



**LAND SOUTH OF WESTWELLS ROAD,
CORSHAM**

Transport Assessment

April 2024

IMA-22-188

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1 Introduction

1.1 General

- 1.1.1 Ark Data Centres has commissioned IMA Transport Planning Ltd to produce a Transport Assessment in support of a new, full planning application for the proposed expansion of Spring Park Data Centre Campus at Land South of Westwells Road.
- 1.1.2 Data centres are storage facilities housing computer servers and telecoms equipment for data processing and data storage. They are effectively unmanned bar for security and maintenance personnel.
- 1.1.3 The majority of the main Spring Park site has been built-out as data centres, through a number of standalone applications for full planning permission, although the original outline permission (reference N/11/02034/OUT) anticipated a mix of data centres and traditional B1 office space. Only a small fraction of the originally predicted B1 office space has been constructed and this has been ancillary to the data centre use.
- 1.1.4 The proposed development site was not covered by the original outline planning application and so a full planning application is being submitted in relation to the proposed development.
- 1.1.5 The application site lies just to the southeast of the main existing Spring Park campus the proposed development site is currently vacant brownfield land, previously occupied by the MoD.
- 1.1.6 The application site has previously been granted permission on 26th April 2021 on Appeal. The application (ref: 18/09884/OUT) for a residential development (Class C3) of up to 81 dwellings including roads, footpaths, balancing pond area and open space. This planning permission has now lapsed but the principles of the acceptability of the site being developed in highway terms remains the same.

1.2 Scope of Report

- 1.2.1 The report firstly describes the site and its immediate surroundings. The report then goes on to provide a description of the site's planning history. Committed nearby developments are described, along with the position of their current 'build' and also their position in relation to traffic generation.
- 1.2.2 Access to the site by car and non-car modes of travel are then examined, the level of traffic occurring on the highway is reviewed. The existing and previously approved traffic flows associated with the application site is also examined.
- 1.2.3 The proposed development is then described, including means of access by all modes. The level of traffic generated by the redeveloped site is then quantified, and distributed onto the highway network.
- 1.2.4 The implications of development traffic on the highway are then examined through modelling the operation of nearby junctions and the implications for travel by non-car modes is also reviewed. The transport implications of the proposed development are also compared to that approved for the approved residential development.
- 1.2.5 Finally, the report is summarised and conclusions drawn.

2 Site Description

2.1 Site Location

- 2.1.1 The proposed data centre site lies to the southeast of the main Spring Park site which is located at the southern end of Westwells Road, Corsham. The site is approximately 2.5km south west of Corsham town centre. The location of the site is shown on Plan 1.
- 2.1.2 The proposed site is currently vacant brownfield land, previously occupied by the MoD.
- 2.1.3 The site is bound by Westwells Road to the northeast and Moor Green/an unnamed lane forms the eastern/southern boundary of the site. To the north Rowan Lane separates the proposed site from the main Spring Park site and Rowan Lane also forms the western boundary of the site.
- 2.1.4 When the site was operational, vehicular access was via a priority junction with Rowan Lane. Rowan Lane is a private road and connects to Westwells Road via a priority junction. There are also redundant accesses into the site from Westwells Road and the unnamed lane to the southeast.
- 2.1.5 Approximately 100m to the northwest of the site, on the northeast side of Westwells Road, is the MoD Corsham site (previously referred to as the MoD Basil Hill Development) which is accessed via a priority junction from Westwells Road.
- 2.1.6 The main Spring Park site lies a further 100m to the northwest of the MoD Corsham access, on the southwest side of Westwells Road. Access into the main Spring Park site is via a roundabout on Westwells Road.

2.2 Proposed Site Planning History

- 2.2.1 The proposed site has been the subject of previous outline planning applications, the key one being:
- 18/09884/OUT - residential development (Class C3) of up to 81 dwellings including roads, footpaths, balancing area, and open space - planning permission granted on 26th April 2021 on Appeal.
- 2.2.2 The approved residential development (18/09884/OUT) was proposed to be accessed from Rowan Lane. This planning permission has now lapsed but the principles of the acceptability of the site being developed in highway terms remains the same.
- 2.2.3 The predicted residential trips have been extracted from the Transport Assessment prepared by WSP which was submitted in support of the resident application and are summarised in Table 1.

Period	Agreed Residential Trips		
	Arrive	Depart	Total
AM Peak	14	37	51
PM Peak	32	15	48

Table 1: Approved Residential Trips

2.3 Spring Park Planning History

- 2.3.1 The development will form an extension to the Spring Park site but will be accessed from Rowan Lane rather than from the main existing Spring Park access located on Westwells Road. The existing layout of the Spring Park site is shown on Plan 2. Plan 2 also shows the location of the proposed P5 North and P5 South buildings.
- 2.3.2 The majority of Spring Park has been built under outline planning permission N/11/02034/OUT, and other various associated permissions (including reserved matters approvals and non-material and material minor amendments). The original, outline application was supported by a Transport Assessment prepared by IMA Transport Planning (dated November 2007).
- 2.3.3 In September 2008 outline planning permission (ref. 07/03214/OUT) was granted for a business and technology park development (a mixture of B1 office space and 'Data Centres') with a maximum gross floor area of 60,000m². This permission was subsequently renewed in December 2011 (N/11/02034/S73).
- 2.3.4 The planning permission required the provision of highway works and contributions towards transport facilities. The majority of these highway works have been implemented, apart from those works for which the triggers for implementation were not met or have subsequently been agreed with the local highway authority (LHA) to be no longer required.
- 2.3.5 The most recent planning applications are summarised briefly below:

2019 Full Application

- 2.3.6 A full planning application (ref. 19/11352/FUL) was granted approval on the 1st April 2021 for the demolition of Building SQ2 and the erection of a new data centre, plant, highway works, vehicle access, infrastructure, enclosures, landscaping, and other associated works. The total gross floor area for the data centre approved by this application (known as P5 North) was 13,100m².
- 2.3.7 Construction has not yet started on data centre P5 North.

2022 Full Application

- 2.3.8 A full planning application (ref. PL/2022/01975) was approved in September 2023 for the construction of a data centre facility/units as an extension of the Spring Park Data Centre Campus.
- 2.3.9 The application site was not part of the original outline application, but lies adjacent to the main Spring Park site. The planning application was for a new building with a gross floor area of 6021m², consisting of 3,220m² data centre, 1,733m² plant area and 1,068m² ancillary block.
- 2.3.10 The proposed layout for P5 South would require changes being made to the approved P5 North layout including an extension of the service road to the rear of the P5 North building to join with Rowan Lane as a one-way exit from the Spring Park site and the removal of the retained access route to the MoD firing range. An alternative route to the MoD firing range via Rowan Lane has been agreed with the LHA as being acceptable.

2023 Full Application

- 2.3.11 A full planning application (ref. PL/2023/10233) was submitted in December 2023 which covers both the approved P5 North and South application sites, as outlined above. This combined application does not materially change the approved quantum of development or the proposed access arrangements, and would not lead to a change in the operation of the local highway network compared to what was already approved for the single applications.

2.4 Committed Development

- 2.4.1 In addition to the proposed P5 North and South data centres, there are several committed developments within the vicinity of the application site. Some have planning permission and have not been implemented while others are under construction or fully implemented.

Rudloe

- 2.4.2 A planning application has been submitted on land to the immediate northwest of Spring Park, referred to as Rudloe. This site is a former MoD base. The application reference is 14/11354/OUT. The application seeks outline permission for up to 180 dwellings and 1,100m² of B1 office space. Also, the demolition of existing buildings & structures, car parking, open space, associated infrastructure & access. The application was approved on the 5th August 2016.
- 2.4.3 A reserved matters application (ref.19/07339/REM) for details of layout and scale for 166 dwellings and B1 office buildings was approved on 29th January 2021.
- 2.4.4 In transport terms, the general position is that redevelopment for residential/office use would give rise to less traffic than when in use as an MoD base, and thus gives rise to improved off-site highways conditions. This results in minimal traffic impact.
- 2.4.5 Traffic flows have been extracted from the Transport Assessment submitted in support of the outline application and are detailed in the following Baseline Transport Conditions section of this report.

Wadswick Green (Formerly Royal Arthur Park)

- 2.4.6 Wadswick is 500m south of the site, the majority of this site has been built out and is in use. However, it is understood that one phase is currently under construction and there is a further remaining phase to be developed (in addition to some of the additional facilities). There is full planning permission for a retirement village comprising a 75-bed care home, 221 extra care apartments, health treatment & hydrotherapy complex, Pavilion, Housing, Dining, Recreation & supporting Retain Facilities, a GP surgery and associated Outdoor Facilities and car Parking (N/10/04093/FUL).
- 2.4.7 A full planning application (19/02829/FUL) for proposed additional facilities at the Wadswick Green Village was approved on 22/10/2019. The LHA raised no objections to this application as it will not lead to an increase in the numbers of staff or residents at the development, and is therefore unlikely to generate any additional trips.

Land south of Bradford Road

- 2.4.8 Land south of Bradford Road is a site approximately 700m to the north west of the site. Outline planning permission was granted for up to 88 dwelling and 1.2ha of B1 employment (13/05724). Since then applications for the approval of reserved matters in relation to 88 dwellings (17/12270/REM) for Bellway Homes and for the erection of 5 no. B1 employment buildings (17/07028/REM) have been approved. The Bellway Homes' 'Dickins Gate' development is under construction and partly occupied.
- 2.4.9 Traffic flows have been extracted from the Transport Assessment produced to accompany that application and are detailed in the following Baseline Transport Conditions section of this report.

Land at Bradford Road

- 2.4.10 Land at Bradford Road lies 1km to the north of the site. This site, currently under construction by Redcliffe Homes benefits from outline planning permission (15/10519/OUT) and reserved matters approval for 170 homes (17/11032/REM).
- 2.4.11 Traffic flows have been extracted from the Transport Assessment produced to accompany that application and are detailed in the following Baseline Transport Conditions section of this report.

3 Baseline Transport Conditions

3.1 Vehicular Access

- 3.1.1 When the site was operational, vehicular access was taken from Rowan Lane via a simple priority junction which has since fallen into disrepair and there is currently no operational vehicular site access. There are also redundant accesses into the site from Westwells Road and the unnamed lane to the southeast.
- 3.1.2 Rowan Lane connects to Westwells Road to the north east and provides access to the Wadswick Green development to the south. In the vicinity of the site Rowan Lane is typically 6.1m wide with grass verges but no footway. Rowan Lane is not an adopted highway, but is a public right of way, as discussed in the following section of this report.
- 3.1.3 In the vicinity of the site, Westwells Road is a single carriageway with a nominal width of around 9m - traffic on it is subject to a 40mph speed limit along a majority of the length but this changes to 30mph from its junction with Rowan Lane heading southeast.
- 3.1.4 To the southeast of the site, Westwells Road leads to the village of Neston and the Leafield Industrial Estate. It also leads to the centre of Corsham and Melksham (by way of the B3353).
- 3.1.5 To the northwest Westwells Road connects to Park Lane at a four-arm roundabout with an access to the Rudloe development site being the fourth arm. To the north Park Lane connects to the A4 at a mini-roundabout junction. Further to northwest, Westwells Road connects to the B3109 Bradford Road and Leafy Lane by way of a double mini-roundabout.
- 3.1.6 The double mini-roundabout at the B3109 Bradford Rd/Westwells Road junction is orientated northeast-southwest along the line of Bradford Road, each of the mini-roundabouts having three-arms. Westwells Road connects to the north-eastern roundabout and Leafy Lane with the south-western roundabout.
- 3.1.7 The centres of the two mini-roundabouts are separated by a distance of some 25m, which, combined with there being 2 lanes in each direction, gives a maximum stacking capacity between the two roundabouts for around 4 cars in either direction.
- 3.1.8 From this double mini-roundabout, the B3109 Bradford Road heading northward connects to the A4 around 1.5km to the north of the junction. The A4 (which runs broadly east to west) forms a key strategic route in the area linking Chippenham to the east with Bath to the west.
- 3.1.9 At the B3109 Bradford Road/Westwells Road/Leafy Lane roundabout junction, Leafy Lane heads north and after around 1km, joins (from the south) the A4 at a priority junction.
- 3.1.10 Heading southwest, away from the B3109 Bradford Road/Westwells Road/Leafy Lane roundabout, the B3109 is subject to the national speed limit. After around 2.5km, it forms a five-arm traffic signal junction called the 'Fiveways' junction.
- 3.1.11 The B3109 runs broadly north to south, with the A365 orientated broadly east to west. Longsplatt Road merges into the south-western corner of the junction. To the south of this junction, the B3109 Bradford, leads to Bradford upon Avon, some 6km distant.

- 3.1.12 To the east of the 'Fiveways' junction, the A365 heads to Melksham some 10km distant and to the west it heads through the village of Box, some 2km distant, where it connects to the A4 at a traffic signal-controlled junction. For the majority of its length in this direction, the A365 is de-restricted to 60mph.

3.2 2009 Wiltshire Transport Study

- 3.2.1 In late 2009 Wiltshire Council commissioned IMA Transport Planning to undertake a detailed study (referred to as the 'Corsham Transport Study') including the review of actual traffic flows, growth forecasts (including committed developments) and assessments of these improvement schemes.
- 3.2.2 The Corsham Transport Study concluded that background traffic growth, predicted as part of the original applications submitted in the area, had not been realised, and that the signalisation of the A4/Pickwick Lane was not considered to be necessary at an early date, and also that improving the existing mini-roundabout produced less network delays than signalisation.
- 3.2.3 In the case of the A4/Park Lane and A4/Leafy Lane junctions, signalisation was not considered necessary, and should an improvement be required at the A4/Park Lane junction, the provision of a standard roundabout would be more beneficial. Improvements would however be required to facilitate improved pedestrian crossings.
- 3.2.4 However, the study also found that signalisation of the Bradford Road/Westwells Road/Leafy Lane would still be necessary to mitigate the effects of the Spring Park and MoD Corsham developments based on expected office floor areas and predicted traffic flows. The trigger for these improvements agreed within the S106 for the Spring Park outline application was not reached.

3.3 Surveyed Traffic Flows

- 3.3.1 To inform a previous planning application at the Spring Park site (P5 North application), traffic surveys were undertaken on 11th September 2019, over the period 07:00-09:30 and 16:00-18:00. The results of the survey are given at Appendix 1.
- 3.3.2 The surveys were undertaken at the following junctions on Westwells Road:
- The 3-arm site access roundabout
 - Westwells Road/Park Lane 4-arm roundabout
 - B3109 Bradford Road/Westwells Road/Leafy Lane double mini-roundabout
- 3.3.3 The surveys show that the AM peak period is 08:00-09:00 and in the PM peak period that the 16:00-17:00 and 17:00-18:00 peak hours are broadly the same. The assessed PM peak hour for committed developments in the area is 17:00-18:00 and the surveyed Spring Park flows are also slightly higher in this hour, therefore this has been adopted as the assessed PM peak period.
- 3.3.4 Figures 1 and 2 show the results of the surveys for the AM (08:00-09:00) and PM (17:00-18:00) respectively. It is noted that on the day of the survey that the B3109 Bradford Road to the north of Westwells Road was closed to traffic with the exception of access for residents. Looking at the 2019 surveyed flows it can be seen that, as would be expected, very little traffic uses the northern arm of the B3109 Bradford Road/Westwells Road/Leafy Lane double mini-roundabout.

- 3.3.5 Traffic surveys at the above junctions were also undertaken in 2016 for the Transport Assessment submitted in support of the application for P3 and P4 and a copy of the 2016 surveyed flows are included as Appendix 2 of this report.
- 3.3.6 Comparing the two sets of survey data it can be seen that due to diverting traffic the number of vehicles recorded in the 2019 survey turning right to Westwells Road from the B3109(S) and the left turn from Westwells Road to Park Lane are both significantly higher compared to the 2016 survey, with the same being true for the reverse movements. To a lesser extent there was also an increase in the turning movements between Leafy Lane and the B3109(S).
- 3.3.7 Two-way traffic flows on the B3109 to the south of the junction in the 2019 are lower than surveyed in 2016 which may indicate that there was a wider diversion of vehicle trips due to the road closure on the day of the survey.
- 3.3.8 Therefore, the surveyed 2019 traffic flows need to be adjusted to take into account of the closure of the B3109 Bradford Road. To do this TEMPRO local traffic growth factors from 2016 to 2019 (1.0408 in the AM peak and 1.0402 in the PM peak) have been applied to the surveyed 2016 turning movements at B3109 Bradford Road/Westwells Road/Leafy Lane double mini-roundabout, the left turn from Westwells Rd to Park Lane and right turn from Park Lane to Westwells Road. Other movements at the Westwells Road/Park Lane roundabout and the Spring Park access roundabout are assumed to be unaffected by the road works on the day the survey.
- 3.3.9 Minor adjustments have then made to the uplifted turning movements to ensure that the traffic flows between the B3109 Bradford Road/Westwells Road/Leafy Lane double mini-roundabout and the Westwells Road/Park Lane roundabout are balanced. The resulting adjusted 2019 Survey flows are shown on Figures 3 and 4 for the AM and PM peaks respectively.
- 3.3.10 The flows contained in Figures 3 and 4 have previously been agreed with Wiltshire Council and were used in Transport Assessments submitted in support of planning applications for the P5 North and South applications.
- 3.3.11 The Transport Assessment submitted in support for the residential scheme to the south of Westwells Road included 2018 traffic survey data. Comparing the total movements at each of the junctions, the agreed 2019 flows are consistently higher than the 2018 flows in the PM Peak. In the AM peak the total flows at two of the junctions are slightly lower in the 2019 flows compared to the 2018 flows, however, overall the 2019 flows are still higher than the 2018 flows.
- 3.3.12 For robustness and to retain consistency with previous transport assessments for Spring Park the higher 2019 flows have been used for the basis of this assessment. The 2019 surveys did not include the Rowan Lane/Westwells Road priority junction and therefore flows from the 2018 survey have been used for this junction.

3.4 Spring Park Traffic Flows and Surveyed Trip Rates

- 3.4.1 This section looks at the trip rates from the Spring Park site. Given the site is to be an extension of the Spring Park campus, the site can be expected to operate in the same manner as the main campus.
- 3.4.2 Data Centres comprise the bulk of the built form on the Spring Park site and Data Centres are essentially storage facilities for computer servers (called Data Halls). They are largely unmanned. There is an element of ancillary office space provided within the existing Data Centres on the Spring Park site.

- 3.4.3 This office space is however effectively ancillary, it serves as a hub or base for individuals visiting the site for occasional meetings or site repairs, etc.
- 3.4.4 The original outline permission for Spring Park anticipated a mix of data centres and B1 office space. Only a small fraction of the originally predicted B1 office space has been constructed (as part of, and ancillary to, the Data Centres built on site) and the concept of a data centre was comparatively new at the time. Hence the traffic predictions erred very much on the cautious side, and were overly optimistic.
- 3.4.5 Trip rates for the Data Hall use can also be calculated from the surveyed arrivals and departures to the Spring Park site.
- 3.4.6 Table 1 gives a breakdown of recorded vehicle arrivals and departures in the peak hours at the Spring Park access on the day of the traffic survey (11th September 2019).

Hour Starting	Spring Park Access		
	In	Out	Tot
08:00	54	14	68
17:00	6	39	45

Table 2: Surveyed In/Out Flows at Spring Park Access

- 3.4.7 The total built data centre floorspace on the site at the time of the surveys amounted to around 28,000m² for data centres P1, P2 and P3. The ancillary office space within the existing P1, P2 and P3 data centres at the time of the surveys amounted to 1,776m². The P4 data centre was under construction at the time of the surveys and the predicted traffic flows associated with the P4 data centre will be included as a committed development, as detailed in the following section, as part of the baseline assessment.
- 3.4.8 Based on the surveyed flows the calculated existing trip-rate for the site, per 100m² for the highway peak periods are summarised in Table 3.

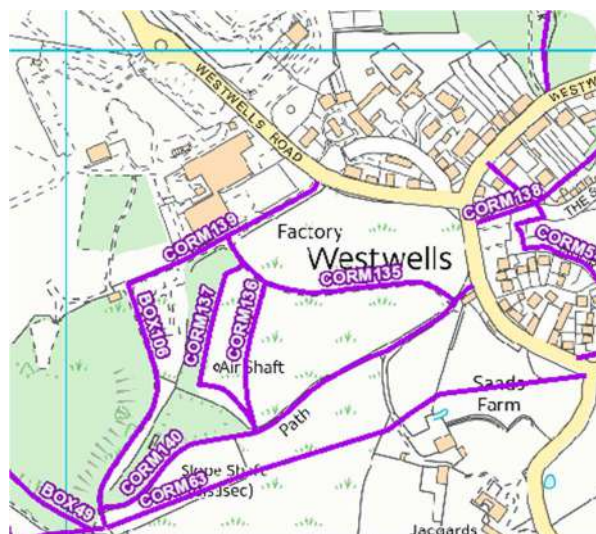
Hour Starting	Spring Park – Calculated trip rate per 100m ²		
	In	Out	Tot
08:00	0.193	0.050	0.243
17:00	0.021	0.139	0.161

Table 3: Existing Spring Park - Trip Rates

- 3.4.9 Table 3 shows that the occupied elements of the site at the time of the survey produced a 2-way trip rates are between around 0.16 and 0.24 per 100m² of built floorspace.
- 3.4.10 Near to, but not part of, the Spring Park site, lies a Data Centre called SQ17. SQ17 is separate from Spring Park but the bulk of traffic associated with SQ17 parks in Spring Park site, and hence is also accounted for in the traffic surveys undertaken at the main Spring Park site access.
- 3.4.11 In line with the original, outline application, and to avoid diluting traffic flows, no allowance is being made for the floor area of SQ17. This represents a worst-case in traffic and highways terms, as it effectively serves to concentrate traffic flow into only Spring Park (when in reality traffic occurs due to both Spring Park and SQ17).

3.5 Committed Development Flows

- 3.5.1 As set out in the previous section of the report there are several committed developments which need to be taken into consideration. There are also the developments associated with Spring Park that need to be considered. These include the P4 data centre which was under construction at the time of traffic surveys and the P5 North data centre which has been approved but construction has not yet started. To ensure a robust assessment the proposed P5 South data centre, which currently is awaiting a decision on the planning application, has also been included as committed development.
- 3.5.2 The proposed P5 North and South data centres will replace existing commercial buildings on these application sites and the vehicle trips associated with the commercial uses in operation at the time of the traffic surveys will also be included within the baseline traffic flows but again to ensure a robust assessment these existing trips have not been removed from the baseline flows.
- 3.5.3 Predicted traffic flows for these committed developments have been taken from the respective transport assessments submitted in support of these applications. The committed development traffic flows included within this assessment are:
- Spring Park (P4 and P5 North) - Figures 5 & 6
 - Rudloe - Figures 7 & 8
 - Land at Bradford Road - Figures 9 & 10
 - Land South of Bradford Road - Figures 11 & 12
 - Spring Park (P5 South) - Figures 13 & 14
 - Total Committed Development Flows - Figure 15 & 16
- 3.5.4 The Transport Assessment for the Land South of Bradford Road site did not include a distribution of trips onto the highway network and for the purposes of this assessment the distribution adopted for the nearby Land at Bradford Road site has been applied to the predicted vehicle trips.
- 3.6 Access on Foot
- 3.6.1 As indicated previously there are no footways provided on Rowan Lane to the existing (non-operational) access into the site. However, as shown on the extract below, a number of PRowS (CORM135, CORM136 and CORM137) cross the site and Rowan Lane is also designated as a PRow (CORM139).



- 3.6.2 Westwells Road has footway and footway/cycleways provided on both sides, varying in width between 1.5 and 3.0m.
- 3.6.3 Crossing facilities on Westwells Road are integrated into the Spring Park access junction and the Park Lane/Westwells Road roundabout to the north. The facilities take the form of central splitter islands allowing pedestrians to cross on an arm-by-arm basis.
- 3.6.4 Looking beyond Westwells Road, for pedestrians heading northeast on Park Lane, towards Katherine Park, there is a footway/cycleway on the south-eastern side of Park Lane (constructed as part of the original Spring Park permission). This footway/cycleway allows for convenient access to the northeast and towards Corsham town centre.
- 3.6.5 At the Leafy Lane double mini-roundabout junction, dropped kerb crossing points are provided on all arms and splitter islands on the B3019 Bradford Road arms allows pedestrians to cross one half of the road at a time.

3.7 Access by Cycle

- 3.7.1 There are no dedicated cycle lanes on Rowan Lane, however it is lightly trafficked road and suitable for cyclists of all abilities.
- 3.7.2 Cycle lanes are provided on both sides of Westwells Roads between the Park Lane roundabout and its junction with Westwells, these cycle lanes are largely on-carriageway way but sections of shared pedestrian/cycleway allow cyclists to bypass the Park Lane and Spring Park Roundabouts.
- 3.7.3 To the south east of the site a short length (approx. 250m) of on carriageway cycle lane exists between the Westwells Road/Rowan Lane junction and the junction between Westwells Road/Westwells.
- 3.7.4 To the north west of the site is a 1.3km length of shared footway/cycleway that runs the length of Park Lane between its junction with Westwells Road and Freestone Way. The shared footway/cycleway is, for the most part, some 3.0m in width though it does narrow to 1.8m in places. This section of footway/cycleway was provided as part of the highway works associated with the Spring Park development.
- 3.7.5 At Freestone Way, cyclists would link into the cycleways and identified 'quiet streets' that run through the Katherine Park housing estate that route towards the centre of Corsham.

3.8 Access by Bus

- 3.8.1 The nearest bus stop is 'Basil Hill Barracks' on Westwells Road which is located to the north east of the site, approximately 225m on foot from the existing Rowan Lane access. The stop serves the number 10 bus route. This service is operated by Faresaver, and runs 6 days a week. It is a local loop service effectively running from the centre of Corsham, past the site and back to Corsham.
- 3.8.2 The service operates from around 07:30 until 18:00 on a weekday, with an hourly frequency. On a Saturday, the service runs from around 08:30 until 12:30, again with an hourly frequency.

- 3.8.3 In addition to the bus stop on Westwells Road, there are also stops on Leafy Lane, the 'Rudloe Fiveways' stops, which are approximately 1km distant from the site to the north. The stops are served by the X31 Bath to Chippenham (via Box/Rudloe/Corsham) service, operated by Faresaver.
- 3.8.4 The X31 runs 7 days a week, with a typical 20-minute weekday frequency, 30-minute Saturday frequency and 120-minute Sunday frequency. The first weekday service runs around 06:30, and the last around 22:30. A journey from Bath to the site would take around 40 minutes, and from Chippenham to the site around 20 minutes.
- 3.8.5 The X31 also provides connections from the site to both Chippenham and Bath Spa railway stations.

4 Proposed Development

4.1 Development Proposals and Site Layout

- 4.1.1 The planning application seeks approval for the development of a new building with a gross floor area of 24,572m², the proposed building will have 3 floors. The proposed layout of the site is included as Appendix 3.
- 4.1.2 The proposed data centre building is split internally into 2 areas consisting of 9,227m² data centre, 9,750m² plant area, 1,941m² office space, 94m² storage space and 3,559m² circulation/core space.
- 4.1.3 A secure outer fence line will be provided around the campus and a further inner security fence line will be provided around the data centre.
- 4.1.4 Vehicular access will be from Rowan Lane via a controlled access gate.

4.2 Proposed Parking Provision

- 4.2.1 As shown on the site layout (Appendix 3) car parking is proposed to be provided in two parking areas on the northern side of the building, either side of the access into site. Nine car parking spaces, including one disability space, will be provided in a smaller visitor car park and 38 car park spaces, including 5 disability spaces, in the main staff car park. A total of 47 car parking spaces, including 4 disability spaces will be provided to serve the development.
- 4.2.2 The current Wiltshire Council parking standards were adopted in 2015 and set a maximum of 1 space per 30sqm for B1 office use. Based on the proposed 1,941m² of office space, this equates to a permitted maximum of 65 car parking spaces. The original Outline Planning permission that the majority of the main Spring Park site has been developed under envisaged a significantly higher level of office provision than has been built. The stand-alone full applications for the proposed P5 North and South data centres have not proposed any significant level of additional car parking due surveyed levels of capacity within the main Spring Park car park.
- 4.2.3 The proposed level of parking therefore accords with adopted car parking standards and is at a level that is considered by Ark Data Centres to be sufficient for its operational needs, based on its experience at Spring Park and other Data Centre sites in the UK.
- 4.2.4 Wiltshire Council car parking standards do not contain any requirements for EV charging points however Part S of Building Regulations indicates that EV requirements for new non-residential developments are as follows:

3.1 For new buildings other than residential or mixed-use buildings with more than 10 parking spaces, both of the following apply.

- a. One electric vehicle charge point must be provided for the building.
- b. At least one in every five remaining parking spaces must be provided with cable routes.

NOTE: A minimum of one in every five means that, for example, if there are 11 parking spaces, two parking spaces must have access to cable routes in addition to the one parking space with access to an electric vehicle charge point.

- 4.2.5 Based on the proposed 47 car parking spaces, the EV requirements above equate to a requirement of at least one active EV space and 11 passive EV spaces. It is proposed to provide two active EV spaces and all other spaces would be passive EV spaces.

- 4.2.6 In terms of disability parking provision, Inclusive Mobility recommends disability parking provision for new employment uses of 5% of the proposed provision. It is proposed that 5 of the 47 parking spaces will be accessible spaces. This equates to 10% of spaces being accessible.
- 4.2.7 In summary, a total of 47 car parking spaces will be provided, including 5 accessible spaces, 2 active EV spaces and 45 passive EV spaces.
- 4.2.8 It is proposed that 5 Sheffield style stands will provide 10 covered spaces to serve the development, which is in accordance with the Wiltshire Council's adopted cycle parking standards for office use of 4 covered spaces plus 2 covered spaces per 400sqm above 1000sqm, based on the proposed 1,941m² of office space.
- 4.2.9 All parking will be within the outer fence line but outside of the inner security fence line.

4.3 Vehicle Access Arrangements and Servicing

- 4.3.1 Vehicle access to the development would be via a priority junction on Rowan Lane, which would replace the existing access into the site and would be widened and moved further to the east to limit the impact on the existing trees along the site boundary.
- 4.3.2 The access would be controlled and all vehicles bound for the site would be subject to the same security checks and clearances as all vehicles entering the main Spring Park campus. Visitors and deliveries to the development site would be first be directed to the main Spring Park site reception via the main site access roundabout before being directed to the site.
- 4.3.3 The advised routing of HGV traffic and directions to the main Spring Park and the proposed site will be via Westwells Road and the B3109 Bradford Road. This routing of traffic will be reinforced by signage provided at the junction of Rowan Lane with Westwells Road.
- 4.3.4 A one-way servicing/emergency route is provided around the perimeter of the building, within the inner security fence line. with fire appliances being able to get to within 45m of all external parts of the P5 building without having to reverse more than 20m. Plan 3 shows the swept vehicle path of a fire appliance.
- 4.3.5 The main servicing area is to the rear of the building, where 2 loading bays are proposed. Plan 4 shows the swept vehicle path of a 16.5m articulated delivery vehicle serving the proposed service yard. A further delivery vehicle lay-by is provided within the outer fence line, close to the site access junction, delivery where vehicles waiting to be allowed access into the secure inner area of the site can park.

4.4 Pedestrian Access and PRow Diversions

- 4.4.1 It is proposed that a footway would be provided on the eastern side of the vehicular access. It is also proposed that an extension of the existing marked pedestrian route would be provided on the southern side of Rowan Lane which would connect the site access to the existing footway on Westwells Road, as shown on Plan 5.
- 4.4.2 A secondary pedestrian access will be provided from Westwells Road but this will only be used for emergency access which will connect to the staff parking area, as shown on the site layout plan (Appendix 3).

- 4.4.3 Both pedestrian accesses into the site will be controlled and there will also be a controlled pedestrian entrance from the car park into the data centre provided at the entrance to the main building.
- 4.4.4 The proposed development will require diversions of the routes of the existing PRowS which currently cross the site (CORM135, CORM136 and CORM137), the proposed Data Centre is required to be secure compound with no unauthorised access.
- 4.4.5 The existing PRowS which cross the site will be re-routed around the outer secure fence line on land which is in the ownership of the applicant and which lies within the application boundary. The proposed diversion of the PRowS will be subject to a separate Section 257 Application.

5 Trip Generation and Assessment Flows

5.1 Introduction

- 5.1.1 This section sets out the predicted travel demand associated with the proposed development along with the derivation of assessment flows.
- 5.1.2 Vehicle trips will firstly be predicted by using the trip rates calculated from the traffic surveys, as set out in section 3.4 of this report and as a sensitivity test using the methodology and trip rates agreed for the original Spring Park outline application. Development traffic will then be assigned onto the highway using the same distribution patterns as for the original Spring Park outline application.
- 5.1.3 Details of the assumed assessment year and traffic growth and derivation of baseline and with development traffic flows will then be detailed.

5.2 Predicted Trips

- 5.2.1 Table 4 provides a summary of the surveyed Spring Park trip rates and the predicted trips based on a GFA of 24,572m².

Period	Calculated trip rate (per 100m ²)			Trips based on 24,572m ²		
	Arrive	Depart	Total	Arrive	Depart	Total
AM Peak	0.193	0.050	0.243	47	12	60
PM Peak	0.021	0.139	0.161	5	34	39

Table 4: Surveyed Spring Park Trip Rates and Predicted Development Trips

- 5.2.2 Based on the surveyed Spring Park trip rates the proposed data centre is predicted to generate 60 two-way trips in the AM peak and 39 two-way trips in the PM peak. It should be appreciated that due construction works being undertaken at the Spring Park site and the inclusion of traffic associated with the SQ17 building that that these trip rates are likely to over-estimate the proposed data centre trips.
- 5.2.3 As a sensitivity test the predicted trips associated with proposed data centre has also been predicted using the methodology previously adopted and agreed with the LHA with regards traffic generation for the outline application at Spring Park, which was to assume that 15% of the gross external floor area of the build footprint would generate traffic in-line with an office and for TRICS office trip rates to be applied to this floor area.
- 5.2.4 For the proposed development, which totals 24,572m², this would equate to a GFA of 3,686m² generating traffic as if it were an office, which is significantly higher than the actual 1,941m² office space proposed.
- 5.2.5 The historically agreed trip rates are given at Table 5, along with the corresponding level of traffic based on 15% of total GFA (3,686m²) and the proposed 1,941m² GFA of office space

Period	B1 Office Trip Rates (per 100m ²)			Trips based on 15% of GFA (3,686m ²)			Trips based on 1,941m ² GFA		
	Arrive	Depart	Total	Arrive	Depart	Total	Arrive	Depart	Total
AM Peak	1.700	0.200	1.900	63	7	70	33	4	37
PM Peak	0.261	0.975	1.236	10	36	46	5	19	24

Table 5: Approved B1 Trip Rates and Alternative Development Trips

- 5.2.6 Based on the trip prediction methodology approved for data centres at the main Spring Park campus, the proposed data centre is predicted to generate 70 two-way trips in the AM peak and 46 two-way trips in the PM peak. Predicted trips based on applying the approved B1 office trips to the proposed office element of the proposed data centre would equate to 37 two-way trips in the AM peak and 24 two-way trips in the PM peak. The higher of these predicted trips (based on 15% of the total GFA) has therefore been used for the sensitivity test assessment.
- 5.2.7 As discussed previously, the site has extant permission for a residential development. Table 6 provides a comparison of the approved trip generations from the residential scheme and the net change in predicted trips with the data centre in place of the residential scheme.

Period	Agreed Residential Trips			Proposed Data Centre Trips			Net Change in Trips		
	Arrive	Depart	Total	Arrive	Depart	Total	Arrive	Depart	Total
AM Peak	14	37	51	47	12	60	+33	-25	+9
PM Peak	32	15	48	5	34	39	-27	+19	-9

Table 6 Comparison of Agreed Residential Trips and Proposed Data Centre Trips

- 5.2.8 As can be seen in Table 5, the proposed data centre would generate a total of 9 more trips in the AM peak and 9 less trips in the PM peak in comparison to the permitted residential scheme. This level of change in predicted development trips will have a negligible impact on the operation of the highway network.

5.3 Trip Distribution

- 5.3.1 Development traffic has been allocated onto the highway as per the historic distribution patterns; the distribution patterns can be seen at Figure 17, with this covering both AM and PM peak periods.
- 5.3.2 The AM and PM site traffic, apportioned onto the highway can then be seen at Figure 18 and 19 for the AM and PM peaks respectively.

5.4 Assessment Year and Traffic Growth

- 5.4.1 A design year of 2028 has been adopted for the assessment of the proposed extension to Spring Park development. To be consistent with the approach adopted previously for the P3, P4 and P5 North and P5 South planning applications, 9 years of traffic growth will be applied to the 2019 background flows.
- 5.4.2 The addition of traffic growth on the local highway network will in part take into consideration the traffic associated with the development sites more remote from the proposed development but not included as committed development.
- 5.4.3 Local traffic growth factors have been obtained from TEMPRO for the period 2019-2028. An average of the growth rates for the two areas which cover Corsham (Wiltshire 017 and 018) and using the 2018 RTF forecast have been used, as summarised below:
- 2019-2028 AM Peak 1.0756
 - 2019-2028 PM Peak 1.0771

- 5.4.4 Baseline flows for 2028 have been calculated by applying the above growth factors to the 2019 background flows, adding the total committed development flows (Figures 15 and 16), and then adding the approved residential development flows which have been reproduced as Figures 20 and 21 for the AM and PM peaks respectively. The resulting 2028 Baseline flows are as shown on Figures 22 and 23.
- 5.4.5 To produce the 2028 With Development traffic flows, as shown on Figures 24 and 25 for the AM and PM peaks respectively, the approved residential development flows (Figures 20 and 21) have been removed from the 2028 Baseline traffic flows (Figures 22 and 23) and replaced with the predicted data centre traffic flows (Figures 18 and 19).
- 5.4.6 The Sensitivity Test flows development trips are shown Figures 26 and 27, which have been calculated with the historically agreed trip prediction methodology and rates for the outline application and assuming the same distribution of development trips (Figure 17). The Sensitivity Test assessment flows (2028 With Development) using these Sensitivity Test development trips are shown on Figures 28 and 29 for the AM and PM peaks respectively.

6 Transport Implications - Vehicular

6.1 Introduction

- 6.1.1 This section examines the likely implications of the development in terms of existing transport infrastructure.
- 6.1.2 The likely effects on the local highway network are examined, firstly by considering the predicted change in traffic flows at key junctions within the study network, and then by detailed junction assessments.

6.2 Change in Traffic Flows

- 6.2.1 Table 7 provides a summary of the predicted change in inflows at the key junctions within the study area.

	Junction	2028 Baseline	2028 With Development	Change	% Change
AM Peak	Spring Park Main Access	856	880	24	2.8%
	Westwells Rd/Park Lane	1272	1296	23	1.8%
	Westwells Rd/Bradford Rd	1654	1689	35	2.1%
	Rowan Lane/Westwells Road	502	510	8	1.6%
PM Peak	Spring Park Main Access	812	821	8	1.0%
	Westwells Rd/Park Lane	1258	1267	9	0.7%
	Westwells Rd/Bradford Rd	1590	1609	19	1.2%
	Rowan Lane/Westwells Road	494	485	-9	-1.8%

Table 7: Predicted Change in Junction Inflows

- 6.2.2 Traffic flows at the assessed junctions would change between the approved 2028 Baseline and the 2028 With Development by between -9 and 35 vehicles or between -1.8% to 2.8%. These levels of change in traffic flows are not expected to have any material impact on the operation on the highway network.

6.3 Junction Assessments

- 6.3.1 The traffic review in the previous section has shown that traffic impact at the junctions is minimal, and thus it is likely that the junctions will operate largely as they would, without the proposed development.

B3109 Bradford Road/Westwells Road/Leafy Lane double mini-roundabout

- 6.3.2 The junction model used to assess the B3109 Bradford Road/Westwells Road/Leafy Lane double mini-roundabout junction has been taken directly from the 2009 transport study (and used to assess the P3, P4, P5 North and South data centres). In effect it is an 'approved' junction model.
- 6.3.3 The results of the JUNCTIONS 9 assessment for the 2019 survey (adjusted) traffic flows are summarised in Table 8 and assessment output is included as Appendix 4. The results summarised in Table 8 match the observed operation of the junction and hence validate the junction model.

Arm	AM Peak			PM Peak		
	RFC	Queue (PCU)	Delay (sec)	RFC	Queue (PCU)	Delay (sec)
Linked Arm (sbound)	0.44	0.8	5.12	0.64	1.8	7.99
Bradford Road (S)	0.66	1.9	11.35	0.40	0.7	6.81
Leafy Lane	0.42	0.7	13.87	0.27	0.4	8.01
Bradford Road (N)	0.45	0.8	6.86	0.40	0.7	5.75
Westwells Rd	0.29	0.4	6.25	0.61	1.6	11.54
Linked arm (nbound)	0.59	1.4	6.69	0.36	0.6	4.33

Table 8: JUNCTIONS 9 Double Mini-Roundabout - 2019 Survey Flows (Adjusted)

6.3.4 The validated junction model has been used to predict the future operation of the junction both for the 2028 Baseline, 2028 With Development and Sensitivity Test (2028 With Development) traffic scenarios. The results of these assessments are summarised in Table 9, Table 10 and Table 11 respectively and full assessment output is included as Appendix 4.

	AM Peak			PM Peak		
	RFC	Queue (PCU)	Delay (sec)	RFC	Queue (PCU)	Delay (sec)
Linked Arm (sbound)	0.55	1.2	6.34	0.77	3.2	12.12
Bradford Road (S)	0.80	3.7	1937	0.48	0.9	8.17
Leafy Lane	0.63	1.6	24.61	0.39	0.6	10.06
Bradford Road (N)	0.59	1.4	9.82	0.47	0.9	6.82
Westwells Rd	0.44	0.8	8.14	0.83	4.5	25.93
Linked arm (nbound)	0.71	2.4	9.52	0.45	0.8	5.17

Table 9: JUNCTIONS 9 Double Mini-Roundabout - 2028 Baseline

Arm	AM Peak			PM Peak		
	RFC	Queue (PCU)	Delay (sec)	RFC	Queue (PCU)	Delay (sec)
Linked Arm (sbound)	0.54	1.2	6.26	0.78	3.4	12.68
Bradford Road (S)	0.81	4.1	20.84	0.48	0.9	8.15
Leafy Lane	0.65	1.8	27.02	0.37	0.6	9.83
Bradford Road (N)	0.62	1.6	10.74	0.47	0.9	6.78
Westwells Rd	0.43	0.8	8.10	0.86	5.6	31.69
OLinked arm (nbound)	0.73	2.6	10.18	0.45	0.8	5.17

Table 10: JUNCTIONS 9 Double Mini-Roundabout - 2028 With Development

Arm	AM Peak			PM Peak		
	RFC	Queue (PCU)	Delay (sec)	RFC	Queue (PCU)	Delay (sec)
Linked Arm (sbound)	0.54	1.2	6.23	0.78	3.4	12.73
Bradford Road (S)	0.82	4.3	21.63	0.48	0.9	8.19
Leafy Lane	0.66	1.9	28.28	0.37	0.6	9.87
Bradford Road (N)	0.63	1.7	11.14	0.47	0.9	6.83
Westwells Rd	0.43	0.7	8.02	0.87	5.7	32.25
Linked arm (nbound)	0.73	2.7	10.43	0.45	0.8	5.19

Table 11: JUNCTIONS 9 Double Mini-Roundabout - Sensitivity Test (2028 With Development)

6.3.5 Comparing the results for the 2028 Baseline and 2028 With Development assessments it can be seen that the Leafy Lane double-mini roundabout junction is expected to operate within capacity during the AM peak for either traffic scenario and for the Westwells Road to be approaching capacity in the PM peak. The results of the Sensitivity Test assessments are very similar to those for the 2028 With Development scenario.

- 6.3.6 The maximum predicted RFC for the 2028 With Development scenario is 0.91 in the PM peak period, with a maximum queue of 7.7 PCU, although these values are only slightly higher than the corresponding 2028 Baseline predicted maximum RFC of 0.87 and queue of 5.7.
- 6.3.7 In summary, the Leafy Lane junction is expected to operate within capacity during all peak periods, either with or without the addition of development traffic.

Park Lane Roundabout

- 6.3.8 The Park Lane/Westwells Roundabout has been modelled using the JUNCTIONS 9 computer programme. The results of the JUNCTIONS 9 assessment for the 2019 survey (adjusted) traffic flows are summarised in Table 12 and full assessment output is included as Appendix 5.

Arm	AM Peak			PM Peak		
	RFC	Queue (PCU)	Delay (sec)	RFC	Queue (PCU)	Delay (sec)
Westwells Rd (E)	0.15	0.2	3.30	0.40	0.7	4.29
Rudloe	0.01	0.0	3.72	0.04	0.0	4.90
Westwells Rd (W)	0.40	0.7	5.57	0.26	0.4	4.83
Park Lane	0.28	0.4	4.30	0.12	0.1	3.09

Table 12: JUNCTIONS 9 Park Lane Roundabout- 2019 Survey Flows (Adjusted)

- 6.3.9 The results summarised in Table 12 match the observed operation of the junction. The validated junction model has been used to predict the future operation of the junction both for the 2028 Baseline and 2028 With Development traffic scenarios.
- 6.3.10 The results of these assessments are summarised Table 13 and Table 14 respectively and full assessment output is included as Appendix 5.

	AM Peak			PM Peak		
	RFC	Queue (PCU)	Delay (sec)	RFC	Queue (PCU)	Delay (sec)
Westwells Rd (E)	0.25	0.3	3.44	0.56	1.3	5.82
Rudloe	0.03	0.0	4.15	0.06	0.1	6.03
Westwells Rd (W)	0.59	1.4	8.03	0.38	0.6	5.70
Park Lane	0.38	0.6	5.38	0.17	0.2	3.33

Table 13: JUNCTIONS 9 Park Lane Roundabout - 2028 Baseline

Arm	AM Peak			PM Peak		
	RFC	Queue (PCU)	Delay (sec)	RFC	Queue (PCU)	Delay (sec)
Westwells Rd (E)	0.24	0.3	3.40	0.58	1.4	6.08
Rudloe	0.03	0.0	4.12	0.06	0.1	6.19
Westwells Rd (W)	0.64	1.8	9.07	0.38	0.6	5.65
Park Lane	0.39	0.6	5.63	0.16	0.2	3.30

Table 14: JUNCTIONS 9 Park Lane Roundabout - 2028 With Development

- 6.3.11 Comparing the results for the 2028 Baseline and 2028 With Development assessments it can be seen that the Park Lane junction is expected to operate within capacity during all peak periods in either traffic scenario. The maximum predicted RFC for the 2028 With Development scenario is 0.64 in the AM peak period and only minimal queuing.

Spring Park Main Access

6.3.12 The Spring Park site access roundabout has been modelled using the JUNCTIONS 9 computer programme. The results of the JUNCTIONS 9 assessment for the 2019 survey (adjusted) traffic flows are summarised in Table 15 and full assessment output is included as Appendix 6.

Arm	AM Peak			PM Peak		
	RFC	Queue (PCU)	Delay (sec)	RFC	Queue (PCU)	Delay (sec)
Westwells Rd (E)	0.14	0.2	2.97	0.29	0.4	3.36
Spring Park	0.01	0.0	4.30	0.03	0.0	2.97
Westwells Rd (W)	0.24	0.3	2.45	0.10	0.1	2.06

Table 15: JUNCTIONS 9 Site Access Roundabout- 2019 Survey Flows (Adjusted)

6.3.13 The validated junction model has been used to predict the future operation of the junction both for the 2028 Baseline and 2028 With Development traffic scenarios. The results of these assessments are summarised in Table 16 and Table 17 respectively and full assessment output is included as Appendix 6.

	AM Peak			PM Peak		
	RFC	Queue (PCU)	Delay (sec)	RFC	Queue (PCU)	Delay (sec)
Westwells Rd (E)	0.20	0.2	3.10	0.35	0.5	3.62
Spring Park	0.03	0.0	2.71	0.11	0.1	3.35
Westwells Rd (W)	0.33	0.5	2.77	0.14	0.2	2.13

Table 16: JUNCTIONS 9 Spring Park Site Access Roundabout - 2028 Baseline

Arm	AM Peak			PM Peak		
	RFC	Queue (PCU)	Delay (sec)	RFC	Queue (PCU)	Delay (sec)
Westwells Rd (E)	0.19	0.2	3.06	0.36	0.6	3.71
Spring Park	0.03	0.0	2.69	0.11	0.1	3.40
Westwells Rd (W)	0.36	0.6	2.89	0.13	0.2	2.12

Table 17: JUNCTIONS 9 Spring Park Site Access Roundabout - 2028 With Development

6.3.14 Comparing the results for the 2028 Baseline and 2028 With Development assessments it can be seen that the Spring Park access junction is expected to operate with significant degree of capacity during all peak periods. The maximum predicted RFC for the 2028 With Development scenario being just 0.36 in both the AM and PM peak and only minimal queuing.

Rowan Lane/Westwells Road

6.3.15 The Rowan Lane/Westwells Road priority junction has been modelled using the JUNCTIONS 9 computer programme. The results of the JUNCTIONS 9 assessment for the 2019 survey (adjusted) traffic flows are summarised in and full assessment output is included as Appendix 7.

Arm	AM Peak			PM Peak		
	RFC	Queue (PCU)	Delay (sec)	RFC	Queue (PCU)	Delay (sec)
Rowan Lane - Left	0.02	0.0	5.83	0.07	0.1	5.90
Rowan Lane - Right	0.00	0.0	7.39	0.02	0.0	7.20
Westwells Rd - Right	0.09	0.1	6.29	0.02	0.0	5.30

Table 18: JUNCTIONS 9 Rowan Lane/Westwells Road - 2019 Survey Flows (Adjusted)

6.3.16 The validated junction model has been used to predict the future operation of the junction both for the 2028 Baseline and 2028 With Development traffic scenarios. The results of these assessments are summarised in Table 16 and Table 17 respectively and full assessment output is included as Appendix 7.

	AM Peak			PM Peak		
	RFC	Queue (PCU)	Delay (sec)	RFC	Queue (PCU)	Delay (sec)
Westwells Rd (E)	0.06	0.1	6.28	0.09	0.1	6.20
Rowan Lane	0.04	0.0	8.08	0.04	0.0	7.74
Westwells Rd (W)	0.12	0.2	6.38	0.06	0.1	5.35

Table 19: JUNCTIONS 9 Rowan Lane/Westwells Road - 2028 Baseline

Arm	AM Peak			PM Peak		
	RFC	Queue (PCU)	Delay (sec)	RFC	Queue (PCU)	Delay (sec)
Westwells Rd (E)	0.04	0.0	6.05	0.13	0.2	6.45
Rowan Lane	0.01	0.0	8.15	0.04	0.0	7.61
Westwells Rd (W)	0.23	0.4	7.29	0.04	0.1	5.26

Table 20: JUNCTIONS 9 Rowan Lane/Westwells Road - 2028 With Development

6.3.17 Comparing the results for the 2028 Baseline and 2028 With Development assessments it can be seen that the Spring Park access junction is expected to operate with significant degree of capacity during all peak periods. The maximum predicted RFC for the 2028 With Development scenario being just 0.23 in the AM and only minimal queuing.

7 Transport Implications - Non-Car Access

7.1 Non-Car Access

- 7.1.1 The site and much of the surroundings have the benefit of recent planning permissions, and the granting of these permissions, along with the provision of various pieces of non-car infrastructure as part of these permissions, inherently demonstrates that the site and surroundings are accessible by non-car modes of transport.
- 7.1.2 There are footways on both sides of Westwells Road; these footways extend to the south (up to the junction of Westwells Road/Moor Green) and to the far north; over the Westwells Road/Park Lane roundabout and up to the Leafy Lane double mini roundabout junction.
- 7.1.3 Pedestrian demand/desire is likely to occur to and from the most populated areas; these are located off the far eastern side of Park Lane (around 1.8km distant) and off Bradford Road/Leafy Lane, to the north (roughly 1.2km distant). All of these areas are accessible to/from the site on foot. A shared footway/cycleway runs the length of Park Lane between its junction with Westwells Road and Freestone Way. This section of footway/cycleway was provided as part of the highway works associated with the Spring Park development and facilitates travel to/from this location.
- 7.1.4 With regards travel on cycle, the aforementioned route on Park Lane caters for cyclists, as do the cycle facilities on Westwells Road which are a mixture of on and off-road routes. Further afield, many of the surrounding roads and lanes are lightly trafficked, and thus attractive to cyclists.
- 7.1.5 The bus stop to the site is Basil Hill Barracks on Westwells Road, 225m on foot from the existing site access on Rowan Road. The stop is served by service number 10; a local loop service effectively running from the centre of Corsham, past the site and back to Corsham. The service operates from around 07:30 until 18:00 on a weekday, with an hourly frequency. On a Saturday, the service runs from around 08:30 until 12:30, again with an hourly frequency.
- 7.1.6 In addition, the 'Rudloe Fiveways' stops on Leafy Lane are approximately 1.1km to the north of the site. The stops are served by the X31 Bath to Chippenham (via Box/Rudloe/Corsham) service. This service has a typical 20-minute weekday frequency, 30-minute Saturday frequency and 120-minute Sunday frequency.
- 7.1.7 Thus, within a 1km of the site, two separate bus services can be accessed, and combined these give a typical frequency of 1 bus every 15 minutes during the weekday.
- 7.1.8 The site is thus highly accessible by non-car modes of travel.

7.2 Travel Plan Statement

- 7.2.1 The occupiers of Spring Park already have a Travel Plan Statement which they implemented as part of previous development phases on the site. This statement will be carried forward to the proposed extension of the Spring Park campus. An updated copy of the statement for the proposed data centre is given at Appendix 8.

8 Summary and Conclusions

8.1 Summary

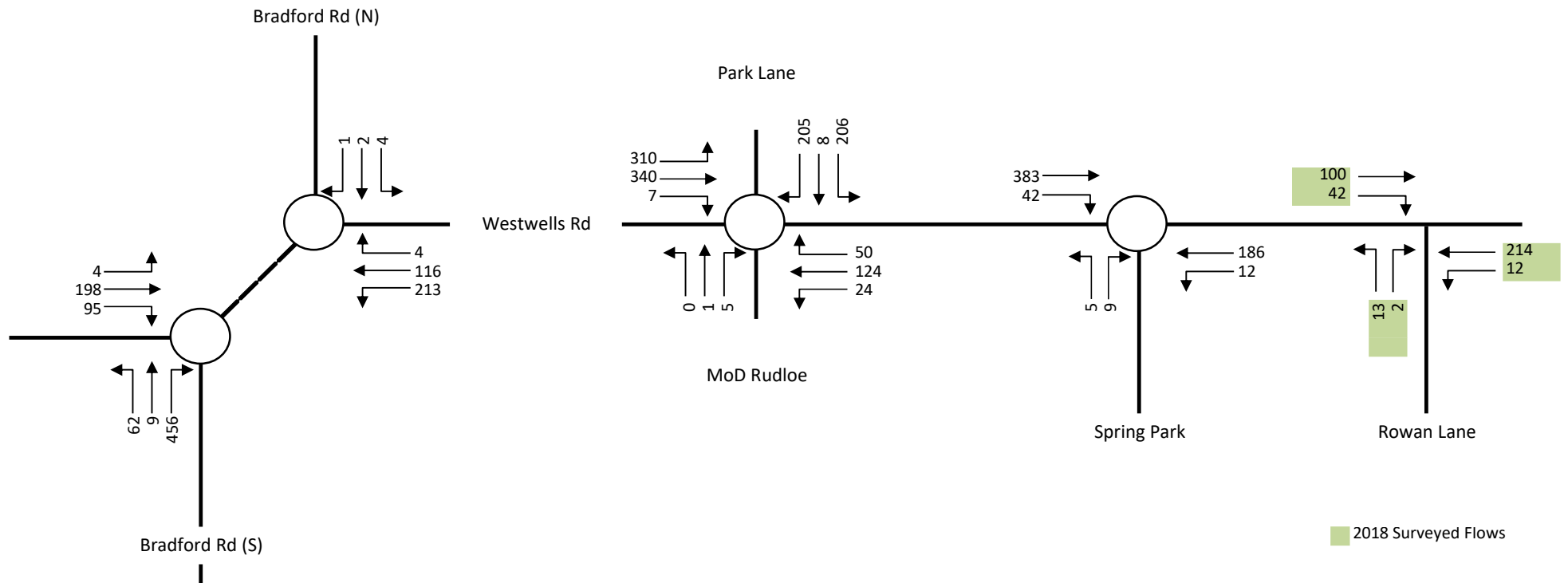
- 8.1.1 Ark Data Centres has commissioned IMA Transport Planning Ltd to produce a Transport Assessment in support of a new, full planning application for the construction of a data centre facility as an extension of the Spring Park Data Centre Campus, located off Westwells Road, Corsham.
- 8.1.2 The proposed site is currently vacant brownfield land, previously occupied by the MoD. When the site was operational, vehicular access was via a priority junction with Rowan Lane. Rowan Lane connects to Westwells Road via a priority junction. There are also redundant accesses into the site from Westwells Road and the unnamed lane to the southeast.
- 8.1.3 The site has previously been granted planning permission for residential development (Class C3) of up to 81 dwellings.
- 8.1.4 In order to gauge the level of traffic occurring on the highway, a comprehensive set of traffic surveys were undertaken on 11th September 2019, over the period 07:00-09:30 and 16:00-18:00. The traffic survey shows that the existing Spring Park campus generates traffic at an exceptionally low-level; based on the current floor area on site the trip rates are between around 0.16 and 0.24 per 100m² of built floorspace.
- 8.1.5 There are footways on both sides of Westwells Road, and crossing facilities integrated into the site access. There is a mixture of footway and footway cycleway on Westwells Road. There is a footway/cycleway on Park Lane, leading towards the St Katherines Park area. There are two separate bus stops within 1km of the site, giving access to services X31 and 10. The X31 has a typical 20-minute frequency and the 10 a 60-minute frequency.
- 8.1.6 There are several committed developments nearby. Some have planning permission and have not been implemented while others are partially/fully implemented. The traffic data used in this report has allowed for these developments as necessary.
- 8.1.7 The proposed data centre building has a gross floor area of 24,572m² and is split internally into 2 areas consisting of 9,227m² data centre, 9,750m² plant area, 1,941m² office space, 94m² storage space and 3,559m² circulation/core space.
- 8.1.8 Vehicle access to the development would be via a priority junction on Rowan Lane, which would replace the existing access into the site and would be widened and moved further to the east to limit the impact on the existing trees along the site boundary.
- 8.1.9 The access would be controlled and all vehicles bound for the site would be subject to the same security checks and clearances as all vehicles entering the main Spring Park campus. Visitors and deliveries to the proposed data centre site would be first be directed to the main Spring Park site reception via the main site access roundabout before being directed to the proposed data centre site.
- 8.1.10 The advised routing of HGV traffic and directions to the main Spring Park and the proposed data centre site will be via Westwells Road and the B3109 Bradford Road. This routing of traffic will be reinforced by signage provided at the junction of Rowan Lane with Westwells Road.

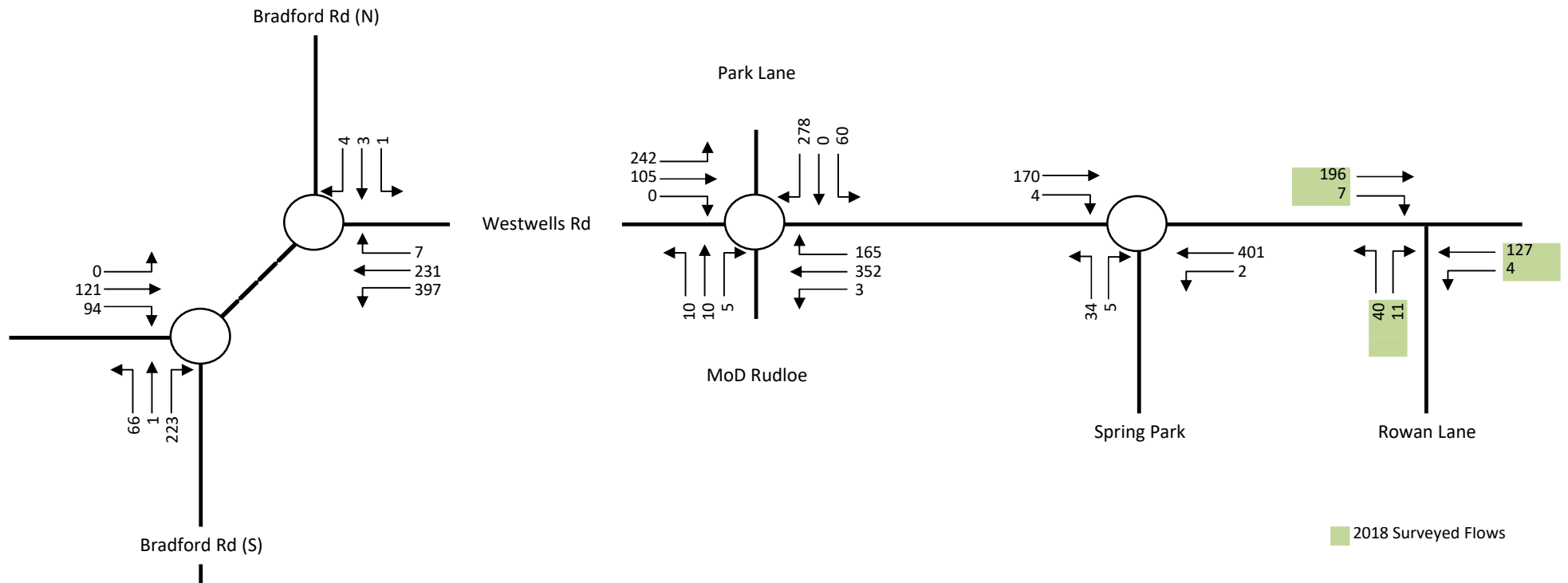
- 8.1.11 It is proposed that a footway would be provided on the eastern side of the vehicular access. An extension of the existing marked pedestrian route would be provided on the southern side of Rowan Lane which would connect the site access to the existing footway on Westwells Road. A secondary pedestrian access will be provided from Westwells Road but this will only be used for emergency access which will connect to the staff parking area.
- 8.1.12 The proposed development will require diversions of the routes of the existing PRowS which currently cross the site (CORM135, CORM136 and CORM137), the proposed Data Centre is required to be secure compound with no unauthorised access.
- 8.1.13 The existing PRowS which cross the site will be re-routed around the outer secure fence line on land which is in the ownership of the applicant and which lies within the application boundary. The proposed diversion of the PRowS will be subject to a separate Section 257 Application.
- 8.1.14 Traffic flows at the assessed junctions would change between the approved 2028 Baseline and the 2028 With Development by between -2 and 45 vehicles or between 0.4% to 3.8%. These levels of change in traffic flows are not expected to have any material impact on the operation on the highway network.
- 8.1.15 The operation of the highways has been modelled for the 2028 Baseline and 2028 With Development scenarios. The assessments demonstrate that the proposed development will result will not have a perceptible change on the operation of the local highway network. No works or improvements to these junctions are necessary or justifiable, due to the proposed development.
- 8.1.16 The site and much of the surroundings have the benefit of recent planning permissions (including extant permission for a residential scheme to be located on the site), and the granting of these permissions, along with the provision of various improvements to non-car infrastructure as part of these permissions, inherently demonstrates that the site and surroundings are accessible by non-car modes of transport.

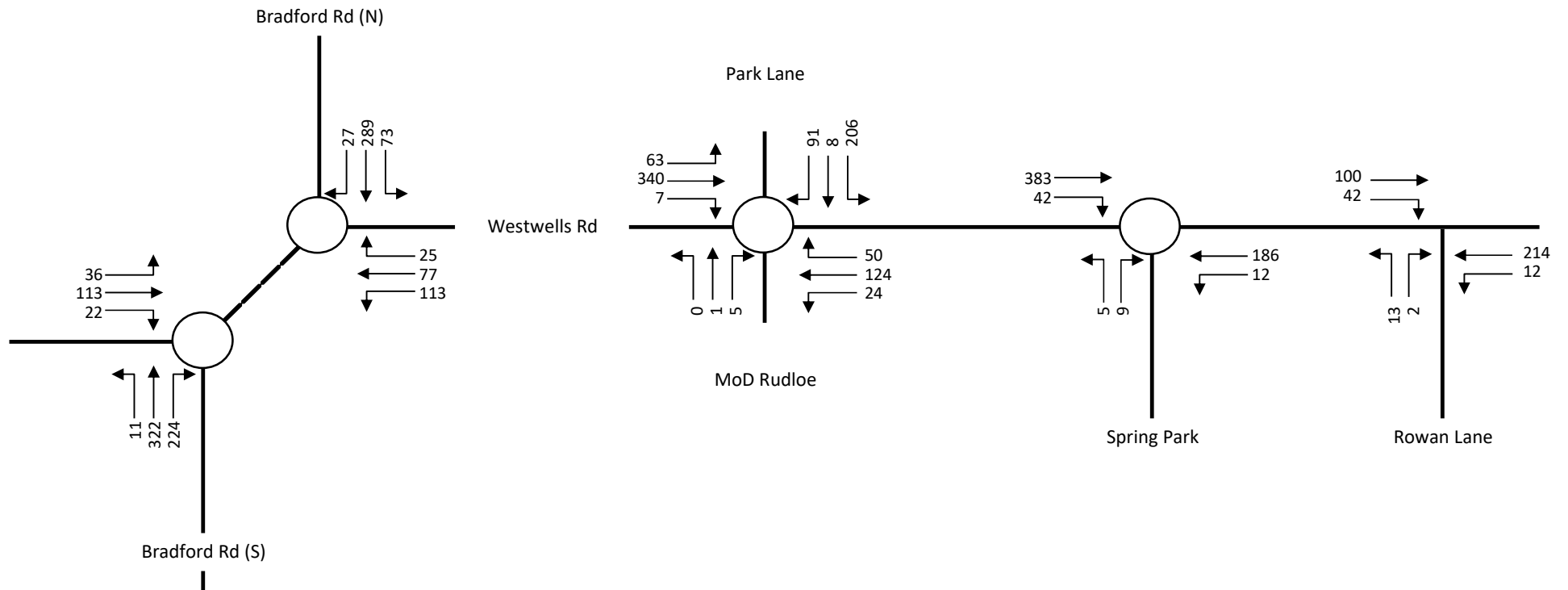
8.2 Conclusions

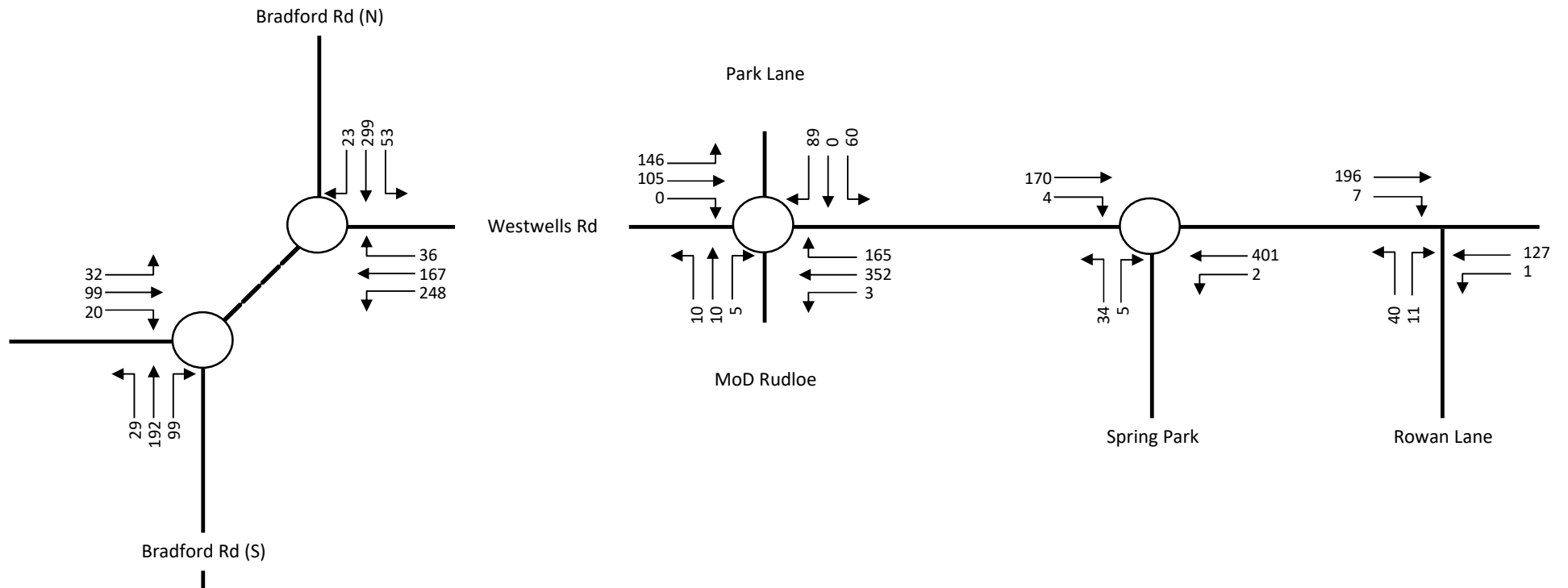
- 8.2.1 To conclude, the development is considered to be acceptable from a traffic and transport perspective with no off-site mitigation works being necessary.

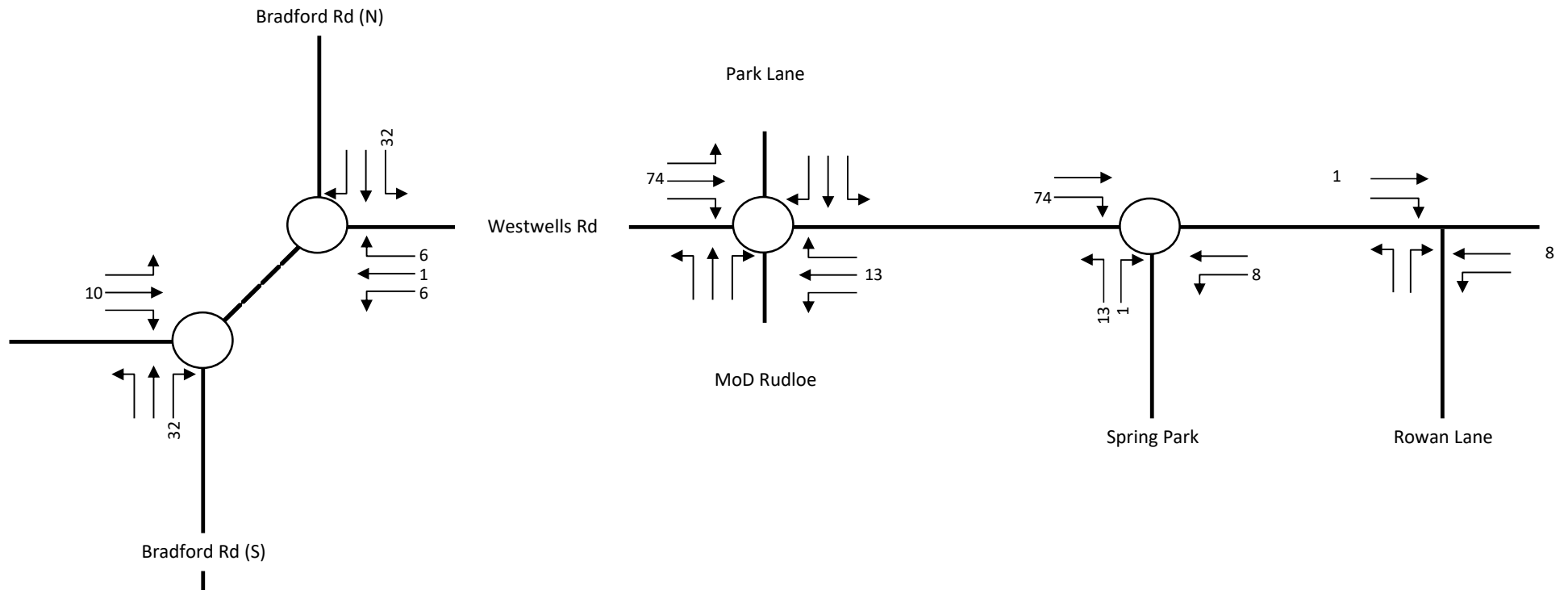
Figures

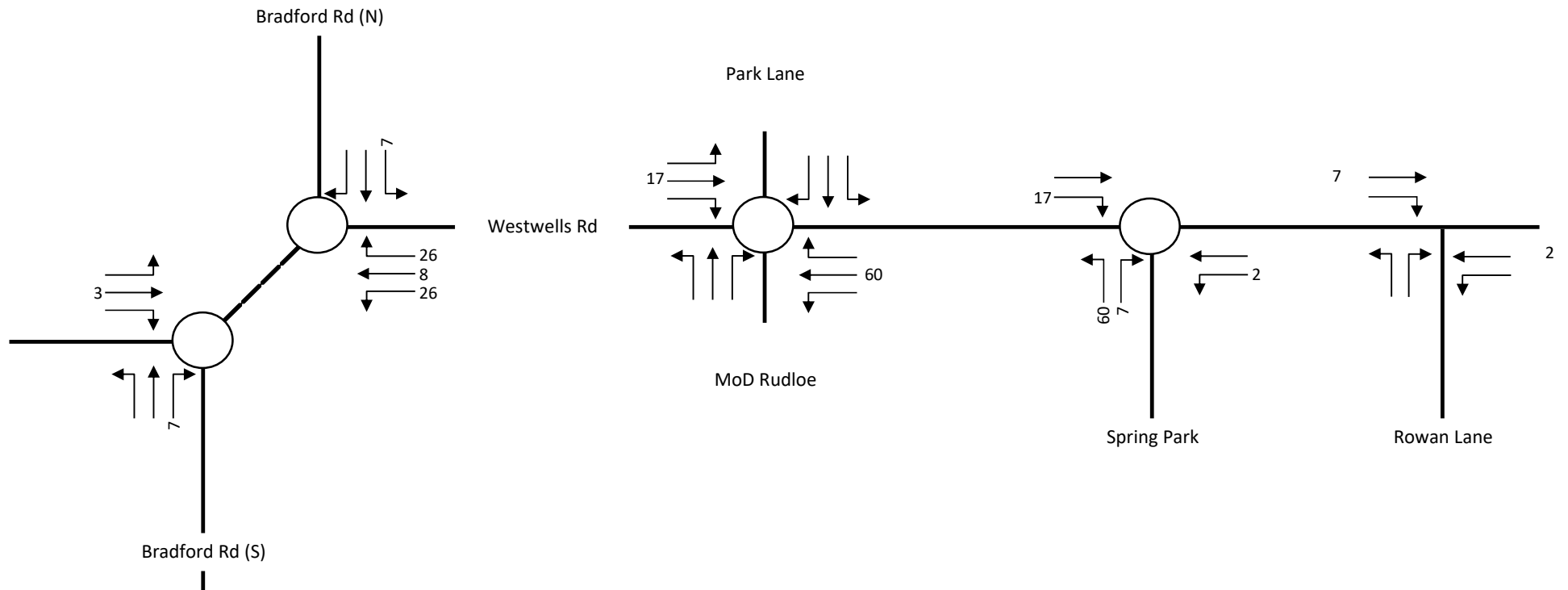


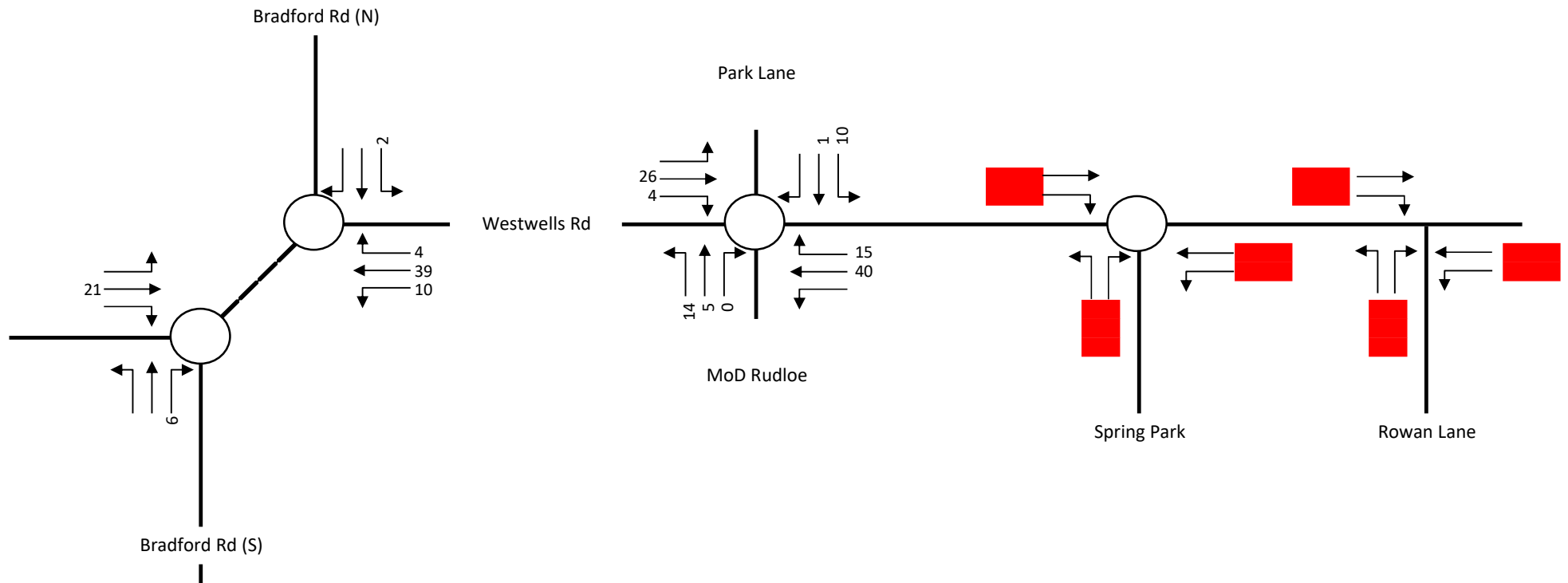


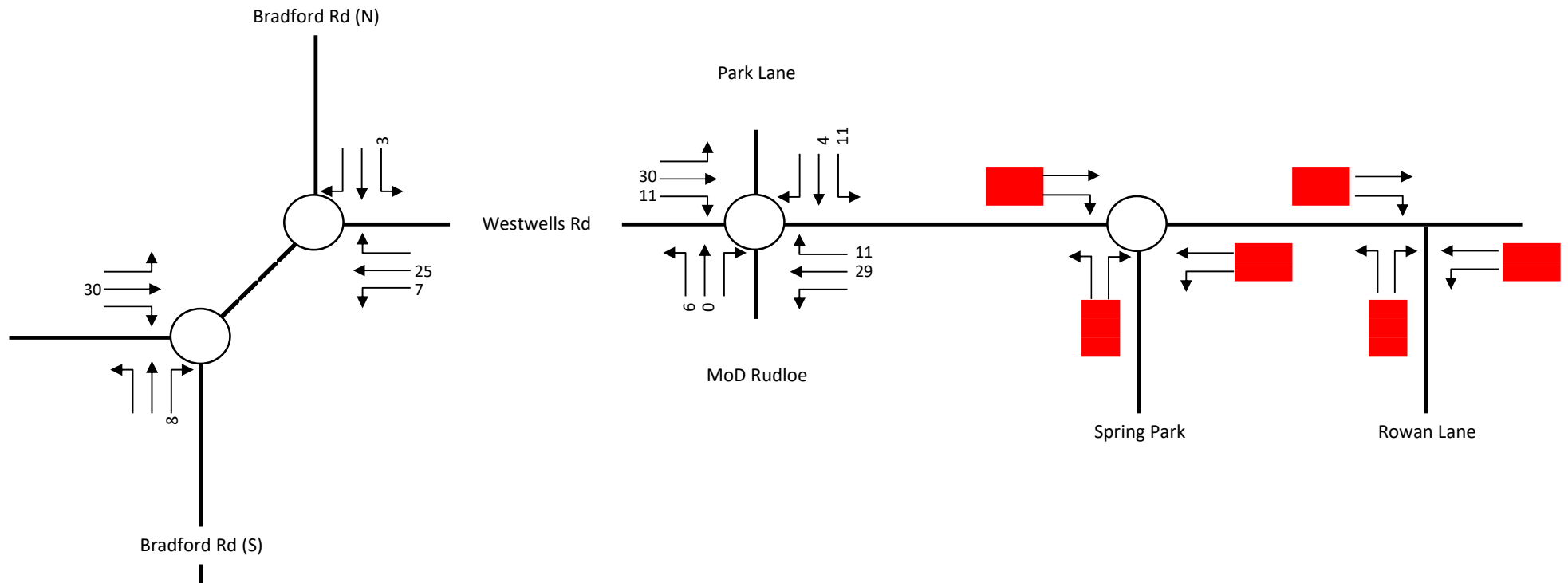


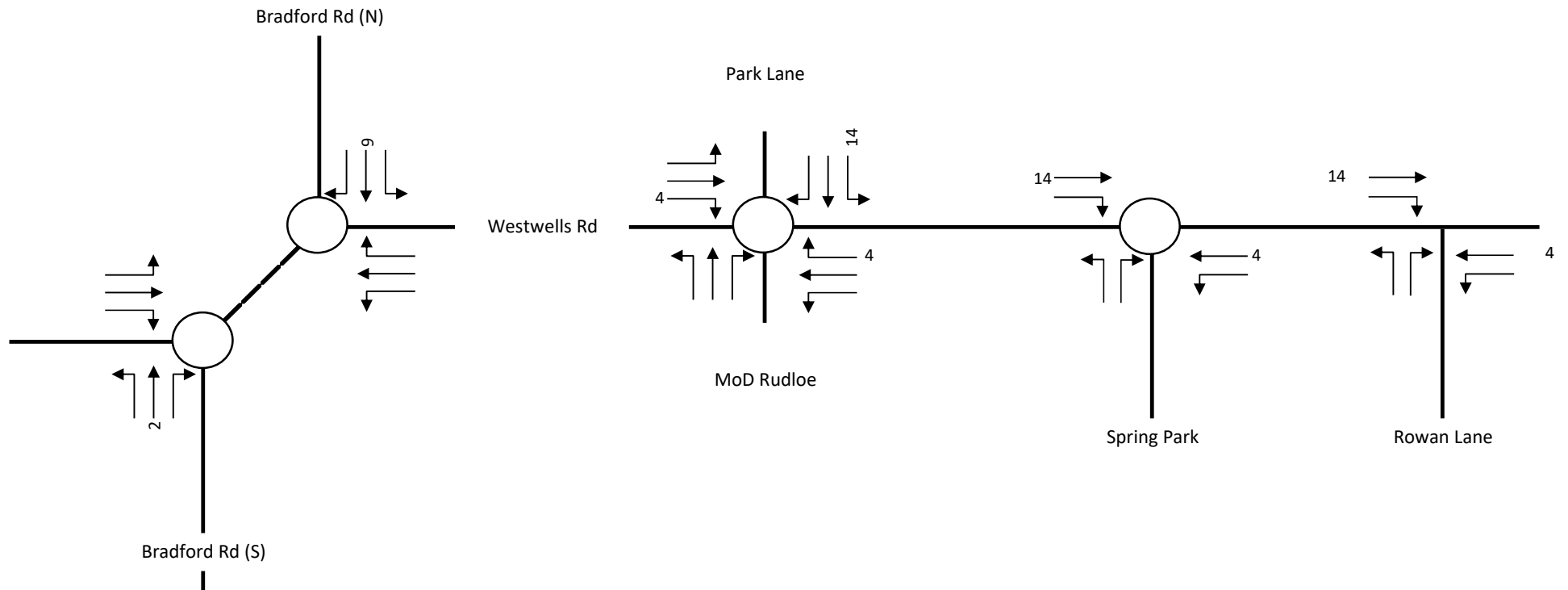


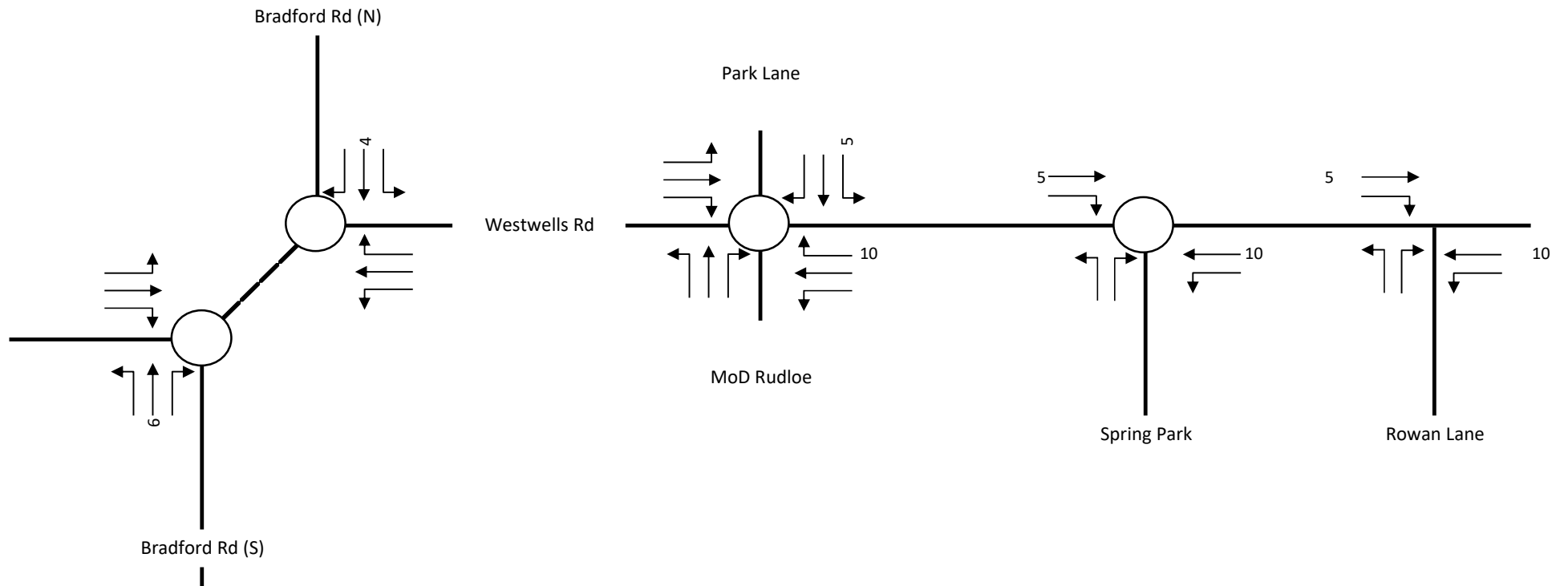


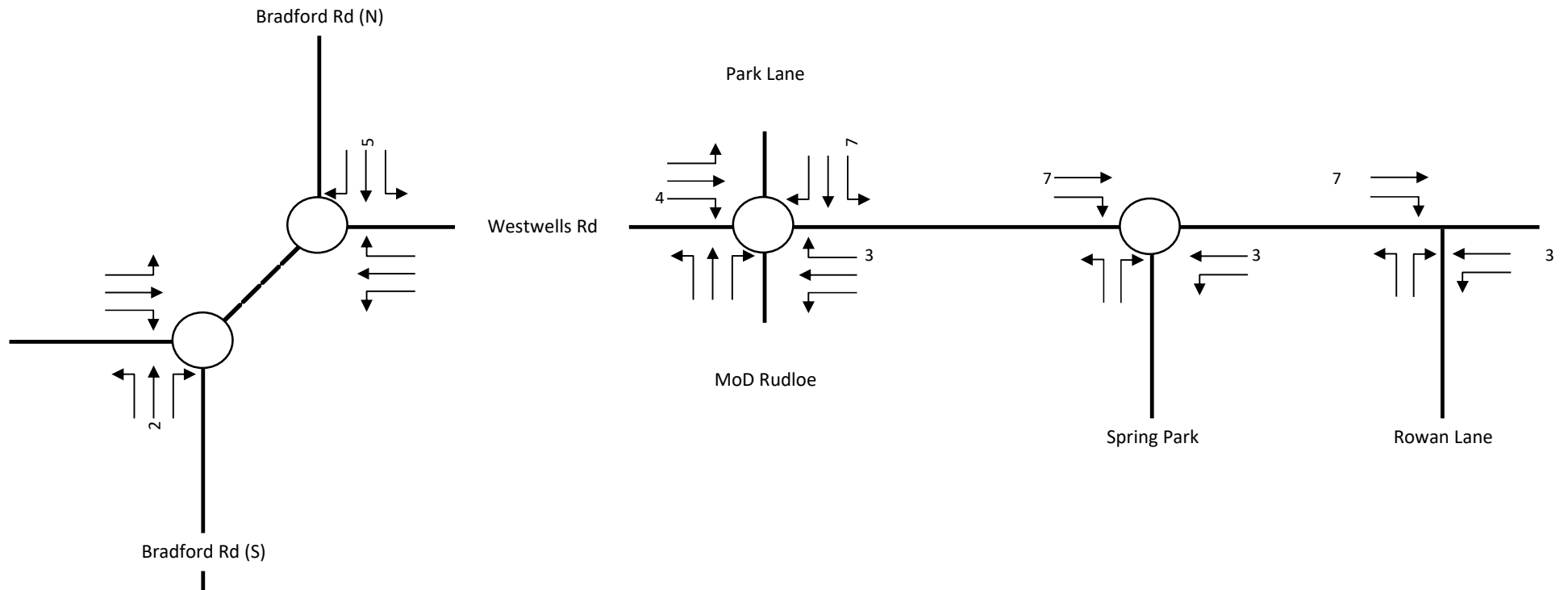


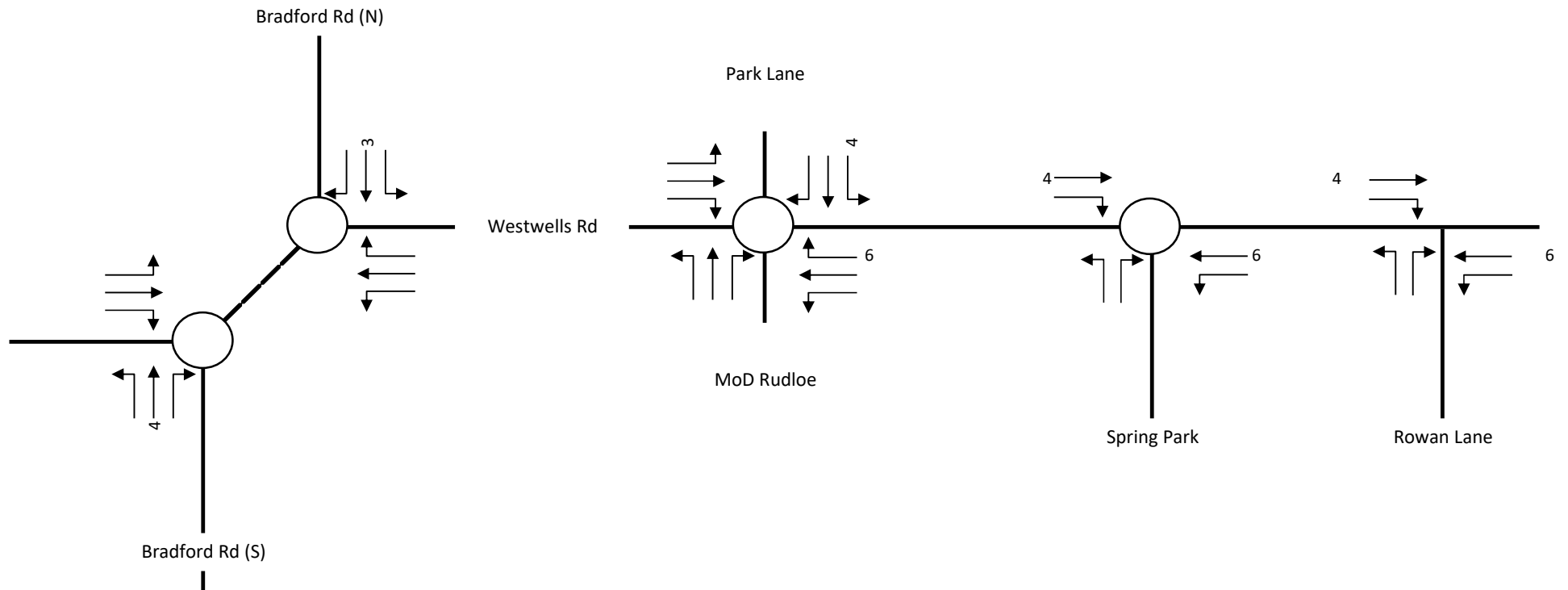


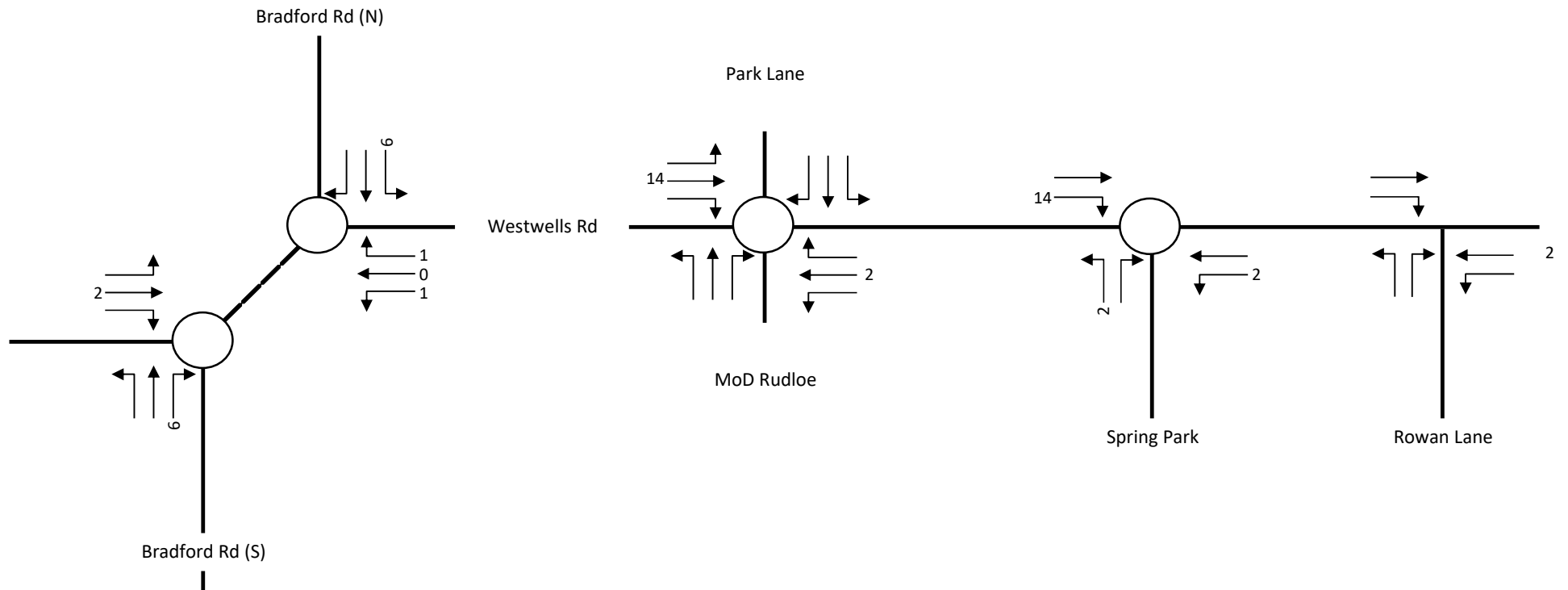


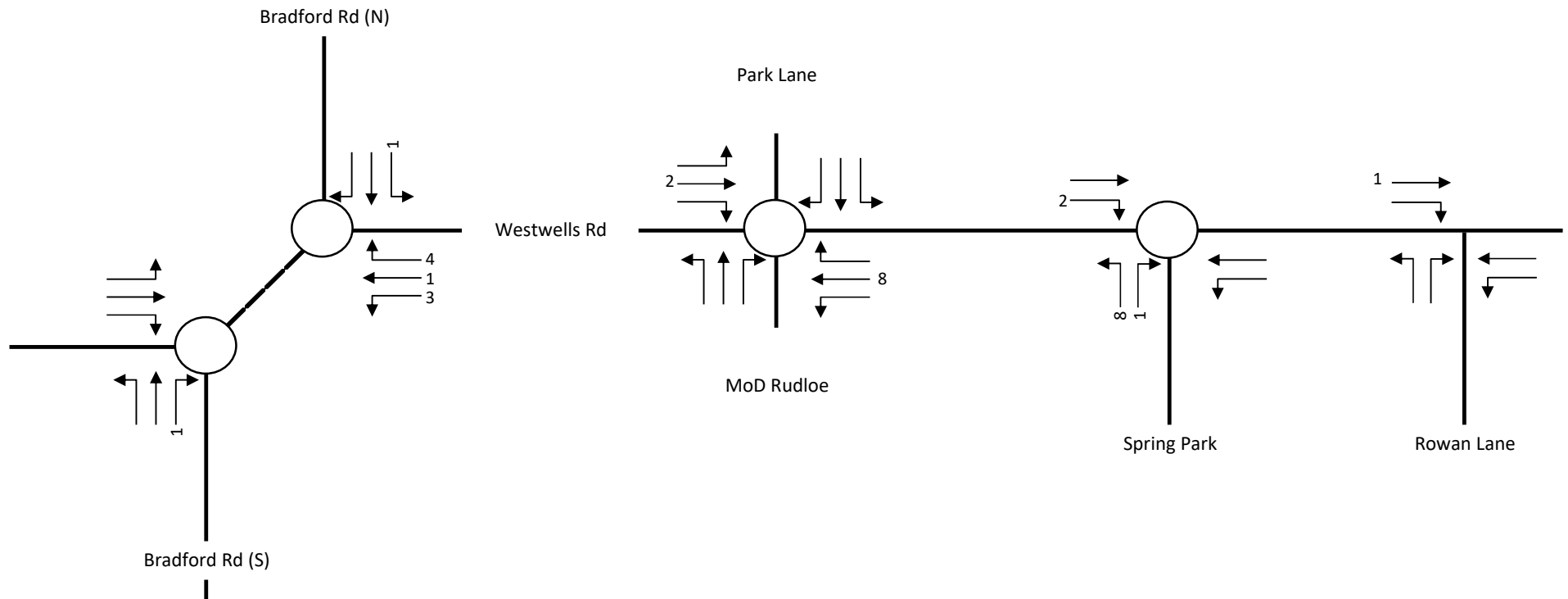




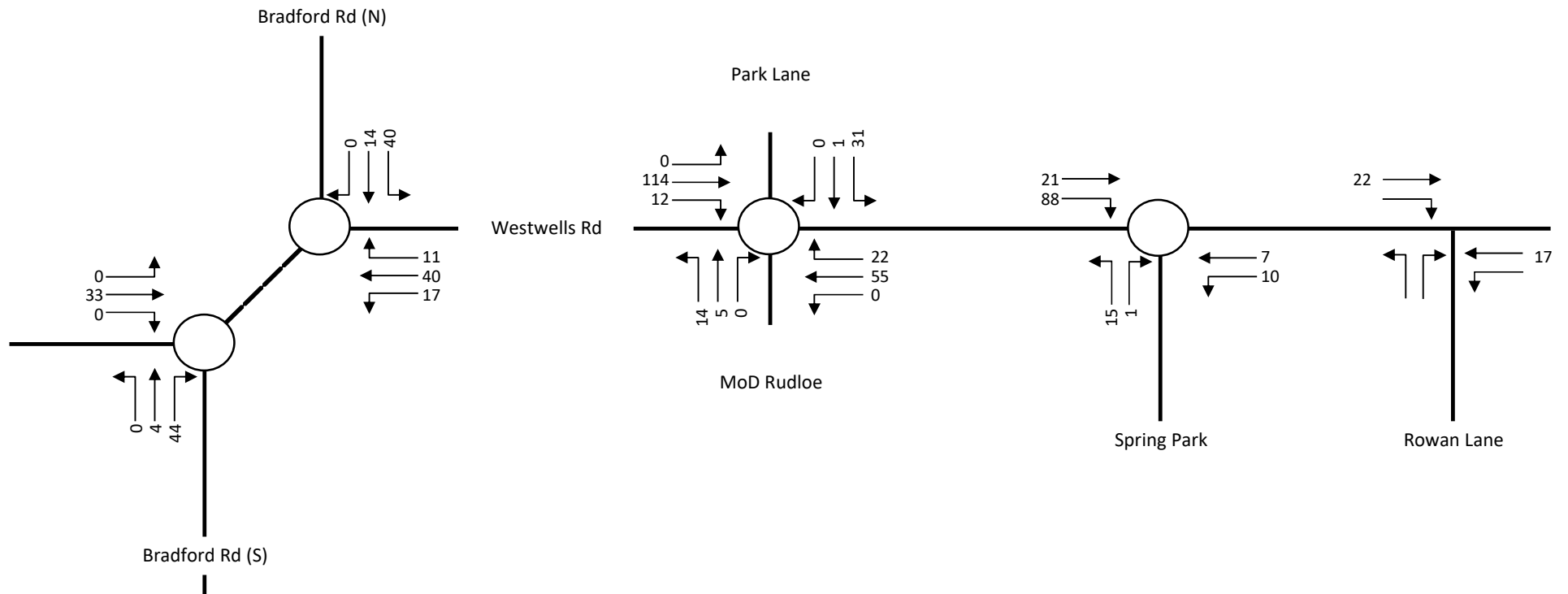


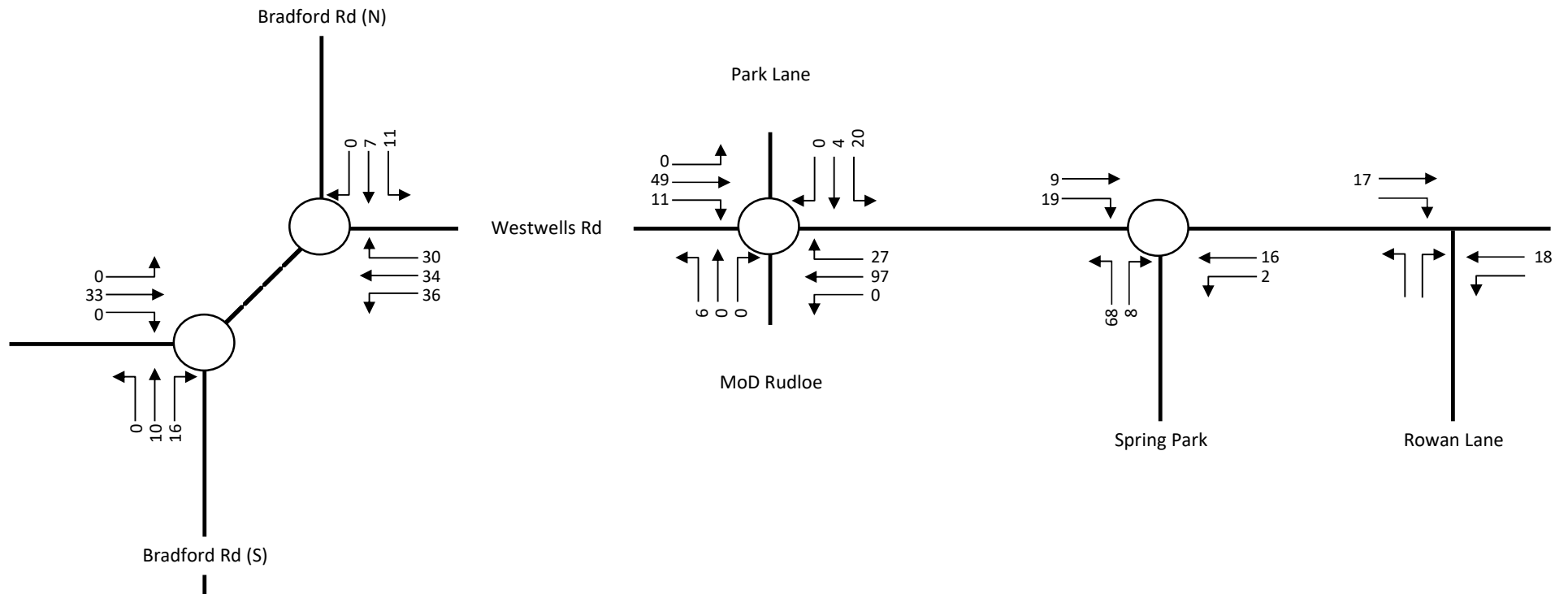


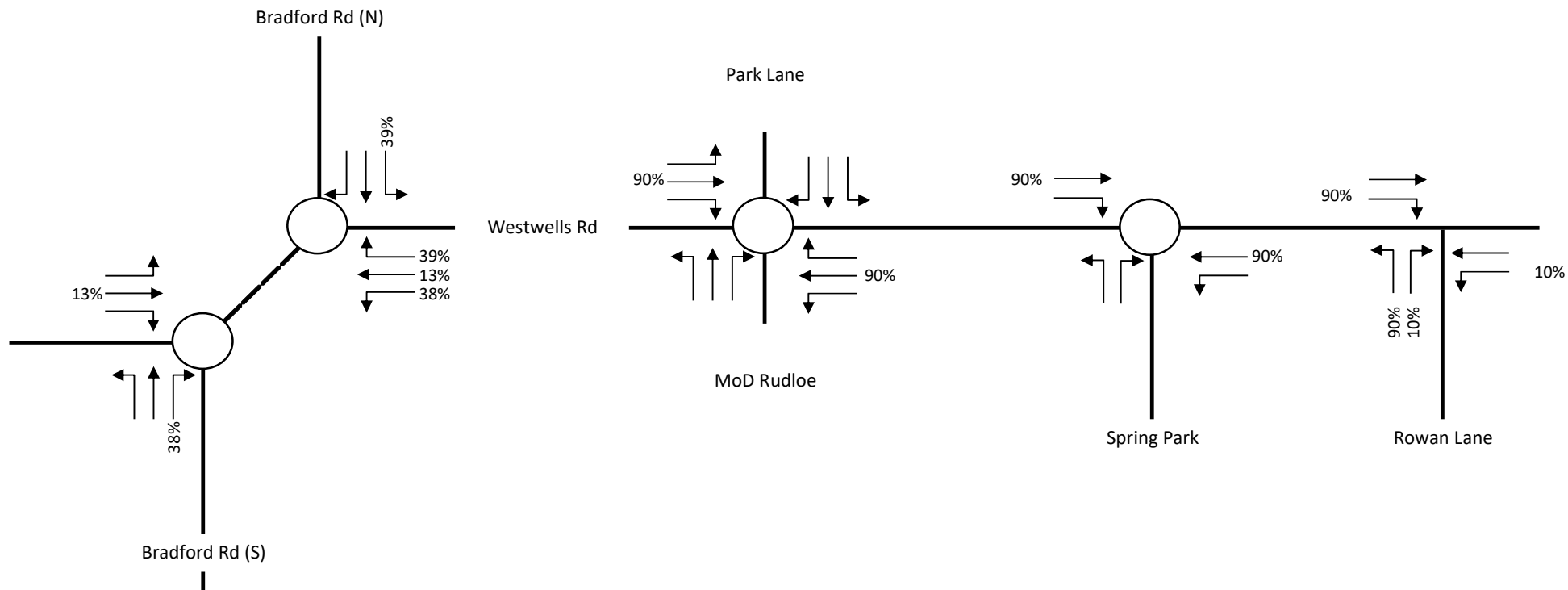


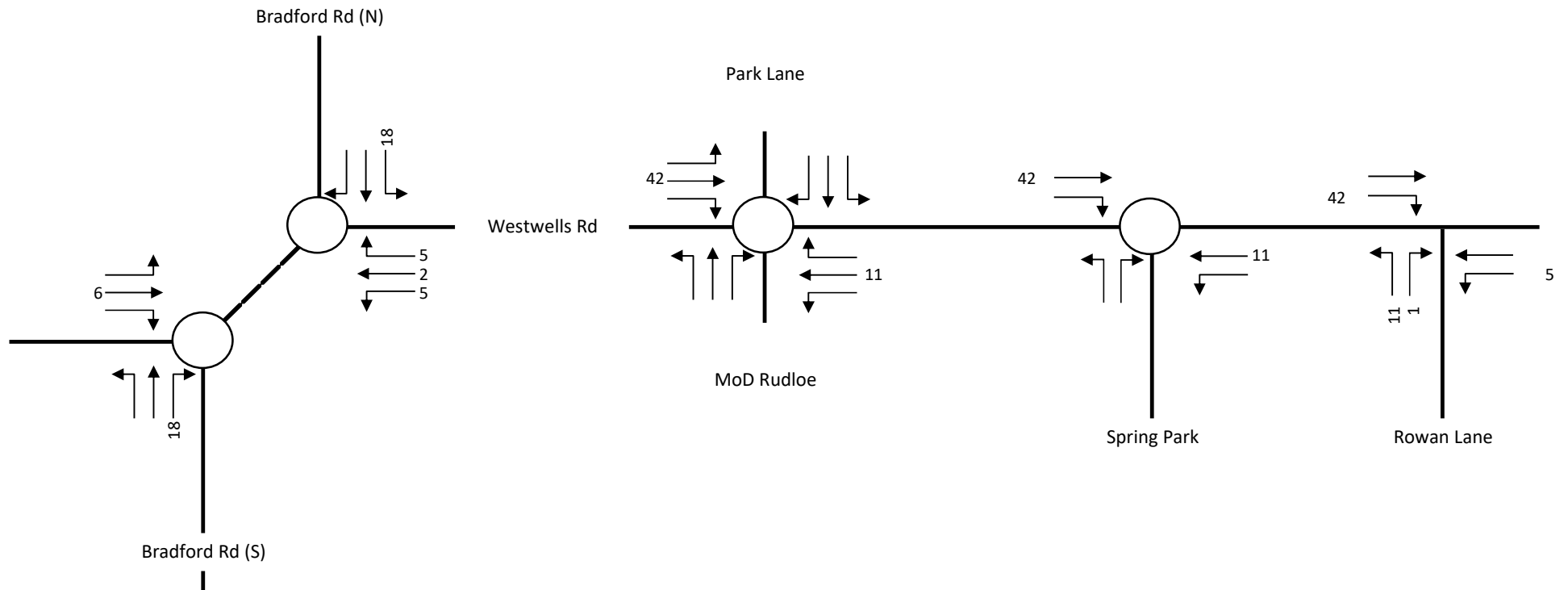


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Out	9

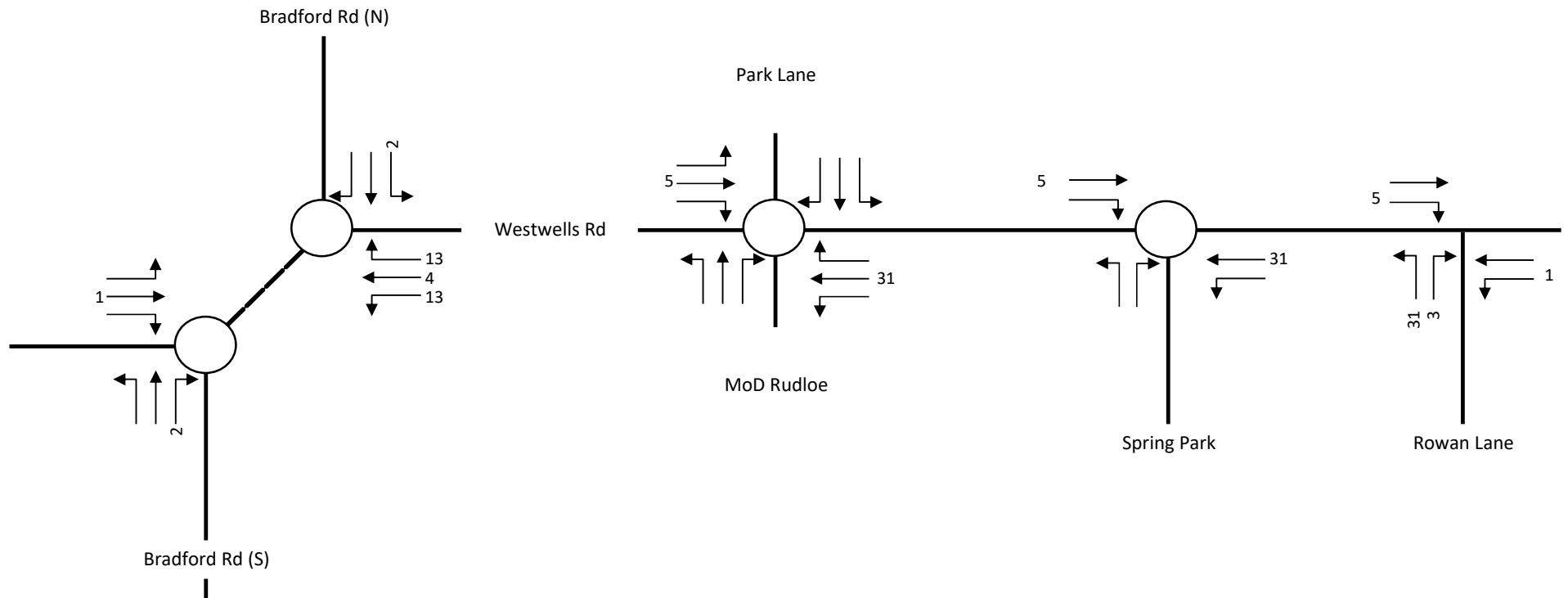




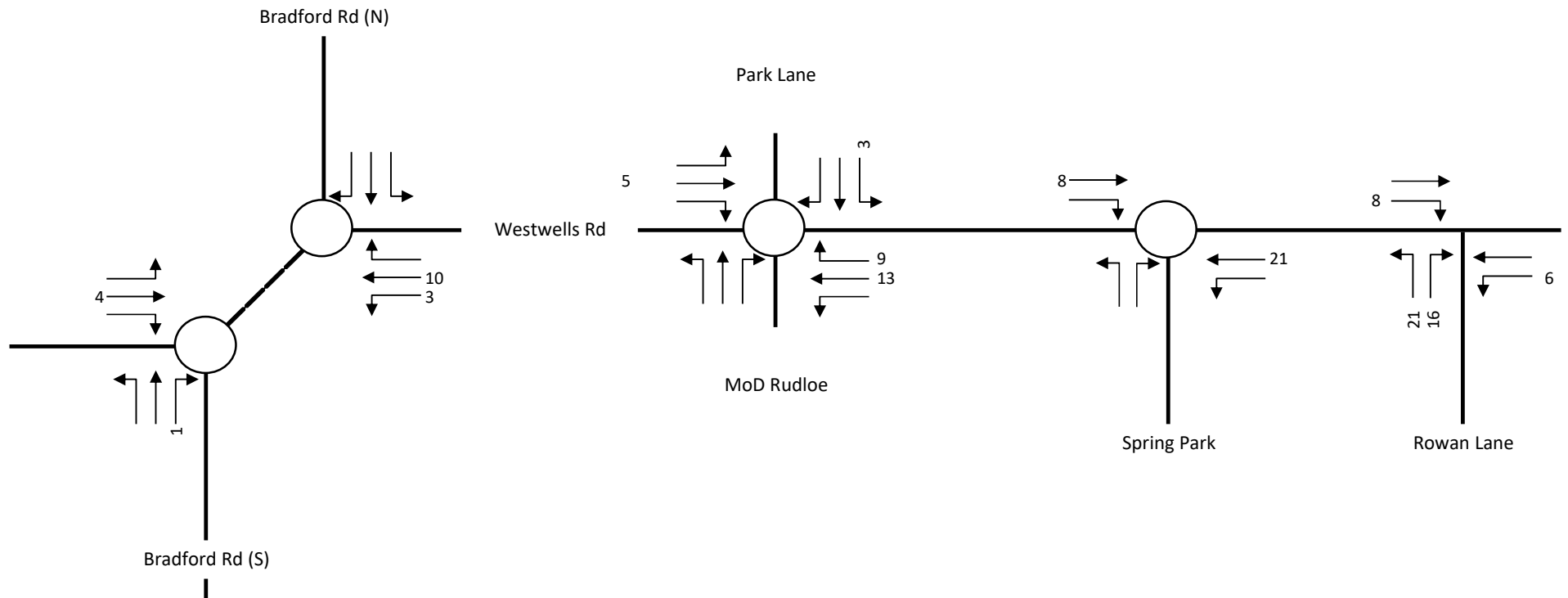


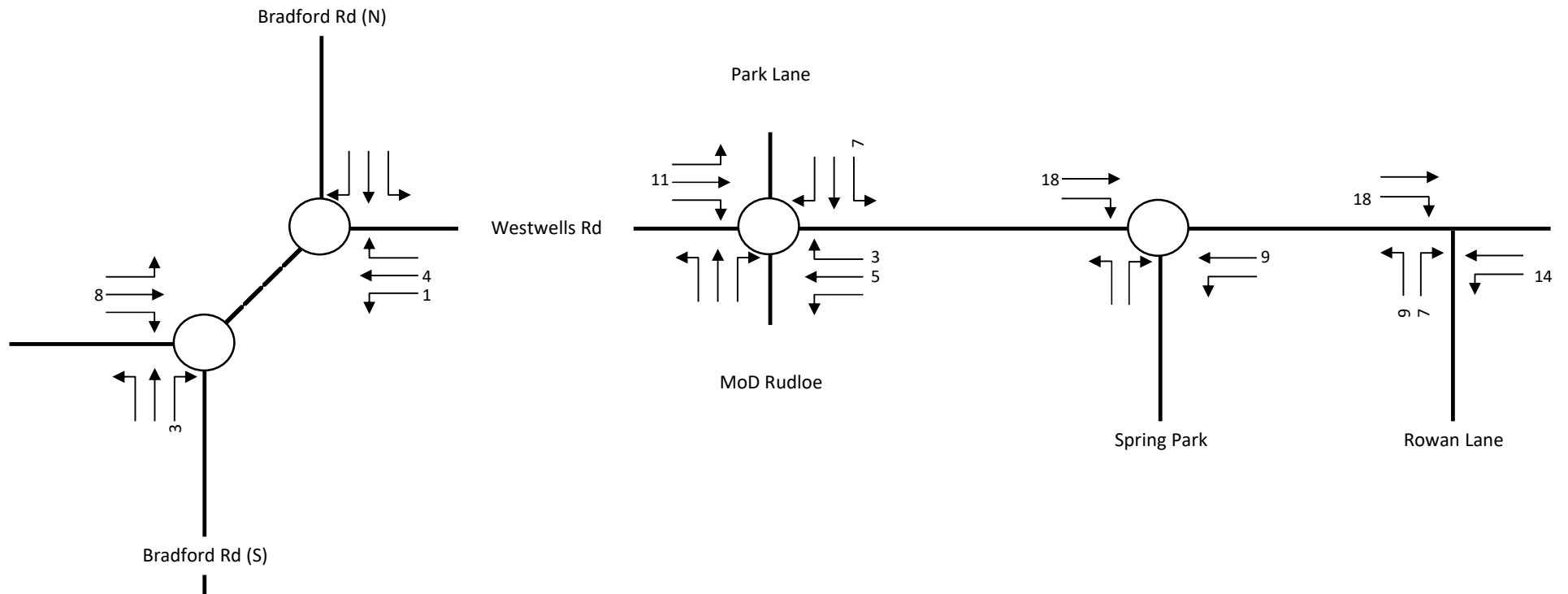


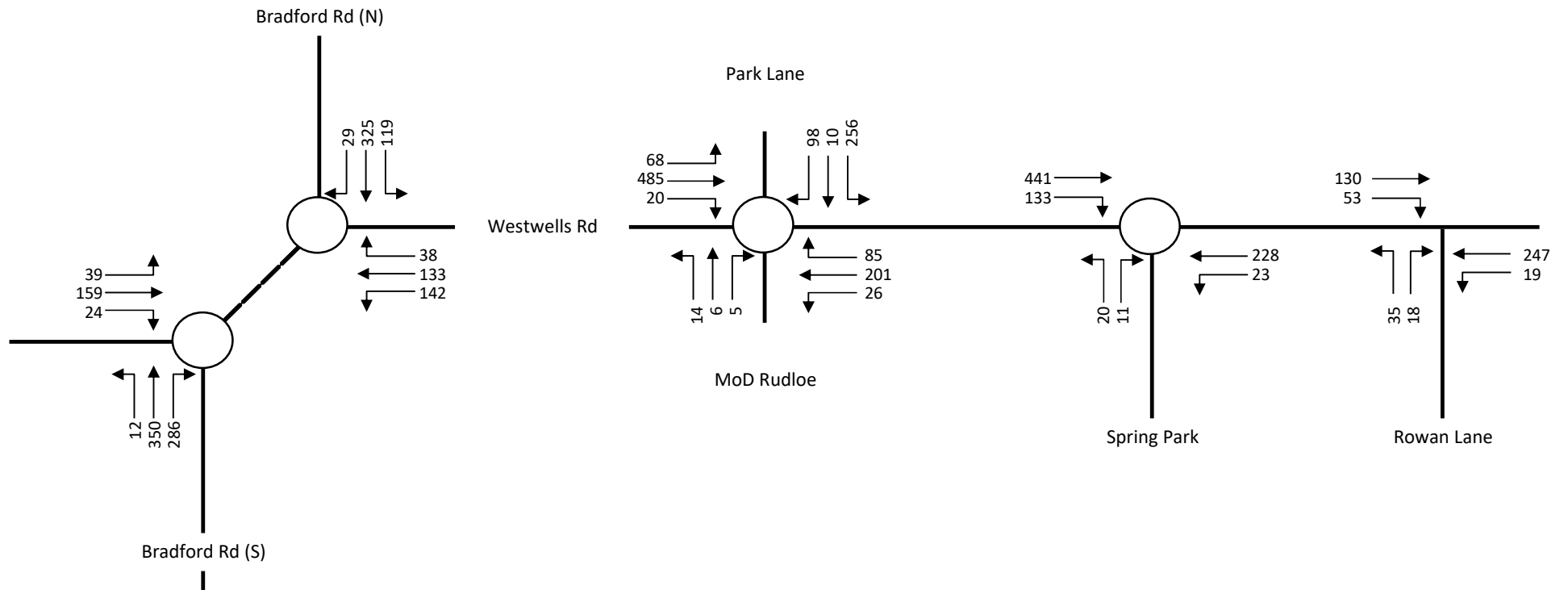
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Out	12



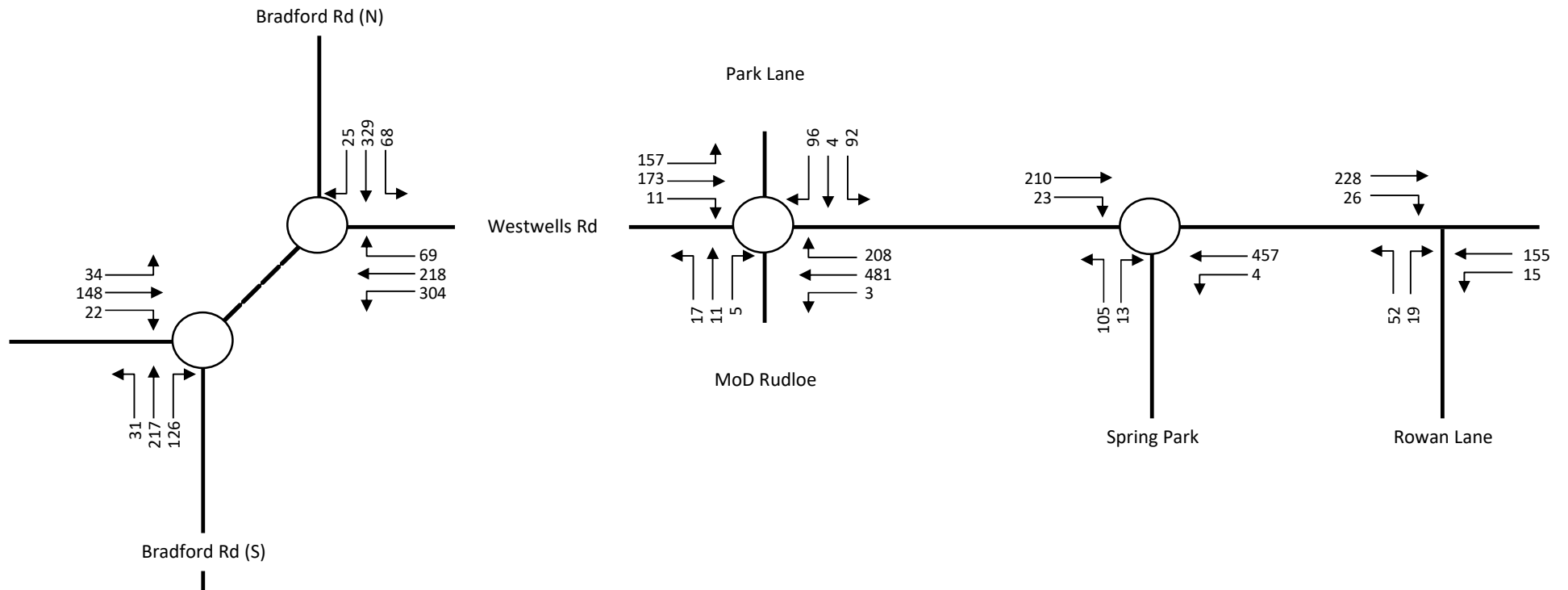
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Out	34

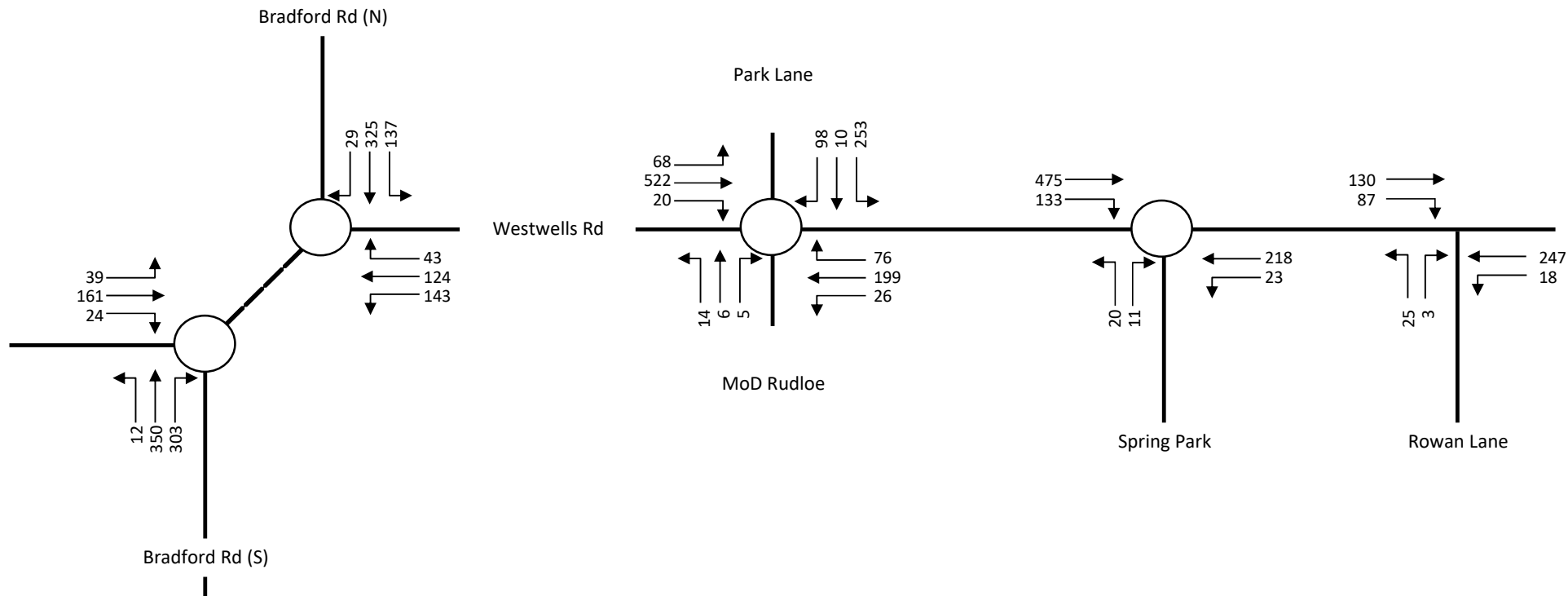




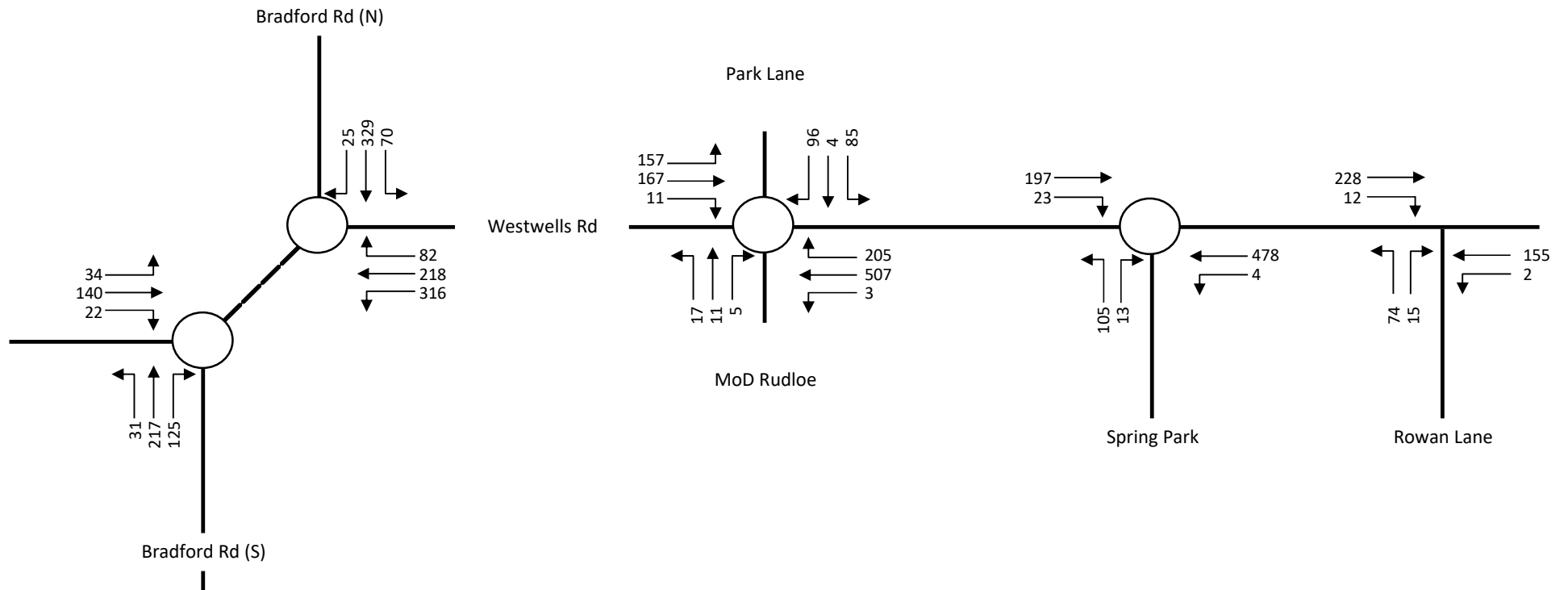


Growth Factor
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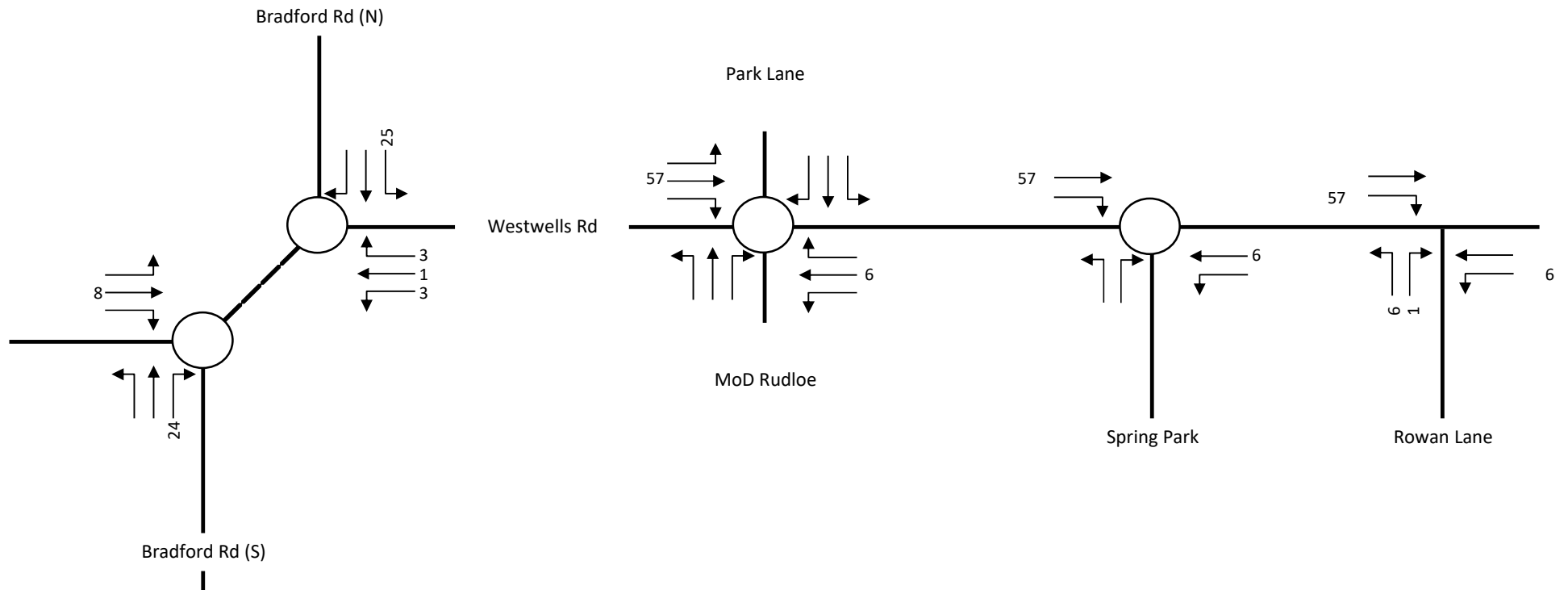




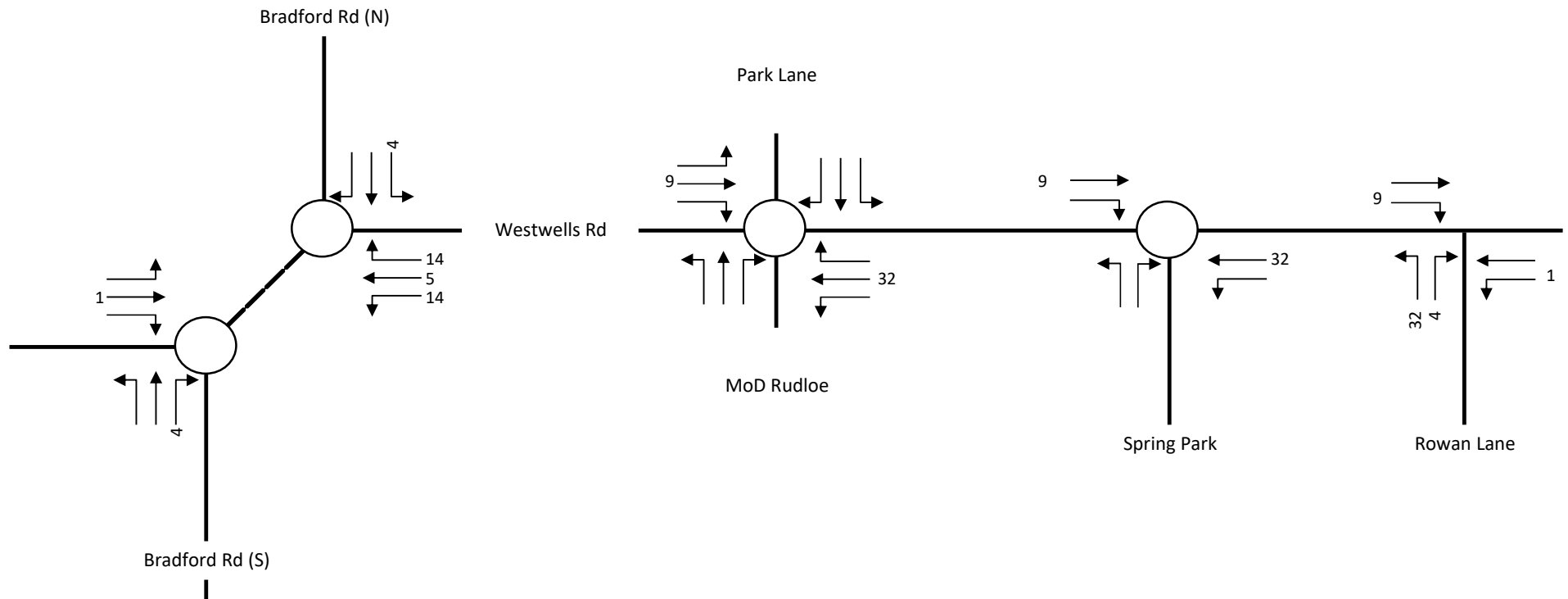
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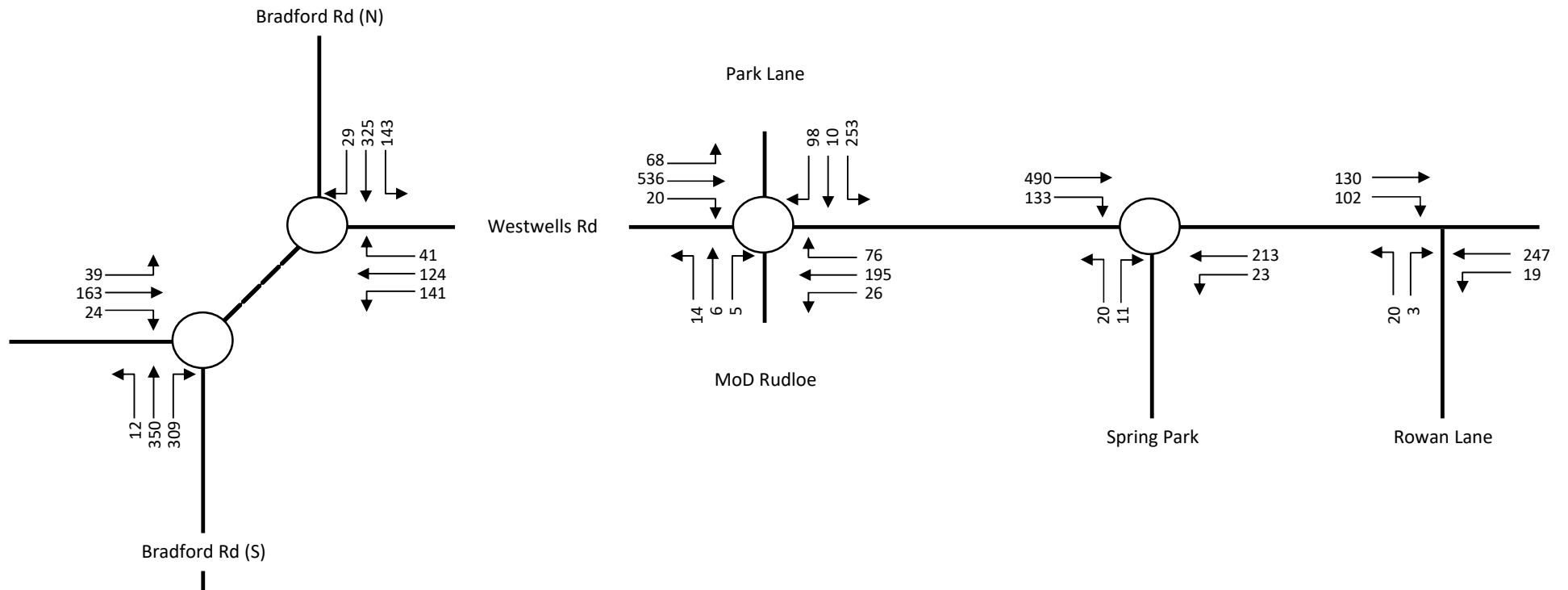


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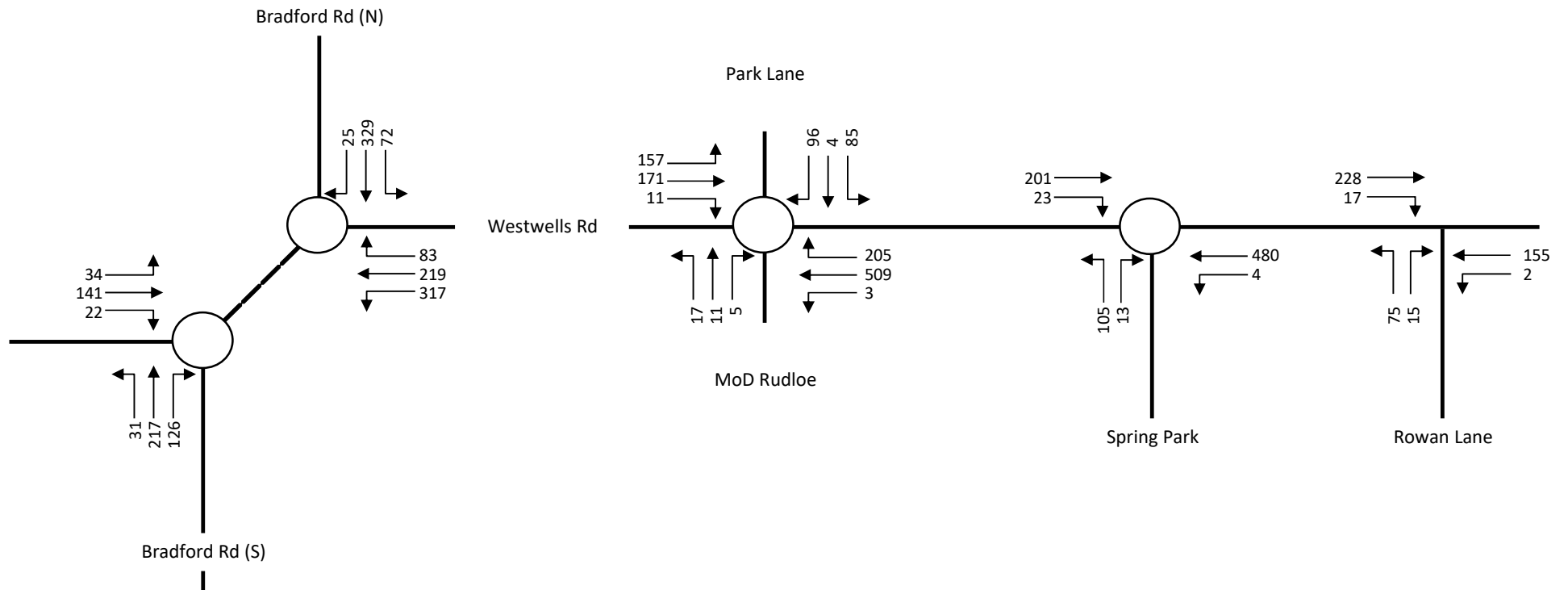


In	63
Out	7





Growth Factor
2019-2028 1.0756





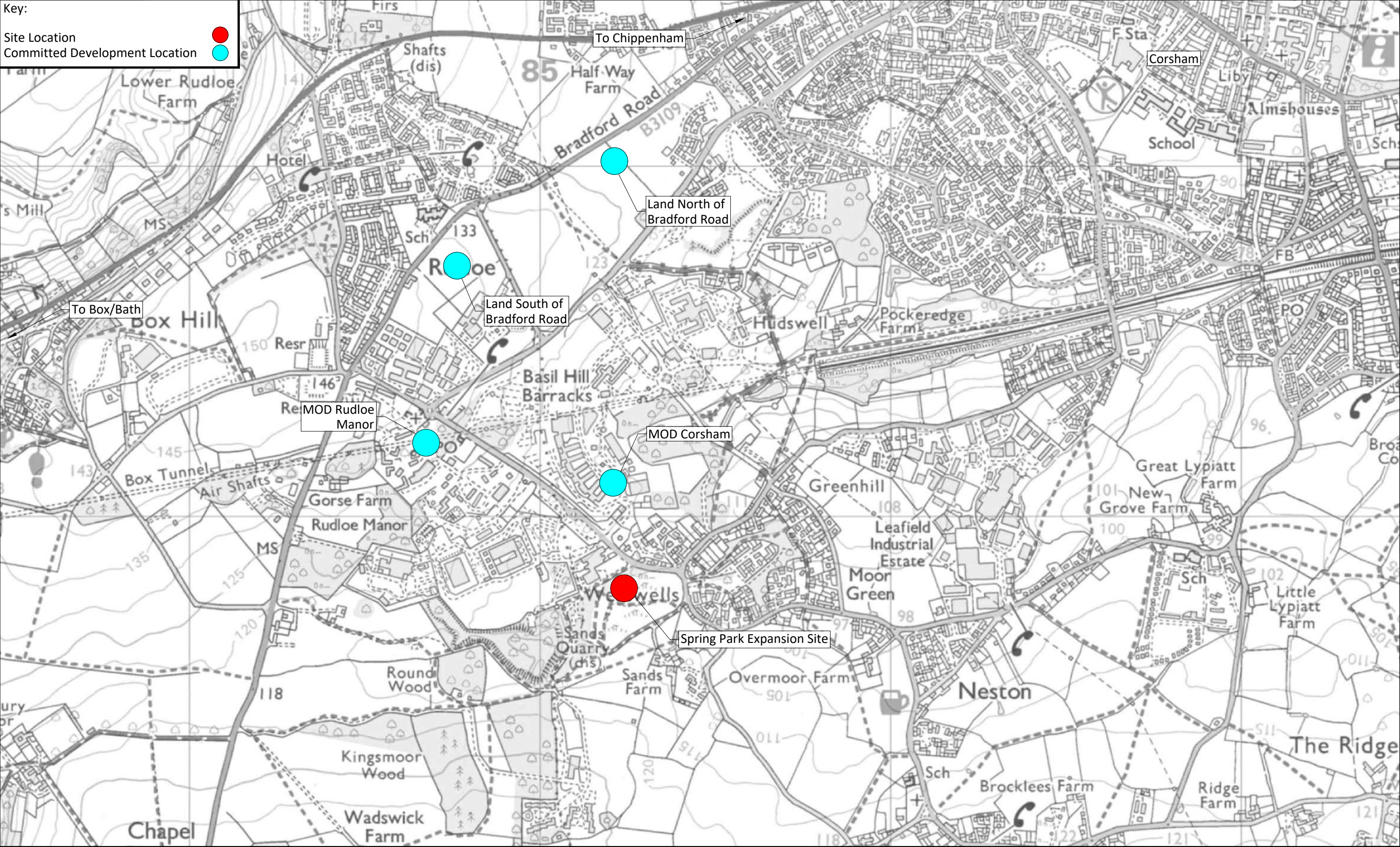
TRANSPORT PLANNING

Plans

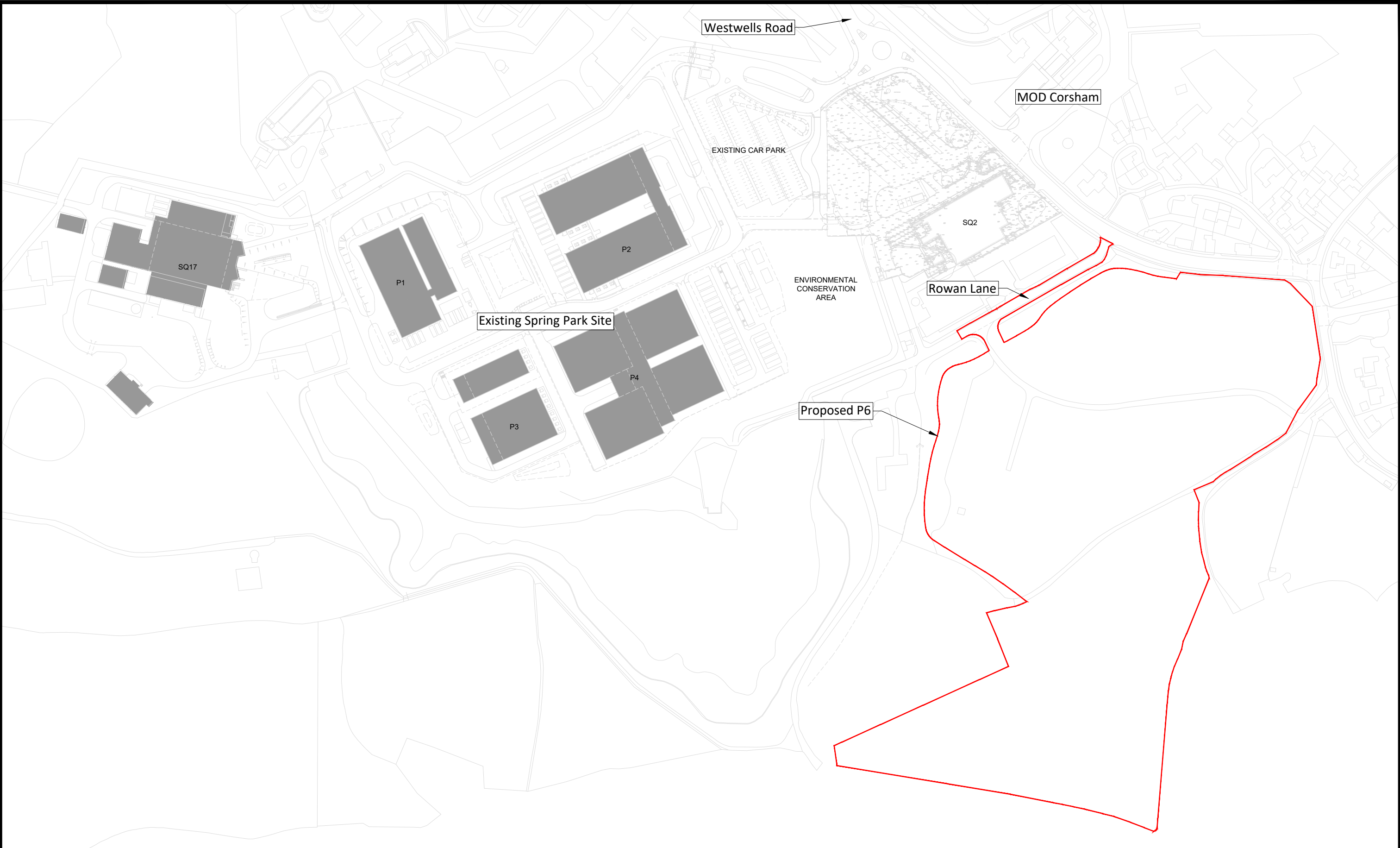
Key:

Site Location

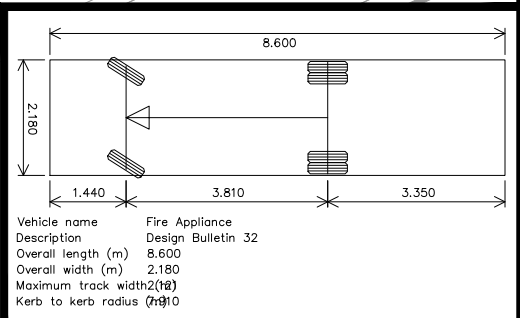
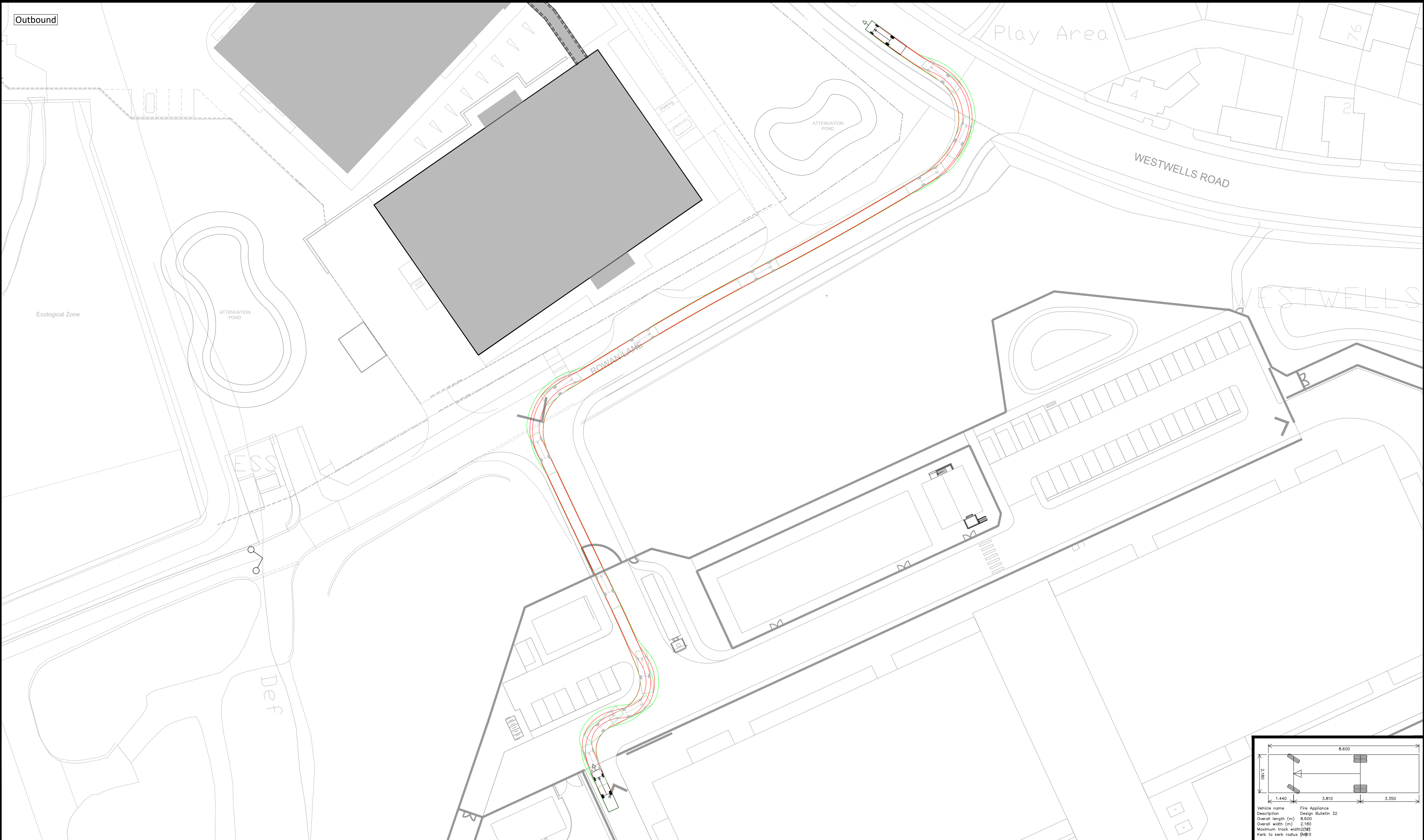
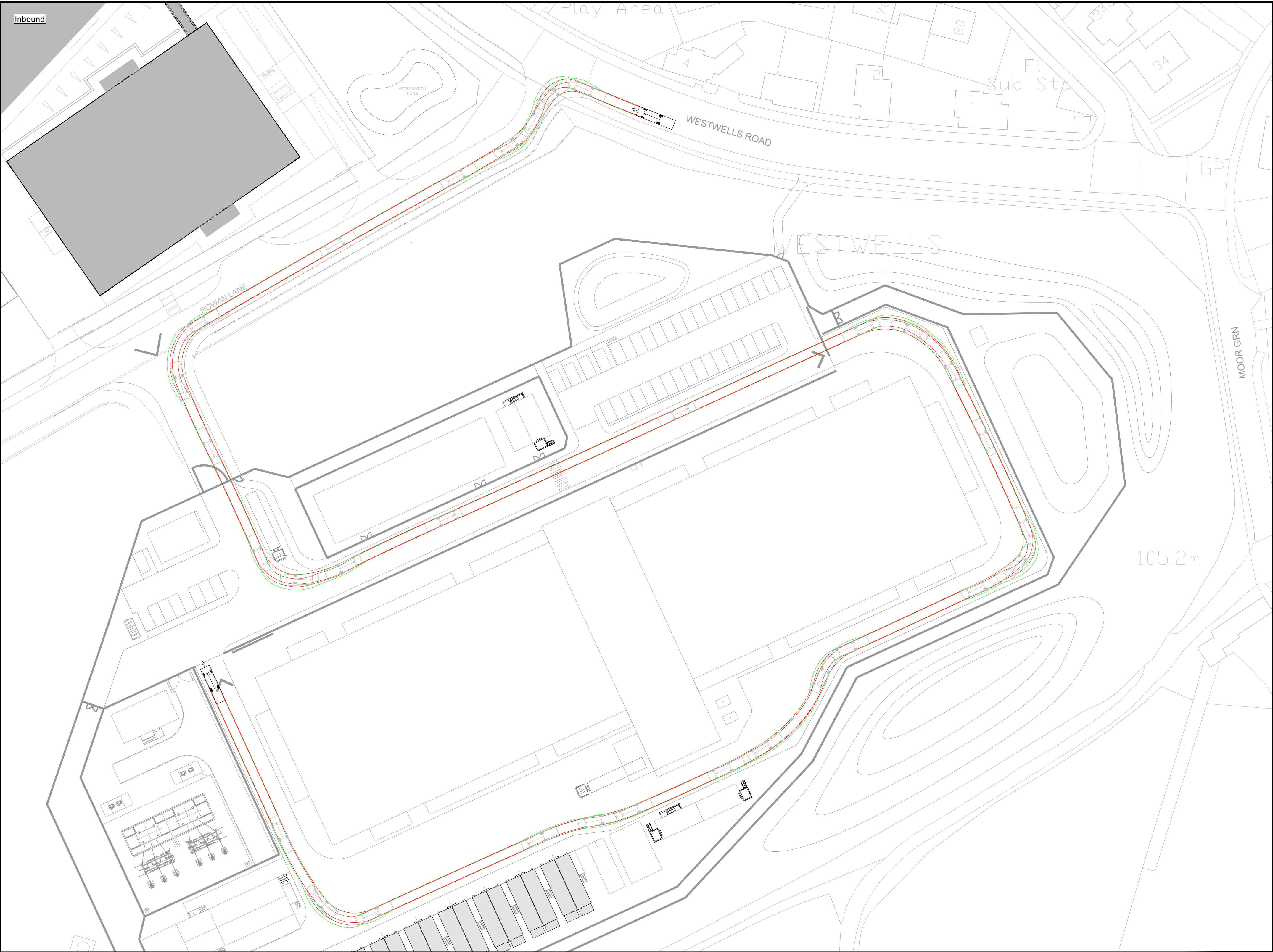
Committed Development Location



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							PROJECT No:	DRAWING No:	REV:
							IMA-22-188	003	B



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