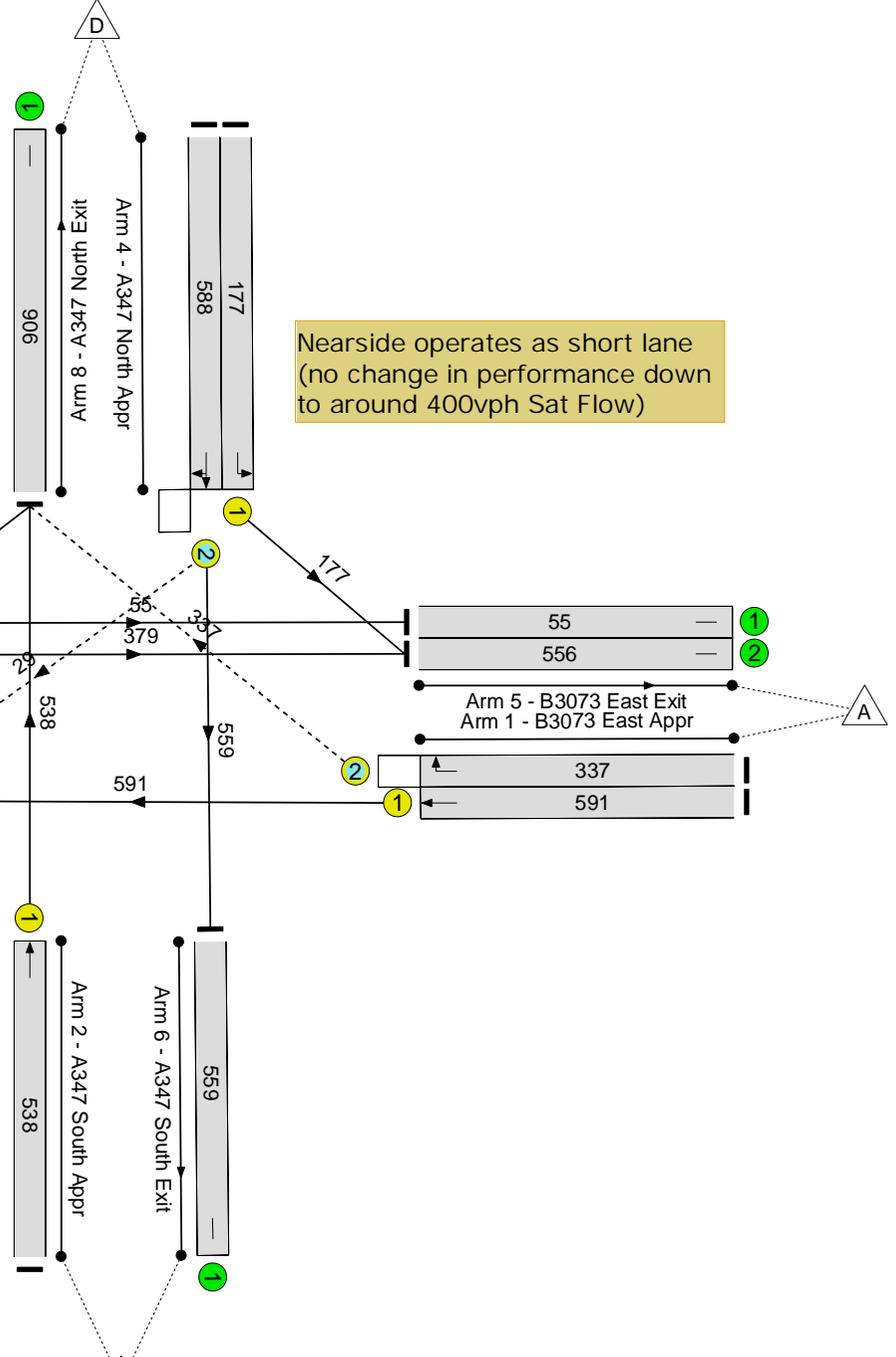
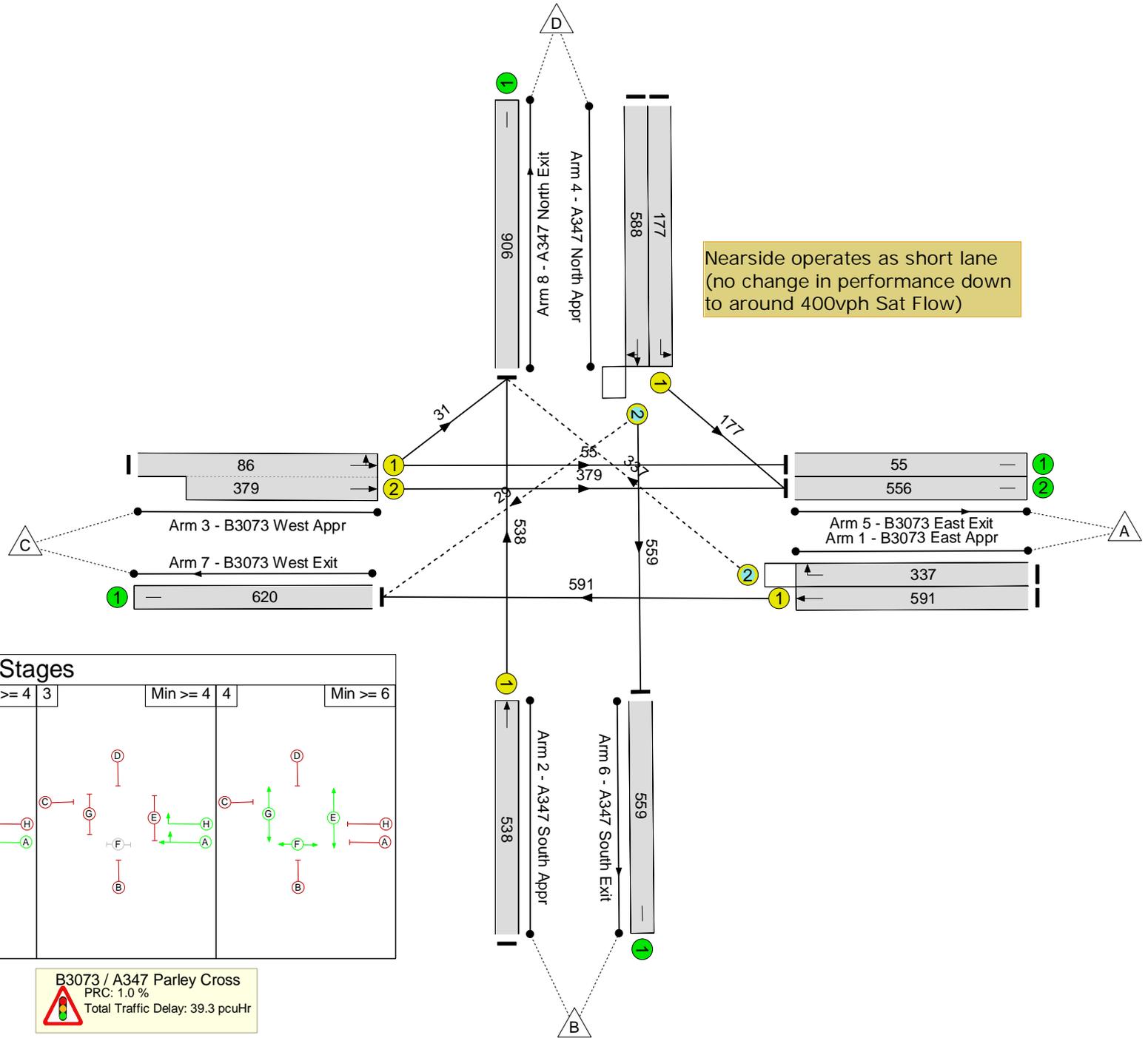
Stage	1	2	3	4
Duration	38	20	15	7
Change Point	0	50	78	98

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Proposed Parley Cross Junction - Option 1	-	-	N/A	-	-		-	-	-	-	-	-	89.1%
B3073 / A347 Parley Cross	-	-	N/A	-	-		-	-	-	-	-	-	89.1%
1/1	B3073 East Appr Ahead	U	N/A	N/A	A		1	42	-	591	2055	782	75.6%
1/2	B3073 East Appr Right	O	N/A	N/A	A	H	1	42	15	337	1780	378	89.1%
2/1	A347 South Appr Ahead	U	N/A	N/A	B		1	43	-	538	1915	746	72.2%
3/1+3/2	B3073 West Appr Ahead Left	U	N/A	N/A	C		1	23	-	465	1849:2055	535	86.8%
4/1	A347 North Appr Left	U	N/A	N/A	D		1	38	-	177	1741	601	29.5%
4/2	A347 North Appr Ahead Right	O	N/A	N/A	D		1	38	-	588	1915	661	89.0%
5/1	B3073 East Exit	U	N/A	N/A	-		-	-	-	55	Inf	Inf	0.0%
5/2	B3073 East Exit	U	N/A	N/A	-		-	-	-	556	Inf	Inf	0.0%
6/1	A347 South Exit	U	N/A	N/A	-		-	-	-	559	Inf	Inf	0.0%
7/1	B3073 West Exit	U	N/A	N/A	-		-	-	-	620	Inf	Inf	0.0%
8/1	A347 North Exit	U	N/A	N/A	-		-	-	-	906	Inf	Inf	0.0%

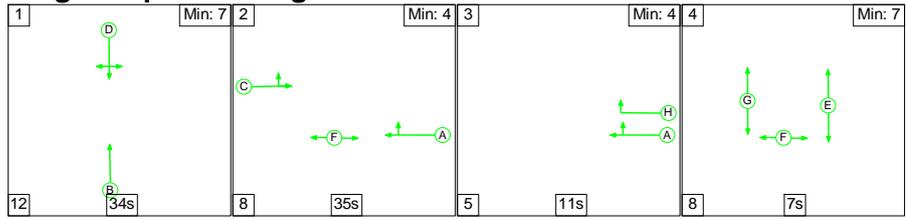
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Proposed Parley Cross Junction - Option 1	-	-	60	284	22	25.5	13.2	0.6	39.3	-	-	-	-
B3073 / A347 Parley Cross	-	-	60	284	22	25.5	13.2	0.6	39.3	-	-	-	-
1/1	591	591	-	-	-	5.0	1.5	-	6.5	39.7	16.1	1.5	17.6
1/2	337	337	31	284	22	3.7	3.5	0.5	7.7	82.5	10.2	3.5	13.7
2/1	538	538	-	-	-	4.4	1.3	-	5.7	37.9	14.2	1.3	15.5
3/1+3/2	465	465	-	-	-	5.4	3.0	-	8.4	65.3	11.5	3.0	14.5
4/1	177	177	-	-	-	1.3	0.2	-	1.5	31.2	4.0	0.2	4.2
4/2	588	588	29	0	0	5.7	3.7	0.1	9.4	57.8	17.3	3.7	21.0
5/1	55	55	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	556	556	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	559	559	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	620	620	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	906	906	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
<p>C1 PRC for Signalled Lanes (%): 1.0 Total Delay for Signalled Lanes (pcuHr): 39.31 Cycle Time (s): 113</p> <p>PRC Over All Lanes (%): 1.0 Total Delay Over All Lanes(pcuHr): 39.31</p>													

Full Input Data And Results

Scenario 5: 'AM peak manual distribution' (FG5: '2020 AM peak Base + Dev Manual Dist', Plan 3: 'Staging Plan No. 3')

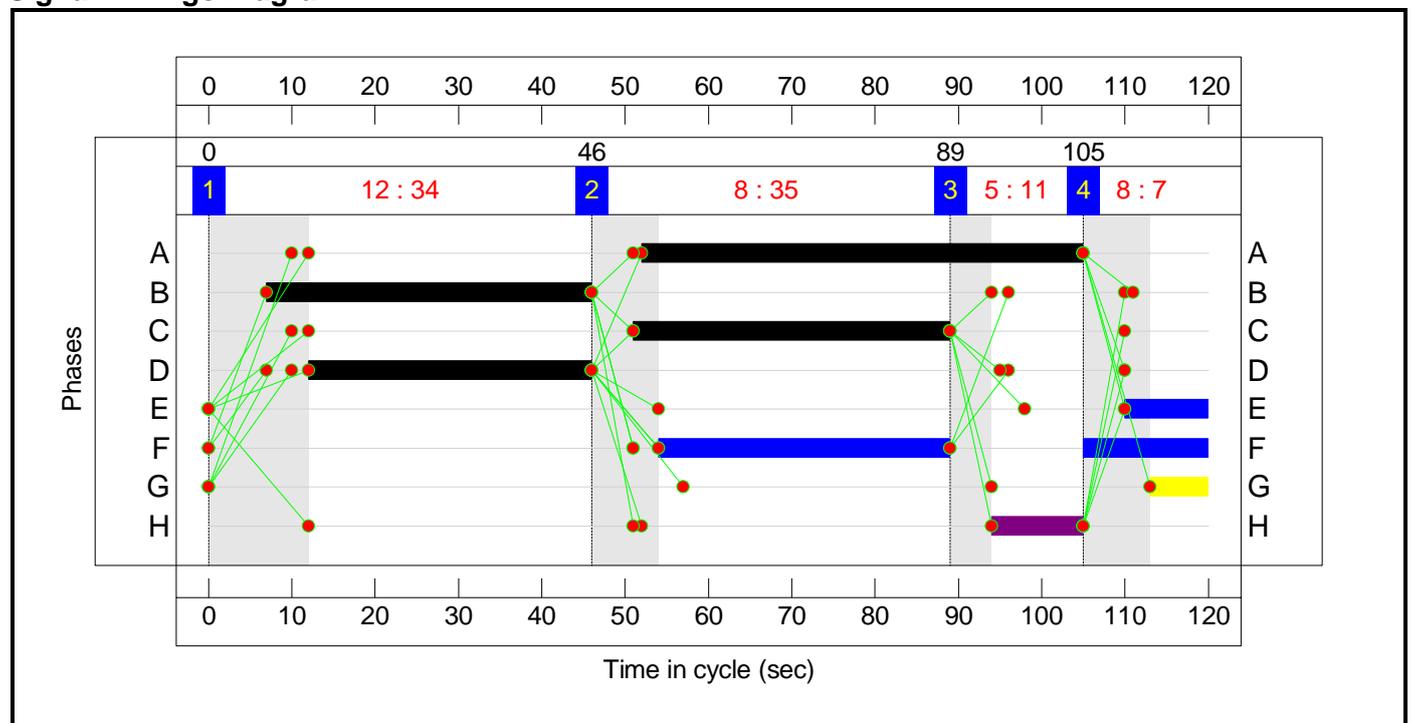
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	34	35	11	7
Change Point	0	46	89	105

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results

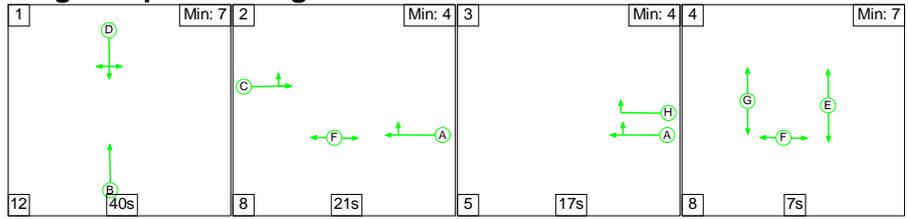
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Proposed Parley Cross Junction - Option 1	-	-	N/A	-	-		-	-	-	-	-	-	93.8%
B3073 / A347 Parley Cross	-	-	N/A	-	-		-	-	-	-	-	-	93.8%
1/1	B3073 East Appr Ahead	U	N/A	N/A	A		1	53	-	414	2055	925	44.8%
1/2	B3073 East Appr Right	O	N/A	N/A	A	H	1	53	11	268	1780	286	93.8%
2/1	A347 South Appr Ahead	U	N/A	N/A	B		1	39	-	587	1915	638	92.0%
3/1+3/2	B3073 West Appr Ahead Left	U	N/A	N/A	C		1	38	-	667	1829:2055	711	93.8%
4/1	A347 North Appr Left	U	N/A	N/A	D		1	34	-	340	1741	508	67.0%
4/2	A347 North Appr Ahead Right	O	N/A	N/A	D		1	34	-	368	1915	559	65.9%
5/1	B3073 East Exit	U	N/A	N/A	-		-	-	-	29	Inf	Inf	0.0%
5/2	B3073 East Exit	U	N/A	N/A	-		-	-	-	952	Inf	Inf	0.0%
6/1	A347 South Exit	U	N/A	N/A	-		-	-	-	352	Inf	Inf	0.0%
7/1	B3073 West Exit	U	N/A	N/A	-		-	-	-	430	Inf	Inf	0.0%
8/1	A347 North Exit	U	N/A	N/A	-		-	-	-	881	Inf	Inf	0.0%

Full Input Data And Results

Scenario 6: 'PM peak manual distribution' (FG6: '2020 PM peak Base + Dev Manual Dist', Plan 3: 'Staging Plan No. 3')

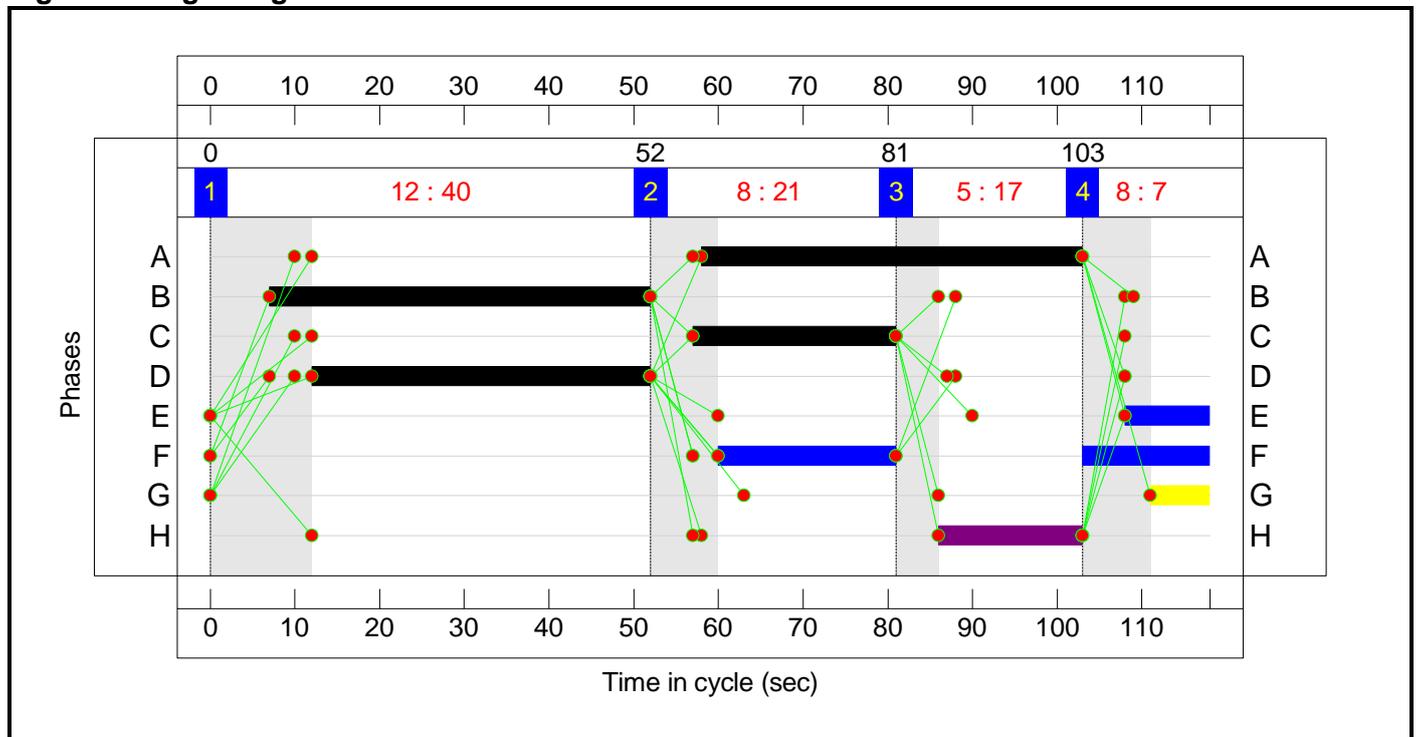
Stage Sequence Diagram



Stage Timings

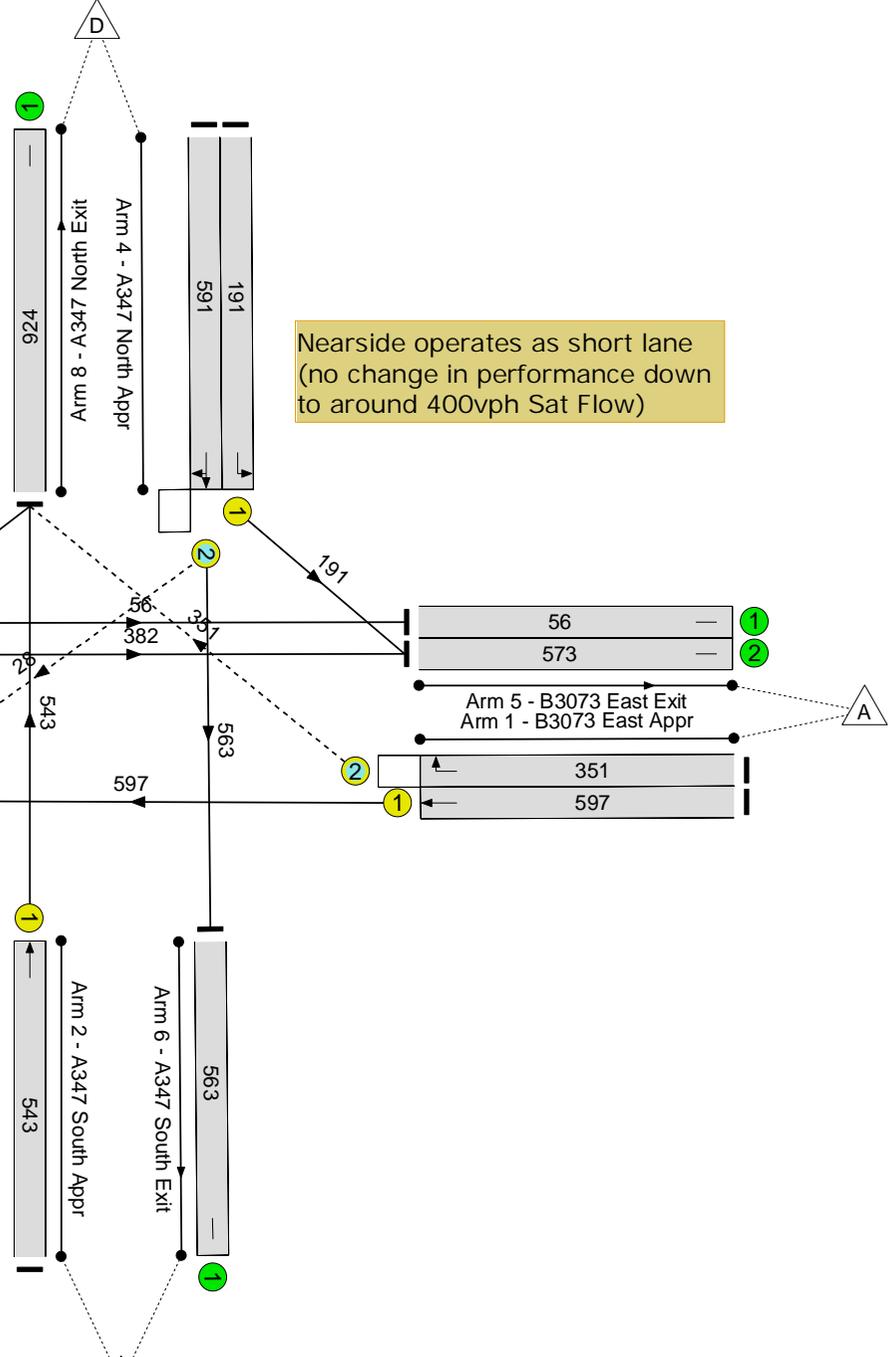
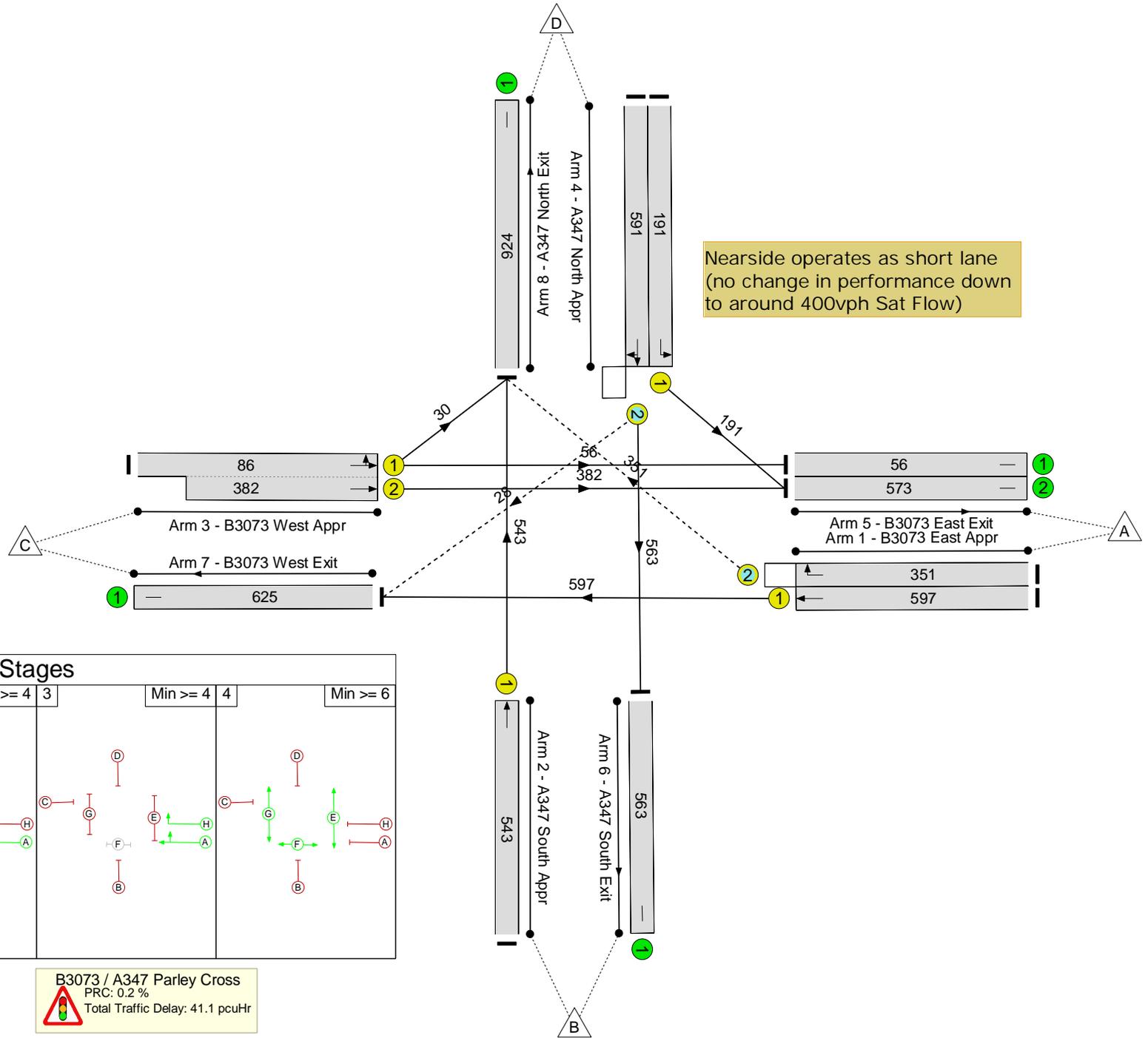
Stage	1	2	3	4
Duration	40	21	17	7
Change Point	0	52	81	103

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Proposed Parley Cross Junction - Option 1	-	-	N/A	-	-		-	-	-	-	-	-	89.9%
B3073 / A347 Parley Cross	-	-	N/A	-	-		-	-	-	-	-	-	89.9%
1/1	B3073 East Appr Ahead	U	N/A	N/A	A		1	45	-	597	2055	801	74.5%
1/2	B3073 East Appr Right	O	N/A	N/A	A	H	1	45	17	351	1780	391	89.9%
2/1	A347 South Appr Ahead	U	N/A	N/A	B		1	45	-	543	1915	747	72.7%
3/1+3/2	B3073 West Appr Ahead Left	U	N/A	N/A	C		1	24	-	468	1851:2055	533	87.7%
4/1	A347 North Appr Left	U	N/A	N/A	D		1	40	-	191	1741	605	31.6%
4/2	A347 North Appr Ahead Right	O	N/A	N/A	D		1	40	-	591	1915	665	88.8%
5/1	B3073 East Exit	U	N/A	N/A	-		-	-	-	56	Inf	Inf	0.0%
5/2	B3073 East Exit	U	N/A	N/A	-		-	-	-	573	Inf	Inf	0.0%
6/1	A347 South Exit	U	N/A	N/A	-		-	-	-	563	Inf	Inf	0.0%
7/1	B3073 West Exit	U	N/A	N/A	-		-	-	-	625	Inf	Inf	0.0%
8/1	A347 North Exit	U	N/A	N/A	-		-	-	-	924	Inf	Inf	0.0%

Full Input Data And Results

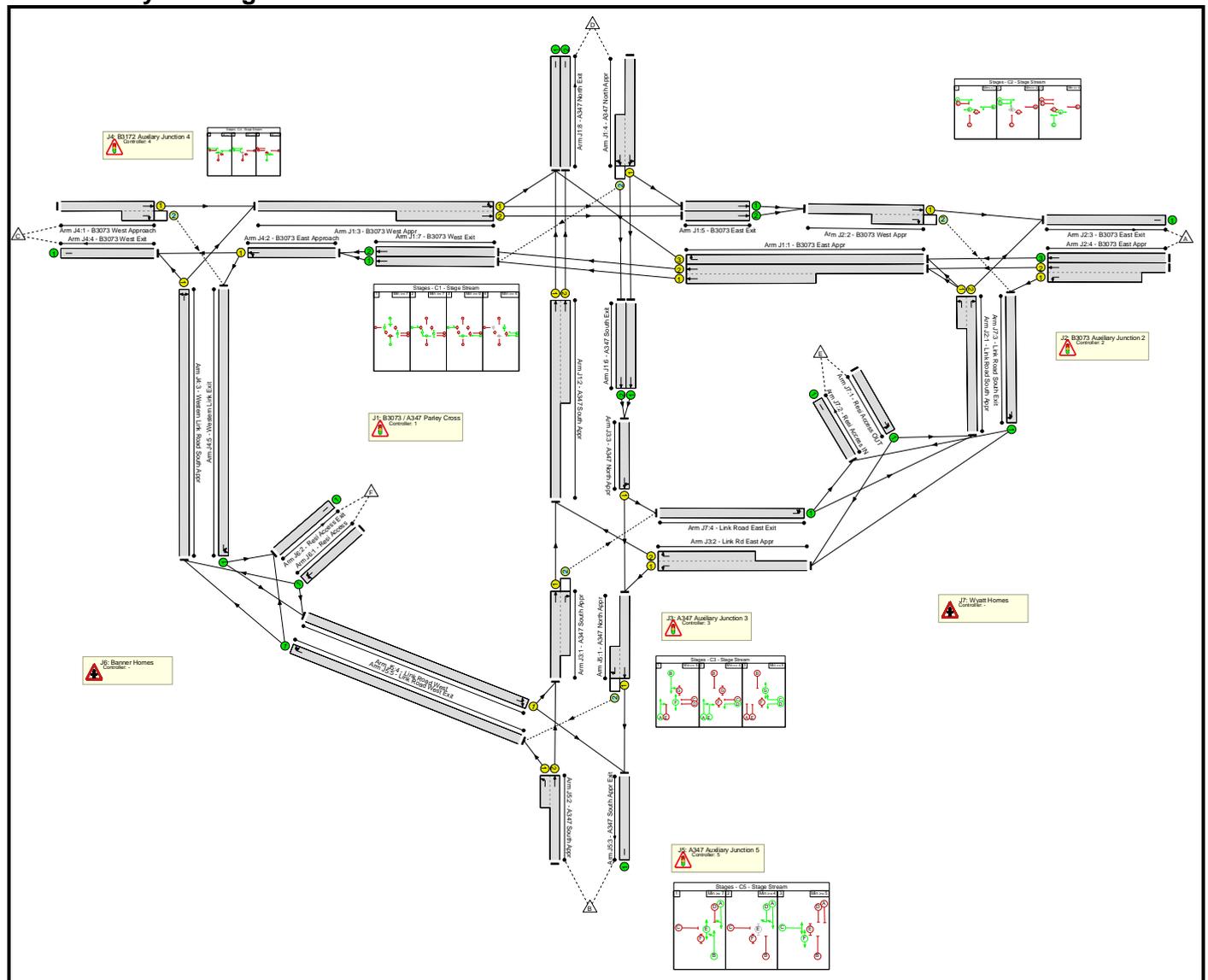
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Proposed Parley Cross Junction - Option 1	-	-	56	302	21	26.9	13.6	0.6	41.1	-	-	-	-
B3073 / A347 Parley Cross	-	-	56	302	21	26.9	13.6	0.6	41.1	-	-	-	-
1/1	597	597	-	-	-	5.1	1.4	-	6.6	39.7	16.7	1.4	18.2
1/2	351	351	28	302	21	4.0	3.7	0.5	8.3	85.0	11.1	3.7	14.8
2/1	543	543	-	-	-	4.6	1.3	-	5.9	39.4	15.1	1.3	16.4
3/1+3/2	468	468	-	-	-	5.7	3.3	-	8.9	68.8	12.1	3.3	15.4
4/1	191	191	-	-	-	1.5	0.2	-	1.7	32.6	4.6	0.2	4.8
4/2	591	591	28	0	0	6.0	3.6	0.1	9.7	58.8	18.2	3.6	21.8
5/1	56	56	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	573	573	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	563	563	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	625	625	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	924	924	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
<p>C1 PRC for Signalled Lanes (%): 0.2 Total Delay for Signalled Lanes (pcuHr): 41.14 Cycle Time (s): 118 PRC Over All Lanes (%): 0.2 Total Delay Over All Lanes(pcuHr): 41.14</p>													

Full Input Data And Results
Full Input Data And Results

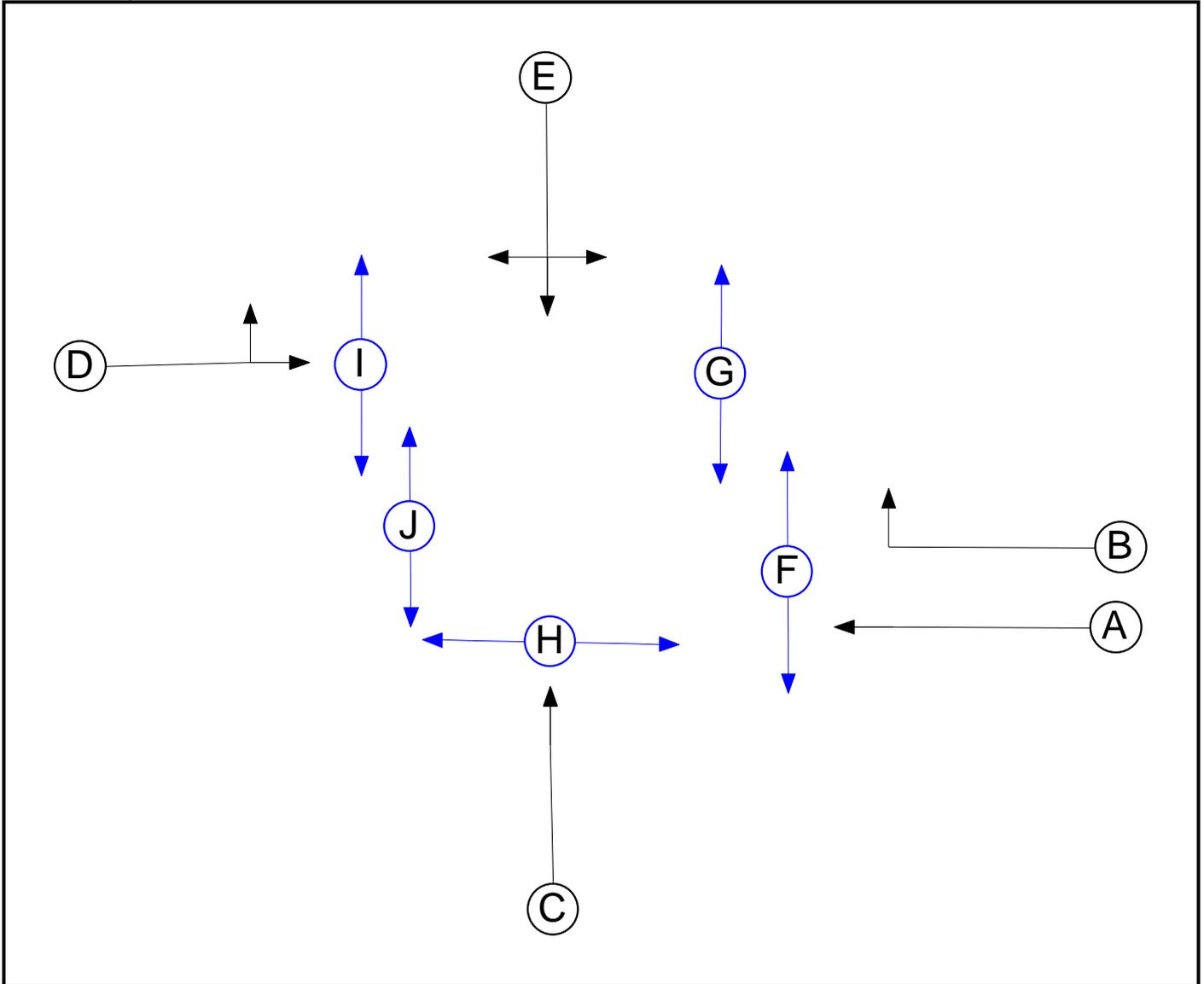
User and Project Details

Project:	025497 B3073 Corridor Study
Title:	Proposed Parley Cross Junction - Option 1
Location:	West Parley
File name:	110609 AL 2012.01.23 Parley Cross & Junctions Option 1 + Resi.lsg3x
Author:	AL
Company:	
Address:	
Notes:	

Network Layout Diagram



C1
Phase Diagram



Phase Input Data

Phase Name	Phase Type	Stage Stream	Assoc. Phase	Street Min	Cont Min
A	Traffic	1		7	7
B	Traffic	1		7	7
C	Traffic	1		7	7
D	Traffic	1		7	7
E	Traffic	1		7	7
F	Pedestrian	1		6	6
G	Pedestrian	1		4	4
H	Pedestrian	1		4	4
I	Pedestrian	1		7	7
J	Pedestrian	1		7	7

Phase Intergrens Matrix

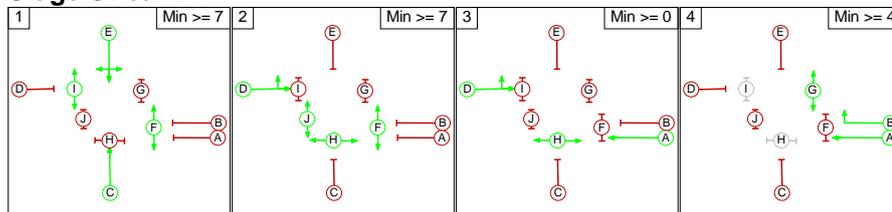
		Starting Phase									
		A	B	C	D	E	F	G	H	I	J
Terminating Phase	A	-	-	6	-	5	5	-	-	-	8
	B	-	-	5	6	5	5	-	-	-	-
	C	5	5	-	5	-	-	-	5	-	-
	D	-	6	5	-	6	-	9	-	5	-
	E	6	6	-	5	-	-	8	8	-	11
	F	11	11	-	-	-	-	-	-	-	-
	G	-	-	-	8	8	-	-	-	-	-
	H	-	-	15	-	15	-	-	-	-	-
	I	-	-	-	8	-	-	-	-	-	-
	J	8	-	-	-	8	-	-	-	-	-

Phases in Stage

Stream	Stage No.	Phases in Stage
1	1	C E F I
1	2	D F H J
1	3	A D H
1	4	A B G

Stage Diagram

Stage Stream: 1



Phase Delays

Stage Stream: 1

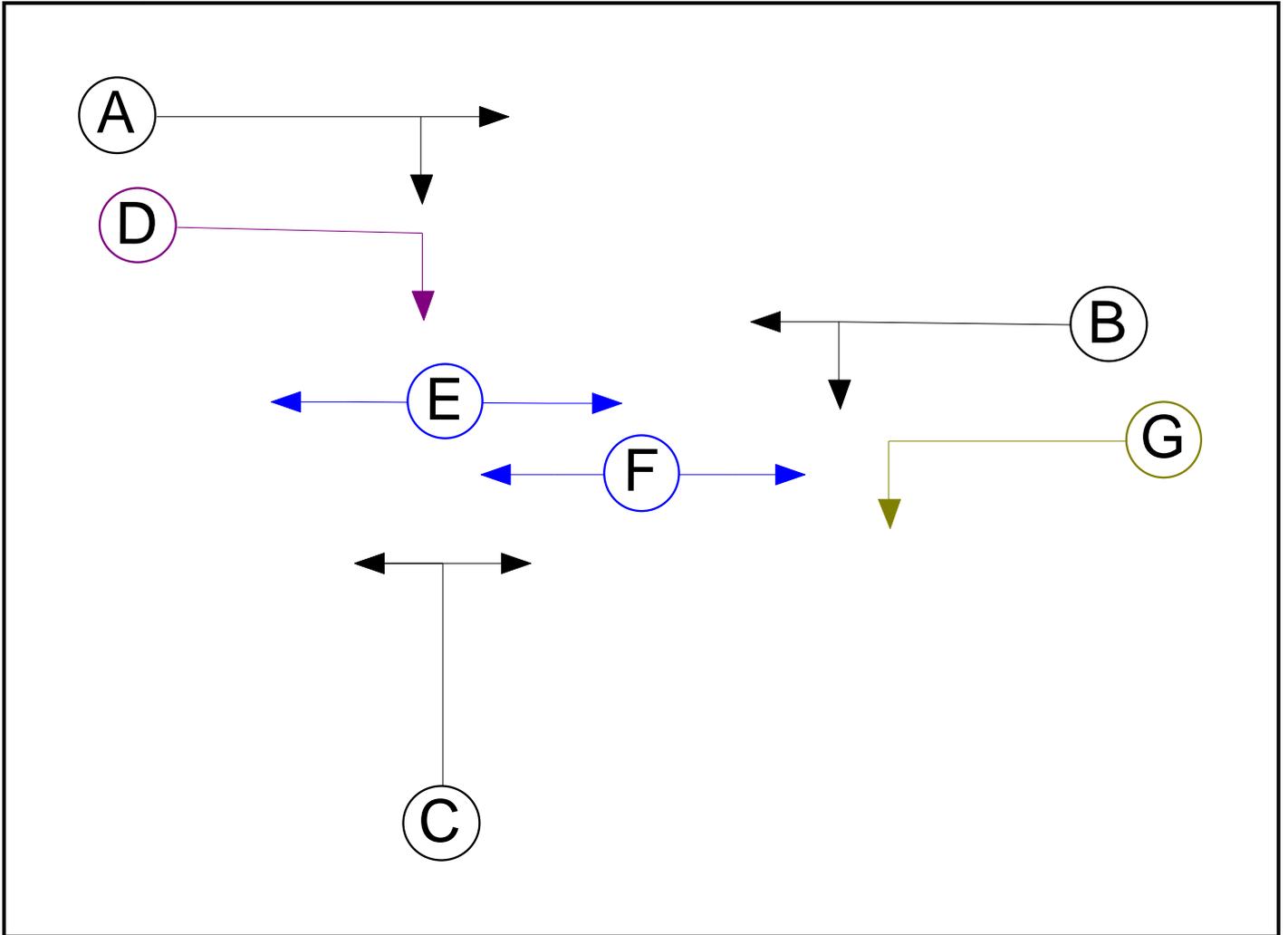
Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

Stage Stream: 1

		To Stage			
		1	2	3	4
From Stage	1	-	11	11	11
	2	15	-	11	11
	3	15	8	-	9
	4	8	8	8	-

C2
Phase Diagram



Phase Input Data

Phase Name	Phase Type	Stage Stream	Assoc. Phase	Street Min	Cont Min
A	Traffic	1		7	7
B	Traffic	1		7	7
C	Traffic	1		7	7
D	Ind. Arrow	1	A	4	4
E	Pedestrian	1		4	4
F	Pedestrian	1		4	4
G	Filter		B	4	4

Full Input Data And Results

Phase Intergrens Matrix

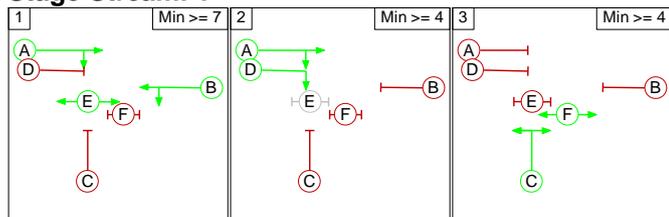
		Starting Phase						
		A	B	C	D	E	F	G
Terminating Phase	A	-	-	5	-	-	8	-
	B	-	-	5	5	-	7	-
	C	5	5	-	5	5	-	-
	D	-	5	5	-	-	8	5
	E	-	-	6	-	-	-	-
	F	6	6	-	6	-	-	6
	G	-	-	-	5	-	7	-

Phases in Stage

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

Stage Diagram

Stage Stream: 1



Phase Delays

Stage Stream: 1

Term. Stage	Start Stage	Phase	Type	Value	Cont value
3	1	C	Losing	1	1

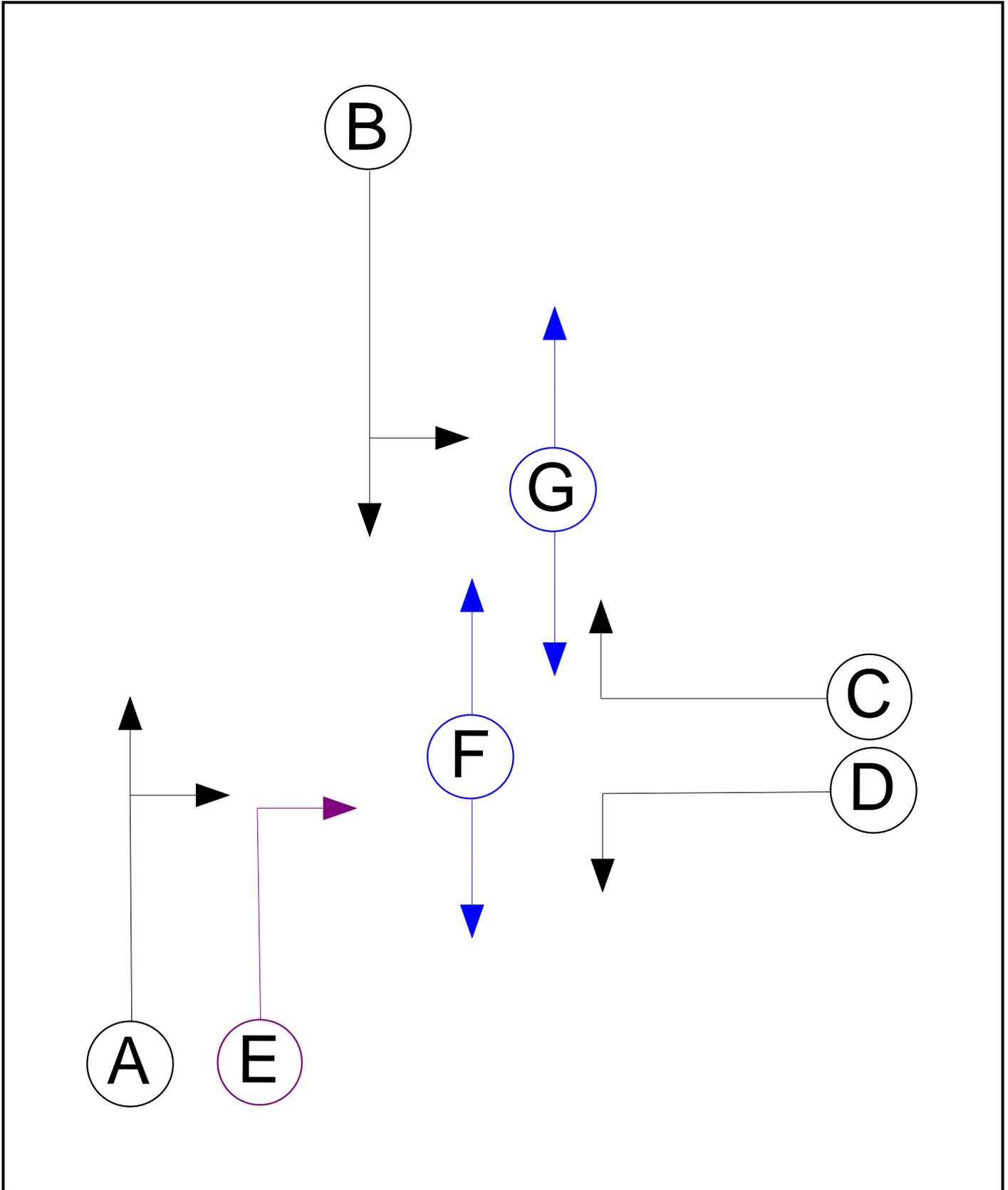
Prohibited Stage Change

Stage Stream: 1

		To Stage		
		1	2	3
From Stage	1	-	5	8
	2	5	-	8
	3	6	6	-

C3

Phase Diagram



Full Input Data And Results

Phase Input Data

Phase Name	Phase Type	Stage Stream	Assoc. Phase	Street Min	Cont Min
A	Traffic	1		7	7
B	Traffic	1		7	5
C	Traffic	1		7	7
D	Traffic	1		7	7
E	Ind. Arrow	1	A	4	4
F	Pedestrian	1		4	4
G	Pedestrian	1		4	4

Phase Intergreens Matrix

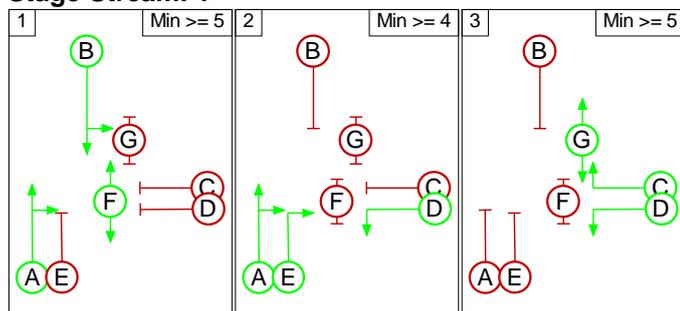
		Starting Phase						
		A	B	C	D	E	F	G
Terminating Phase	A	-	5	-	-	-	-	7
	B	-	-	6	6	6	-	6
	C	6	5	-	-	6	5	-
	D	-	5	-	-	-	5	-
	E	-	5	5	-	-	-	7
	F	-	-	8	8	-	-	-
	G	6	6	-	-	6	-	-

Phases in Stage

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

Stage Diagram

Stage Stream: 1



Phase Delays

Stage Stream: 1

Term. Stage	Start Stage	Phase	Type	Value	Cont value
1	2	B	Losing	2	2
1	3	A	Losing	2	2
1	3	B	Losing	2	2

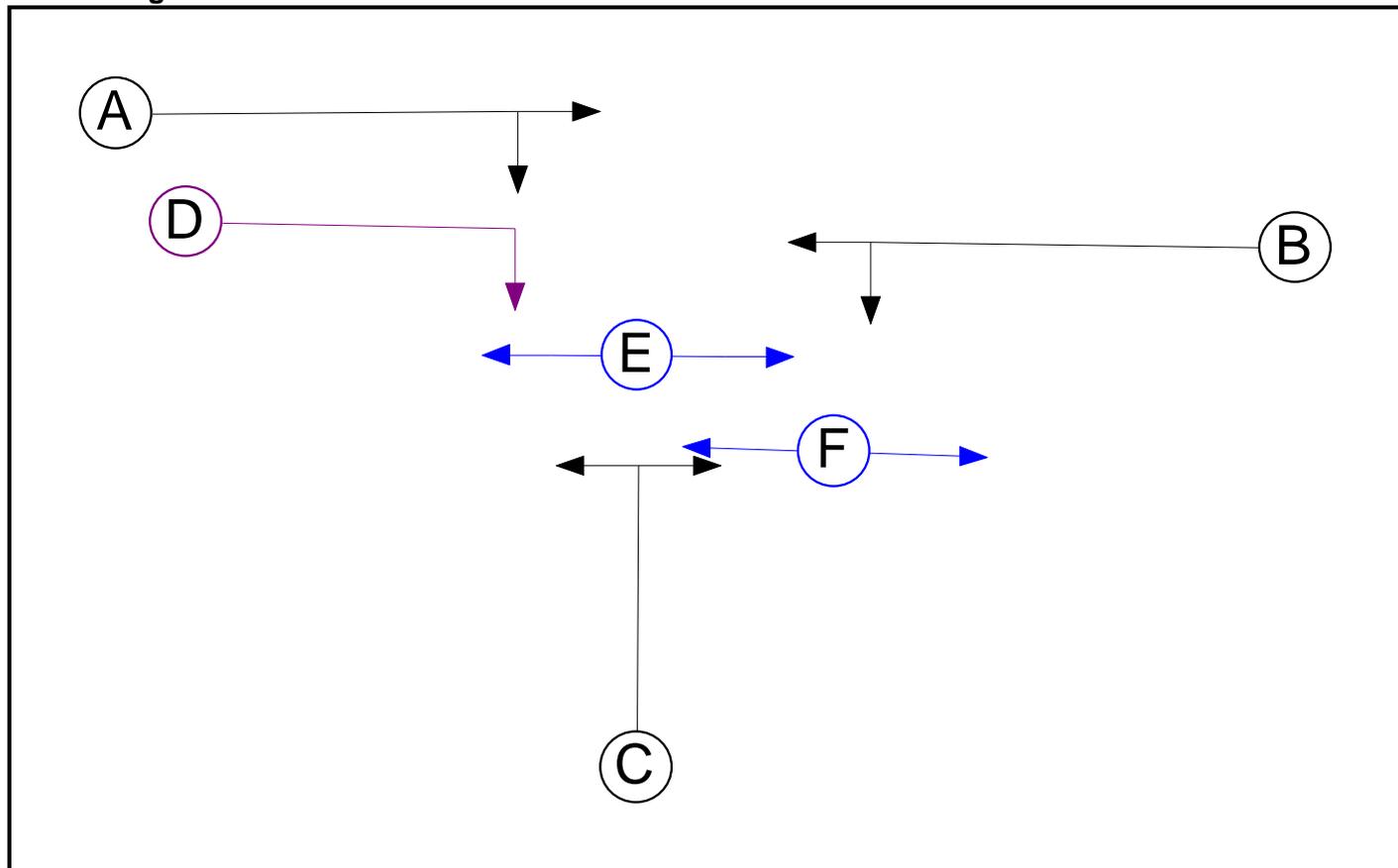
Full Input Data And Results

Prohibited Stage Change

Stage Stream: 1

		To Stage		
		1	2	3
From Stage	1		8	9
	2	5		7
	3	6	6	

C4 Phase Diagram



Phase Input Data

Phase Name	Phase Type	Stage Stream	Assoc. Phase	Street Min	Cont Min
A	Traffic	1		7	7
B	Traffic	1		7	7
C	Traffic	1		7	7
D	Ind. Arrow	1	A	4	4
E	Pedestrian	1		5	5
F	Pedestrian	1		5	5

Full Input Data And Results

Phase Intergrens Matrix

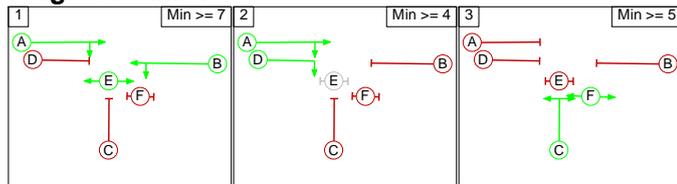
		Starting Phase					
		A	B	C	D	E	F
Terminating Phase	A	-	-	5	-	-	8
	B	-	-	5	5	-	7
	C	5	5	-	5	5	-
	D	-	5	5	-	-	8
	E	-	-	6	-	-	-
	F	6	6	-	6	-	-

Phases in Stage

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

Stage Diagram

Stage Stream: 1



Phase Delays

Stage Stream: 1

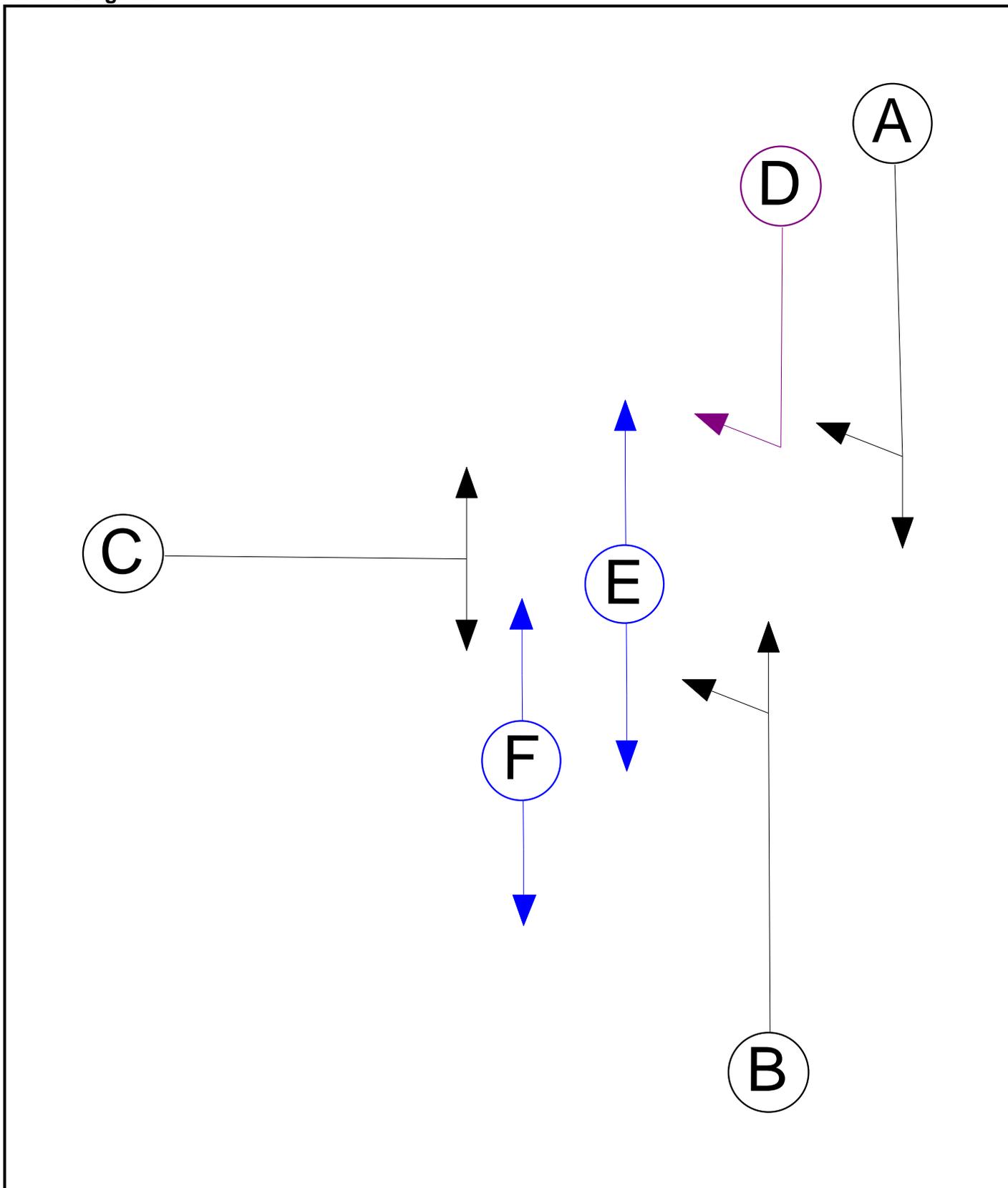
Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

Stage Stream: 1

		To Stage		
		1	2	3
From Stage	1	-	5	8
	2	5	-	8
	3	6	6	-

C5
Phase Diagram



Full Input Data And Results

Phase Input Data

Phase Name	Phase Type	Stage Stream	Assoc. Phase	Street Min	Cont Min
A	Traffic	1		7	7
B	Traffic	1		7	7
C	Traffic	1		7	7
D	Ind. Arrow	1	A	4	4
E	Pedestrian	1		5	5
F	Pedestrian	1		5	5

Phase Intergreens Matrix

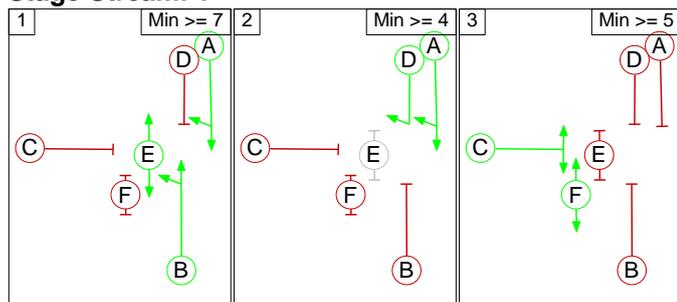
		Starting Phase					
		A	B	C	D	E	F
Terminating Phase	A	-	-	5	-	-	8
	B	-	-	5	5	-	7
	C	5	5	-	5	5	-
	D	-	5	5	-	-	8
	E	-	-	6	-	-	-
	F	6	6	-	6	-	-

Phases in Stage

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

Stage Diagram

Stage Stream: 1



Phase Delays

Stage Stream: 1

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

Full Input Data And Results

Prohibited Stage Change
Stage Stream: 1

		To Stage		
		1	2	3
From Stage	1	1	5	8
	2	5	8	
	3	6	6	

Full Input Data And Results

Give-Way Lane Input Data

Junction: J1: B3073 / A347 Parley Cross										
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
J1:4/2 (A347 North Appr)	J1:7/1 (Right)	1440	J1:2/1	1.09	J1:2/1	2.00	-	0.50	2	2.00
			J1:2/2	1.09	J1:2/2					

Junction: J2: B3073 Auxiliary Junction 2										
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
J2:2/2 (B3073 West Appr)	J7:3/1 (Right)	1400	J2:4/1	1.10	J2:4/1	2.00	-	0.50	2	2.00
			J2:4/2	1.10	J2:4/2					

Junction: J3: A347 Auxiliary Junction 3										
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
J3:1/2 (A347 South Appr)	J7:4/1 (Right)	1400	J3:3/1	1.10	J3:3/1	2.00	-	0.50	2	2.00

Junction: J4: B3172 Auxiliary Junction 4										
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
J4:1/2 (B3073 West Approach)	J4:5/1 (Right)	1440	J4:2/1	1.09	J4:2/1	2.00	-	0.50	2	2.00

Full Input Data And Results

Junction: J5: A347 Auxiliary Junction 5										
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
J5:1/2 (A347 North Appr)	J5:5/1 (Right)	1440	J5:2/2	1.09	J5:2/2	2.00	-	0.50	2	2.00

Junction: J6: Banner Homes

There are no Opposed Lanes in this Junction

Junction: J7: Wyatt Homes

There are no Opposed Lanes in this Junction

Full Input Data And Results

Lane Input Data

Junction: J1: B3073 / A347 Parley Cross												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
J1:1/1 (B3073 East Appr)	U	A	2	3	20.0	Geom	-	3.00	0.00	Y	Arm J1:7 Ahead	Inf
J1:1/2 (B3073 East Appr)	U	A	2	3	60.0	Geom	-	3.00	0.00	N	Arm J1:7 Ahead	Inf
J1:1/3 (B3073 East Appr)	U	B	2	3	17.0	Geom	-	3.00	0.00	N	Arm J1:8 Right	19.70
J1:2/1 (A347 South Appr)	U	C	2	3	15.0	Geom	-	3.00	0.00	Y	Arm J1:8 Ahead	Inf
J1:2/2 (A347 South Appr)	U	C	2	3	16.0	Geom	-	3.00	0.00	N	Arm J1:8 Ahead	Inf
J1:3/1 (B3073 West Appr)	U	D	2	3	60.0	Geom	-	3.00	0.00	Y	Arm J1:5 Ahead Arm J1:8 Left	Inf 15.10
J1:3/2 (B3073 West Appr)	U	D	2	3	15.0	Geom	-	3.00	0.00	N	Arm J1:5 Ahead	Inf
J1:4/1 (A347 North Appr)	U	E	2	3	60.0	Geom	-	3.00	0.00	Y	Arm J1:5 Left Arm J1:6 Ahead	11.20 Inf
J1:4/2 (A347 North Appr)	O	E	2	3	8.0	Geom	-	3.00	0.00	N	Arm J1:6 Ahead Arm J1:7 Right	Inf 18.10
J1:5/1 (B3073 East Exit)	U		2	3	8.0	Geom	-	3.00	0.00	Y	Arm J2:2 Ahead	Inf
J1:5/2 (B3073 East Exit)	U		2	3	8.0	Geom	-	3.00	0.00	Y	Arm J2:2 Ahead	Inf
J1:6/1 (A347 South Exit)	U		2	3	8.0	Geom	-	3.00	0.00	Y	Arm J3:3 Ahead	Inf
J1:6/2 (A347 South Exit)	U		2	3	8.0	Geom	-	3.00	0.00	Y	Arm J3:3 Ahead	Inf
J1:7/1 (B3073 West Exit)	U		2	3	60.0	Geom	-	3.00	0.00	Y	Arm J4:2 Ahead	Inf
J1:7/2 (B3073 West Exit)	U		2	3	60.0	Geom	-	3.00	0.00	Y	Arm J4:2 Ahead	Inf

Full Input Data And Results

J1:8/1 (A347 North Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
J1:8/2 (A347 North Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

Junction: J2: B3073 Auxiliary Junction 2												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
J2:1/1 (Link Road South Appr)	U	C	2	3	5.0	Geom	-	3.00	0.00	Y	Arm J1:1 Left	12.50
J2:1/2 (Link Road South Appr)	U	C	2	3	80.0	Geom	-	3.00	0.00	Y	Arm J2:3 Right	17.10
J2:2/1 (B3073 West Appr)	U	A	2	3	35.0	Geom	-	3.00	0.00	Y	Arm J2:3 Ahead	Inf
J2:2/2 (B3073 West Appr)	O	A D	2	3	8.0	Geom	-	3.00	0.00	Y	Arm J7:3 Right	15.30
J2:3/1 (B3073 East Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
J2:4/1 (B3073 East Appr)	U	B G	2	3	15.0	Geom	-	3.00	0.00	Y	Arm J7:3 Left	11.70
J2:4/2 (B3073 East Appr)	U	B	2	3	60.0	Geom	-	3.00	0.00	Y	Arm J1:1 Ahead	Inf
J2:4/3 (B3073 East Appr)	U		2	3	60.0	Inf	-	-	-	-	-	-

Full Input Data And Results

Junction: J3: A347 Auxiliary Junction 3												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
J3:1/1 (A347 South Appr)	U	A	2	3	60.0	Geom	-	3.00	0.00	Y	Arm J1:2 Ahead	Inf
J3:1/2 (A347 South Appr)	O	A E	2	3	10.0	Geom	-	3.00	0.00	Y	Arm J7:4 Right	12.19
J3:2/1 (Link Rd East Appr)	U	D	2	3	60.0	Geom	-	3.00	0.00	Y	Arm J5:1 Left	14.90
J3:2/2 (Link Rd East Appr)	U	C	2	3	15.0	Geom	-	3.00	0.00	Y	Arm J1:2 Right	18.20
J3:3/1 (A347 North Appr)	U	B	2	3	35.0	Geom	-	3.00	0.00	Y	Arm J7:4 Left Arm J5:1 Ahead	8.20 Inf

Junction: J4: B3172 Auxiliary Junction 4												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
J4:1/1 (B3073 West Approach)	U	A	2	3	60.0	Geom	-	3.00	0.00	Y	Arm J1:3 Ahead	Inf
J4:1/2 (B3073 West Approach)	O	A D	2	3	5.0	Geom	-	3.00	0.00	Y	Arm J4:5 Right	15.30
J4:2/1 (B3073 East Approach)	U	B	2	3	60.0	Geom	-	3.00	0.00	Y	Arm J4:4 Ahead	Inf
J4:3/1 (Western Link Road South Appr)	U	C	2	3	60.0	Geom	-	3.00	0.00	Y	Arm J1:3 Right Arm J4:4 Left	17.10 12.50
J4:4/1 (B3073 West Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
J4:5/1 (Western Link Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

Full Input Data And Results

Junction: J5: A347 Auxiliary Junction 5												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
J5:1/1 (A347 North Appr)	U	A	2	3	60.0	Geom	-	3.00	0.00	Y	Arm J5:3 Ahead	Inf
J5:1/2 (A347 North Appr)	O	A D	2	3	5.0	Geom	-	3.00	0.00	Y	Arm J5:5 Right	14.30
J5:2/1 (A347 South Appr)	U	B	2	3	5.0	Geom	-	3.00	0.00	Y	Arm J5:5 Left	12.50
J5:2/2 (A347 South Appr)	U	B	2	3	60.0	Geom	-	3.00	0.00	Y	Arm J3:1 Ahead	Inf
J5:3/1 (A347 South Appr Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
J5:4/1 (Link Road West)	U	C	2	3	60.0	Geom	-	3.00	0.00	Y	Arm J3:1 Left	11.90
											Arm J5:3 Right	23.20
J5:5/1 (Link Road West Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

Junction: J6: Banner Homes												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
J6:1/1 (Resi Access)	U		2	3	60.0	Inf	-	-	-	-	-	-
J6:2/1 (Resi Access Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

Junction: J7: Wyatt Homes												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
J7:1/1 (Resi Access OUT)	U		2	3	60.0	Inf	-	-	-	-	-	-
J7:2/1 (Resi Access IN)	U		2	3	60.0	Inf	-	-	-	-	-	-
J7:3/1 (Link Road South Exit)	U		2	3	68.0	Inf	-	-	-	-	-	-
J7:4/1 (Link Road East Exit)	U		2	3	12.0	Inf	-	-	-	-	-	-

Full Input Data And Results

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2020 AM peak Base + Dev'	08:00	09:00	01:00	
2: '2020 PM peak Base + Dev'	17:00	18:00	01:00	

Scenario 1: 'AM peak' (FG1: '2020 AM peak Base + Dev', Plan 1: 'Staging Plan No. 1')

Traffic Flows, Desired

Desired Flow :

	Destination							
		A	B	C	D	E	F	Tot.
Origin	A	0	280	387	240	53	9	969
	B	435	0	210	548	59	12	1264
	C	604	284	0	15	41	9	953
	D	321	329	12	0	37	7	706
	E	85	70	46	56	0	0	257
	F	31	23	17	21	0	0	92
	Tot.	1476	986	672	880	190	37	4241

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: AM peak
Junction: J1: B3073 / A347 Parley Cross	
J1:1/1 (short)	200
J1:1/2 (with short)	414(In) 214(Out)
J1:1/3	240
J1:2/1 (with short)	604(In) 291(Out)
J1:2/2 (short)	313
J1:3/1 (with short)	827(In) 399(Out)
J1:3/2 (short)	428
J1:4/1 (with short)	706(In) 479(Out)
J1:4/2 (short)	227
J1:5/1	684
J1:5/2	428
J1:6/1	158
J1:6/2	208
J1:7/1	219
J1:7/2	214
J1:8/1	567
J1:8/2	313
Junction: J2: B3073 Auxiliary Junction 2	
J2:1/1 (short)	18
J2:1/2 (with short)	538(In) 520(Out)
J2:2/1 (with short)	1112(In) 956(Out)
J2:2/2 (short)	156
J2:3/1	1476
J2:4/1 (short)	333
J2:4/2 (with short)	729(In) 396(Out)
J2:4/3	240
Junction: J3: A347 Auxiliary Junction 3	
J3:1/1 (with short)	1042(In) 548(Out)
J3:1/2 (short)	494
J3:2/1 (with short)	549(In) 493(Out)

Full Input Data And Results

J3:2/2 (short)	56
J3:3/1	366
Junction: J4: B3172 Auxiliary Junction 4	
J4:1/1 (with short)	953(In) 775(Out)
J4:1/2 (short)	178
J4:2/1	433
J4:3/1	307
J4:4/1	672
J4:5/1	194
Junction: J5: A347 Auxiliary Junction 5	
J5:1/1 (with short)	822(In) 794(Out)
J5:1/2 (short)	28
J5:2/1 (short)	222
J5:2/2 (with short)	1264(In) 1042(Out)
J5:3/1	986
J5:4/1	192
J5:5/1	250
Junction: J6: Banner Homes	
J6:1/1	92
J6:2/1	37
Junction: J7: Wyatt Homes	
J7:1/1	257
J7:2/1	190
J7:3/1	489
J7:4/1	531

Full Input Data And Results

Lane Saturation Flows

Junction: J1: B3073 / A347 Parley Cross								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (B3073 East Appr)	3.00	0.00	Y	Arm J1:7 Ahead	Inf	100.0 %	1915	1915
J1:1/2 (B3073 East Appr)	3.00	0.00	N	Arm J1:7 Ahead	Inf	100.0 %	2055	2055
J1:1/3 (B3073 East Appr)	3.00	0.00	N	Arm J1:8 Right	19.70	100.0 %	1910	1910
J1:2/1 (A347 South Appr)	3.00	0.00	Y	Arm J1:8 Ahead	Inf	100.0 %	1915	1915
J1:2/2 (A347 South Appr)	3.00	0.00	N	Arm J1:8 Ahead	Inf	100.0 %	2055	2055
J1:3/1 (B3073 West Appr)	3.00	0.00	Y	Arm J1:5 Ahead	Inf	91.0 %	1898	1898
				Arm J1:8 Left	15.10	9.0 %		
J1:3/2 (B3073 West Appr)	3.00	0.00	N	Arm J1:5 Ahead	Inf	100.0 %	2055	2055
J1:4/1 (A347 North Appr)	3.00	0.00	Y	Arm J1:5 Left	11.20	67.0 %	1757	1757
				Arm J1:6 Ahead	Inf	33.0 %		
J1:4/2 (A347 North Appr)	3.00	0.00	N	Arm J1:6 Ahead	Inf	91.6 %	2041	2041
				Arm J1:7 Right	18.10	8.4 %		
J1:5/1 (B3073 East Exit)	3.00	0.00	Y	Arm J2:2 Ahead	Inf	100.0 %	1915	1915
J1:5/2 (B3073 East Exit)	3.00	0.00	Y	Arm J2:2 Ahead	Inf	100.0 %	1915	1915
J1:6/1 (A347 South Exit)	3.00	0.00	Y	Arm J3:3 Ahead	Inf	100.0 %	1915	1915
J1:6/2 (A347 South Exit)	3.00	0.00	Y	Arm J3:3 Ahead	Inf	100.0 %	1915	1915
J1:7/1 (B3073 West Exit)	3.00	0.00	Y	Arm J4:2 Ahead	Inf	100.0 %	1915	1915
J1:7/2 (B3073 West Exit)	3.00	0.00	Y	Arm J4:2 Ahead	Inf	100.0 %	1915	1915
J1:8/1 (A347 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/2 (A347 North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J2: B3073 Auxiliary Junction 2								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J2:1/1 (Link Road South Appr)	3.00	0.00	Y	Arm J1:1 Left	12.50	100.0 %	1710	1710
J2:1/2 (Link Road South Appr)	3.00	0.00	Y	Arm J2:3 Right	17.10	100.0 %	1761	1761
J2:2/1 (B3073 West Appr)	3.00	0.00	Y	Arm J2:3 Ahead	Inf	100.0 %	1915	1915
J2:2/2 (B3073 West Appr)	3.00	0.00	Y	Arm J7:3 Right	15.30	100.0 %	1744	1744
J2:3/1 (B3073 East Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:4/1 (B3073 East Appr)	3.00	0.00	Y	Arm J7:3 Left	11.70	100.0 %	1697	1697
J2:4/2 (B3073 East Appr)	3.00	0.00	Y	Arm J1:1 Ahead	Inf	100.0 %	1915	1915
J2:4/3 (B3073 East Appr Lane 3)	Infinite Saturation Flow						Inf	Inf

Junction: J3: A347 Auxiliary Junction 3								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J3:1/1 (A347 South Appr)	3.00	0.00	Y	Arm J1:2 Ahead	Inf	100.0 %	1915	1915
J3:1/2 (A347 South Appr)	3.00	0.00	Y	Arm J7:4 Right	12.19	100.0 %	1705	1705
J3:2/1 (Link Rd East Appr)	3.00	0.00	Y	Arm J5:1 Left	14.90	100.0 %	1740	1740
J3:2/2 (Link Rd East Appr)	3.00	0.00	Y	Arm J1:2 Right	18.20	100.0 %	1769	1769
J3:3/1 (A347 North Appr)	3.00	0.00	Y	Arm J7:4 Left	8.20	10.1 %	1880	1880
				Arm J5:1 Ahead	Inf	89.9 %		

Full Input Data And Results

Junction: J4: B3172 Auxiliary Junction 4								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J4:1/1 (B3073 West Approach)	3.00	0.00	Y	Arm J1:3 Ahead	Inf	100.0 %	1915	1915
J4:1/2 (B3073 West Approach)	3.00	0.00	Y	Arm J4:5 Right	15.30	100.0 %	1744	1744
J4:2/1 (B3073 East Approach)	3.00	0.00	Y	Arm J4:4 Ahead	Inf	96.3 %	1906	1906
				Arm J4:5 Left	11.70	3.7 %		
J4:3/1 (Western Link Road South Appr)	3.00	0.00	Y	Arm J1:3 Right	17.10	16.9 %	1718	1718
				Arm J4:4 Left	12.50	83.1 %		
J4:4/1 (B3073 West Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J4:5/1 (Western Link Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Junction: J5: A347 Auxiliary Junction 5								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J5:1/1 (A347 North Appr)	3.00	0.00	Y	Arm J5:3 Ahead	Inf	100.0 %	1915	1915
J5:1/2 (A347 North Appr)	3.00	0.00	Y	Arm J5:5 Right	14.30	100.0 %	1733	1733
J5:2/1 (A347 South Appr)	3.00	0.00	Y	Arm J5:5 Left	12.50	100.0 %	1710	1710
J5:2/2 (A347 South Appr)	3.00	0.00	Y	Arm J3:1 Ahead	Inf	100.0 %	1915	1915
J5:3/1 (A347 South Appr Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J5:4/1 (Link Road West)	3.00	0.00	Y	Arm J3:1 Left	11.90	0.0 %	1799	1799
J5:5/1 (Link Road West Exit Lane 1)				Arm J5:3 Right	23.20	100.0 %		
J5:5/1 (Link Road West Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Junction: J6: Banner Homes								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J6:1/1 (Resi Access Lane 1)	Infinite Saturation Flow						Inf	Inf
J6:2/1 (Resi Access Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J7: Wyatt Homes								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J7:1/1 (Resi Access OUT Lane 1)							Inf	Inf
J7:2/1 (Resi Access IN Lane 1)							Inf	Inf
J7:3/1 (Link Road South Exit Lane 1)							Inf	Inf
J7:4/1 (Link Road East Exit Lane 1)							Inf	Inf

Scenario 2: 'PM peak' (FG2: '2020 PM peak Base + Dev', Plan 1: 'Staging Plan No. 1')

Traffic Flows, Desired

Desired Flow :

	Destination							
	A	B	C	D	E	F	Tot.	
Origin	A	0	497	553	316	110	22	1498
B	204	0	252	502	123	29	1110	
C	386	402	0	24	86	21	919	
D	153	516	19	0	76	17	781	
E	105	97	65	70	0	0	337	
F	17	13	9	12	0	0	51	
Tot.	865	1525	898	924	395	89	4696	

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: PM peak
Junction: J1: B3073 / A347 Parley Cross	
J1:1/1 (short)	314
J1:1/2 (with short)	640(In) 326(Out)
J1:1/3	316
J1:2/1 (with short)	574(In) 277(Out)
J1:2/2 (short)	297
J1:3/1 (with short)	539(In) 263(Out)
J1:3/2 (short)	276
J1:4/1 (with short)	781(In) 526(Out)
J1:4/2 (short)	255
J1:5/1	382
J1:5/2	276
J1:6/1	373
J1:6/2	219
J1:7/1	350
J1:7/2	326
J1:8/1	627
J1:8/2	297
Junction: J2: B3073 Auxiliary Junction 2	
J2:1/1 (short)	65
J2:1/2 (with short)	374(In) 309(Out)
J2:2/1 (with short)	658(In) 556(Out)
J2:2/2 (short)	102
J2:3/1	865
J2:4/1 (short)	607
J2:4/2 (with short)	1182(In) 575(Out)
J2:4/3	316
Junction: J3: A347 Auxiliary Junction 3	
J3:1/1 (with short)	831(In) 504(Out)
J3:1/2 (short)	327
J3:2/1 (with short)	680(In) 610(Out)

Full Input Data And Results

J3:2/2 (short)	70
J3:3/1	592
Junction: J4: B3172 Auxiliary Junction 4	
J4:1/1 (with short)	919(In) 512(Out)
J4:1/2 (short)	407
J4:2/1	676
J4:3/1	288
J4:4/1	898
J4:5/1	446
Junction: J5: A347 Auxiliary Junction 5	
J5:1/1 (with short)	1126(In) 1126(Out)
J5:1/2 (short)	0
J5:2/1 (short)	281
J5:2/2 (with short)	1110(In) 829(Out)
J5:3/1	1525
J5:4/1	401
J5:5/1	281
Junction: J6: Banner Homes	
J6:1/1	51
J6:2/1	89
Junction: J7: Wyatt Homes	
J7:1/1	337
J7:2/1	395
J7:3/1	709
J7:4/1	403

Full Input Data And Results

Lane Saturation Flows

Junction: J1: B3073 / A347 Parley Cross								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (B3073 East Appr)	3.00	0.00	Y	Arm J1:7 Ahead	Inf	100.0 %	1915	1915
J1:1/2 (B3073 East Appr)	3.00	0.00	N	Arm J1:7 Ahead	Inf	100.0 %	2055	2055
J1:1/3 (B3073 East Appr)	3.00	0.00	N	Arm J1:8 Right	19.70	100.0 %	1910	1910
J1:2/1 (A347 South Appr)	3.00	0.00	Y	Arm J1:8 Ahead	Inf	100.0 %	1915	1915
J1:2/2 (A347 South Appr)	3.00	0.00	N	Arm J1:8 Ahead	Inf	100.0 %	2055	2055
J1:3/1 (B3073 West Appr)	3.00	0.00	Y	Arm J1:5 Ahead	Inf	87.1 %	1891	1891
				Arm J1:8 Left	15.10	12.9 %		
J1:3/2 (B3073 West Appr)	3.00	0.00	N	Arm J1:5 Ahead	Inf	100.0 %	2055	2055
J1:4/1 (A347 North Appr)	3.00	0.00	Y	Arm J1:5 Left	11.20	29.1 %	1843	1843
				Arm J1:6 Ahead	Inf	70.9 %		
J1:4/2 (A347 North Appr)	3.00	0.00	N	Arm J1:6 Ahead	Inf	85.9 %	2031	2031
				Arm J1:7 Right	18.10	14.1 %		
J1:5/1 (B3073 East Exit)	3.00	0.00	Y	Arm J2:2 Ahead	Inf	100.0 %	1915	1915
J1:5/2 (B3073 East Exit)	3.00	0.00	Y	Arm J2:2 Ahead	Inf	100.0 %	1915	1915
J1:6/1 (A347 South Exit)	3.00	0.00	Y	Arm J3:3 Ahead	Inf	100.0 %	1915	1915
J1:6/2 (A347 South Exit)	3.00	0.00	Y	Arm J3:3 Ahead	Inf	100.0 %	1915	1915
J1:7/1 (B3073 West Exit)	3.00	0.00	Y	Arm J4:2 Ahead	Inf	100.0 %	1915	1915
J1:7/2 (B3073 West Exit)	3.00	0.00	Y	Arm J4:2 Ahead	Inf	100.0 %	1915	1915
J1:8/1 (A347 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/2 (A347 North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J2: B3073 Auxiliary Junction 2								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J2:1/1 (Link Road South Appr)	3.00	0.00	Y	Arm J1:1 Left	12.50	100.0 %	1710	1710
J2:1/2 (Link Road South Appr)	3.00	0.00	Y	Arm J2:3 Right	17.10	100.0 %	1761	1761
J2:2/1 (B3073 West Appr)	3.00	0.00	Y	Arm J2:3 Ahead	Inf	100.0 %	1915	1915
J2:2/2 (B3073 West Appr)	3.00	0.00	Y	Arm J7:3 Right	15.30	100.0 %	1744	1744
J2:3/1 (B3073 East Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:4/1 (B3073 East Appr)	3.00	0.00	Y	Arm J7:3 Left	11.70	100.0 %	1697	1697
J2:4/2 (B3073 East Appr)	3.00	0.00	Y	Arm J1:1 Ahead	Inf	100.0 %	1915	1915
J2:4/3 (B3073 East Appr Lane 3)	Infinite Saturation Flow						Inf	Inf

Junction: J3: A347 Auxiliary Junction 3								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J3:1/1 (A347 South Appr)	3.00	0.00	Y	Arm J1:2 Ahead	Inf	100.0 %	1915	1915
J3:1/2 (A347 South Appr)	3.00	0.00	Y	Arm J7:4 Right	12.19	100.0 %	1705	1705
J3:2/1 (Link Rd East Appr)	3.00	0.00	Y	Arm J5:1 Left	14.90	100.0 %	1740	1740
J3:2/2 (Link Rd East Appr)	3.00	0.00	Y	Arm J1:2 Right	18.20	100.0 %	1769	1769
J3:3/1 (A347 North Appr)	3.00	0.00	Y	Arm J7:4 Left	8.20	12.8 %	1871	1871
				Arm J5:1 Ahead	Inf	87.2 %		

Full Input Data And Results

Junction: J4: B3172 Auxiliary Junction 4								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J4:1/1 (B3073 West Approach)	3.00	0.00	Y	Arm J1:3 Ahead	Inf	100.0 %	1915	1915
J4:1/2 (B3073 West Approach)	3.00	0.00	Y	Arm J4:5 Right	15.30	100.0 %	1744	1744
J4:2/1 (B3073 East Approach)	3.00	0.00	Y	Arm J4:4 Ahead	Inf	94.2 %	1901	1901
				Arm J4:5 Left	11.70	5.8 %		
J4:3/1 (Western Link Road South Appr)	3.00	0.00	Y	Arm J1:3 Right	17.10	9.4 %	1714	1714
				Arm J4:4 Left	12.50	90.6 %		
J4:4/1 (B3073 West Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J4:5/1 (Western Link Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Junction: J5: A347 Auxiliary Junction 5								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J5:1/1 (A347 North Appr)	3.00	0.00	Y	Arm J5:3 Ahead	Inf	100.0 %	1915	1915
J5:1/2 (A347 North Appr)	3.00	0.00	Y	Arm J5:5 Right	14.30	0.0 %	1915	1915
J5:2/1 (A347 South Appr)	3.00	0.00	Y	Arm J5:5 Left	12.50	100.0 %	1710	1710
J5:2/2 (A347 South Appr)	3.00	0.00	Y	Arm J3:1 Ahead	Inf	100.0 %	1915	1915
J5:3/1 (A347 South Appr Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J5:4/1 (Link Road West)	3.00	0.00	Y	Arm J3:1 Left	11.90	0.5 %	1798	1798
J5:5/1 (Link Road West Exit Lane 1)				Arm J5:3 Right	23.20	99.5 %		
J5:5/1 (Link Road West Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Junction: J6: Banner Homes								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J6:1/1 (Resi Access Lane 1)	Infinite Saturation Flow						Inf	Inf
J6:2/1 (Resi Access Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

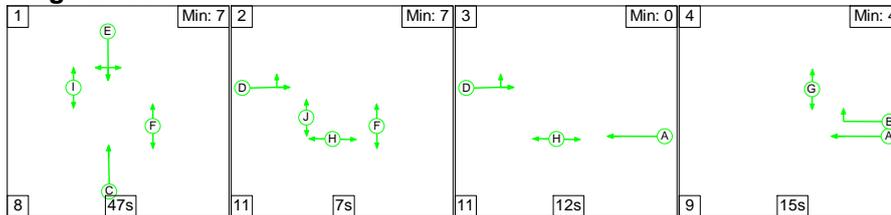
Junction: J7: Wyatt Homes								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J7:1/1 (Resi Access OUT Lane 1)				Infinite Saturation Flow			Inf	Inf
J7:2/1 (Resi Access IN Lane 1)				Infinite Saturation Flow			Inf	Inf
J7:3/1 (Link Road South Exit Lane 1)				Infinite Saturation Flow			Inf	Inf
J7:4/1 (Link Road East Exit Lane 1)				Infinite Saturation Flow			Inf	Inf

Scenario 1: 'AM peak' (FG1: '2020 AM peak Base + Dev', Plan 1: 'Staging Plan No. 1')

C1

Stage Sequence Diagram

Stage Stream: 1

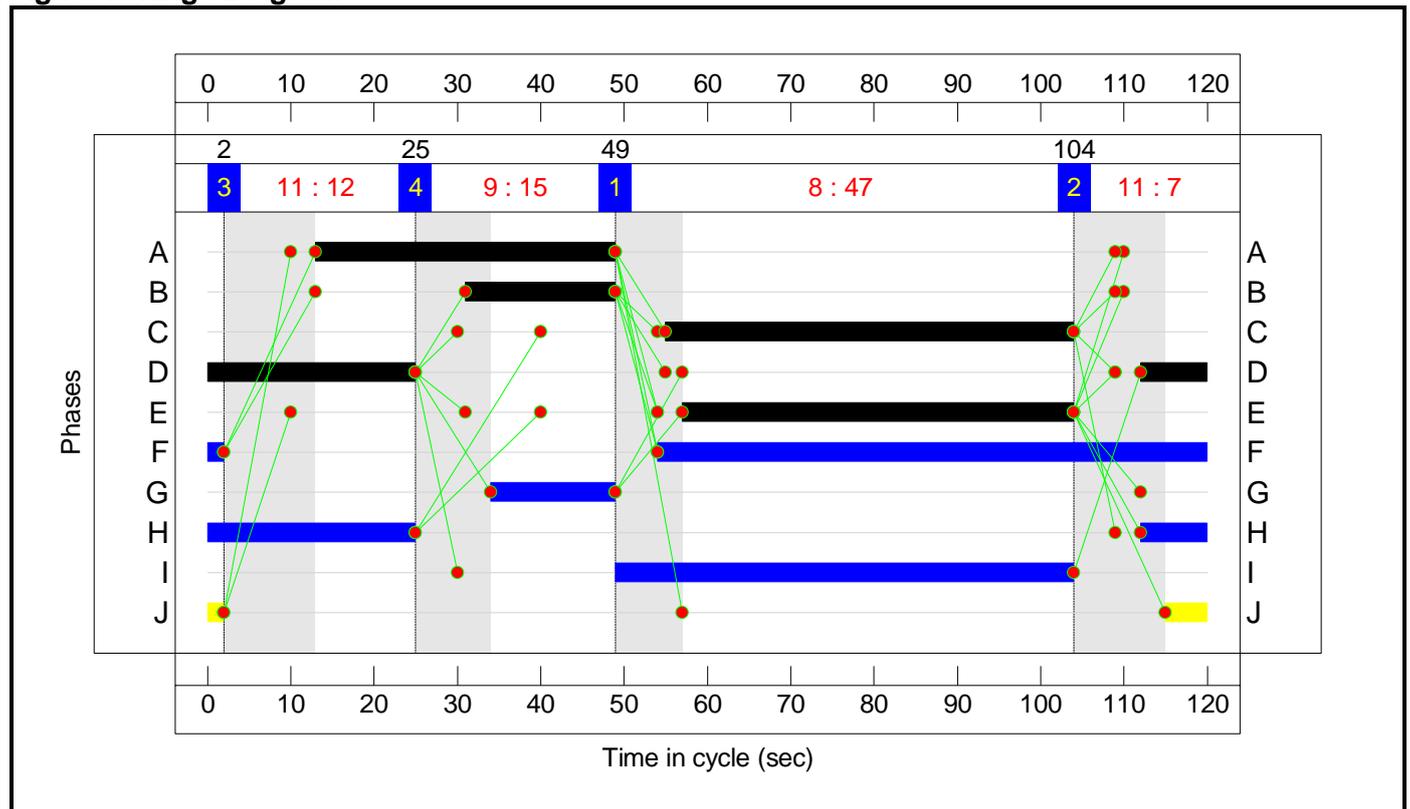


Stage Timings

Stage Stream: 1

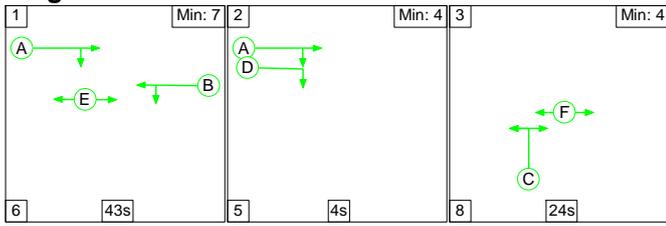
Stage	1	2	3	4
Duration	47	7	12	15
Change Point	49	104	2	25

Signal Timings Diagram



C2
Stage Sequence Diagram

Stage Stream: 1

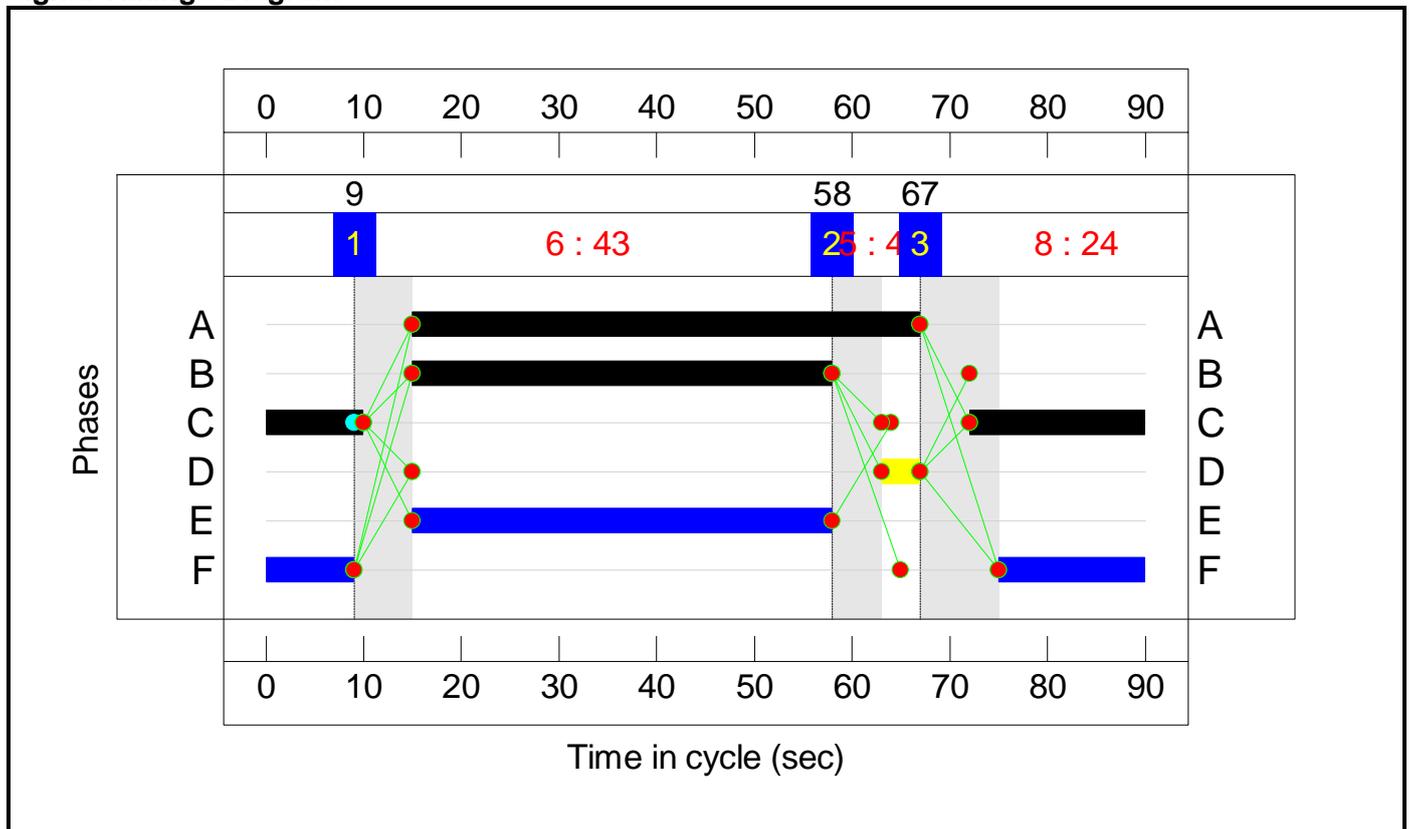


Stage Timings

Stage Stream: 1

Stage	1	2	3
Duration	43	4	24
Change Point	9	58	67

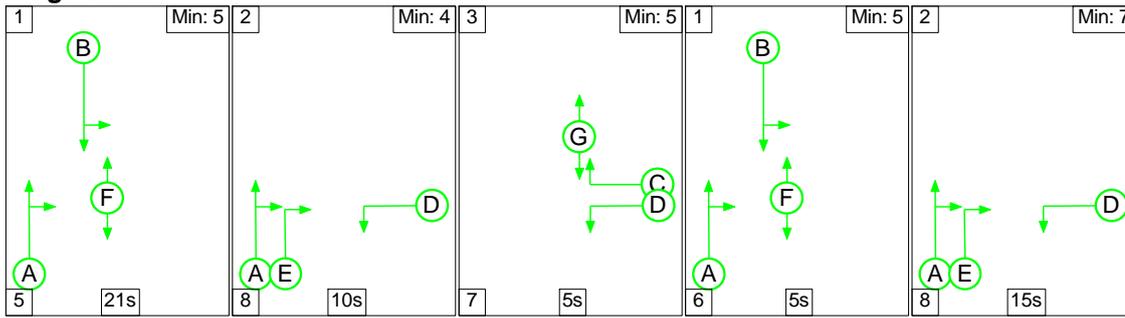
Signal Timings Diagram



C3

Stage Sequence Diagram

Stage Stream: 1

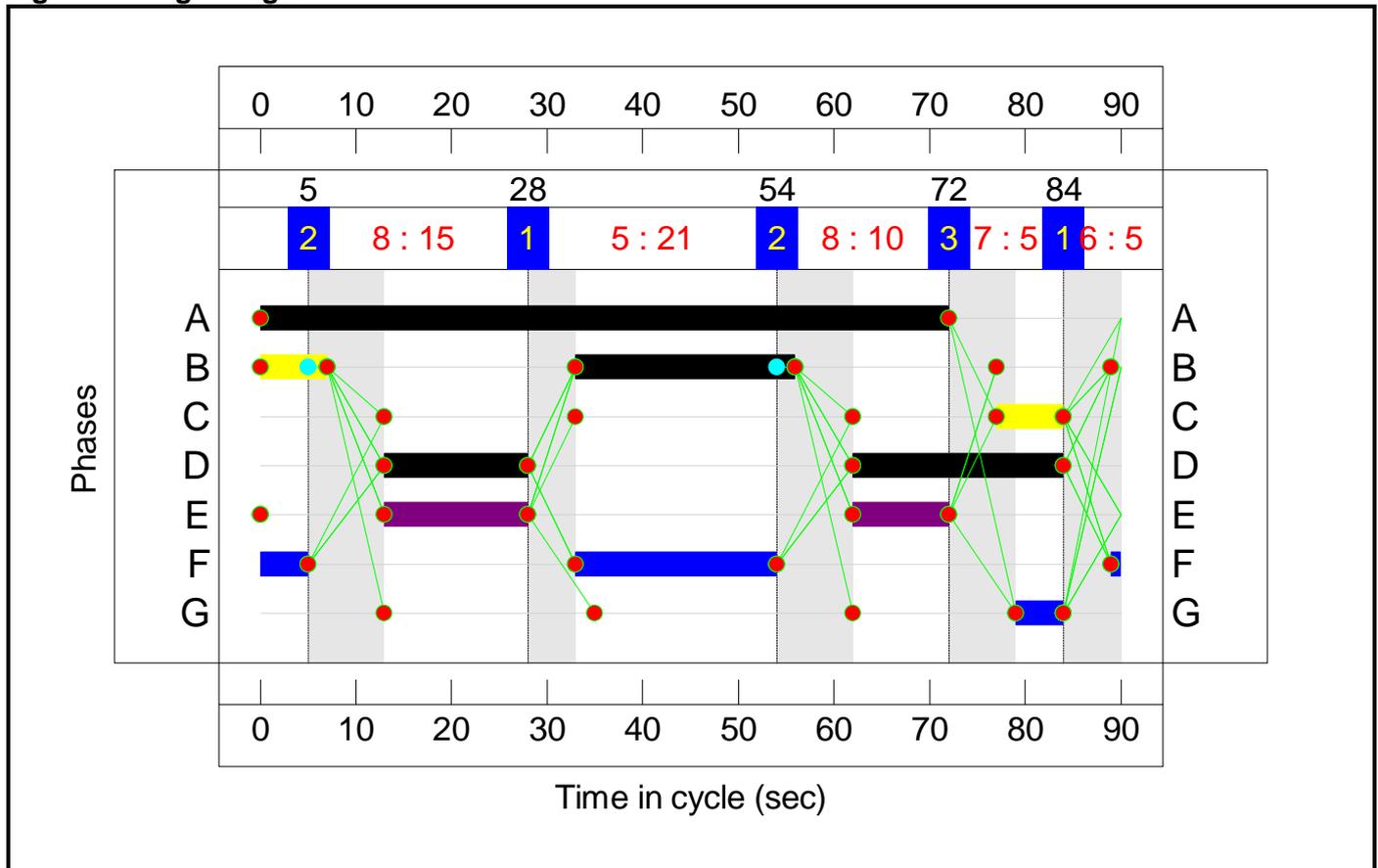


Stage Timings

Stage Stream: 1

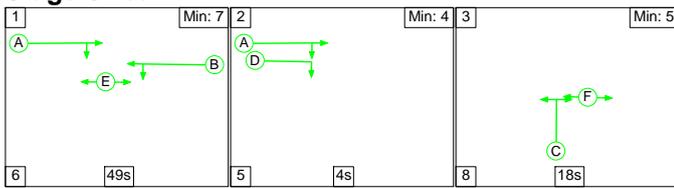
Stage	1	2	3	1	2
Duration	21	10	5	5	15
Change Point	28	54	72	84	5

Signal Timings Diagram



Full Input Data And Results

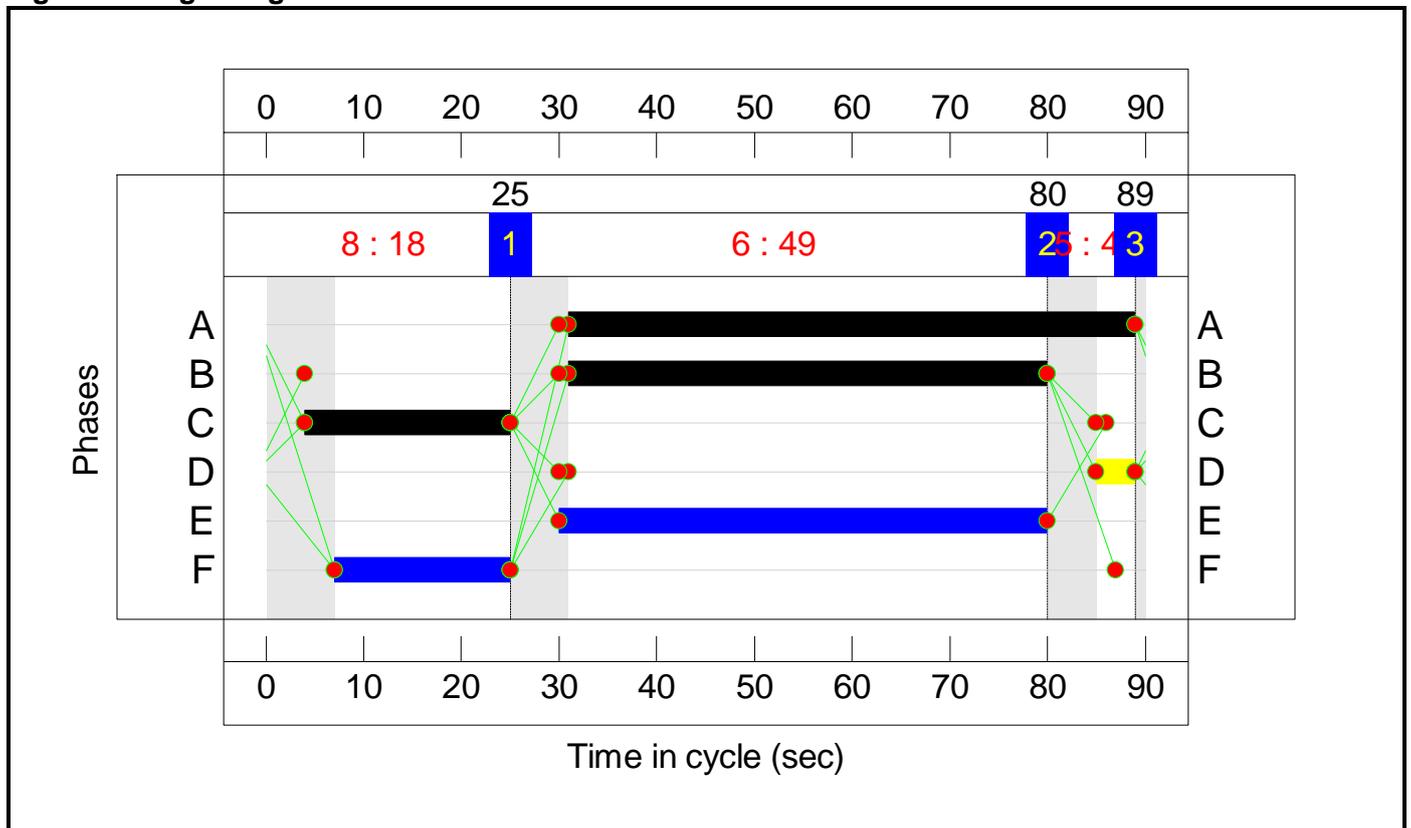
C4
Stage Sequence Diagram
Stage Stream: 1



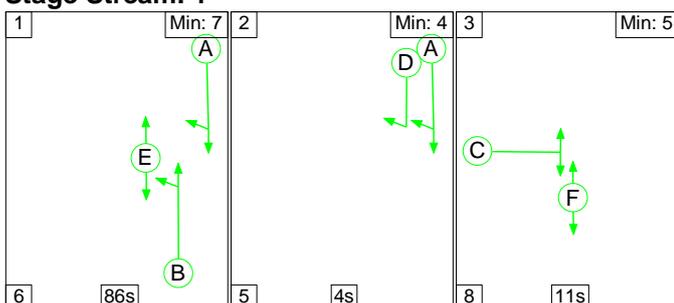
Stage Timings
Stage Stream: 1

Stage	1	2	3
Duration	49	4	18
Change Point	25	80	89

Signal Timings Diagram



C5
Stage Sequence Diagram
Stage Stream: 1

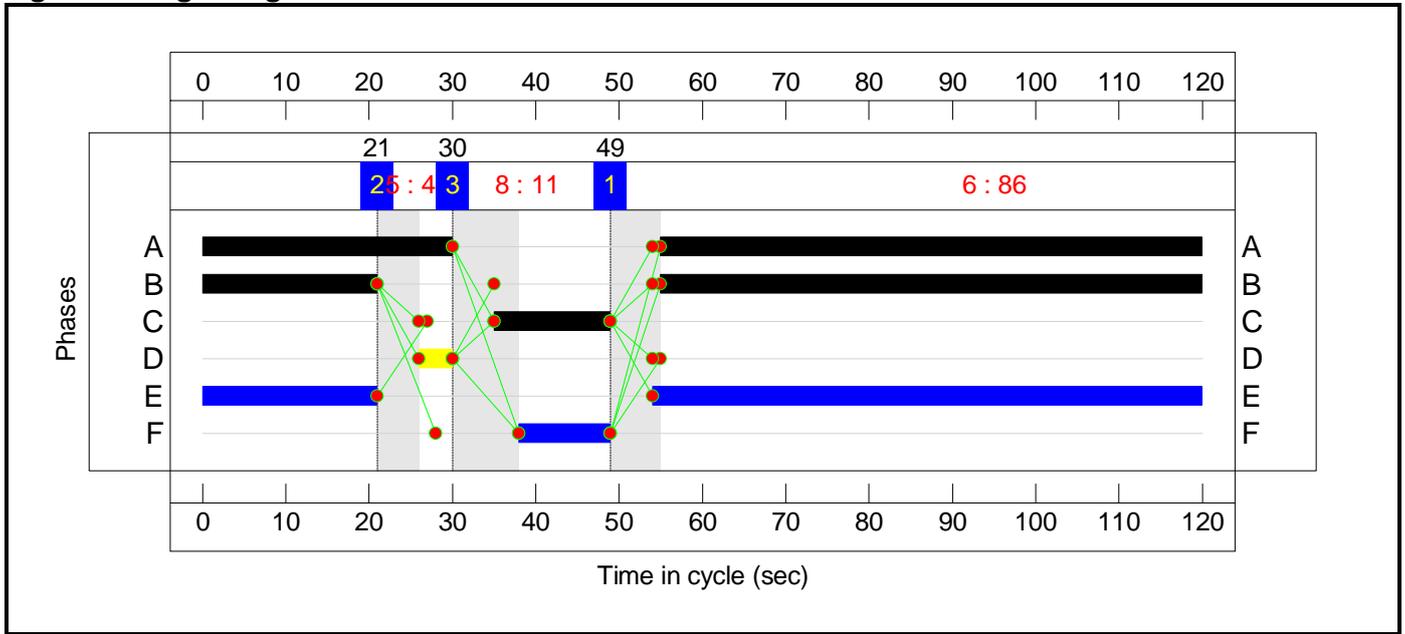


Full Input Data And Results

Stage Timings
Stage Stream: 1

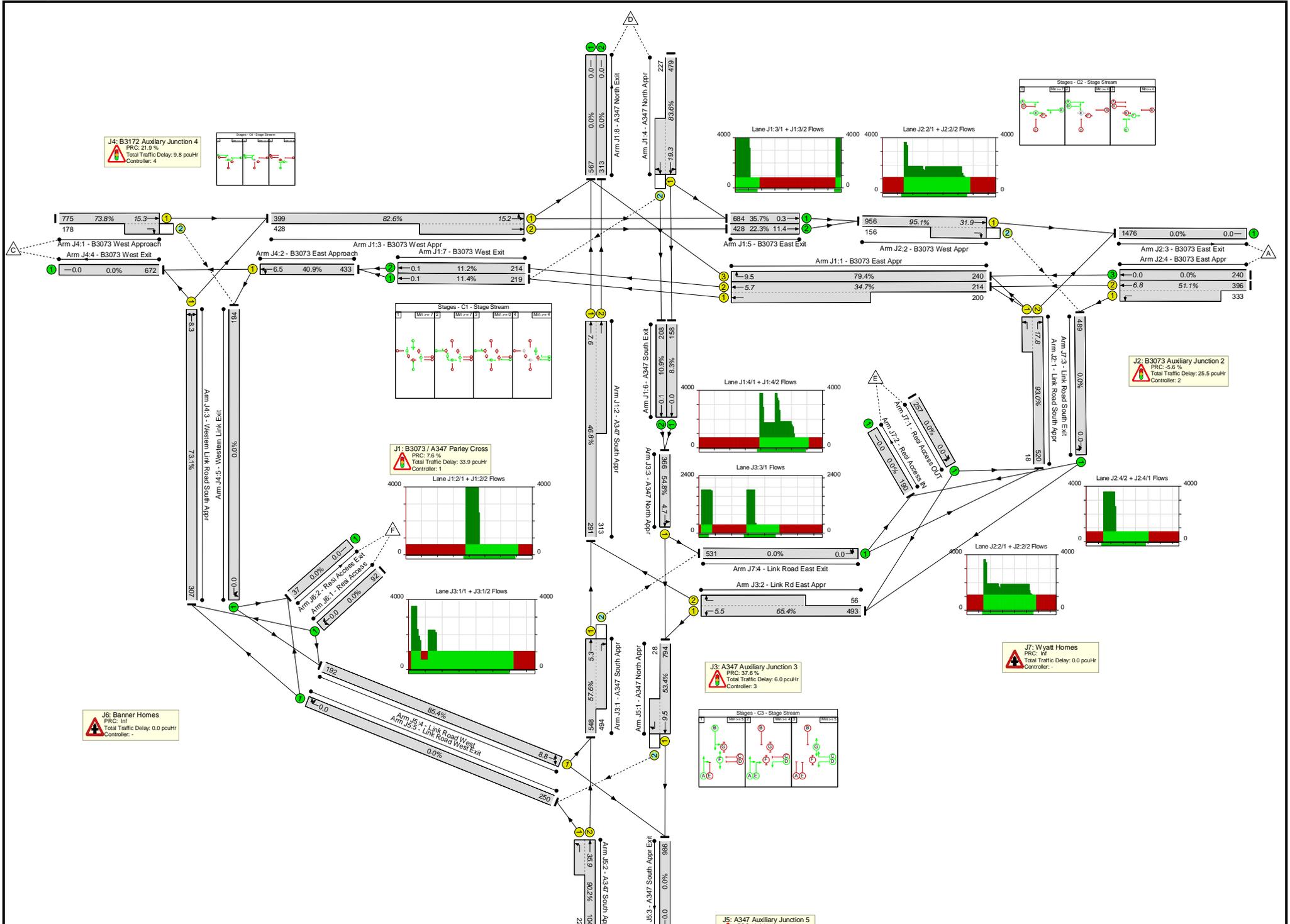
Stage	1	2	3
Duration	86	4	11
Change Point	49	21	30

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Proposed Parley Cross Junction - Option 1	-	-	N/A	-	-		-	-	-	-	-	-	95.1%
J1: B3073 / A347 Parley Cross	-	-	N/A	-	-		-	-	-	-	-	-	83.6%
1/2+1/1	B3073 East Appr Ahead	U	1:1	N/A	C1:A		1	36	-	414	2055:1915	1194	34.7%
1/3	B3073 East Appr Right	U	1:1	N/A	C1:B		1	18	-	240	1910	302	79.4%
2/1+2/2	A347 South Appr Ahead	U	1:1	N/A	C1:C		1	49	-	604	1915:2055	1290	46.8%
3/1+3/2	B3073 West Appr Ahead Left	U	1:1	N/A	C1:D		1	33	-	827	1898:2055	1001	82.6%
4/1+4/2	A347 North Appr Left Ahead Right	U+O	1:1	N/A	C1:E		1	47	-	706	1757:2041	844	83.6%
5/1	B3073 East Exit Ahead	U	N/A	N/A	-		-	-	-	684	1915	1915	35.7%
5/2	B3073 East Exit Ahead	U	N/A	N/A	-		-	-	-	428	1915	1915	22.3%
6/1	A347 South Exit Ahead	U	N/A	N/A	-		-	-	-	158	1915	1915	8.3%
6/2	A347 South Exit Ahead	U	N/A	N/A	-		-	-	-	208	1915	1915	10.9%
7/1	B3073 West Exit Ahead	U	N/A	N/A	-		-	-	-	219	1915	1915	11.4%
7/2	B3073 West Exit Ahead	U	N/A	N/A	-		-	-	-	214	1915	1915	11.2%
8/1	A347 North Exit	U	N/A	N/A	-		-	-	-	567	Inf	Inf	0.0%
8/2	A347 North Exit	U	N/A	N/A	-		-	-	-	313	Inf	Inf	0.0%
J2: B3073 Auxiliary Junction 2	-	-	N/A	-	-		-	-	-	-	-	-	95.1%
1/2+1/1	Link Road South Appr Left Right	U	2:1	N/A	C2:C		1	28	-	538	1761:1710	578	93.0%

Full Input Data And Results

2/1+2/2	B3073 West Appr Ahead Right	U+O	2:1	N/A	C2:A	C2:D	1	52	4	1112	1915:1744	1170	95.1%
3/1	B3073 East Exit	U	N/A	N/A	-		-	-	-	1476	Inf	Inf	0.0%
4/2+4/1	B3073 East Appr Ahead Left	U	2:1	N/A	C2:B	C2:G	1	43	-	729	1915:1697	1426	51.1%
4/3	B3073 East Appr Ahead	U	N/A	N/A	-		-	-	-	240	Inf	Inf	0.0%
J3: A347 Auxiliary Junction 3	-	-	N/A	-	-		-	-	-	-	-	-	65.4%
1/1+1/2	A347 South Appr Ahead Right	U+O	3:1	N/A	C3:A	C3:E	1	72	25	1042	1915:1705	1809	57.6%
2/1+2/2	Link Rd East Appr Right Left	U	3:1	N/A	C3:D C3:C		2:1	37:7	-	549	1740:1769	840	65.4%
3/1	A347 North Appr Left Ahead	U	3:1	N/A	C3:B		2	30	-	366	1880	668	54.8%
J4: B3172 Auxiliary Junction 4	-	-	N/A	-	-		-	-	-	-	-	-	73.8%
1/1+1/2	B3073 West Approach Ahead Right	U+O	4:1	N/A	C4:A	C4:D	1	58	4	953	1915:1744	1291	73.8%
2/1	B3073 East Approach Ahead Left	U	4:1	N/A	C4:B		1	49	-	433	1906	1059	40.9%
3/1	Western Link Road South Appr Right Left	U	4:1	N/A	C4:C		1	21	-	307	1718	420	73.1%
4/1	B3073 West Exit	U	N/A	N/A	-		-	-	-	672	Inf	Inf	0.0%
5/1	Western Link Exit Left Left2	U	N/A	N/A	-		-	-	-	194	Inf	Inf	0.0%
J5: A347 Auxiliary Junction 5	-	-	N/A	-	-		-	-	-	-	-	-	90.2%
1/1+1/2	A347 North Appr Ahead Right	U+O	5:1	N/A	C5:A	C5:D	1	95	4	822	1915:1733	1539	53.4%
2/2+2/1	A347 South Appr Ahead Left	U	5:1	N/A	C5:B		1	86	-	1264	1915:1710	1401	90.2%

Full Input Data And Results

3/1	A347 South Appr Exit	U	N/A	N/A	-		-	-	-	986	Inf	Inf	0.0%
4/1	Link Road West Left Right	U	5:1	N/A	C5:C		1	14	-	192	1799	225	85.4%
5/1	Link Road West Exit Right Right2	U	N/A	N/A	-		-	-	-	250	Inf	Inf	0.0%
J6: Banner Homes	-	-	N/A	-	-		-	-	-	-	-	-	0.0%
1/1	Resi Access Right Left	U	N/A	N/A	-		-	-	-	92	Inf	Inf	0.0%
2/1	Resi Access Exit	U	N/A	N/A	-		-	-	-	37	Inf	Inf	0.0%
J7: Wyatt Homes	-	-	N/A	-	-		-	-	-	-	-	-	0.0%
1/1	Resi Access OUT U-Turn Right	U	N/A	N/A	-		-	-	-	257	Inf	Inf	0.0%
2/1	Resi Access IN	U	N/A	N/A	-		-	-	-	190	Inf	Inf	0.0%
3/1	Link Road South Exit Right U-Turn	U	N/A	N/A	-		-	-	-	489	Inf	Inf	0.0%
4/1	Link Road East Exit Left Left2	U	N/A	N/A	-		-	-	-	531	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Proposed Parley Cross Junction - Option 1	-	-	483	373	19	55.6	34.1	1.0	90.7	-	-	-	-
J1: B3073 / A347 Parley Cross	-	-	19	0	0	25.9	8.0	0.0	33.9	-	-	-	-
1/2+1/1	414	414	-	-	-	3.7	0.3	-	4.0	34.4	5.5	0.3	5.7
1/3	240	240	-	-	-	3.2	1.8	-	5.1	75.9	7.7	1.8	9.5
2/1+2/2	604	604	-	-	-	4.0	0.4	-	4.5	26.7	7.1	0.4	7.6
3/1+3/2	827	827	-	-	-	9.0	2.3	-	11.3	49.0	12.8	2.3	15.2
4/1+4/2	706	706	19	0	0	6.0	2.5	0.0	8.4	43.0	16.8	2.5	19.3
5/1	684	684	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
5/2	428	428	-	-	-	0.1	0.1	-	0.2	1.7	11.2	0.1	11.4
6/1	158	158	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
6/2	208	208	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
7/1	219	219	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
7/2	214	214	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
8/1	567	567	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	313	313	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: B3073 Auxiliary Junction 2	-	-	135	17	3	11.8	13.4	0.2	25.5	-	-	-	-
1/2+1/1	538	538	-	-	-	3.9	5.3	-	9.1	61.1	12.5	5.3	17.8
2/1+2/2	1112	1112	135	17	3	5.0	7.6	0.2	12.8	41.5	24.3	7.6	31.9
3/1	1476	1476	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2+4/1	729	729	-	-	-	3.0	0.5	-	3.5	17.3	6.3	0.5	6.8
4/3	240	240	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J3: A347 Auxiliary Junction 3	-	-	143	340	11	3.5	2.2	0.3	6.0	-	-	-	-

Full Input Data And Results

1/1+1/2	1042	1042	143	340	11	0.8	0.7	0.3	1.8	6.2	4.7	0.7	5.3
2/1+2/2	549	549	-	-	-	1.4	0.9	-	2.4	15.6	4.6	0.9	5.5
3/1	366	366	-	-	-	1.2	0.6	-	1.8	17.8	4.1	0.6	4.7
J4: B3172 Auxiliary Junction 4	-	-	160	14	4	6.5	3.1	0.2	9.8	-	-	-	-
1/1+1/2	953	953	160	14	4	2.4	1.4	0.2	4.1	15.3	13.9	1.4	15.3
2/1	433	433	-	-	-	1.4	0.3	-	1.7	14.4	6.1	0.3	6.5
3/1	307	307	-	-	-	2.7	1.3	-	4.0	46.9	7.0	1.3	8.3
4/1	672	672	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	194	194	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J5: A347 Auxiliary Junction 5	-	-	26	2	0	7.9	7.4	0.2	15.5	-	-	-	-
1/1+1/2	822	822	26	2	0	0.9	0.6	0.2	1.7	7.6	9.0	0.6	9.5
2/2+2/1	1264	1264	-	-	-	4.2	4.3	-	8.5	24.3	31.6	4.3	35.9
3/1	986	986	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	192	192	-	-	-	2.7	2.5	-	5.3	98.9	6.2	2.5	8.8
5/1	250	250	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J6: Banner Homes	-	-	0	0	0	0.0	0.0	0.0	0.0	-	-	-	-
1/1	92	92	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/1	37	37	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J7: Wyatt Homes	-	-	0	0	0	0.0	0.0	0.0	0.0	-	-	-	-
1/1	257	257	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/1	190	190	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	489	489	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	531	531	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	Stream: 1 PRC for Signalled Lanes (%)	7.6	Total Delay for Signalled Lanes (pcuHr):	33.20	Cycle Time (s):	120
C2	Stream: 1 PRC for Signalled Lanes (%)	-5.6	Total Delay for Signalled Lanes (pcuHr):	25.45	Cycle Time (s):	90
C3	Stream: 1 PRC for Signalled Lanes (%)	37.6	Total Delay for Signalled Lanes (pcuHr):	5.97	Cycle Time (s):	90
C4	Stream: 1 PRC for Signalled Lanes (%)	21.9	Total Delay for Signalled Lanes (pcuHr):	9.78	Cycle Time (s):	90
C5	Stream: 1 PRC for Signalled Lanes (%)	-0.2	Total Delay for Signalled Lanes (pcuHr):	15.54	Cycle Time (s):	120
	PRC Over All Lanes (%)	-5.6	Total Delay Over All Lanes(pcuHr):	90.65		

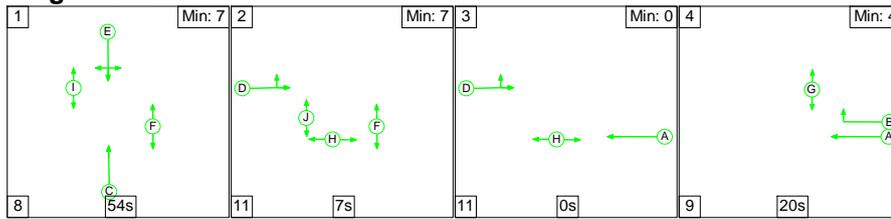
Full Input Data And Results

Scenario 2: 'PM peak' (FG2: '2020 PM peak Base + Dev', Plan 1: 'Staging Plan No. 1')

C1

Stage Sequence Diagram

Stage Stream: 1

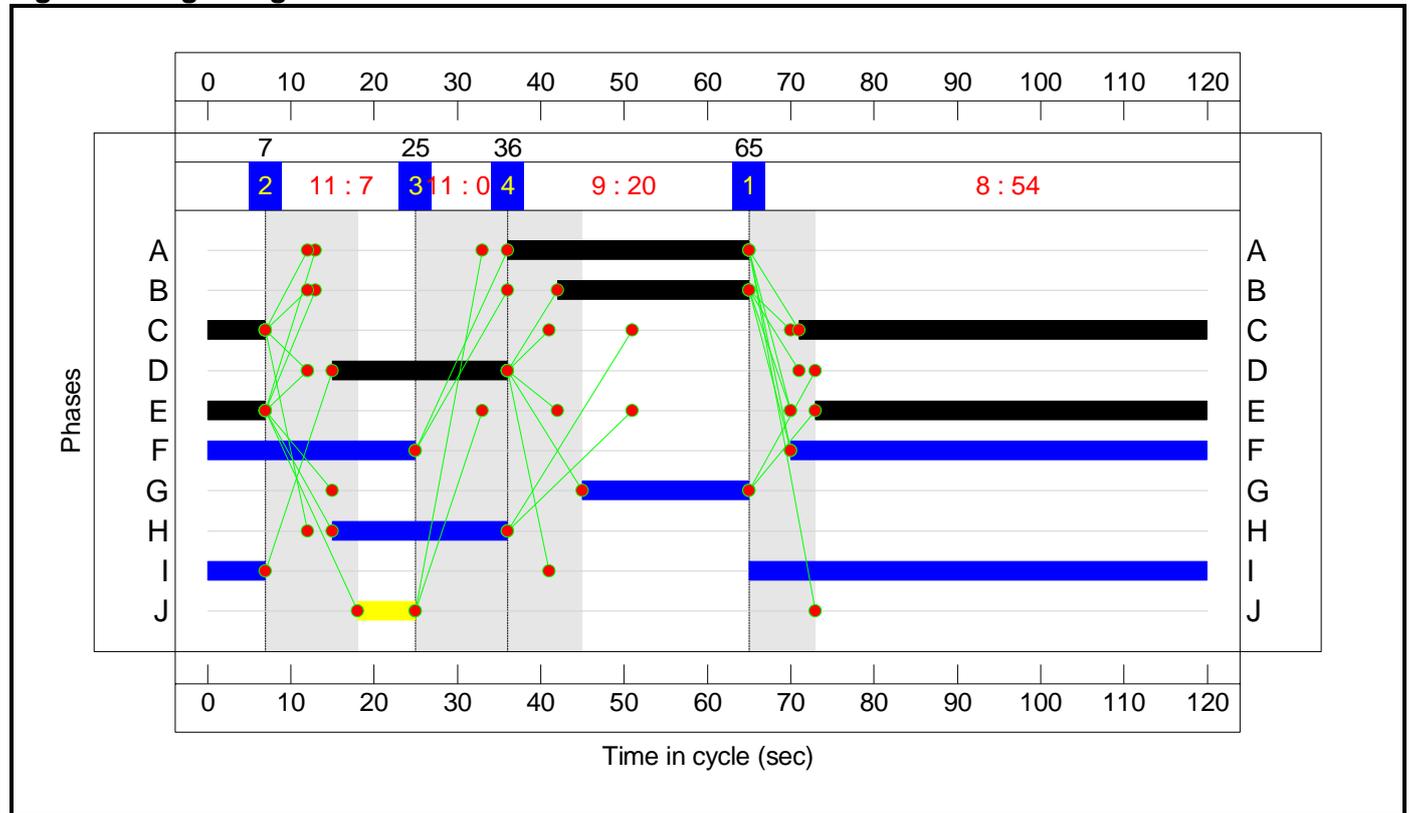


Stage Timings

Stage Stream: 1

Stage	1	2	3	4
Duration	54	7	0	20
Change Point	65	7	25	36

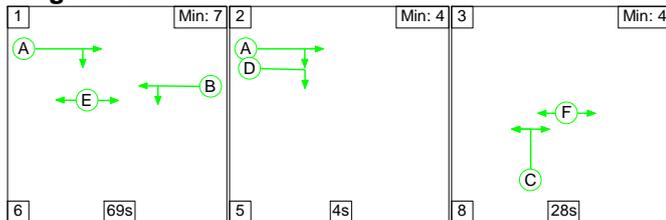
Signal Timings Diagram



C2

Stage Sequence Diagram

Stage Stream: 1

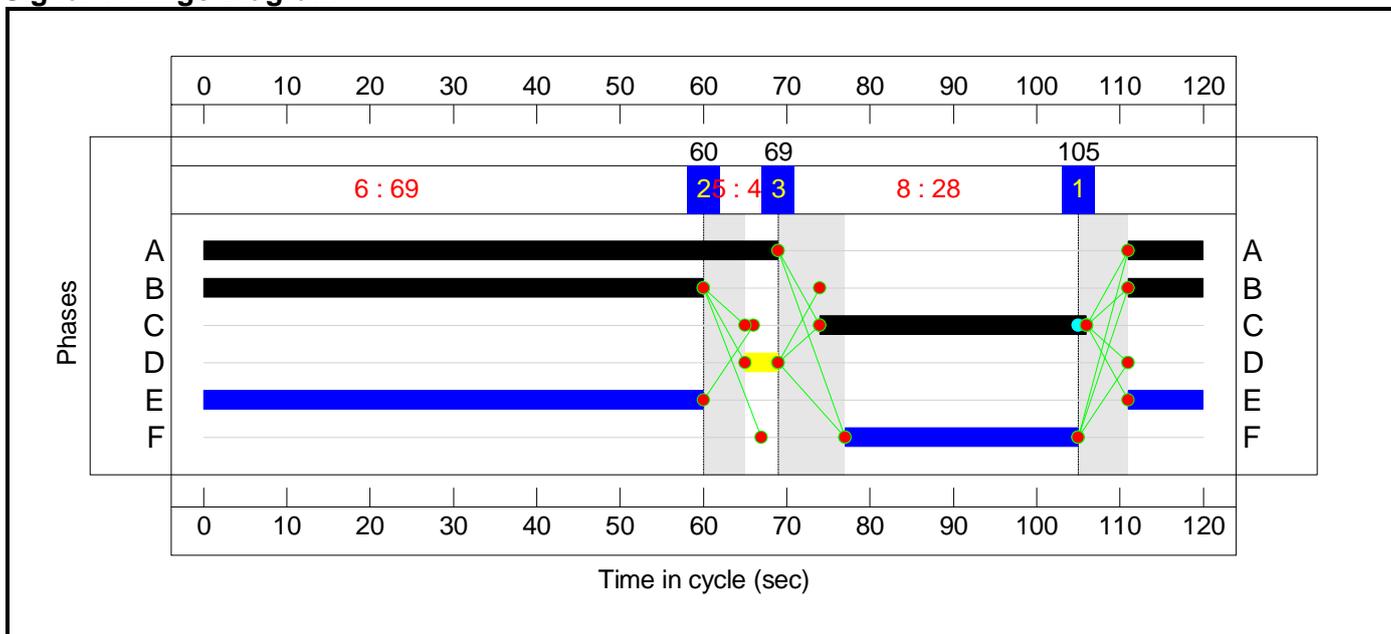


Stage Timings

Stage Stream: 1

Stage	1	2	3
Duration	69	4	28
Change Point	105	60	69

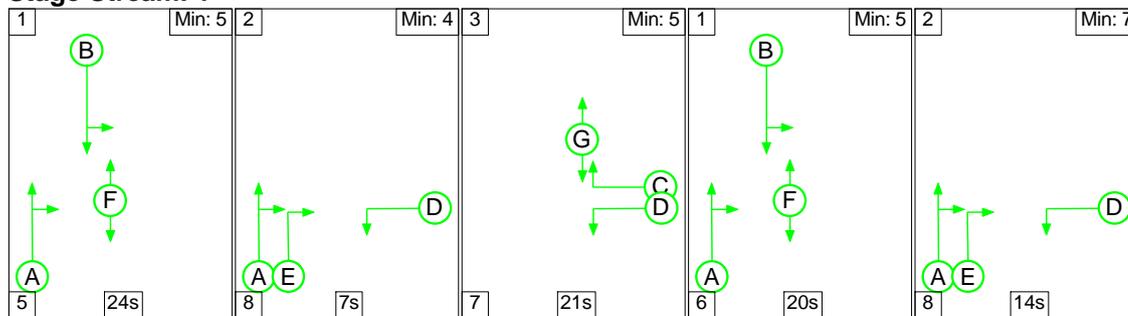
Signal Timings Diagram



C3

Stage Sequence Diagram

Stage Stream: 1

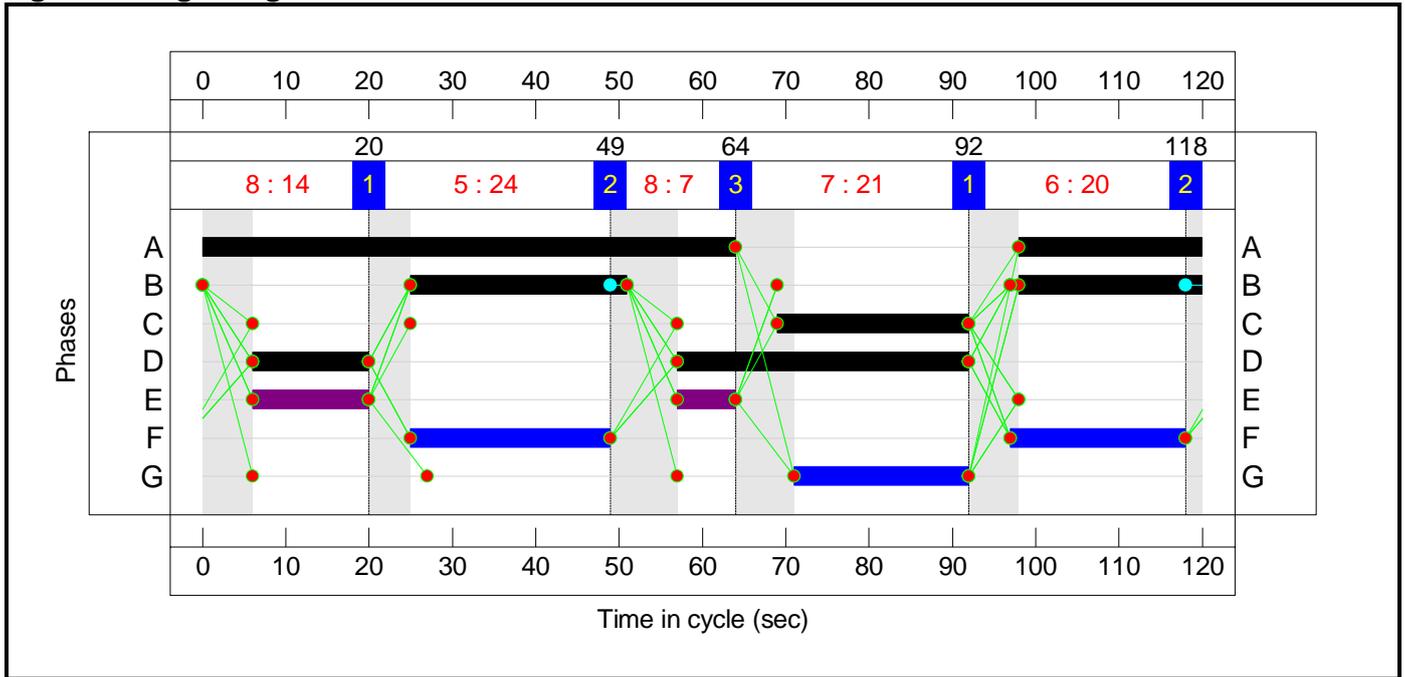


Stage Timings

Stage Stream: 1

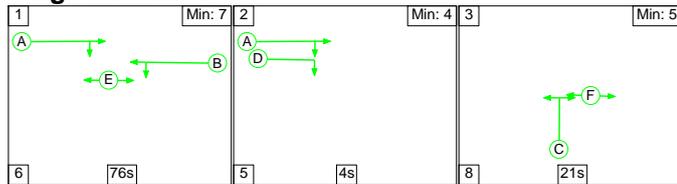
Stage	1	2	3	1	2
Duration	24	7	21	20	14
Change Point	20	49	64	92	118

Signal Timings Diagram



C4 Stage Sequence Diagram

Stage Stream: 1

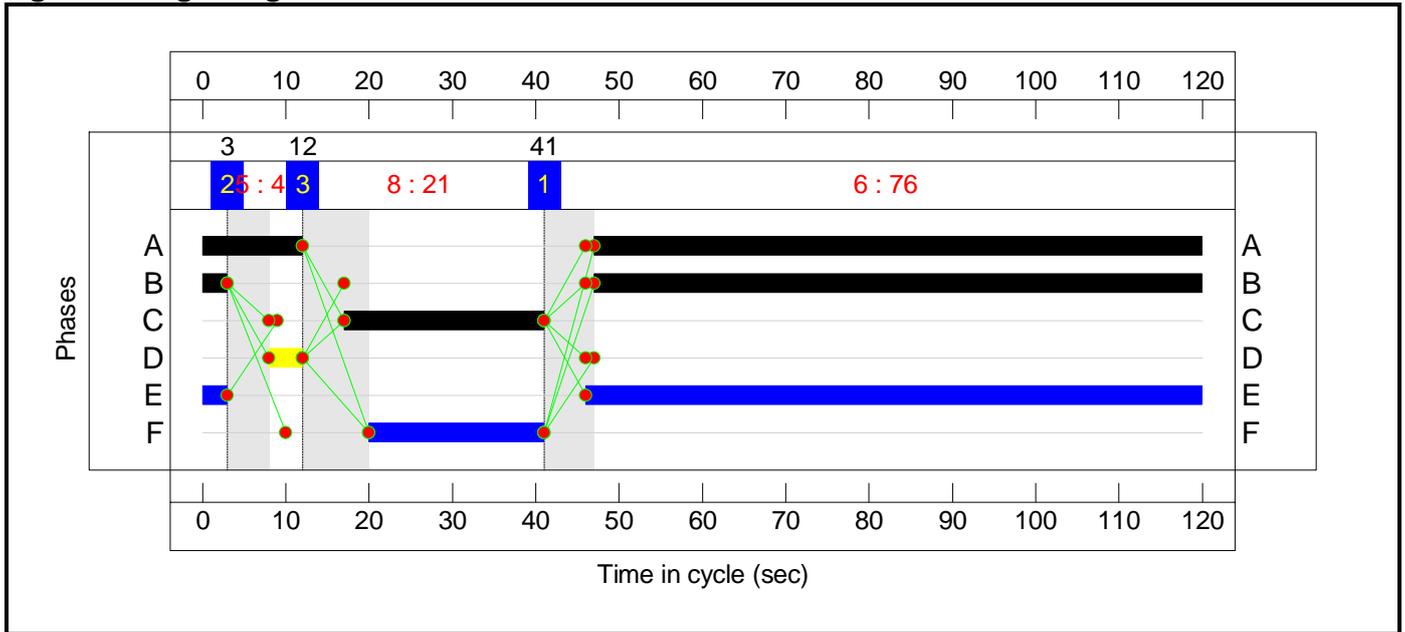


Stage Timings

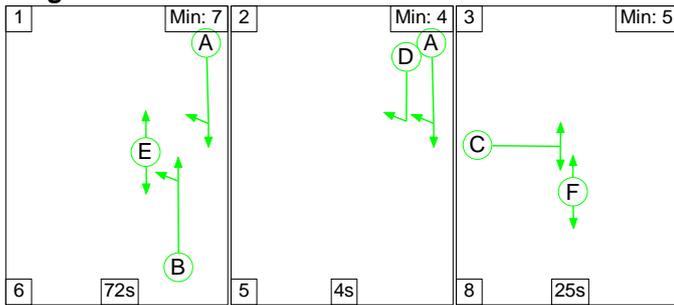
Stage Stream: 1

Stage	1	2	3
Duration	76	4	21
Change Point	41	3	12

Signal Timings Diagram



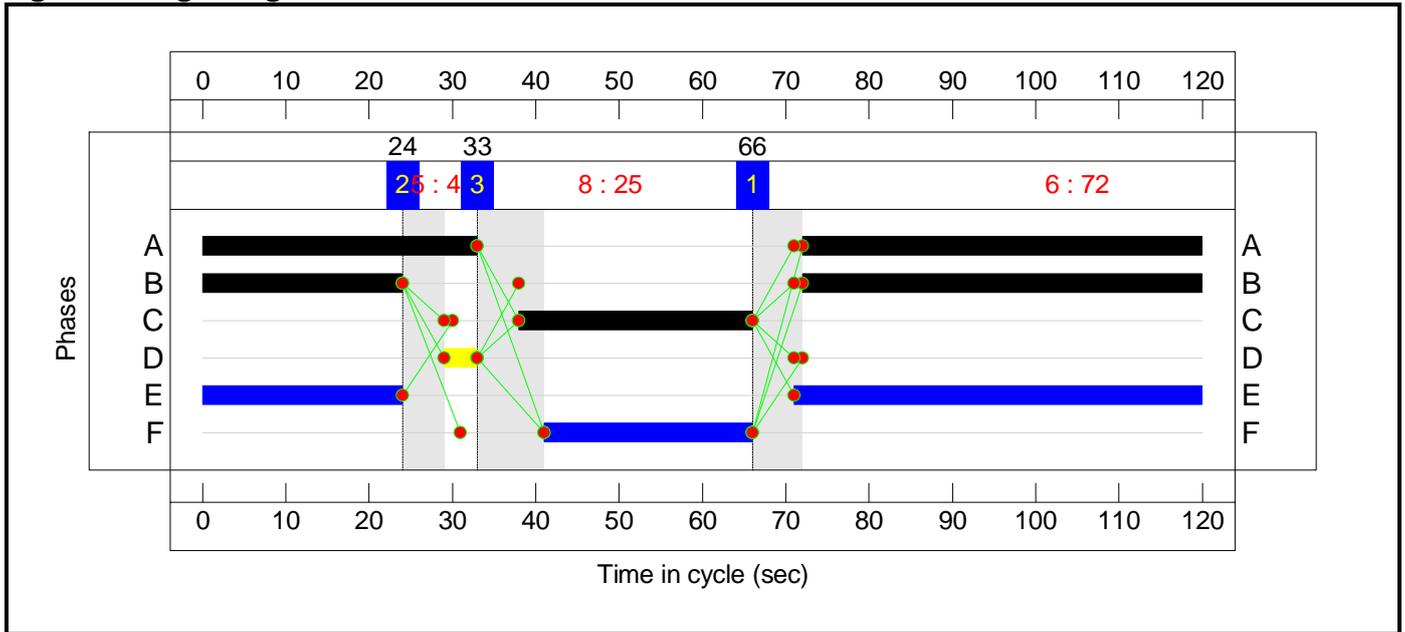
C5 Stage Sequence Diagram
Stage Stream: 1



Stage Timings
Stage Stream: 1

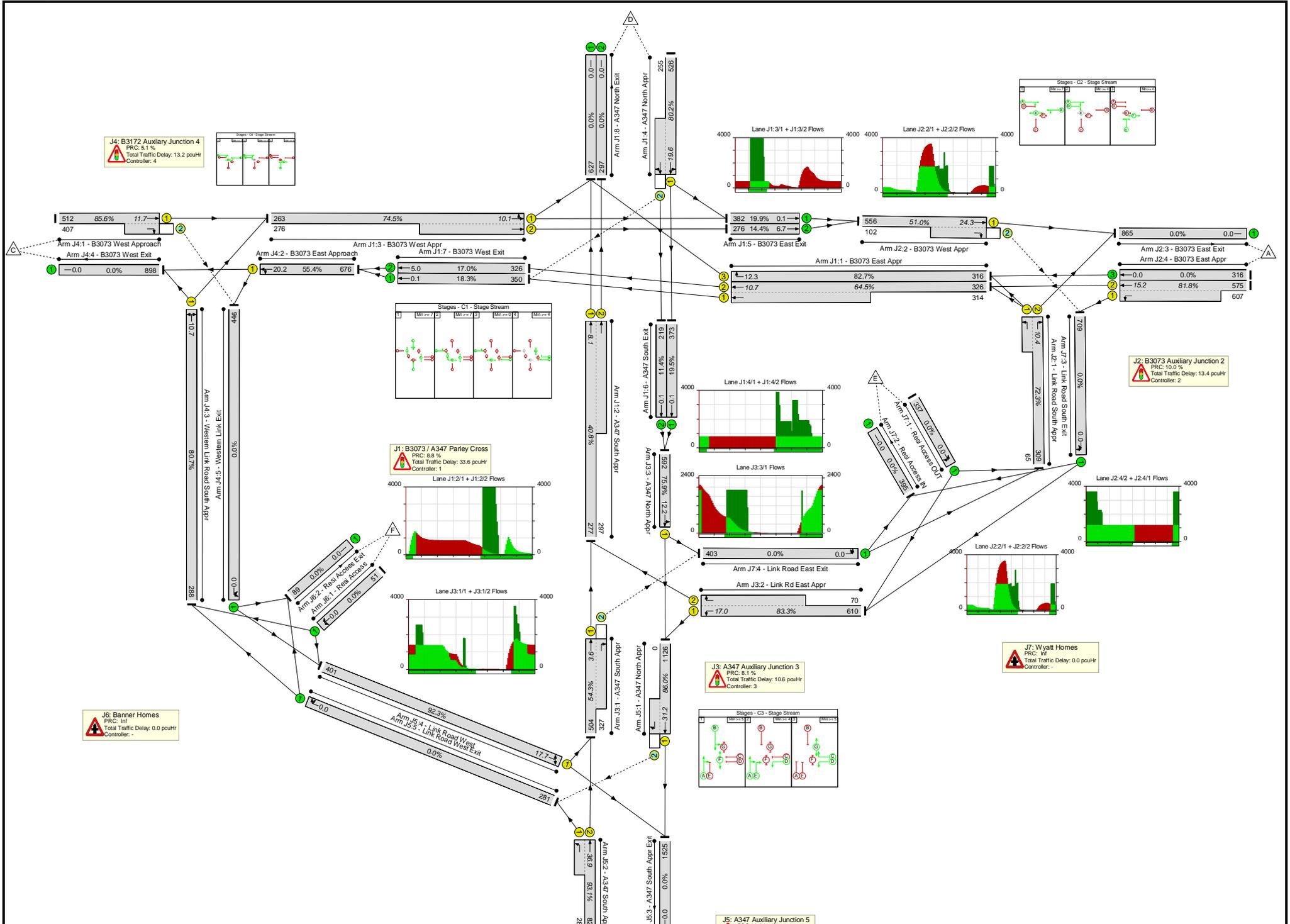
Stage	1	2	3
Duration	72	4	25
Change Point	66	24	33

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Proposed Parley Cross Junction - Option 1	-	-	N/A	-	-		-	-	-	-	-	-	93.1%
J1: B3073 / A347 Parley Cross	-	-	N/A	-	-		-	-	-	-	-	-	82.7%
1/2+1/1	B3073 East Appr Ahead	U	1:1	N/A	C1:A		1	29	-	640	2055:1915	992	64.5%
1/3	B3073 East Appr Right	U	1:1	N/A	C1:B		1	23	-	316	1910	382	82.7%
2/1+2/2	A347 South Appr Ahead	U	1:1	N/A	C1:C		1	56	-	574	1915:2055	1407	40.8%
3/1+3/2	B3073 West Appr Ahead Left	U	1:1	N/A	C1:D		1	21	-	539	1891:2055	723	74.5%
4/1+4/2	A347 North Appr Left Ahead Right	U+O	1:1	N/A	C1:E		1	54	-	781	1843:2031	974	80.2%
5/1	B3073 East Exit Ahead	U	N/A	N/A	-		-	-	-	382	1915	1915	19.9%
5/2	B3073 East Exit Ahead	U	N/A	N/A	-		-	-	-	276	1915	1915	14.4%
6/1	A347 South Exit Ahead	U	N/A	N/A	-		-	-	-	373	1915	1915	19.5%
6/2	A347 South Exit Ahead	U	N/A	N/A	-		-	-	-	219	1915	1915	11.4%
7/1	B3073 West Exit Ahead	U	N/A	N/A	-		-	-	-	350	1915	1915	18.3%
7/2	B3073 West Exit Ahead	U	N/A	N/A	-		-	-	-	326	1915	1915	17.0%
8/1	A347 North Exit	U	N/A	N/A	-		-	-	-	627	Inf	Inf	0.0%
8/2	A347 North Exit	U	N/A	N/A	-		-	-	-	297	Inf	Inf	0.0%
J2: B3073 Auxiliary Junction 2	-	-	N/A	-	-		-	-	-	-	-	-	81.8%
1/2+1/1	Link Road South Appr Left Right	U	2:1	N/A	C2:C		1	32	-	374	1761:1710	517	72.3%

Full Input Data And Results

2/1+2/2	B3073 West Appr Ahead Right	U+O	2:1	N/A	C2:A	C2:D	1	78	4	658	1915:1744	1290	51.0%
3/1	B3073 East Exit	U	N/A	N/A	-		-	-	-	865	Inf	Inf	0.0%
4/2+4/1	B3073 East Appr Ahead Left	U	2:1	N/A	C2:B	C2:G	1	69	-	1182	1915:1697	1445	81.8%
4/3	B3073 East Appr Ahead	U	N/A	N/A	-		-	-	-	316	Inf	Inf	0.0%
J3: A347 Auxiliary Junction 3	-	-	N/A	-	-		-	-	-	-	-	-	83.3%
1/1+1/2	A347 South Appr Ahead Right	U+O	3:1	N/A	C3:A	C3:E	1	86	21	831	1915:1705	1530	54.3%
2/1+2/2	Link Rd East Appr Right Left	U	3:1	N/A	C3:D C3:C		2:1	49:23	-	680	1740:1769	817	83.3%
3/1	A347 North Appr Left Ahead	U	3:1	N/A	C3:B		2	48	-	592	1871	780	75.9%
J4: B3172 Auxiliary Junction 4	-	-	N/A	-	-		-	-	-	-	-	-	85.6%
1/1+1/2	B3073 West Approach Ahead Right	U+O	4:1	N/A	C4:A	C4:D	1	85	4	919	1915:1744	1074	85.6%
2/1	B3073 East Approach Ahead Left	U	4:1	N/A	C4:B		1	76	-	676	1901	1220	55.4%
3/1	Western Link Road South Appr Right Left	U	4:1	N/A	C4:C		1	24	-	288	1714	357	80.7%
4/1	B3073 West Exit	U	N/A	N/A	-		-	-	-	898	Inf	Inf	0.0%
5/1	Western Link Exit Left Left2	U	N/A	N/A	-		-	-	-	446	Inf	Inf	0.0%
J5: A347 Auxiliary Junction 5	-	-	N/A	-	-		-	-	-	-	-	-	93.1%
1/1+1/2	A347 North Appr Ahead Right	U+O	5:1	N/A	C5:A	C5:D	1	81	4	1126	1915:1915	1309	86.0%
2/2+2/1	A347 South Appr Ahead Left	U	5:1	N/A	C5:B		1	72	-	1110	1915:1710	1192	93.1%

Full Input Data And Results

3/1	A347 South Appr Exit	U	N/A	N/A	-		-	-	-	1525	Inf	Inf	0.0%
4/1	Link Road West Left Right	U	5:1	N/A	C5:C		1	28	-	401	1798	435	92.3%
5/1	Link Road West Exit Right Right2	U	N/A	N/A	-		-	-	-	281	Inf	Inf	0.0%
J6: Banner Homes	-	-	N/A	-	-		-	-	-	-	-	-	0.0%
1/1	Resi Access Right Left	U	N/A	N/A	-		-	-	-	51	Inf	Inf	0.0%
2/1	Resi Access Exit	U	N/A	N/A	-		-	-	-	89	Inf	Inf	0.0%
J7: Wyatt Homes	-	-	N/A	-	-		-	-	-	-	-	-	0.0%
1/1	Resi Access OUT U-Turn Right	U	N/A	N/A	-		-	-	-	337	Inf	Inf	0.0%
2/1	Resi Access IN	U	N/A	N/A	-		-	-	-	395	Inf	Inf	0.0%
3/1	Link Road South Exit Right U-Turn	U	N/A	N/A	-		-	-	-	709	Inf	Inf	0.0%
4/1	Link Road East Exit Left Left2	U	N/A	N/A	-		-	-	-	403	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Proposed Parley Cross Junction - Option 1	-	-	532	331	9	61.3	35.1	1.8	98.2	-	-	-	-
J1: B3073 / A347 Parley Cross	-	-	35	0	1	26.1	7.5	0.0	33.6	-	-	-	-
1/2+1/1	640	640	-	-	-	5.1	0.9	-	6.0	33.9	9.8	0.9	10.7
1/3	316	316	-	-	-	4.0	2.2	-	6.3	71.6	10.1	2.2	12.3
2/1+2/2	574	574	-	-	-	4.9	0.3	-	5.3	33.1	7.8	0.3	8.1
3/1+3/2	539	539	-	-	-	6.3	1.4	-	7.8	51.8	8.7	1.4	10.1
4/1+4/2	781	781	35	0	1	5.6	2.0	0.0	7.6	35.1	17.6	2.0	19.6
5/1	382	382	-	-	-	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1
5/2	276	276	-	-	-	0.0	0.1	-	0.1	1.4	6.6	0.1	6.7
6/1	373	373	-	-	-	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1
6/2	219	219	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
7/1	350	350	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
7/2	326	326	-	-	-	0.0	0.1	-	0.1	1.2	4.9	0.1	5.0
8/1	627	627	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	297	297	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: B3073 Auxiliary Junction 2	-	-	22	78	2	9.1	4.0	0.3	13.4	-	-	-	-
1/2+1/1	374	374	-	-	-	3.1	1.3	-	4.4	42.3	9.2	1.3	10.4
2/1+2/2	658	658	22	78	2	0.9	0.5	0.3	1.7	9.3	23.8	0.5	24.3
3/1	865	865	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2+4/1	1182	1182	-	-	-	5.1	2.2	-	7.3	22.3	13.0	2.2	15.2
4/3	316	316	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J3: A347 Auxiliary Junction 3	-	-	98	229	0	5.4	4.5	0.7	10.6	-	-	-	-

Full Input Data And Results

1/1+1/2	831	831	98	229	0	0.3	0.6	0.7	1.6	7.0	3.1	0.6	3.6	
2/1+2/2	680	680	-	-	-	3.1	2.4	-	5.5	29.4	14.6	2.4	17.0	
3/1	592	592	-	-	-	1.9	1.6	-	3.4	21.0	10.7	1.6	12.2	
J4: B3172 Auxiliary Junction 4	-	-	376	24	7	6.9	5.5	0.8	13.2	-	-	-	-	
1/1+1/2	919	919	376	24	7	2.3	2.9	0.8	6.0	23.5	8.8	2.9	11.7	
2/1	676	676	-	-	-	1.1	0.6	-	1.7	9.2	19.5	0.6	20.2	
3/1	288	288	-	-	-	3.5	2.0	-	5.4	68.0	8.7	2.0	10.7	
4/1	898	898	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/1	446	446	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
J5: A347 Auxiliary Junction 5	-	-	0	0	0	13.8	13.6	0.0	27.4	-	-	-	-	
1/1+1/2	1126	1126	0	0	0	4.3	3.0	0.0	7.3	23.3	28.3	3.0	31.2	
2/2+2/1	1110	1110	-	-	-	6.0	5.9	-	11.9	38.7	31.0	5.9	36.9	
3/1	1525	1525	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/1	401	401	-	-	-	3.5	4.7	-	8.2	73.4	13.1	4.7	17.7	
5/1	281	281	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
J6: Banner Homes	-	-	0	0	0	0.0	0.0	0.0	0.0	-	-	-	-	
1/1	51	51	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
2/1	89	89	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
J7: Wyatt Homes	-	-	0	0	0	0.0	0.0	0.0	0.0	-	-	-	-	
1/1	337	337	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
2/1	395	395	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
3/1	709	709	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/1	403	403	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
C1 Stream: 1 PRC for Signalled Lanes (%)					8.8	Total Delay for Signalled Lanes (pcuHr):					32.97	Cycle Time (s): 120		
C2 Stream: 1 PRC for Signalled Lanes (%)					10.0	Total Delay for Signalled Lanes (pcuHr):					13.42	Cycle Time (s): 120		
C3 Stream: 1 PRC for Signalled Lanes (%)					8.1	Total Delay for Signalled Lanes (pcuHr):					10.59	Cycle Time (s): 120		
C4 Stream: 1 PRC for Signalled Lanes (%)					5.1	Total Delay for Signalled Lanes (pcuHr):					13.17	Cycle Time (s): 120		
C5 Stream: 1 PRC for Signalled Lanes (%)					-3.5	Total Delay for Signalled Lanes (pcuHr):					27.41	Cycle Time (s): 120		
PRC Over All Lanes (%)					-3.5	Total Delay Over All Lanes(pcuHr):					98.19			