

Client: Lidl GB

New Lidl, A482, Cwmann, Lampeter

Transport Assessment

Project No. 240833

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SCP GENERAL NOTES

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Client: Lidl GB

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Where field investigations have been carried out, these have been restricted to a level of detail required to achieve the stated objectives of the work.

This work has been undertaken in accordance with the quality management system of SCP.

EXECUTIVE/NON-TECHNICAL SUMMARY

SCP have been commissioned by Lidl GB to provide highways and transportation advice in association with their planning application for a new store located in Cwmann, Lampeter on the border of Ceredigion and Carmarthenshire.

Lidl GB have designed the site layout to be attractive to pedestrians and cyclists who reside within easy walking and cycling distance of the store, whether they are staff or customers. Cycle storage is conveniently located under the canopy at the front of the store and overlooked by customers inside at the packing shelf. Safe pedestrian routes have been defined into and through the store car park, and in recognition that the car will be the choice of mode for those doing a bulk food shop, we have examined the demand for parking at peak times and confirmed that there is no risk of overspill parking onto the local highway network.

Within this study area, we have examined accessibility by all modes, investigated personal injury accident trends and considered the effect of other committed development in terms of additional peak hour trips. We have looked at the existing operation of the local highway network in the network peak hours on both weekdays and a weekend and have reported the baseline levels of service that users of the local highway network are currently experiencing and will expect to experience five years hence within the study area.

Within the study area, we have demonstrated that the impact of Lidl's proposals is de minimis and that there is no evidence of any unacceptable impact on highway safety, or of any residual cumulative impact on the road network that might be considered to be severe. As a result, our advice to Carmarthenshire County Council is that, in terms of highways, the application should therefore receive a positive recommendation for approval, subject to conditions.

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1 INTRODUCTION

- 1.1 This Transport Assessment (TA) has been prepared on behalf of Lidl Great Britain Limited and provides a review of the transport and highways impacts related to the proposed development of a new discount food store located on land west of the A482, Cwmann, Lampeter.

Site location

- 1.2 The location of the Application Site and the surrounding highway network is shown below in **Figure 1.1**.

Figure 1.1 Site Location Plan



Site background

- 1.3 The site is located on the southeastern edge of the town of Lampeter, on the border of Ceredigion and Carmarthenshire, within the administrative boundary of Carmarthenshire. The site is currently occupied by The Burger Box, although most of the land is available for parking.

Proposed development

- 1.4 The proposals include the construction of an A1 discount foodstore with a sales area of 1,334sqm and 1,962sqm of gross internal area. There will be provision for 120 car parking spaces for Lidl customers only. The site plan is attached as **Appendix 1**.
- 1.5 Vehicular access would be provided via a new bellmouth into the car park from the A482 for Lidl customers and deliveries.

Scope of This Report

- 1.6 This report seeks to demonstrate that the proposed development of the site can be accommodated without detriment to the operational capacity or safety of the local highway network, and that it can be readily accessed on foot, by bicycle and by local public transport.

Report structure

- 1.7 After this introductory section, the report is set out as follows:
- **Chapter 2 – Policy Context.** This provides an overview of the relevant national and local transport policy and its relationship to the proposed development;
 - **Chapter 3 – Existing Site Context.** This describes the site in relation to the local highway network, its current traffic levels and the road safety of the area;
 - **Chapter 4 – Sustainable Transport Appraisal.** This sets out the site’s accessibility in terms of walking, cycling and public transport;
 - **Chapter 5 – Proposed Development.** This details the proposals for the application site;
 - **Chapter 6 – Access Strategy.** This sets out how the site will be accessed via all modes;
 - **Chapter 7 – Delivery, Service and Waste Management Plan.** This summarised Lidl’s standard approach to deliveries and servicing adopted across the majority of its UK estate, and how such a strategy will be adopted at the application site.
 - **Chapter 8 – Car Parking.** This reports on the demand and supply of car parking to confirm that the proposals are sufficient to meet the operational needs of the store.
 - **Chapter 9 – Future Baseline Traffic Conditions.** This reports on network conditions that may materialise given the anticipated growth in traffic over a circa five-year period, together with traffic associated with local committed development.
 - **Chapter 10 – Development Related Transport Movements.** This reports on the anticipated level of additional traffic expected to be generated by the new Lidl store. It is based upon survey evidence of other Lidl’s within the nationally adopted and industry standard TRICS database.
 - **Chapter 11 – Anticipated Highway Impacts.** This reports on the combination of Lidl traffic with future-year baseline conditions and on the levels of service that are expected to materialise across the study area.
 - **Chapter 12 – Conclusions.** This provides our overall conclusions and summarises our advice to the LHA.

2 POLICY CONTEXT

- 2.1 This chapter provides a summary of relevant national and local transport policies and provides a brief analysis of how the proposed development contributes towards the aims and objectives of these policies.

National policy

Planning Policy Wales (PPW)

- 2.2 In terms of the national transport policy that is relevant to the Transport Implementation Strategy, the latest 12th edition of PPW was published in February 2024 by the Welsh Government and sets out a framework for the Welsh planning authorities to prepare their development plans. Chapter 4 of PPW sets out the approach to Transport.
- 2.3 Paragraph 4.1.1 of PPW states that *“The planning system should enable people to access jobs and services through shorter, more efficient and sustainable journeys, by walking, cycling and public transport. By influencing the location, scale, density, mix of uses and design of new development, the planning system can improve choice in transport and secure accessibility in a way which supports sustainable development, increases physical activity, improves health and helps to tackle the causes of climate change and airborne pollution by:*
- *Enabling More Sustainable Travel Choices – measures to increase walking, cycling and public transport, reduce dependency on the car for daily travel;*
 - *Network Management – measures to make best use of the available capacity, supported by targeted new infrastructure; and,*
 - *Demand Management – the application of strategies and policies to reduce travel demand, specifically that of single-occupancy private vehicles”.*
- 2.4 Paragraph 4.1.8 of PPW states that *“The Welsh Government is committed to reducing reliance on the private car and supporting a modal shift to walking, cycling and public transport. The planning system has a key role to play in reducing the need to travel and supporting sustainable transport, by facilitating developments which:*
- *are sited in the right locations, where they can be easily accessed by sustainable modes of travel and without the need for a car;*
 - *are designed in a way which integrates them with existing land uses and neighbourhoods; and,*
 - *make it possible for all short journeys within and beyond the development to be easily made by walking and cycling.”*
- 2.5 With reference to the Active Travel (Wales) Act 2013, Paragraph 4.1.27 of PPW states that walking and cycling should be promoted for shorter journeys, particularly everyday journeys to work and education establishments or to other local services and facilities. *“The Active Travel Act requires local authorities to produce Integrated Network Maps, identifying the walking and cycling routes required to create fully integrated networks for walking and cycling to access work, education, services and facilities”.*

- 2.6 In reference to supporting documentation with planning applications, paragraph 4.1.56 of PPW states that *“Transport Assessments are an important mechanism for setting out the scale of anticipated impacts of a proposed development, or redevelopment, is likely to have. They assist in helping to anticipate the impacts of development so that they can be understood and catered for appropriately.”*

Local policy

Carmarthenshire Local Development Plan

- 2.7 The Local Development Plan (LDP) identifies opportunities for continuing investment and regeneration including provision of new homes, jobs, community facilities and transport infrastructure that will be needed over the next 15 years (to 2021) if the County and its residents are to continue to prosper. It is noted that there is currently a revised LDP submitted for examination by Carmarthenshire County Council, however until that is adopted, the existing 2006 – 2021 LDP will remain in place.
- 2.8 Policy TR2: Location of Development – Transport Considerations. *Proposals which have potential for significant trip generation will be permitted where:*
- *It is located in a manner consistent with the plans strategic objectives, its settlement framework and its policies and proposals;*
 - *It is accessible to non car modes of transport including public transport, cycling and walking;*
 - *Provision is made for the non car modes of transport and for those with mobility difficulties in the design of the proposal and the provision of on site facilities;*
 - *Travel plans have been considered and where appropriate incorporated.*
- 2.9 Policy TR3: Highways in Developments – Design Considerations. *The design and layout of all development proposals will, where appropriate be required to include:*
- *An integrated network of convenient and safe pedestrian and cycle routes (within and from the site) which promotes the interests of pedestrians, cyclists and public transport;*
 - *Suitable provision for access by public transport;*
 - *Appropriate parking and where applicable, servicing space in accordance with required standards;*
 - *Infrastructure and spaces allowing safe and easy access for those with mobility difficulties;*
 - *Required access standards reflective of the relevant Class of road and speed restrictions including visibility splays and design features and calming measures necessary to ensure highway safety and the ease of movement is maintained, and where required enhanced;*
 - *Provision for Sustainable Urban Drainage Systems to allow for the disposal of surface water run off from the highway.*

- 2.10 Policy RT7: District Centres (Local Service Centres). *Proposals for small scale development within the Development Limits of the designated district centres and of appropriate settlements (including those within sustainable communities) will be permitted where they are of a scale appropriate in relation to the function of the settlement and area of a type that will enhance the existing retail offer or that of nearby centres.*
- 2.11 Proposals (including change of use) should not adversely affect the vitality and viability of these centres, or those elsewhere within the retail hierarchy.

3 EXISTING SITE CONTEXT

- 3.1 The application site is currently an undeveloped piece of land occupied by a food van known as The Burger Box and is bound by the A485 to the south, the A482 to the east and fields to the west and north. The site is situated approximately 650m to the southeast of Lampeter town centre. The location of the site in the context of the local highway network is illustrated in **Figure 3.1** below.

Figure 3.1 Existing Site



Surrounding Highway Network

A482

- 3.2 The A482 runs in a northwest-southeast alignment along the eastern boundary of the site and is a single carriageway road. Pedestrian footways are provided on both sides of the road.
- 3.3 At a local scale, the northern end of the A482 in Lampeter, forms a roundabout junction with the A475 High Street before continuing to Aberaeron to the north. Adjacent to the development site, the A482 forms a priority junction with the A485 and then the B4343 Cellan Road to the south before joining the A40 at Llanwrda.
- 3.4 The A482 is restricted to 20mph speed limit to the south of the site access and a 30mph speed limit to the north of the site.

A485

- 3.5 The A485 is a single carriageway two-way road and at its northern end it connects as the minor arm of a simple priority junction with the A482 just southeast of the site. Travelling further south, the A485 provides access to locations such as Pencarreg and Llanybydder before continuing to join the A40 at Carmarthen. Locally, the road operates at a 20mph speed limit.
- 3.6 There is an existing vehicular access to the site along the A485 which will be made redundant, the opening shall be paved over to continue pedestrian movements along the A485.

Traffic Surveys

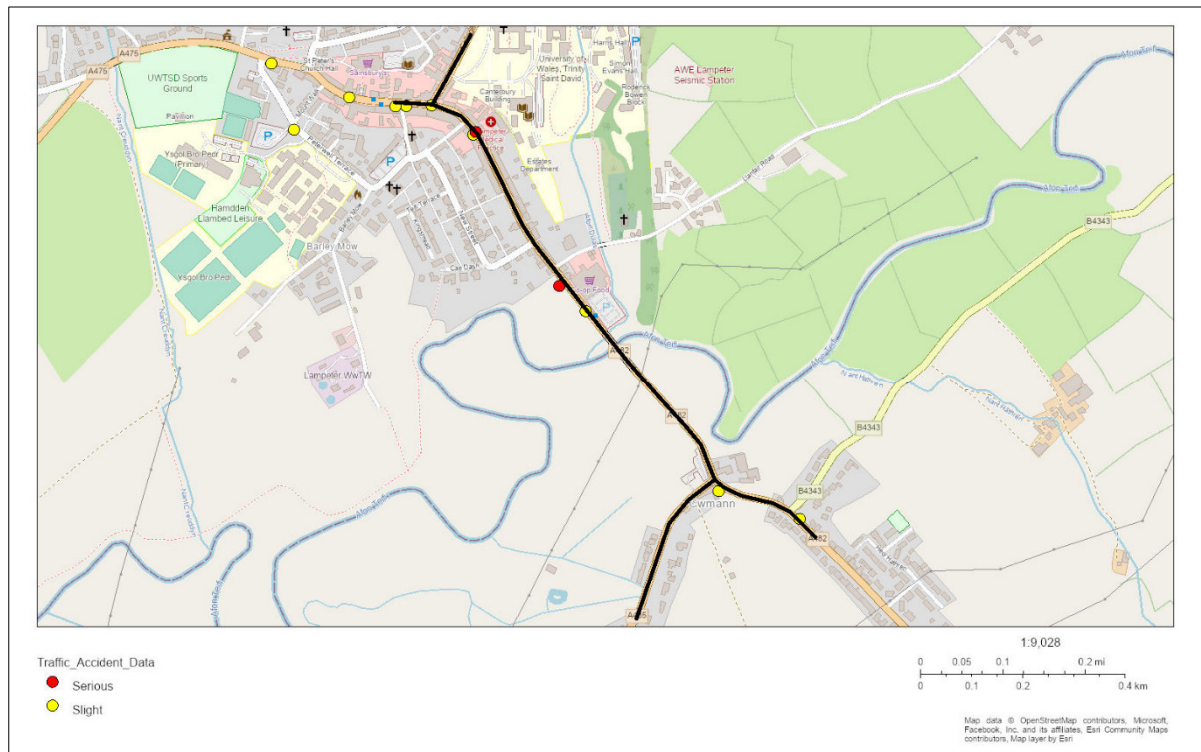
- 3.7 Fully classified turning counts along with queues, were undertaken at the following junctions:
- A482 / A485
 - A483 / B4343 (Cellan Road)
- 3.8 Turning counts for the A483 / A485 and the A482 / B4343 were carried out on Tuesday 20th August 2024 and Saturday 24th August 2024, between 15:00 and 19:00 in the weekday PM and 11:00 and 14:00 in the Saturday peak.
- 3.9 The raw traffic data for these junctions is provided at **Appendix 2** and is summarised at the end of this document in **Traffic Flow Figure 1**.
- 3.10 The raw data has been converted into passenger car units (PCUs) for the weekday PM and the Saturday peak hour. The following conversion factor have been applied to each vehicle class:
- Pedal Cycle – 0.2
 - Motor Cycle – 0.4
 - Car/Taxi – 1
 - LGV – 1
 - OGV1 – 1.5
 - OGV2 – 2.3
 - Bus/Coach – 2
- 3.11 In order to determine the Weekday PM and Saturday peak hours, reference has been made to the aggregate traffic volume of the junctions subject to assessment. The Lidl development traffic has then been added to this in order to derive a combined network peak hour. Analysis of this data highlighted that the peak hours occurred during 17:00 and 18:00 for the weekday PM peak and 12:00 and 13:00 for the Saturday peak.

Road Safety

- 3.12 Collision data was obtained using Stats19 data for the area surrounding the Application Site for the most recently available 5-year period. The accident reports provide information on the location and severity of all accidents which took place on the adjoining highway network. The full accident report is attached as **Appendix 3**.

- 3.13 An analysis of the surrounding area and junctions that have been included in the traffic impact assessment has been undertaken. **Figure 3.2** below illustrates the extent of the accident analysis study area.

Figure 3.2: Accident Data Study Area



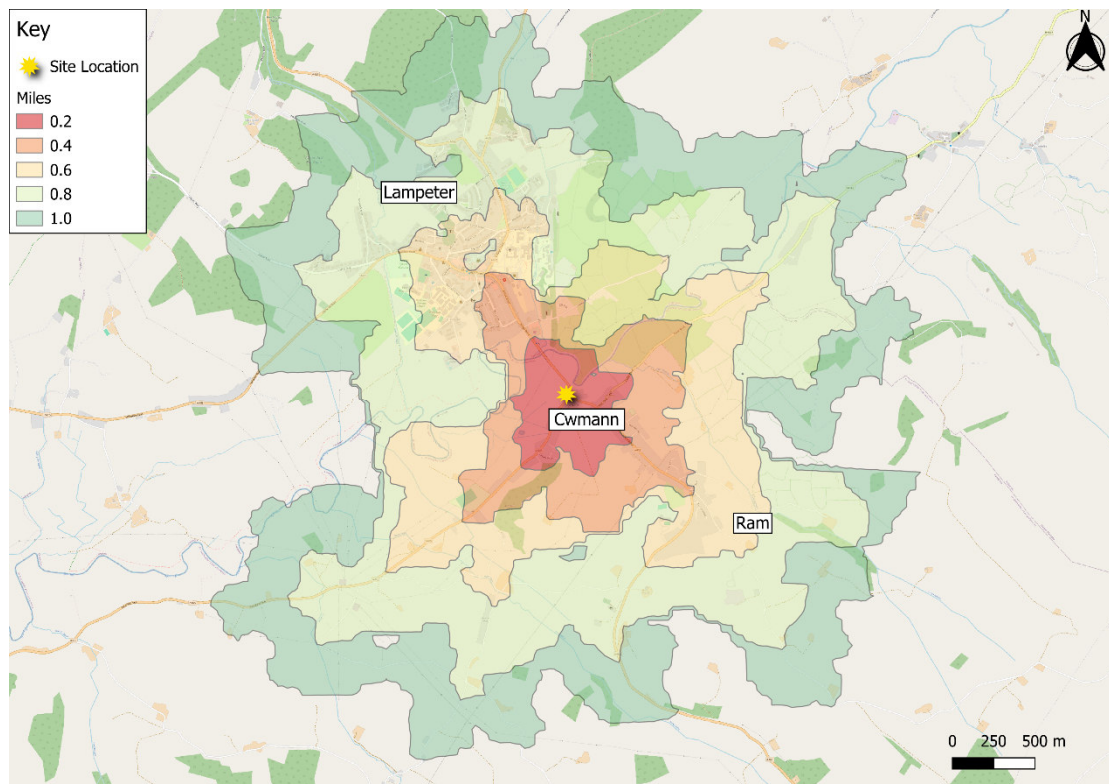
- 3.14 The analysis of this wide study area demonstrates that there has been a total of 10 accidents during the most recently available 5-year period. Eight of which were recorded as being slight in severity, with the remaining two being recorded as serious in severity.
- 3.15 However, only one personal injury accident has been recorded in the vicinity of the development site which resulted in slight injury.
- 3.16 In light of the above analysis, it is not considered that there are existing highway safety issues that may be exacerbated by the proposed development.

4 SUSTAINABLE TRANSPORT APPRAISAL

Access on Foot

- 4.1 Walking is recognised as the most important mode of travel at a local level and offers the greatest potential to replace short car trips, particularly those within a 1-mile walk from the site.
- 4.2 TRACC software has been used to assess the accessibility of the development by foot as shown on **Figure 4.1**. The plan shows the areas within a 1-mile walk of the site.

Figure 4.1: Walking Accessibility within 1 mile



- 4.3 The above figure demonstrates that the residential areas of Lampeter and Ram are within a 1-mile walking catchment area. This demonstrates that employees from the local area will be able to easily access the site by foot. This also indicates that a proportion of potential customers will be within reasonable walking distance of the application site.
- 4.4 A number of local amenities are also within a 1-mile walk of the site (up to 20 minutes' walk) which will promote linked trips; as shown in **Table 4.1**.

Table 4.1 Accessibility to Local Facilities from the Development Site

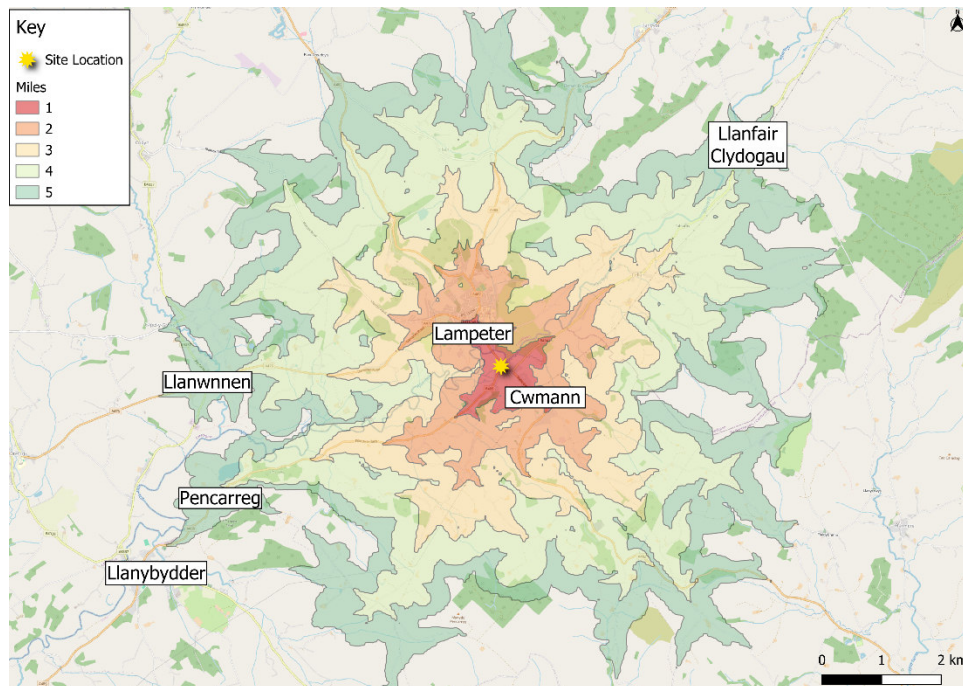
Service	Detail	Distance
GP	Lampeter Medical Practice	800m
Bus stops	Cwmann War Memorial, A482	120m
ATM	Barclays local, Bridge Street	500m
Nursery	Meithrinfa Seren Day Nursery, College Street	1.5km
Primary School	Ysgol Carreg Hirfaen,	1.4km
Dentist	Denticare, Market Street	1.0km
Pharmacy	Allied Pharmacy bridge Street	800m
Post Office	Lampeter Post Office, Bridge Street	350m
Secondary School	Ysgol Bro Pedr	1.1km
Secondary School	Ysgol Carreg Hirfaen	1.4km

- 4.5 The surrounding area benefits from a good level of pedestrian infrastructure. A footway is present on both sides of the A482 running north from the site into Lampeter. Dropped kerbs and tactile paving are also provided at the majority of junctions when travelling towards Lampeter. Additionally, there is a footway on one side of the carriageway going south into Cwmann. The infrastructure described above helps to create a conducive walking environment for pedestrians.

Access by Cycle

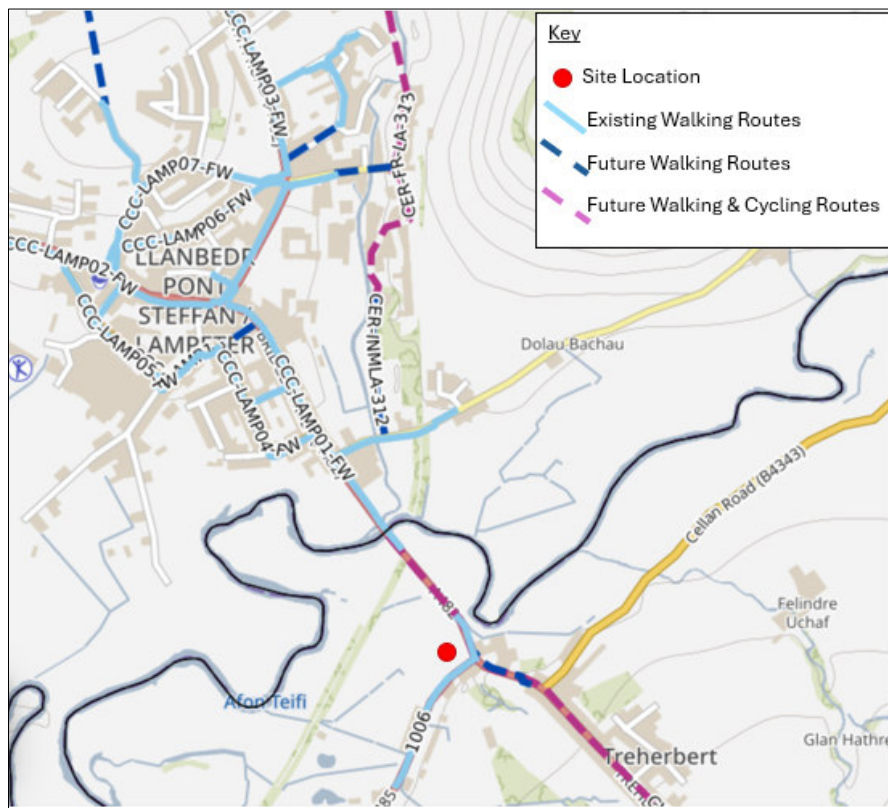
- 4.6 Transport policy identifies that cycling represents a realistic and healthy option when compared to the private car, for journeys up to 5-miles as a whole journey, or as part of a longer journey by public transport.
- 4.7 The cycle accessibility plan in **Figure 4.2** shows a 5-mile cycling catchment area from the site.

Figure 4.2 Cycle Accessibility within 5-miles



- 4.8 The mapping provided above demonstrates that the areas of Lampeter, Cwmann, Llanfaie Clydogau, Lanwnnen and Pencarreg are within a 5-mile cycle distance from the site.
- 4.9 The existing local cycle infrastructure combined with the cycle parking provision and topography of the area will ensure that employees and customers will easily be able to access the proposed development by bike.
- 4.10 Several local active travel routes are/will also available in close proximity to the site, as can be seen in **Figure 4.3**.

Figure 4.3: Local Active Travel Routes to the Application Site



- 4.11 Cycle parking for the site will be located under the canopy and in front of the glazed end to the store, this will provide natural surveillance from the street and car park externally, and from customers at the packing shelf internally. The covered cycle parking provision for cyclists will ensure that employees and customers will be provided with safe and attractive bike storage facilities. Secure staff cycle parking will also be provided for employees within the warehouse.
- 4.12 The cycle parking provision and topography of the area will ensure that employees and customers will easily be able to access the proposed development by bike.

Public transport

Bus

- 4.13 In terms of bus services, the Chartered Institute of Highways & Transportation’s (CIHT’s) “Guidelines for Planning for Public Transport in Developments” document identifies, at section 6.20, that “Bus stops are located to minimise passengers’ walking distance to their final destination. The maximum walking distance to a bus stop should not exceed 400m and preferably be no more than 300m.”
- 4.14 The nearest accessible bus stops to the site are located on the A482, just after its junction with the A485 to the southeast of the site.

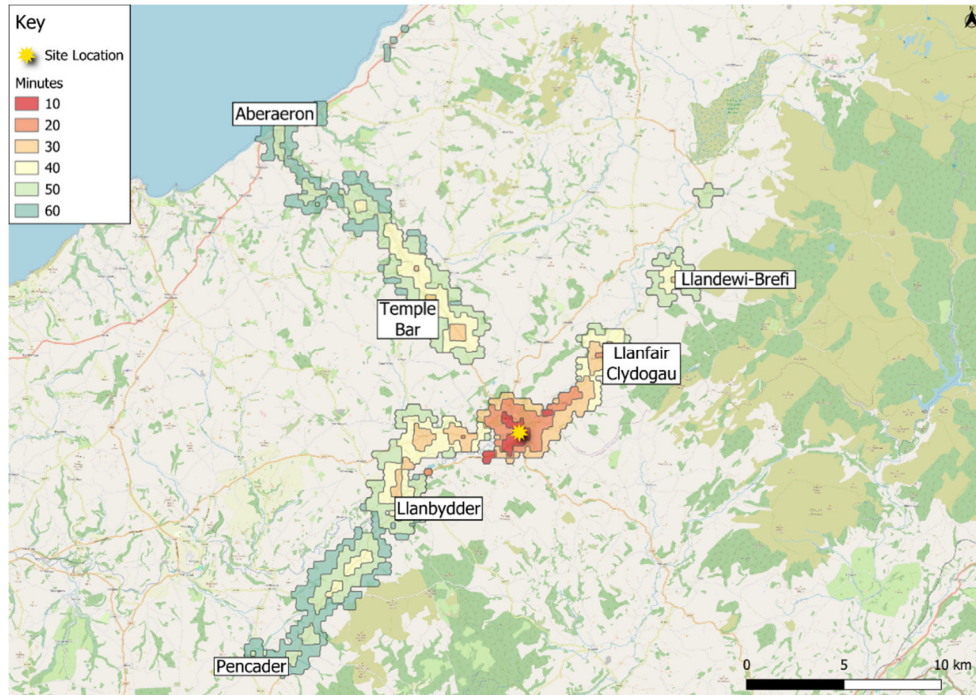
- 4.15 Further stops are also provided along the A485, approximately 210m from the site access.
- 4.16 In addition to the nearby bus stops, the town of Lampeter is served by the TrawsCymru Bus Route, providing travel to Aberystwyth.
- 4.17 The frequency of the different bus services available from these stops is outlined in **Table 4.2**.

Table 4.2: Bus services within 400m of the site

Service No.	Destinations	Bus Stop Location	Average Frequency
475	Lampeter – Aberystwyth	Cwmann War Memorial	Approximately every 3 hours
BB6	Llanybydder – Lampeter	Cwmann War Memorial	Twice a day
BB7	Llanybydder – Lampeter	Cwmann War Memorial	Once a day
T1	Carmarthen – Aberstwyth	Cwmann War Memorial	Approximately every 2 hours

- 4.18 The above table demonstrates that prospective employees and shoppers of the site will have access to several bus services which provide access to a wide range of destinations from Lampeter. Services are available on all days of the week.
- 4.19 However, due to the condition of the nearest Cwmann War Memorial bus stops on the A482, it is recommended that the Proposed Development should offer the upgrade of the bus stop – moving it north across the carriageway to the pedestrian footway on the northeastern corner of the site and providing a stop with a flag and pole, shelter and timetable information, to the specification of the Local Highway Authority (LHA).
- 4.20 **Figure 4-1** below illustrates the distance that can be travelled within 60 minutes by public transport to and from the site.

Figure 4-1 Public Transport Accessibility Within 60 Minutes



4.21 The time includes the walk to the bus stops and demonstrates that key areas such as Aberaeron, Temple Bar, Pencader, Llanbydder and Llandewi-Brefi in addition to the local surrounding areas are within an acceptable 60-minute public transport commute.

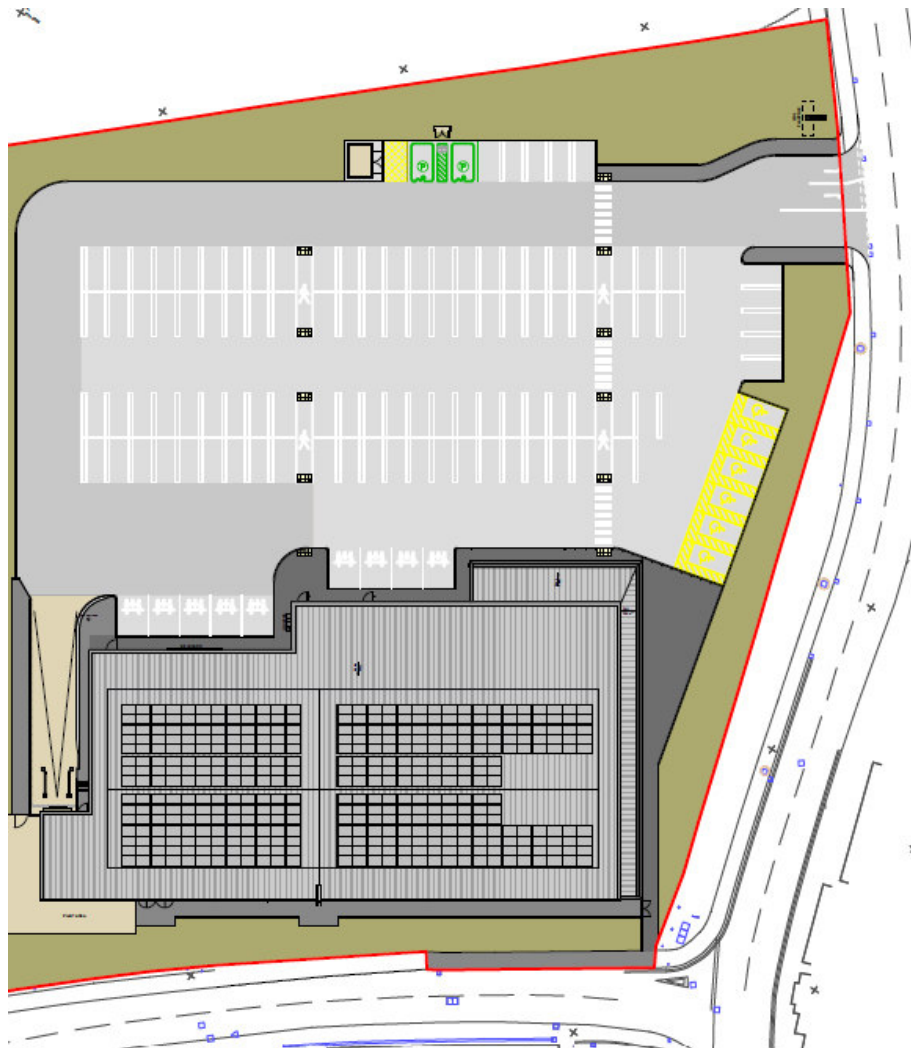
Summary

4.22 Having regard to the above, it is considered that the site has acceptable levels of accessibility by most of the main non-car modes of transport. Access to the site by foot and cycle is of a good standard, and bus connections are also available within close proximity, thereby enabling access to the site from a range of local destinations.

5 PROPOSED DEVELOPMENT

Background

- 5.1 The proposals for the application site include the construction of a discount food retail unit (Use Class A1) with a total retail floor area (RFA) of 1,334sqm and a gross internal area (GIA) of 1,962sqm.
- 5.2 The proposed site layout plan is shown below and is attached to scale at **Appendix 1**.



- 5.3 A total of 120 car parking spaces will be provided across the site. Of the 120 spaces, nine will be designated to parent and child standard and six will be DDA compliant. These spaces will be clearly marked and positioned close to the store entrance and trolley bays for customers' convenience. Furthermore, two spaces will be fitted with electric vehicle charging capabilities of rapid charger type.
- 5.4 Internally, zebra crossings along with tactile paving and dropped kerbs will be provided within the store car park to provide safe access to and from the store entrance for pedestrians.

- 5.5 A loading bay will be provided on site to accommodate delivery vehicles up to the size of a maximum legal articulated HGV.
- 5.6 Cycle parking is proposed underneath the canopy and in front of the glazed end of the store. Six Sheffield stands, providing 12 cycle parking spaces for customers, are proposed under the store canopy for shelter and in front of the glazed elevation of the store. They are overlooked by customers at the packing shelf and are therefore under constant surveillance for maximum security.
- 5.7 Secure staff cycle parking is also provided for employees within the warehouse, accompanied by changing areas and lockers.

6 ACCESS STRATEGY

- 6.1 Vehicular and pedestrian access to the store will be taken directly from the A482. The site access road itself will be 10.5m wide at the bellmouth with a single 4.5m-wide inbound lane and two 3m-wide outbound lanes for the left and right turns. From this point it narrows to circa 8.2m at the point where access into the areas of the car park north and south of the store entrance is taken..
- 6.2 The proposed new site access onto the A482 will provide visibility splays that have an 'x' (minor arm setback) distance of 2.4m and a 'y' (major road visibility) distance of at least 43m to the northwest and southeast which is in accordance with guidance set out in Manual for Streets for speeds of up to 30mph. The A482 at the site access is restricted to 30mph; to the southeast of the access the speed limit reduces to 20mph.
- 6.3 At the site access, both the entry and radius is 10m. Lidl will generate one HGV movement per day, increasing to two at peak trading times of the year and there will never be two HGVs on site at any one time. To design the site access specifically for HGV movements would result in excessively generous entry and exit radii that would not serve to slow traffic down on the site access road and make drivers aware of their surroundings. Across the UK, highway authorities have accepted that narrowed site accesses that require the occasional, infrequent HGV movement to make use of the full width of the access is more conducive to a safe environment for pedestrians and cyclists.
- 6.4 Pedestrians and cyclists will also enter the site via the vehicular access along with a pedestrian access point found to the southeast of the site off the A485, providing pedestrian only access directly to the front of the store.
- 6.5 The full access proposal is illustrated at drawing SCP/240833/SK02 at **Appendix 4**.

7 DELIVERY, SERVICING & WASTE MANAGEMENT PLAN

Servicing and Deliveries

- 7.1 Servicing for the new foodstore will conform to the typical Lidl model. Deliveries to the store will be made by a 16.5m articulated lorry via the access off the A482. Drawings provided at **Appendix 5** illustrate the swept path analysis of a 16.5m long articulated lorry entering and leaving the Lidl loading bay area from the A482.
- 7.2 It is anticipated that there will be one dedicated delivery per average day and up to two deliveries during seasonal peak periods, such as Easter and Christmas. Recycling and waste will be taken away by the delivery vehicles, reducing the number of vehicles visiting the store per day.

Waste Management

- 7.3 Waste is stored within the building close to the servicing bay, to enable easy collection by vehicles servicing the site. There is no external storage of either stock or waste.
- 7.4 Lidl operates a policy of reloading empty delivery HGVs with store waste to return to the depot for recycling. This reduces the number of on-site vehicle movements required. Empty pallets and TKT boxes along with waste and recycling are returned to the warehouse on the same HGV.
- 7.5 Lidl are committed to developing innovative ways to effectively manage waste streams to ensure that packaging requirements are reduced, more is recycled and surplus food is redistributed to charity.
- 7.6 Lidl boast an award-winning recycling and waste management programme. In-store and warehouse waste management concepts are integral to Lidl's Zero Waste Commitment. Through the commitment of Lidl's logistics and procurement teams and all store and warehouse employees, Lidl achieved Zero Waste to Landfill and are working hard to maintain this. Much of Lidl's waste is cardboard, which is reused for paper and packaging. Segregation is key to the programme's success by increasing Lidl's recycling streams and reducing their environmental impact.

In Store Recycling

- 7.7 Plastic packaging serves important functions – such as containing product, protecting goods in transport, preserving the product and extending its shelf life and communicating product information to customers.
- 7.8 However, Lidl are very aware of the need to reduce the use of plastics in products' packaging and replacing them with more sustainable alternatives. Lidl are also working on increasing the recyclability of the materials. For this reason, Lidl have made ambitious packaging commitments to support the circular economy.
- 7.9 While Lidl continue to reduce and improve their plastic packaging, Lidl want to support their customers by reducing the amount of packaging they take home.

8 CAR PARKING

- 8.1 A total of 120 car parking spaces will be provided across the site. Of these, nine will be designed to parent and child standard and six will be DDA compliant. These spaces will be clearly marked and positioned close to the store entrance and trolley bays for customers' convenience. Two spaces will also be fitted with electric vehicle charging capabilities of rapid charger type.
- 8.2 To assess the suitability of the proposed parking provision in relation to the proposed development, a parking accumulation exercise has been undertaken based upon the forecast trip generation associated with the new development. Details on the trip rates and the estimated generated traffic are presented in the following chapter.
- 8.3 Initial iterations were run to identify if in any instances the accumulation dropped below zero (where departure trips exceeded arrival trips) and in any instances where this occurred, the starting point for the accumulation was increased to a point where the minimum accumulation was no less than zero.
- 8.4 Assessments have been carried out for both a weekday and a Saturday and the results are shown in **Figure 8.1** and **Figure 8.2** below.
- 8.5 During a weekday, the peak forecast car parking demand is 54 spaces between 13:00 and 14:00. On a typical Saturday, the forecast car parking demand peaks at 65 spaces between 12:00 and 13:00. On the basis of the above, the proposed level of car parking is deemed to be sufficient to meet the anticipated demand.
- 8.6 The spare capacity evident within these charts allows for variability in the demand for arrivals and departures. The hourly trip rates derived from TRICS can only allow for consistent demand throughout the period, which cannot be guaranteed. Peak trading times such as Easter and Christmas generate circa 10% more demand for car parking and can lead to an increase in the average length of stay. Both factors place additional demand on the car park, which is catered for under these proposals.

Figure 8.1: Estimated car trip generation and parking accumulation, weekday

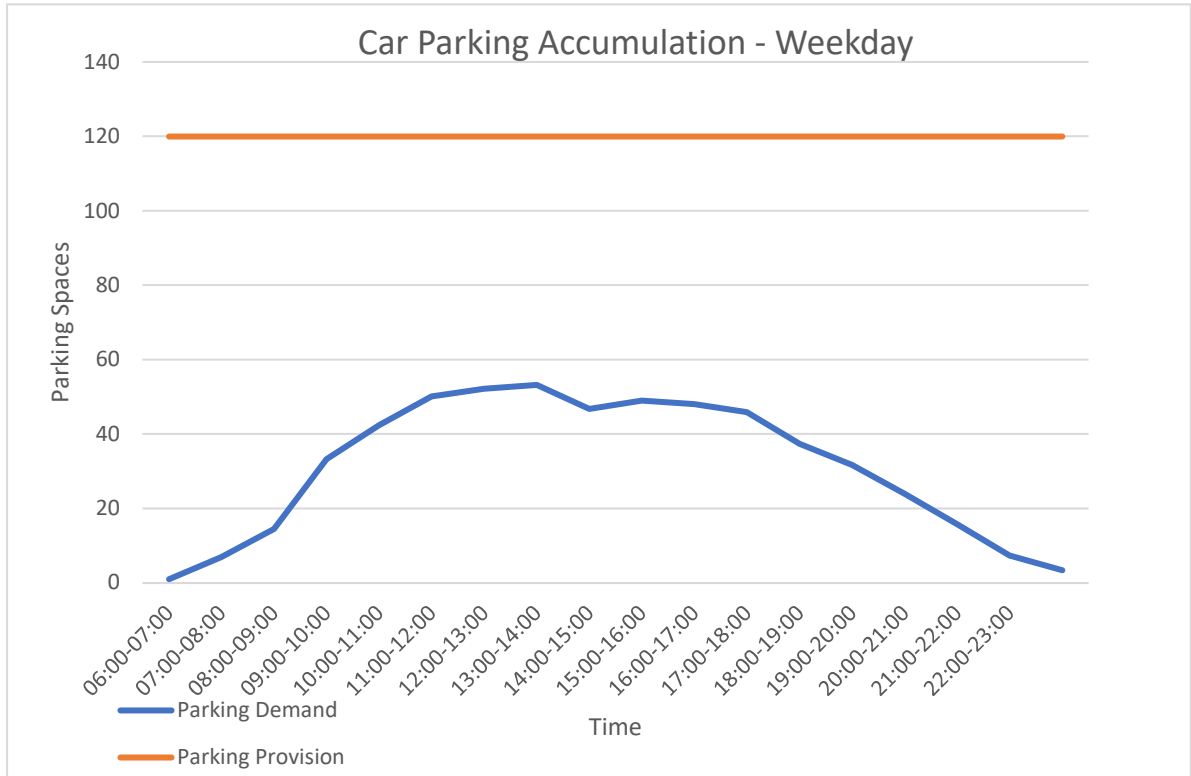
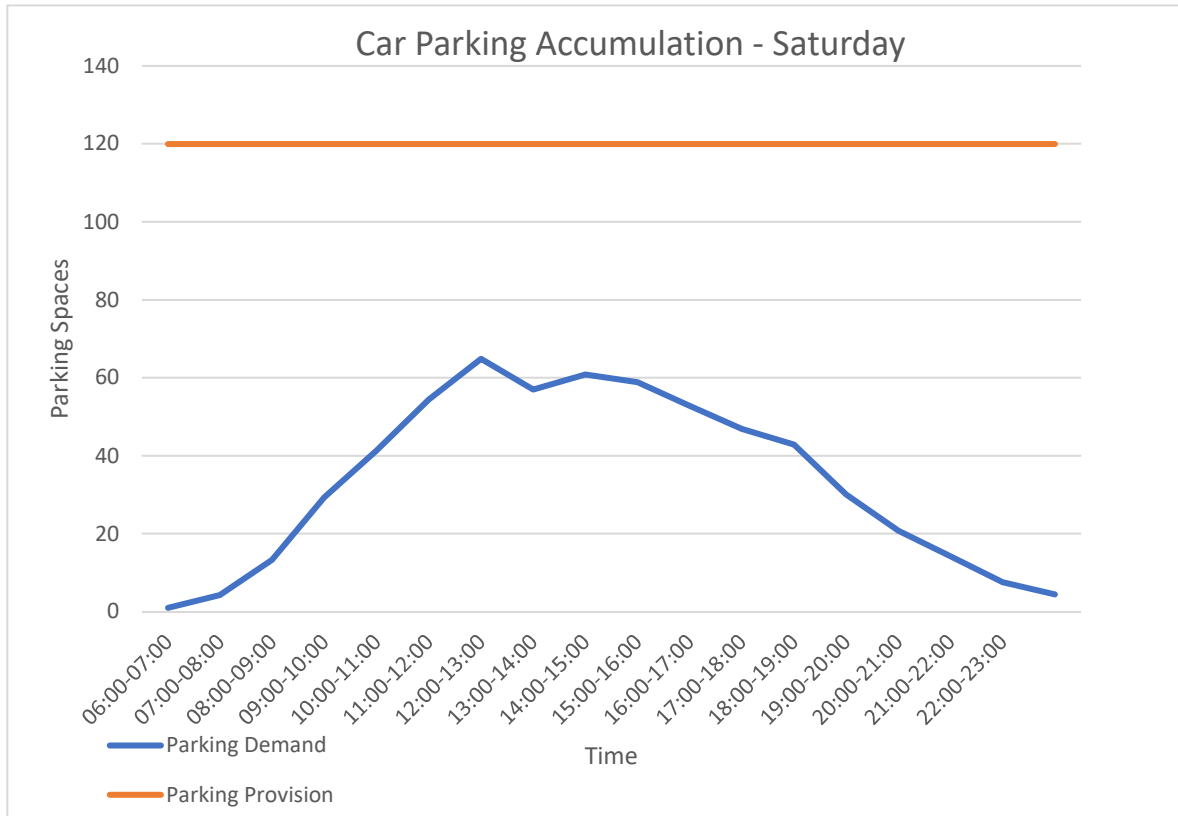


Figure 8.2: Estimated car trip generation and parking accumulation, weekend



9 FUTURE BASELINE TRAFFIC CONDITIONS

9.1 This chapter describes the future baseline traffic conditions on the local highway network in relation to traffic growth and committed development traffic flows.

Traffic Growth

9.2 Capacity assessments have been undertaken for a horizon of 5 years post anticipated store opening. The anticipated future assessment year is therefore 2031.

9.3 In order to quantify the level of background traffic growth that could occur on the local network, National Traffic Model (NTM) growth factors, modified by TEMPRO local growth factors, have been used for the Carmarthenshire 001 area dataset.

9.4 The growth factors used are summarised below:

2024 – 2026

- AM Factor: 1.0161
- PM Factor: 1.0158
- Saturday Factor: 1.0174

2026 – 2031

- AM Factor: 1.0351
- PM Factor: 1.0426
- Saturday Factor: 1.0471

9.5 The above growth factors are applied to the 2024 surveyed traffic flow data to obtain the 2026 and 2031 baseline traffic flows, as shown in **Traffic Flow Figures 2 and 3**.

10 DEVELOPMENT RELATED TRANSPORT MOVEMENTS

Introduction

- 10.1 This chapter provides an estimation of the likely trip-generating potential of the proposed development during the weekday PM and Saturday peak hours. The assessment is based on those peak hours when the combination of the development-related traffic and local highway peak traffic are highest, in order to present a robust, worst-case scenario. In this case, the peak hours from the development are 17:00-18:00 on a weekday PM Peak and 12:00-13:00 on a Saturday Peak. As the survey data was recorded over the August school holidays, the PM and Saturday movements found in the survey have been factored up to be more representative of a typical neutral network.
- 10.2 The AM traffic movements have been estimated using established DfT countpoints along the A482 and A485. The DfT traffic data has then been factored up using the previously mentioned TEMPro factors and input into a matrix that estimates the turning movements at each arm of the A482/A485 junction.
- 10.3 Along with the survey recording the turning counts at the A482/A485 junction, there was an Automatic Traffic Count (ATC) placed on the A482, to the west of the A482/A485 junction. This ATC recorded the volume and speed of traffic along the A482 during a regular period in September 2024, outside of the school holidays, to assess whether the factored up junction survey data was accurate. The result of this, is that the ATC traffic data showed less vehicles were travelling along the A485 than estimated by the factored up junction count data. Therefore, the junction turning data has been left in the assessment to complete a more robust analysis.
- 10.4 The estimated distribution and assignment of development related traffic and background traffic growth forecasts (to the assessment year of 2031) are also set out.

Proposed Food Store Trip Generation

- 10.5 In order to present a robust set of capacity assessments later in this TA, trip rates based on other existing Lidl stores within the TRICS database with a similar RFA have been used. Only stores surveyed after January 2016 have been included. The average trip rate was calculated from the TRICS outputs for a weekday and Saturday. The TRICS reports are provided at **Appendix 6**.
- 10.6 The table below provides the peak hour trip rates for these stores for the weekday AM and PM and Saturday midday peak periods. It also shows the estimated trip generation associated with the proposed discount foodstore calculated on an RFA of 1,334m².

10.7 The full TRICS outputs are summarised in **Table 10.1** below.

Table 10.1 – Weekday AM and PM and Saturday Peak Hour Trip Rates and Trip Generation (per 100m² RFA)

Discount Food Retail						
Estimated Weekday AM and PM and Saturday Peak Hour Trip Rates and Trip Generation						
Similar Lidl Stores	Weekday AM Peak (0800 – 0900)		Weekday PM Peak (15:00 – 16:00)		Saturday Peak (12:00 – 13:00)	
	Arrivals	Departures	Arrivals	Departures	Arrivals	Departures
Vehicle Trip Rate	4.461	3.05	7.06	7.132	8.586	9.178
Vehicle Trip Generation	60	41	94	95	115	123

Trip Types

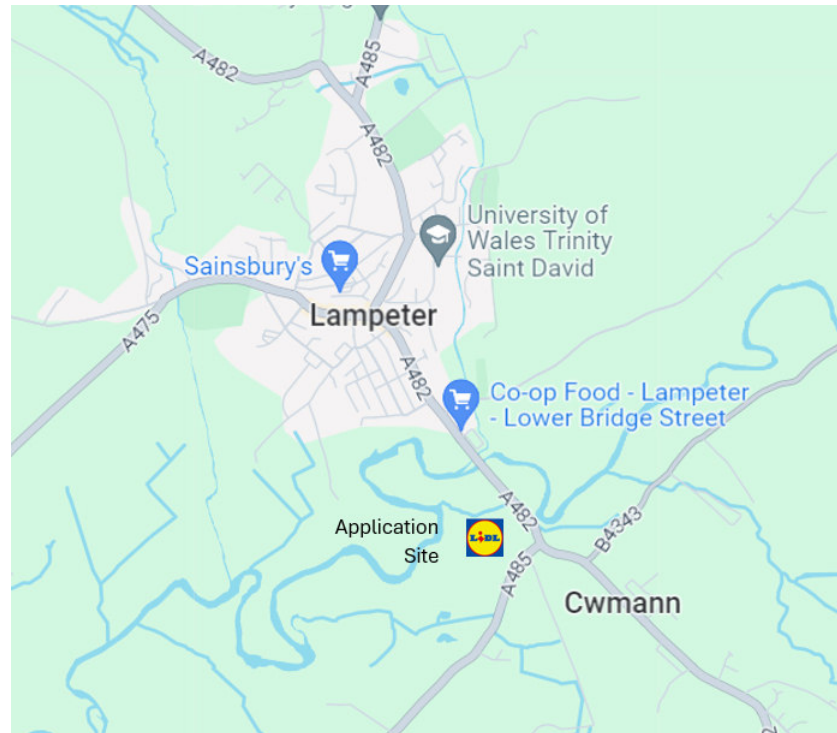
- 10.8 The latest research on trip types is set out within the TRICS Research Report 14/1 and supersedes TRICS Research Report 95/2. This has shown that the vast majority of trips associated with new food retail developments are not ‘new’ but are a ‘secondary’ trip as part of an existing journey. The secondary trips can be split into two types; ‘linked’ to other shops and ‘pass-by’ where trips are already on the main road past the site.
- 10.9 The research does not specifically mention trips ‘diverted’ from other stores (although this may come under the linked umbrella) or ‘transferred’ from another store (using the new store instead of an existing foodstore). The research relating to linked trips do not differentiate between trips to other stores on the same site or trips to other stores off-site.
- 10.10 From established research, typical proportions of trip types are summarised in **Table 10.2**.

Table 10.2 Typical Trip Type Proportions

Typical Trip Type Proportions		
Research Source	Range of Each Trip Type (%)	
	Linked	Pass-By
Somerfield 1996	46%	
Benison et al 2000 for Tesco	40%	
Tesco 2001	49%	
Harrison et al 2012	57-67%	
Ghezani et al 2012		72%
Wrigley 2006	60%	
Alsop Verrill	20%	
Maclver 1999		15-35%

- 10.11 The general consensus from the research is that those stores located in Town Centres or on commuter routes will experience higher levels of pass-by and linked trips. Stores with floor areas of less than 4000m² GFA are more likely to act as a convenience store and a convenience store is likely to experience much higher rates of pass-by traffic.
- 10.12 In light of this research and given the scale of the study area, the following trip type assumptions have been made:
- New (primary) trips – It has been assumed that circa 50% of trips will be entirely new to the local highway network in this location.
 - Pass-by/diverted/linked trips – These are trips that are already on the network as part of a primary trip. A proportion of 50% has been assumed for this purpose.
- 10.13 New food retail development does not generate new trips; it merely redistributes existing trips as customers seek to minimise travel costs. Residents of Lampeter have limited food retail opportunities nearby. It is clear from examination of the availability of open Class A1 food retail and discount food stores within reach of residents of Lampeter and Cwmann (see **Figure 10.1**), that Co-op and Sainsbury’s are closest. Trips will already be being made to these destinations, by private car and these journeys will, to a large extent, be along routes already within the study area. The application site will enable those residents that are closest, to either reduce the distance of a car-borne trip or replace that trip entirely with one on foot or by bike.

Figure 10-1 – Food Retail Opportunities, Lampeter



Traffic Distribution and Assignment

- 10.14 The vehicular distribution of the development traffic has been split through reference to the percentage distribution of existing trips travelling northbound and southbound along the A482. The distribution can be seen in **Traffic Flow Figure 4**.
- 10.15 The 'pass-by' trip distribution has also been calculated using the same method as above and can be seen in **Traffic Flow Figure 5**. Along with the diverted trips at **Traffic Flow Figure 6**.
- 10.16 The resultant generated traffic distributed on the local highway network from the site is indicated in **Traffic Flow Figure 10**.
- 10.17 Traffic flows for the future year of 2031 with Lidl are contained in **Traffic Flow Figure 12**.

11 ANTICIPATED HIGHWAY IMPACTS

Introduction

- 11.1 This Chapter describes the impact of the additional trips generated by the proposed development on the operation of the local highway network, specifically the A482/A485 junction.

Assessment Methodology

- 11.2 Assessments have been undertaken using Junctions 9 (PICADY). With the junctions 9 models the results generated provide a Ratio of Flow to Capacity (RFC) along with an estimate of the likely traffic queues. RFC values between 0.00 and 0.85 are generally accepted as representing stable and acceptable operating conditions. Values between 0.85 and one represent variable operation (i.e. possible queues building up at the junction during the period under consideration and increases in vehicular delay moving through the junction). RFC values in excess of one represents overloaded conditions (i.e. congested conditions).
- 11.3 Assessments have been undertaken in the opening base year of 2026 and future assessment year of 2031 with and without the proposed food store.

Capacity Assessment Analysis – Proposed Access

- 11.4 The junction capacity assessment results are presented for the 2026 and 2031 with development scenario. The full junctions 9 output reports are presented in **Appendix 7** with the results summarised in **Table 11.1** below.

Table 11.1 – PICADY Summary: Proposed Site Access

Movement from	WEEKDAY AM PEAK		Weekday PM PEAK		Saturday Peak	
	RFC	Queue (PCU)	RFC	Queue (PCU)	RFC	Queue (PCU)
2026 Base + Lidl						
Site Access Left	0.04	0.0	0.10	0.1	0.14	0.2
Site Access Right	0.07	0.1	0.17	0.2	0.23	0.3
A485 south/ Right	0.09	0.2	0.15	0.4	0.18	0.4
2031 Base + Lidl						
Site Access Left	0.04	0.0	0.10	0.1	0.14	0.2
Site Access Right	0.07	0.1	0.17	0.2	0.23	0.3
A485 south/ Right	0.09	0.2	0.15	0.4	0.18	0.5

- 11.5 The above results show that the proposed site access junction will operate well within capacity in the future assessment years of 2026 and 2031 with the Lidl in place and fully operational.

Capacity Assessment Analysis – A482/A485

- 11.6 The junction capacity assessment results are presented for the 2026 and 2031 with and without Development scenarios. The full junctions 9 output reports are presented in **Appendix 8** with the results summarised in **Table 11.2** below.

Table 11.2 – PICADY Summary: A482/A485

Movement from	WEEKDAY AM PEAK		Weekday PM PEAK		Saturday Peak	
	RFC	Queue (PCU)	RFC	Queue (PCU)	RFC	Queue (PCU)
2026 Baseline						
A485-A482 (left turn)	0.30	0.5	0.31	0.4	0.32	0.5
A485-A482 (right turn)	0.26	0.4	0.19	0.2	0.04	0.0
A482 southbound	0.37	0.8	0.49	1.5	0.43	1.1
2031 Baseline						
A485-A482 (left turn)	0.30	0.5	0.32	0.5	0.33	0.5
A485-A482 (right turn)	0.27	0.4	0.20	0.2	0.04	0.0
A482 southbound	0.38	0.9	0.51	1.6	0.45	1.2
2026 Baseline + Lidl						
A485-A482 (left turn)	0.62	1.9	0.34	0.6	0.36	0.6
A485-A482 (right turn)	0.34	0.5	0.20	0.3	0.04	0.0
A482 southbound	0.38	0.9	0.51	1.6	0.46	1.3
2031 Baseline + Lidl						
A485-A482 (left turn)	0.62	1.7	0.35	0.6	0.37	0.6
A485-A482 (right turn)	0.35	0.6	0.21	0.3	0.04	0.0
A482 southbound	0.39	1.0	0.53	1.7	0.48	1.4

- 11.7 The above results show that the priority junction between the A482 and A585 will operate well within capacity in the future assessment years of 2026 and 2031. Adding Lidl's development traffic results in a very minimal increase in queuing on the A482 (1 additional PCU in both 2026 and 2031). As such, Lidl's impact on this junction is deemed to be negligible and will not affect the level of service currently offered to road users.
- 11.8 There is no material increase in queuing or delay on any of the approaches that is directly attributable to Lidl.

Stage 1 Road Safety Audit

- 11.9 A Stage 1 Road Safety Audit (RSA) was undertaken in October 2024 on the proposed site access on the A482. This can be found at **Appendix 9**.
- 11.10 SCP have prepared a Designer's Response, which addresses any problems identified in the Stage 1 RSA. The Designer's Response can be found at **Appendix 10**.

Summary

- 11.11 In summary, the above assessments have been undertaken on an extremely robust basis given that the trip rates used for the site are all from recent, new-format Lidl store developments and that a high proportion (50%) of the trips generated by the proposal has been assessed as being new to the network.
- 11.12 All of the junctions subject to assessment are anticipated to operate well within capacity under the development conditions and there is therefore no requirement for any mitigation to accommodate the impact of traffic associated with Lidl's proposals.

12 SUMMARY AND CONCLUSIONS

- 12.1 This Transport Assessment has been prepared on behalf of Lidl Great Britain Limited and provides a review of the transport and highway impacts related to the proposed development of a new discount food store at land west of the A482, Cwmann, Lampeter.
- 12.2 The proposals for the application site include the construction of a discount food retail unit (Use Class A1) with a total retail floor area (RFA) of approximately 1,334sqm and a gross internal area (GIA) of 1,962sqm.
- 12.3 A total of 120 car parking spaces will be provided across the site. Of these, nine will be designated to parent and child standard and six will be DDA compliant. These spaces will be clearly marked and positioned close to the store entrance and trolley bays for customers' convenience. A further two spaces will be fitted with electric vehicle charging capabilities of rapid charger type.
- 12.4 A review of the nearby PIAs has revealed that there is no existing highway safety issues within close proximity to the site that may be exacerbated by the proposed development.
- 12.5 Following the review of the accessibility options by different modes of transport, it is considered that the site has good levels of accessibility. Access to the site on foot and by cycle is of a good standard, there are multiple bus stops nearby providing access to a range of local destinations. Moreover, the site is also well connected to the adjacent highway network allowing it to maximise the custom it attracts from existing pass-by traffic.
- 12.6 Servicing for the new foodstore will conform to the typical Lidl model, with an on-site dedicated servicing bay at the south western side of the store accessed from the main vehicular access off the A482. The store will be serviced once a day on average (and up to twice a day at Christmas and Easter) by a maximum legal articulated HGV. Swept path analysis drawings provided demonstrate that a 16.5m articulated HGV can safely enter and exit the delivery bay in forward gear and prove that the store can be serviced while fully operational.
- 12.7 To assess the suitability of the proposed parking provision on site, a parking accumulation exercise has been undertaken based upon the forecast trip generation associated with the new development. The proposed parking provision on site has been demonstrated to be sufficient to meet the forecast demand of the proposed development. Furthermore, it offers some additional headroom to service any peaks in demand over the average forecasts.
- 12.8 The proposed means of access into the application site has been tested using Junctions 9 and the results have confirmed that it provides more than adequate levels of service for the forecast turning movements in and out of Lidl at peak times for both the store and the local highway network.
- 12.9 Off-site, the impact of the development at nearby junctions has been found to be minimised. All of the junctions that have been subject to capacity assessment have been found to operate well within capacity in the future scenarios that include Lidl development traffic.

- 12.10 A Stage 1 Road Safety Audit (RSA) was undertaken in October 2024 on the proposed site access on the A482 and any problems addressed.

Conclusion

- 12.11 With all of the above in mind, it is concluded that the proposed development meets local and national transport policy objectives in terms of accessibility, sustainability and highway safety. There is no evidence of any severe impact to the interests of the free flow of traffic or of any unacceptable impact to highway safety resulting from the proposals. We therefore consider there to be no highways-related reasons which could preclude the granting of planning permission.

S|C|P

APPENDIX 1

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BOUNDARY BASED ON TITLE DEEDS: W4591812

SUBJECT TO LEVELS REVIEW

SUBJECT TO LANDSCAPE ARCHITECT DESIGN

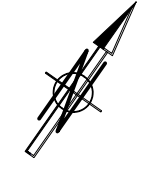
SUBJECT TO TREE SURVEY AND ECOLOGIST REPORT/REVIEW

SUBJECT TO HIGHWAYS DESIGN AND REVIEW

SUBJECT TO DRAINAGE DESIGN AND REVIEW

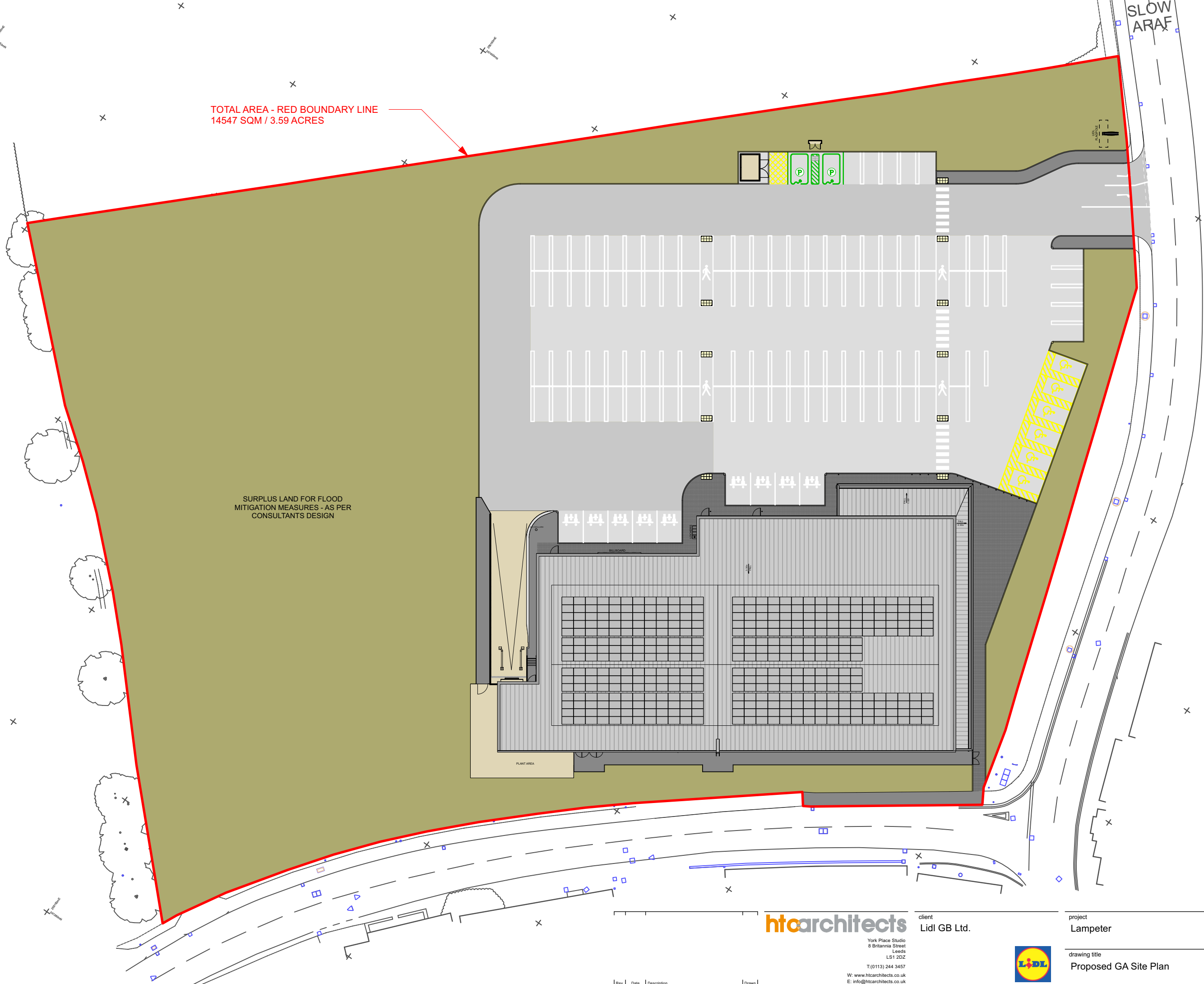
SUBJECT TO FLOOD RISK ASSESSMENT

LIDL DESIGN AS PER LATEST STANDARD SPECIFICATION TYPE 1300 JUNE 2024



TOTAL AREA - RED BOUNDARY LINE
14547 SQM / 3.59 ACRES

SURPLUS LAND FOR FLOOD MITIGATION MEASURES - AS PER CONSULTANTS DESIGN



htcarchitects

client
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project
Lampeter

drawing title
Proposed GA Site Plan

date September 2024
status Planning
scale 1:500 @ A3
drawn BM checked -
job no. 3384 dwg no. P411 rev.

Rev	Date	Description	Drawn

S|C|P

APPENDIX 2

Manual Classified Turning Counts, Lampeter

DATE: TUESDAY 20th AUGUST 2024

LOCATION: A482 / A485

ARM: A482 SOUTH

TIME / CLASS	LEFT TO A485								STRAIGHT TO A482 NORTH								TOTAL MOVEMENT FROM ARM
	PEDAL CYCLE	MOTOR CYCLE	CAR TAXI	LGV	OGV1	OGV2	BUS COACH	TOTAL	PEDAL CYCLE	MOTOR CYCLE	CAR TAXI	LGV	OGV1	OGV2	BUS COACH	TOTAL	
15:00 - 15:15	0	0	5	1	0	0	0	6	0	0	16	6	0	1	0	23	29
15:15 - 15:30	0	0	1	1	0	1	0	3	0	1	27	17	0	1	0	46	49
15:30 - 15:45	0	0	3	1	0	0	0	4	0	1	22	7	1	1	0	32	36
15:45 - 16:00	0	0	5	1	0	0	0	6	0	0	31	11	0	2	0	44	50
HOURLY TOTAL	0	0	14	4	0	1	0	19	0	2	96	41	1	5	0	145	164
16:00 - 16:15	0	0	2	0	1	1	0	4	0	1	18	9	1	1	1	31	35
16:15 - 16:30	0	0	2	1	0	0	0	3	0	2	32	6	1	1	0	42	45
16:30 - 16:45	0	0	3	0	0	0	0	3	0	0	25	14	1	0	0	40	43
16:45 - 17:00	0	0	2	2	0	0	0	4	0	0	32	7	0	3	0	42	46
HOURLY TOTAL	0	0	9	3	1	1	0	14	0	3	107	36	3	5	1	155	169
17:00 - 17:15	0	0	2	3	1	0	0	6	0	0	22	5	1	2	0	30	36
17:15 - 17:30	0	1	2	4	0	0	0	7	0	0	32	15	0	1	1	49	56
17:30 - 17:45	0	0	3	1	0	0	0	4	0	0	42	8	0	0	0	50	54
17:45 - 18:00	0	0	7	3	0	0	0	10	2	0	34	12	0	1	0	49	59
HOURLY TOTAL	0	1	14	11	1	0	0	27	2	0	130	40	1	4	1	178	205
18:00 - 18:15	0	0	6	2	0	0	0	8	0	0	27	4	0	0	0	31	39
18:15 - 18:30	0	0	5	1	0	0	0	6	0	0	31	10	0	0	0	41	47
18:30 - 18:45	0	0	6	1	0	0	0	7	0	0	26	4	0	0	0	30	37
18:45 - 19:00	0	0	5	2	0	0	0	7	0	0	14	6	0	0	0	20	27
HOURLY TOTAL	0	0	22	6	0	0	0	28	0	0	98	24	0	0	0	122	150
PERIOD TOTAL	0	1	59	24	2	2	0	88	2	5	431	141	5	14	2	600	688

DATE: SATURDAY 24th AUGUST 2024

11:00 - 11:15	0	0	3	0	0	0	0	3	0	0	58	2	0	0	0	60	63
11:15 - 11:30	0	0	5	0	0	0	0	5	0	0	62	4	0	0	0	66	71
11:30 - 11:45	0	0	3	0	0	0	0	3	0	1	61	3	0	0	0	65	68
11:45 - 12:00	0	0	3	1	0	0	0	4	0	2	61	3	0	0	0	66	70
HOURLY TOTAL	0	0	14	1	0	0	0	15	0	3	242	12	0	0	0	257	272
12:00 - 12:15	0	0	1	0	0	0	0	1	1	1	58	1	0	0	0	61	62
12:15 - 12:30	0	0	4	0	0	0	0	4	1	0	58	4	0	0	0	63	67
12:30 - 12:45	0	0	4	0	0	0	0	4	0	0	50	1	0	0	0	51	55
12:45 - 13:00	1	0	3	1	0	0	0	5	0	1	66	5	0	1	0	73	78
HOURLY TOTAL	1	0	12	1	0	0	0	14	2	2	232	11	0	1	0	248	262
13:00 - 13:15	0	0	5	0	0	0	0	5	0	1	61	5	0	0	0	67	72
13:15 - 13:30	0	0	2	0	0	0	0	2	0	1	35	2	0	0	0	38	40
13:30 - 13:45	0	0	1	2	0	0	0	3	0	5	49	0	0	1	0	55	58
13:45 - 14:00	0	0	3	0	0	0	0	3	0	1	49	2	0	0	0	52	55
HOURLY TOTAL	0	0	11	2	0	0	0	13	0	8	194	9	0	1	0	212	225
PERIOD TOTAL	1	0	37	4	0	0	0	42	2	13	668	32	0	2	0	717	759

Manual Classified Turning Counts, Lampeter

DATE: TUESDAY 20th AUGUST 2024

LOCATION: A482 / A485

ARM: A485

TIME / CLASS	LEFT TO A482 NORTH								RIGHT TO A482 SOUTH								TOTAL MOVEMENT FROM ARM
	PEDAL CYCLE	MOTOR CYCLE	CAR TAXI	LGV	OGV1	OGV2	BUS COACH	TOTAL	PEDAL CYCLE	MOTOR CYCLE	CAR TAXI	LGV	OGV1	OGV2	BUS COACH	TOTAL	
15:00 - 15:15	0	0	14	0	0	0	0	14	0	0	6	2	0	0	0	8	22
15:15 - 15:30	0	1	17	6	0	0	0	24	0	0	2	1	0	0	0	3	27
15:30 - 15:45	0	0	6	5	1	0	0	12	0	0	4	1	0	1	0	6	18
15:45 - 16:00	0	0	12	7	1	0	0	20	0	0	5	3	0	0	0	8	28
HOURLY TOTAL	0	1	49	18	2	0	0	70	0	0	17	7	0	1	0	25	95
16:00 - 16:15	0	0	18	7	2	0	0	27	0	0	1	0	0	0	0	1	28
16:15 - 16:30	2	1	13	5	0	0	0	21	0	0	2	4	0	0	0	6	27
16:30 - 16:45	0	0	14	4	0	0	0	18	0	0	3	2	0	0	0	5	23
16:45 - 17:00	0	1	19	11	0	0	0	31	0	0	7	2	1	1	0	11	42
HOURLY TOTAL	2	2	64	27	2	0	0	97	0	0	13	8	1	1	0	23	120
17:00 - 17:15	0	0	15	6	0	0	1	22	0	0	8	1	0	0	0	9	31
17:15 - 17:30	0	1	37	5	0	0	0	43	0	0	6	1	0	0	0	7	50
17:30 - 17:45	0	1	29	4	1	0	0	35	0	0	14	2	0	0	0	16	51
17:45 - 18:00	0	0	20	2	0	0	0	22	0	0	5	1	0	0	0	6	28
HOURLY TOTAL	0	2	101	17	1	0	1	122	0	0	33	5	0	0	0	38	160
18:00 - 18:15	0	1	25	2	2	1	0	31	0	0	11	0	0	0	0	11	42
18:15 - 18:30	0	1	16	5	1	0	1	24	0	0	7	3	0	0	0	10	34
18:30 - 18:45	0	0	15	3	0	0	0	18	0	0	6	0	0	0	0	6	24
18:45 - 19:00	0	0	17	2	0	0	0	19	0	0	8	1	0	0	0	9	28
HOURLY TOTAL	0	2	73	12	3	1	1	92	0	0	32	4	0	0	0	36	128
PERIOD TOTAL	2	7	287	74	8	1	2	381	0	0	95	24	1	2	0	122	503

DATE: SATURDAY 24th AUGUST 2024

11:00 - 11:15	0	0	25	1	0	0	0	26	0	0	1	0	0	0	0	1	27
11:15 - 11:30	0	0	26	1	0	0	0	27	0	0	1	0	0	0	0	1	28
11:30 - 11:45	0	0	19	4	0	0	0	23	0	0	2	0	0	0	0	2	25
11:45 - 12:00	0	0	16	1	0	0	0	17	0	0	4	1	0	0	0	5	22
HOURLY TOTAL	0	0	86	7	0	0	0	93	0	0	8	1	0	0	0	9	102
12:00 - 12:15	0	0	16	1	1	0	0	18	0	0	8	0	0	0	0	8	26
12:15 - 12:30	0	1	21	2	0	0	0	24	0	0	7	0	0	0	0	7	31
12:30 - 12:45	0	0	17	1	0	0	0	18	0	0	4	0	0	0	0	4	22
12:45 - 13:00	0	1	25	3	0	0	0	29	0	0	1	0	0	0	0	1	30
HOURLY TOTAL	0	2	79	7	1	0	0	89	0	0	20	0	0	0	0	20	109
13:00 - 13:15	0	0	14	0	0	0	0	14	0	0	3	1	0	0	0	4	18
13:15 - 13:30	0	0	8	1	0	0	0	9	0	0	2	0	0	0	0	2	11
13:30 - 13:45	0	0	18	0	1	0	0	19	0	0	2	0	0	0	0	2	21
13:45 - 14:00	0	0	10	2	0	0	0	12	0	0	1	0	0	0	0	1	13
HOURLY TOTAL	0	0	50	3	1	0	0	54	0	0	8	1	0	0	0	9	63
PERIOD TOTAL	0	2	215	17	2	0	0	236	0	0	36	2	0	0	0	38	274

Manual Classified Turning Counts, Lampeter

DATE: TUESDAY 20th AUGUST 2024

LOCATION: A482 / A485

ARM: A482 NORTH

TIME / CLASS	STRAIGHT TO A482 SOUTH								RIGHT TO A485								TOTAL MOVEMENT FROM ARM
	PEDAL CYCLE	MOTOR CYCLE	CAR TAXI	LGV	OGV1	OGV2	BUS COACH	TOTAL	PEDAL CYCLE	MOTOR CYCLE	CAR TAXI	LGV	OGV1	OGV2	BUS COACH	TOTAL	
15:00 - 15:15	0	0	17	2	1	0	0	20	0	2	9	5	0	0	0	16	36
15:15 - 15:30	0	0	27	9	1	0	0	37	0	0	18	6	1	0	0	25	62
15:30 - 15:45	0	0	38	11	1	1	1	52	0	1	8	7	2	2	0	20	72
15:45 - 16:00	0	2	32	14	2	4	1	55	0	0	20	3	2	0	0	25	80
HOURLY TOTAL	0	2	114	36	5	5	2	164	0	3	55	21	5	2	0	86	250
16:00 - 16:15	1	0	30	12	1	0	0	44	0	0	12	8	0	0	0	20	64
16:15 - 16:30	0	0	28	11	1	0	0	40	0	0	12	4	0	0	0	16	56
16:30 - 16:45	0	0	31	15	0	1	0	47	0	0	14	5	0	1	0	20	67
16:45 - 17:00	0	0	40	15	0	3	0	58	1	2	16	4	2	0	1	26	84
HOURLY TOTAL	1	0	129	53	2	4	0	189	1	2	54	21	2	1	1	82	271
17:00 - 17:15	0	1	60	14	0	2	0	77	0	3	20	7	1	0	0	31	108
17:15 - 17:30	1	0	42	17	1	2	0	63	0	0	36	7	1	0	0	44	107
17:30 - 17:45	0	0	42	12	0	2	0	56	0	0	23	9	0	0	0	32	88
17:45 - 18:00	0	0	34	11	1	2	0	48	0	2	21	11	1	0	0	35	83
HOURLY TOTAL	1	1	178	54	2	8	0	244	0	5	100	34	3	0	0	142	386
18:00 - 18:15	0	0	15	4	1	0	0	20	0	1	28	6	2	1	0	38	58
18:15 - 18:30	0	0	20	8	2	0	0	30	0	0	20	6	0	0	0	26	56
18:30 - 18:45	0	0	37	11	1	2	1	52	0	0	21	5	0	0	0	26	78
18:45 - 19:00	0	1	28	17	1	2	1	50	0	0	18	2	0	0	0	20	70
HOURLY TOTAL	0	1	100	40	5	4	2	152	0	1	87	19	2	1	0	110	262
PERIOD TOTAL	2	4	521	183	14	21	4	749	1	11	296	95	12	4	1	420	1169

DATE: SATURDAY 24th AUGUST 2024

11:00 - 11:15	0	0	40	2	0	0	0	42	0	0	18	3	0	0	0	21	63
11:15 - 11:30	0	1	39	3	0	0	0	43	0	0	20	4	0	0	0	24	67
11:30 - 11:45	2	0	33	2	0	0	0	37	0	0	16	4	0	1	0	21	58
11:45 - 12:00	0	0	46	8	0	0	0	54	0	0	23	2	2	0	0	27	81
HOURLY TOTAL	2	1	158	15	0	0	0	176	0	0	77	13	2	1	0	93	269
12:00 - 12:15	0	0	46	3	0	1	0	50	0	0	26	3	0	0	0	29	79
12:15 - 12:30	0	1	49	4	0	0	0	54	0	0	18	2	0	0	0	20	74
12:30 - 12:45	5	0	38	4	0	1	0	48	0	0	20	2	0	0	0	22	70
12:45 - 13:00	1	0	25	1	0	0	0	27	0	1	22	1	0	0	1	25	52
HOURLY TOTAL	6	1	158	12	0	2	0	179	0	1	86	8	0	0	1	96	275
13:00 - 13:15	1	3	36	3	0	0	0	43	0	0	21	3	0	0	0	24	67
13:15 - 13:30	2	0	34	4	0	0	0	40	0	0	17	2	0	0	0	19	59
13:30 - 13:45	1	0	35	3	0	0	0	39	0	0	21	1	0	0	0	22	61
13:45 - 14:00	0	3	37	3	0	0	0	43	0	0	10	1	0	0	0	11	54
HOURLY TOTAL	4	6	142	13	0	0	0	165	0	0	69	7	0	0	0	76	241
PERIOD TOTAL	12	8	458	40	0	2	0	520	0	1	232	28	2	1	1	265	785

Queue Lengths, Lampeter

DATE: TUESDAY 20th AUGUST 2024

LOCATION: A482 / A485

ARM: A482 SOUTH

Max Queue in 15 minute	LANE 1			
	LIGHTS	HEAVIES	QUEUE LENGTH (M)	%AGE HEAVIES
15:00 - 15:15	0	0	0	0.0
15:15 - 15:30	0	0	0	0.0
15:30 - 15:45	0	0	0	0.0
15:45 - 16:00	0	0	0	0.0
16:00 - 16:15	0	0	0	0.0
16:15 - 16:30	0	0	0	0.0
16:30 - 16:45	0	0	0	0.0
16:45 - 17:00	0	0	0	0.0
17:00 - 17:15	0	0	0	0.0
17:15 - 17:30	0	0	0	0.0
17:30 - 17:45	0	0	0	0.0
17:45 - 18:00	0	0	0	0.0
18:00 - 18:15	0	0	0	0.0
18:15 - 18:30	0	0	0	0.0
18:30 - 18:45	0	0	0	0.0
18:45 - 19:00	0	0	0	0.0

ARM: A485

Max Queue in 15 minute	LANE 1			
	LIGHTS	HEAVIES	QUEUE LENGTH (M)	%AGE HEAVIES
15:00 - 15:15	2	0	11	0.0
15:15 - 15:30	3	0	16.5	0.0
15:30 - 15:45	2	0	11	0.0
15:45 - 16:00	2	0	11	0.0
16:00 - 16:15	3	0	16.5	0.0
16:15 - 16:30	2	0	11	0.0
16:30 - 16:45	2	0	11	0.0
16:45 - 17:00	3	0	16.5	0.0
17:00 - 17:15	3	0	16.5	0.0
17:15 - 17:30	2	0	11	0.0
17:30 - 17:45	1	0	5.5	0.0
17:45 - 18:00	1	0	5.5	0.0
18:00 - 18:15	2	0	11	0.0
18:15 - 18:30	1	0	5.5	0.0
18:30 - 18:45	1	0	5.5	0.0
18:45 - 19:00	1	0	5.5	0.0

ARM: A482 NORTH

Max Queue in 15 minute	LANE 1			
	LIGHTS	HEAVIES	QUEUE LENGTH (M)	%AGE HEAVIES
15:00 - 15:15	1	0	5.5	0.0
15:15 - 15:30	2	0	11	0.0
15:30 - 15:45	1	0	5.5	0.0
15:45 - 16:00	0	0	0	0.0
16:00 - 16:15	1	0	5.5	0.0
16:15 - 16:30	1	0	5.5	0.0
16:30 - 16:45	0	0	0	0.0
16:45 - 17:00	2	0	11	0.0
17:00 - 17:15	1	0	5.5	0.0
17:15 - 17:30	0	0	0	0.0
17:30 - 17:45	0	0	0	0.0
17:45 - 18:00	0	0	0	0.0
18:00 - 18:15	1	0	5.5	0.0
18:15 - 18:30	0	0	0	0.0
18:30 - 18:45	0	0	0	0.0
18:45 - 19:00	0	0	0	0.0

DATE: SATURDAY 24th AUGUST 2024

Max Queue in 15 minute	LANE 1			
	LIGHTS	HEAVIES	QUEUE LENGTH (M)	%AGE HEAVIES
11:00 - 11:15	0	0	0	0.0
11:15 - 11:30	0	0	0	0.0
11:30 - 11:45	0	0	0	0.0
11:45 - 12:00	0	0	0	0.0
12:00 - 12:15	0	0	0	0.0
12:15 - 12:30	0	0	0	0.0
12:30 - 12:45	0	0	0	0.0
12:45 - 13:00	0	0	0	0.0
13:00 - 13:15	0	0	0	0.0
13:15 - 13:30	0	0	0	0.0
13:30 - 13:45	0	0	0	0.0
13:45 - 14:00	0	0	0	0.0

Max Queue in 15 minute	LANE 1			
	LIGHTS	HEAVIES	QUEUE LENGTH (M)	%AGE HEAVIES
11:00 - 11:15	2	0	11	0.0
11:15 - 11:30	4	0	22	0.0
11:30 - 11:45	3	0	16.5	0.0
11:45 - 12:00	6	0	33	0.0
12:00 - 12:15	4	0	22	0.0
12:15 - 12:30	4	0	22	0.0
12:30 - 12:45	3	0	16.5	0.0
12:45 - 13:00	3	0	16.5	0.0
13:00 - 13:15	4	0	22	0.0
13:15 - 13:30	3	0	16.5	0.0
13:30 - 13:45	0	0	0	0.0
13:45 - 14:00	3	0	16.5	0.0

Max Queue in 15 minute	LANE 1			
	LIGHTS	HEAVIES	QUEUE LENGTH (M)	%AGE HEAVIES
11:00 - 11:15	0	0	0	0.0
11:15 - 11:30	0	0	0	0.0
11:30 - 11:45	0	0	0	0.0
11:45 - 12:00	0	0	0	0.0
12:00 - 12:15	1	0	5.5	0.0
12:15 - 12:30	0	0	0	0.0
12:30 - 12:45	1	0	5.5	0.0
12:45 - 13:00	0	0	0	0.0
13:00 - 13:15	0	0	0	0.0
13:15 - 13:30	1	0	5.5	0.0
13:30 - 13:45	0	0	0	0.0
13:45 - 14:00	0	0	0	0.0

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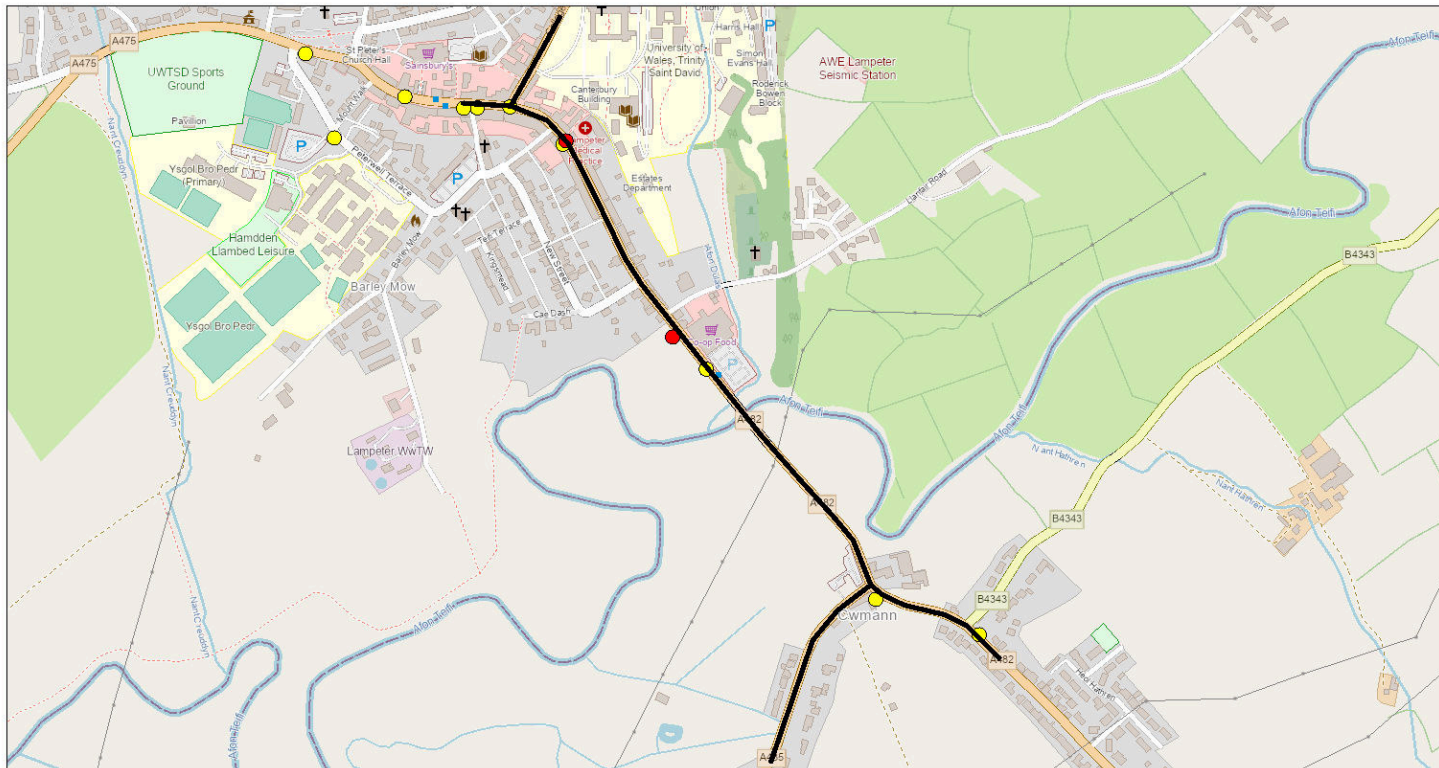
APPENDIX 3

Screening Report

Area of Interest (AOI) Information

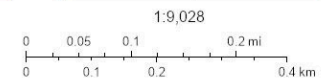
Length : 2,114.38 m

Aug 15 2024 15:17:39 British Summer Time



Traffic_Accident_Data

- Serious
- Slight



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Summary

Name	Count	Area(m ²)	Length(m)
Accidents	10	N/A	N/A
Vehicles	12	N/A	N/A
Casualties	10	N/A	N/A

Accidents

#	Accident Reference	Accident Severity	Year	Easting	Northing	Number of Vehicles	Number of Casualties	Date
1	63A057120	Slight	2020	258,300	247,330	1	1	29/08/2020
2	63A104322	Slight	2022	258,457	247,271	1	1	12-Dec-22
3	63B068220	Serious	2020	258,000	247,740	2	1	21/09/2020
4	63B078619	Slight	2019	257,690	248,100	1	1	28/08/2019
5	63B080618	Slight	2018	257,760	248,100	1	1	28/08/2018
6	63B088422	Serious	2022	257,845	248,045	1	1	21-Oct-22
7	63B094918	Slight	2018	257,840	248,040	1	1	30/09/2018
8	63B101218	Slight	2018	257,710	248,100	1	1	23/10/2018
9	63B117518	Slight	2018	257,760	248,100	1	1	08/12/2018
10	63B118719	Slight	2019	258,050	247,690	2	1	14/12/2019

#	Day of Week	Time	Local Authority Highway	Road Class	Road_Number	Road Type	Speed limit	Junction Detail
1	Saturday	11:48 PM	Carmarthenshire	A	482	Single carriageway	30	T or staggered junction
2	Monday	10:40 AM	Carmarthenshire	A	482	Single carriageway	40	T or staggered junction
3	Monday	10:40 PM	Ceredigion	A	482	Single carriageway	30	Not at junction or within 20 metres
4	Wednesday	2:35 PM	Ceredigion	A	475	Single carriageway	30	T or staggered junction
5	Tuesday	2:10 PM	Ceredigion	A	475	Roundabout	30	Mini-roundabout
6	Friday	7:45 PM	Ceredigion	A	482	Single carriageway	30	Not at junction or within 20 metres
7	Sunday	4:10 PM	Ceredigion	A	482	Single carriageway	30	T or staggered junction
8	Tuesday	10:15 AM	Ceredigion	A	475	Single carriageway	30	T or staggered junction
9	Saturday	11:09 AM	Ceredigion	A	475	Roundabout	30	Mini-roundabout
10	Saturday	9:10 AM	Ceredigion	A	482	Single carriageway	30	Not at junction or within 20 metres

#	Junction Control	Light Conditions	Weather Conditions	Road Surface Conditions	Special Conditions at Site	Carriageway Hazards	Urban or Rural Area	Pedestrian Crossing - Human Control
1	Give way or uncontrolled	Darkness - lights lit	Fine no high winds	Dry	None	None	Rural	None within 50 metres
2	Give way or uncontrolled	Daylight	Fine no high winds	Wet or damp	Roadworks	None	Rural	None within 50 metres
3	Data missing or out of range	Darkness - lighting unknown	Fine no high winds	Dry	None	None	Rural	None within 50 metres
4	Give way or uncontrolled	Daylight	Fine no high winds	Dry	None	None	Rural	None within 50 metres
5	Give way or uncontrolled	Daylight	Fine no high winds	Dry	None	None	Rural	None within 50 metres
6	Data missing or out of range	Darkness - lights lit	Other	Wet or damp	None	None	Rural	None within 50 metres
7	Give way or uncontrolled	Daylight	Fine no high winds	Dry	None	None	Rural	None within 50 metres
8	Give way or uncontrolled	Daylight	Fine no high winds	Dry	None	None	Rural	None within 50 metres
9	Give way or uncontrolled	Daylight	Raining no high winds	Wet or damp	None	None	Rural	None within 50 metres
10	Data missing or out of range	Daylight	Fine no high winds	Wet or damp	None	None	Rural	None within 50 metres

#	Pedestrian Crossing - Physical Facilities	Did Police Officer Attend Scene of Accident	Count
1	No physical crossing facilities within 50 metres	Yes	1
2	No physical crossing facilities within 50 metres	Yes	1
3	No physical crossing facilities within 50 metres	No	1
4	Pelican, puffin, toucan or similar non-junction pedestrian light crossing	No	1
5	Pelican, puffin, toucan or similar non-junction pedestrian light crossing	Yes	1
6	No physical crossing facilities within 50 metres	No - accident was reported using a self completion form (self rep only)	1
7	Pelican, puffin, toucan or similar non-junction pedestrian light crossing	Yes	1
8	Pelican, puffin, toucan or similar non-junction pedestrian light crossing	Yes	1
9	No physical crossing facilities within 50 metres	Yes	1
10	No physical crossing facilities within 50 metres	Yes	1

Vehicles

#	Accident Reference	Year	Vehicle Reference	Vehicle Type	Towing and Articulation	Vehicle Manoeuvre	Vehicle Location - Restricted Lane	Junction Location
1	63A057120	2020	1	Car	No tow/articulation	Going ahead left-hand bend	On main c'way - not in restricted lane	Cleared junction or waiting/parked at junction exit
2	63A104322	2022	1	Car	No tow/articulation	Going ahead other	On main c'way - not in restricted lane	Cleared junction or waiting/parked at junction exit
3	63B068220	2020	1	Car	No tow/articulation	Going ahead other	On main c'way - not in restricted lane	Not at or within 20 metres of junction
4	63B068220	2020	2	Pedal cycle	No tow/articulation	Going ahead other	On main c'way - not in restricted lane	Not at or within 20 metres of junction
5	63B078619	2019	1	Car	No tow/articulation	Going ahead other	Footway (pavement)	Cleared junction or waiting/parked at junction exit
6	63B080618	2018	1	Car	No tow/articulation	Going ahead other	On main c'way - not in restricted lane	Leaving roundabout
7	63B088422	2022	1	Van / Goods 3.5 tonnes mgw or under	No tow/articulation	Going ahead right-hand bend	On main c'way - not in restricted lane	Not at or within 20 metres of junction
8	63B094918	2018	1	Car	No tow/articulation	Going ahead other	On main c'way - not in restricted lane	Approaching junction or waiting/parked at junction approach
9	63B101218	2018	1	Van / Goods 3.5 tonnes mgw or under	No tow/articulation	Going ahead other	On main c'way - not in restricted lane	Cleared junction or waiting/parked at junction exit
10	63B117518	2018	1	Car	No tow/articulation	Turning right	On main c'way - not in restricted lane	Leaving roundabout
11	63B118719	2019	1	Car	No tow/articulation	Going ahead other	On main c'way - not in restricted lane	Not at or within 20 metres of junction
12	63B118719	2019	2	Taxi/Private hire car	No tow/articulation	Slowing or stopping	On main c'way - not in restricted lane	Not at or within 20 metres of junction

#	Skidding and Overturning	Hit Object in Carriageway	1st Point of Impact	Journey Purpose of Driver	Sex of Driver	Age Band of Driver	Age of Vehicle	Driver Home Area Type	Count
1	None	None	Front	Not known	Male	26 - 35	16	Small town	1
2	None	None	Offside	Commuting to/from work	Male	21 - 25	22	Nov-15	1
3	None	None	Data missing or out of range	Not known	Not known	Data missing or out of range	-1	Data missing or out of range	1
4	None	None	Data missing or out of range	Not known	Male	36 - 45	-1	Rural	1
5	None	None	Nearside	Not known	Male	Over 75	1	Urban area	1
6	None	None	Front	Not known	Male	56 - 65	16	Rural	1
7	None	None	Offside	Not known	Male	Data missing or out of range	-1	Nov-15	1
8	None	None	Front	Not known	Male	Over 75	4	Small town	1
9	None	None	Nearside	Journey as part of work	Male	26 - 35	0	Rural	1
10	None	None	Nearside	Not known	Female	26 - 35	0	Small town	1
11	None	None	Front	Not known	Male	26 - 35	14	Rural	1
12	None	None	Back	Journey as part of work	Female	56 - 65	1	Small town	1

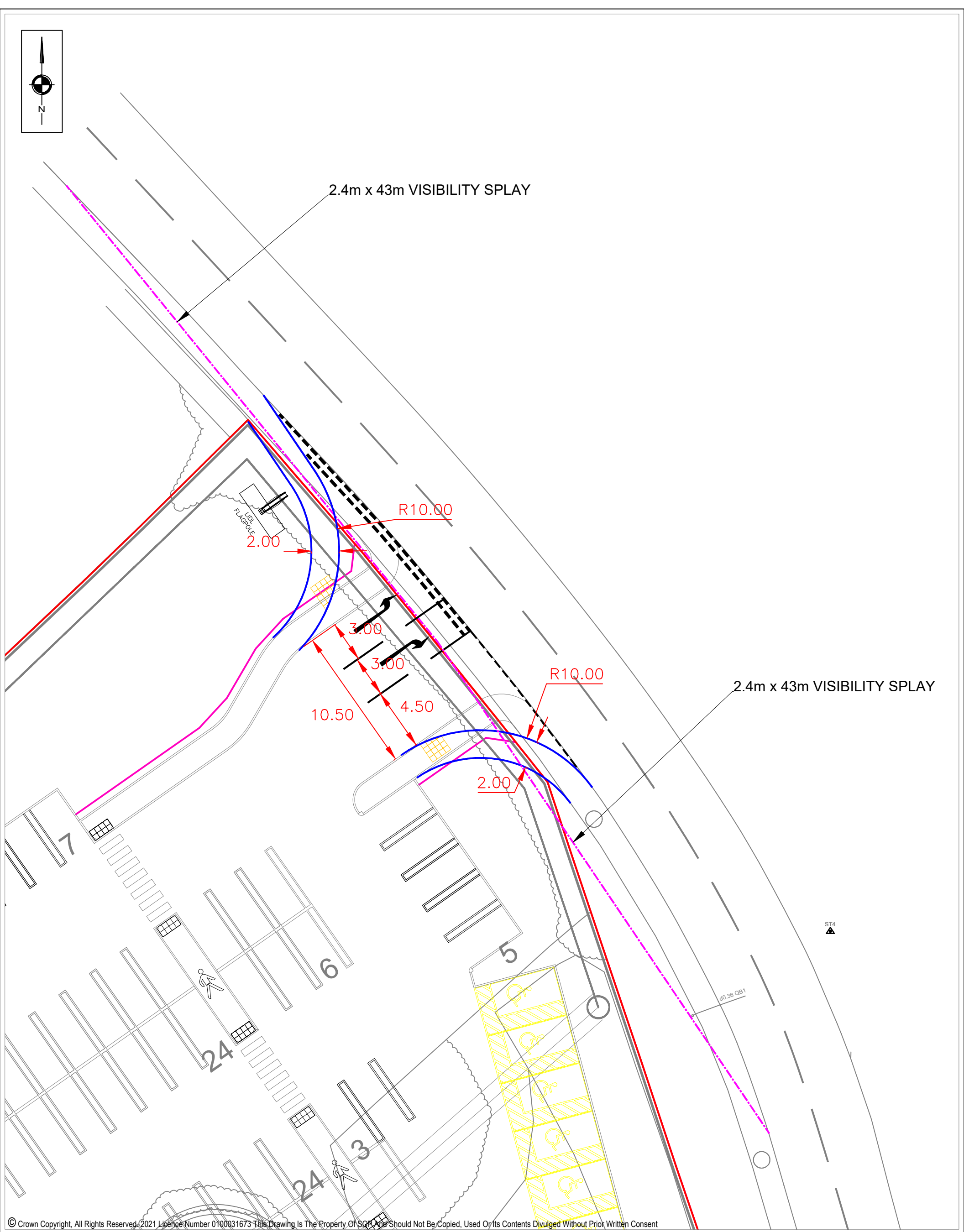
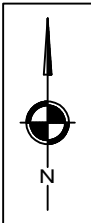
Casualties

#	Accident_Reference	Year	Vehicle Reference	Casualty Reference	Casualty Class	Sex of Casualty	Age Band of Casualty	Casualty Severity
1	63A057120	2020	1	1	Driver or rider	Male	26 - 35	Slight
2	63A104322	2022	1	1	Pedestrian	Male	21 - 25	Slight
3	63B068220	2020	2	1	Driver or rider	Male	36 - 45	Serious
4	63B078619	2019	1	1	Pedestrian	Male	46 - 55	Slight
5	63B080618	2018	1	1	Pedestrian	Female	Nov-15	Slight
6	63B088422	2022	1	1	Pedestrian	Female	46 - 55	Serious
7	63B094918	2018	1	1	Pedestrian	Male	26 - 35	Slight
8	63B101218	2018	1	1	Pedestrian	Female	36 - 45	Slight
9	63B117518	2018	1	1	Pedestrian	Male	Over 75	Slight
10	63B118719	2019	2	1	Driver or rider	Female	56 - 65	Slight

#	Pedestrian Location	Pedestrian Movement	Car Passenger	Bus or Coach Passenger	Pedestrian Road Maintenance Worker	Casualty Type	Count
1	Not a Pedestrian	Not a Pedestrian	Not car passenger	Not a bus or coach passenger	No / Not applicable	Car occupant	1
2	In carriageway, not crossing	In carriageway, stationary - not crossing (standing or playing)	Not car passenger	Not a bus or coach passenger	Yes	Pedestrian	1
3	Not a Pedestrian	Not a Pedestrian	Not car passenger	Not a bus or coach passenger	No / Not applicable	Cyclist	1
4	On footway or verge	Unknown or other	Not car passenger	Not a bus or coach passenger	No / Not applicable	Pedestrian	1
5	Crossing in zig-zag approach lines	Crossing from driver's offside	Not car passenger	Not a bus or coach passenger	No / Not applicable	Pedestrian	1
6	In carriageway, crossing elsewhere	Crossing from driver's offside	Not car passenger	Not a bus or coach passenger	No / Not applicable	Pedestrian	1
7	Crossing in zig-zag approach lines	Crossing from driver's nearside	Not car passenger	Not a bus or coach passenger	No / Not applicable	Pedestrian	1
8	Crossing on pedestrian crossing facility	Crossing from driver's nearside	Not car passenger	Not a bus or coach passenger	No / Not applicable	Pedestrian	1
9	In carriageway, crossing elsewhere	Crossing from driver's nearside	Not car passenger	Not a bus or coach passenger	No / Not applicable	Pedestrian	1
10	Not a Pedestrian	Not a Pedestrian	Not car passenger	Not a bus or coach passenger	No / Not applicable	Taxi/Private hire car occupant	1

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APPENDIX 4



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Rev	Description	Date	By
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-	-	-	-
-	-	-	-
-	-	-	-
REVISIONS			

Client Name:			
Drawn By:	LD	Date:	25.09.2024
Checked:	JL	Scale@A3:	1:250
Approved:	JL	Status:	PLANNING

Project Title:		LIDL, LAMPETER	
Drawing Title:		PROPOSED SITE ACCESS ARRANGEMENT Based on 3384 P412 Proposed Setting out Plan	
Drawing No.	SCP/240833/SK02		Rev.
			-

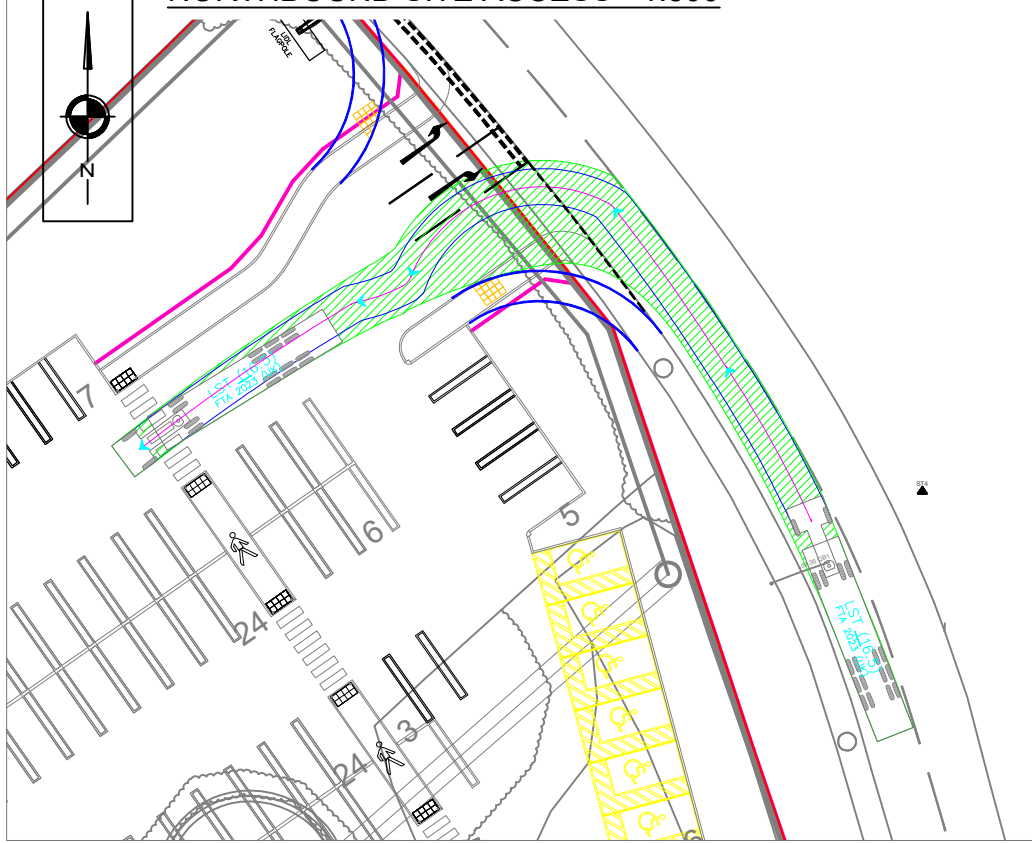
an RSK company

Office of Origin: Manchester Tel: 0161 832 4400
www.scptransport.co.uk - www.rskgroup.com

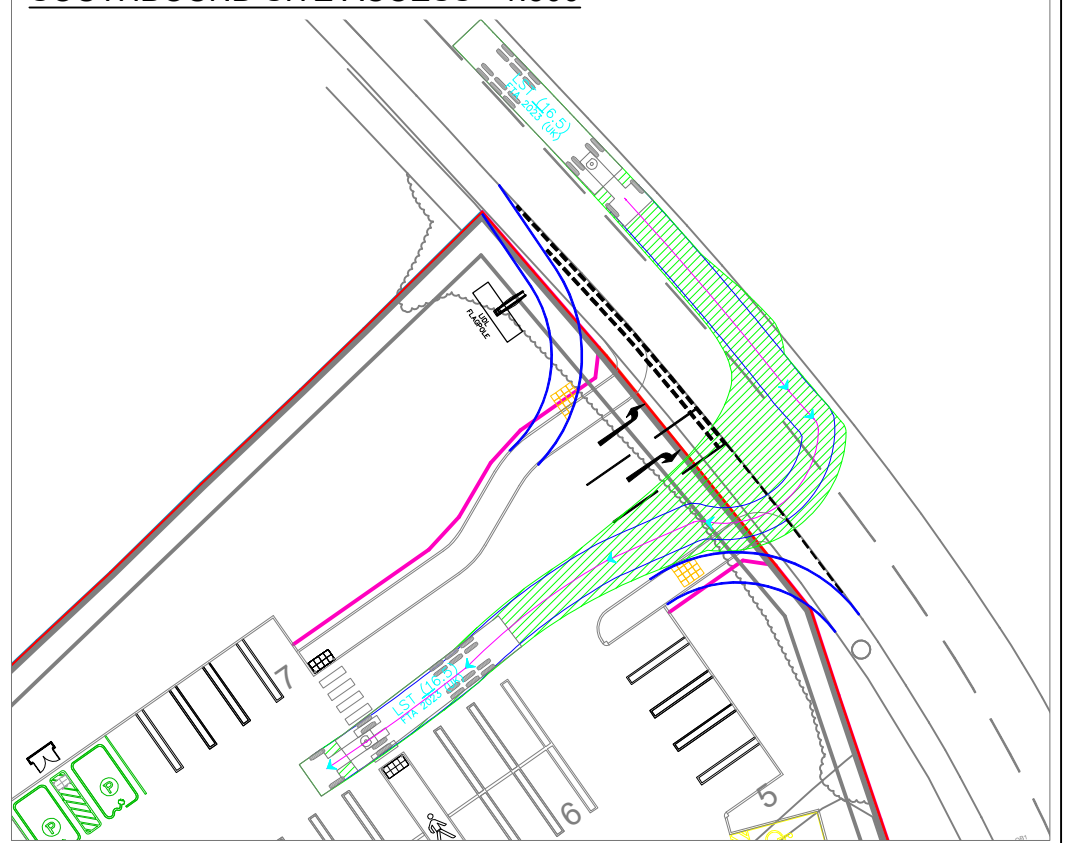
S|C|P

APPENDIX 5

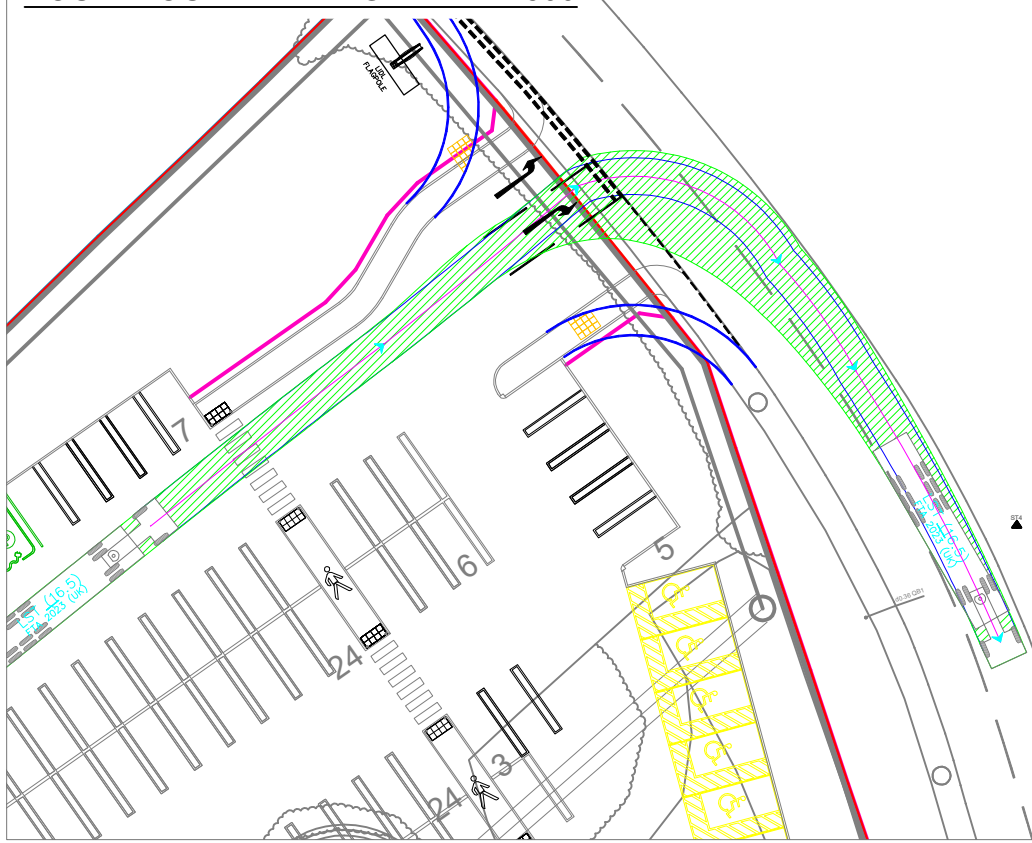
NORTHBOUND SITE ACCESS - 1:500



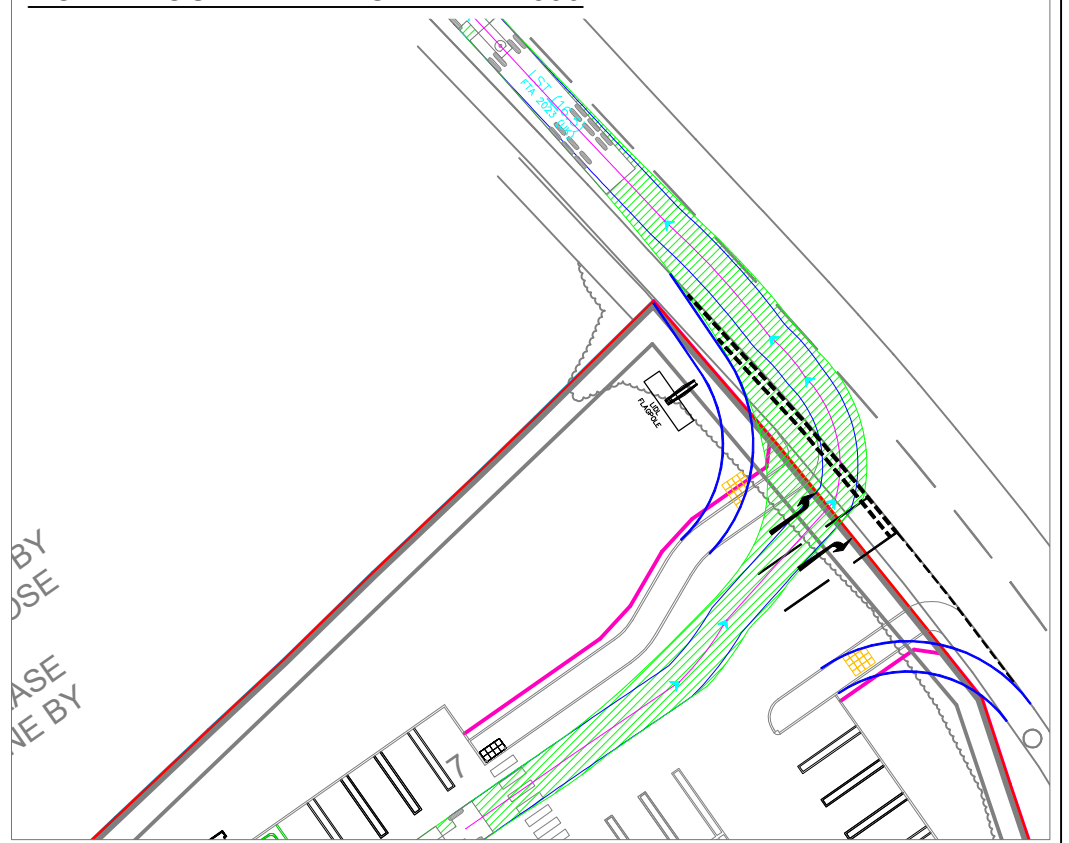
SOUTHBOUND SITE ACCESS - 1:500



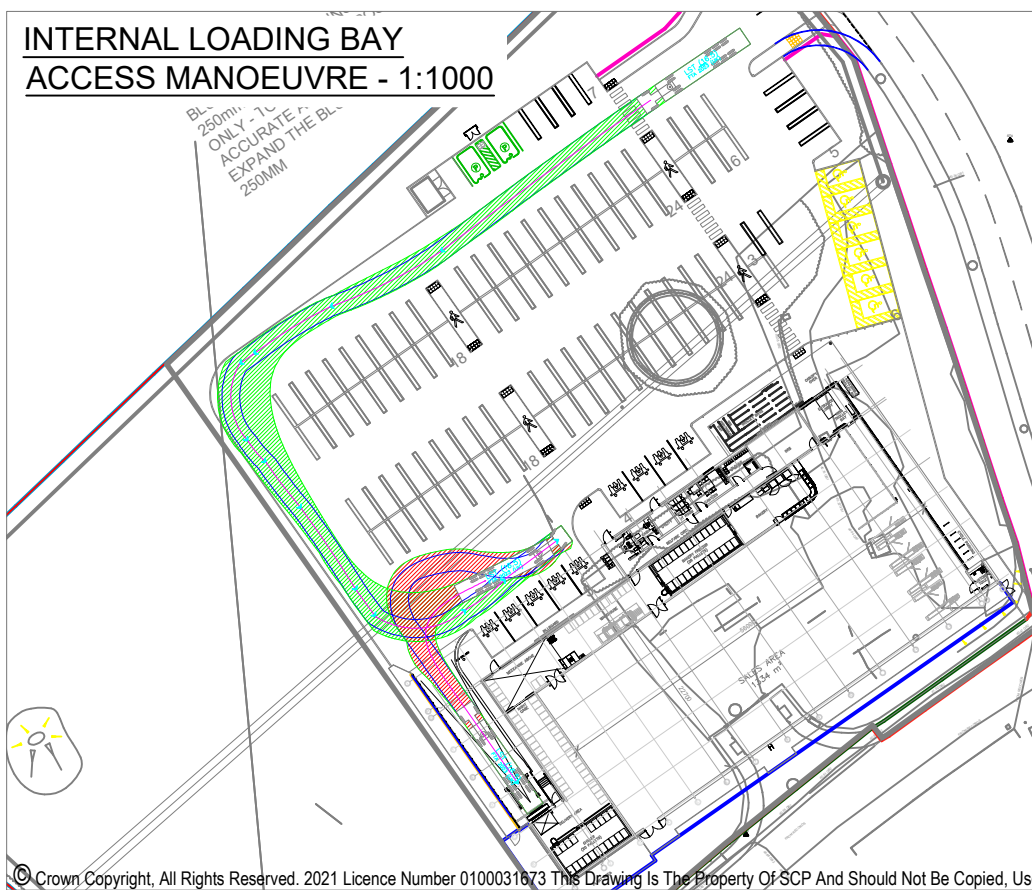
SOUTHBOUND SITE EGRESS - 1:500



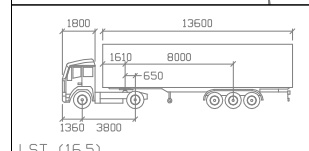
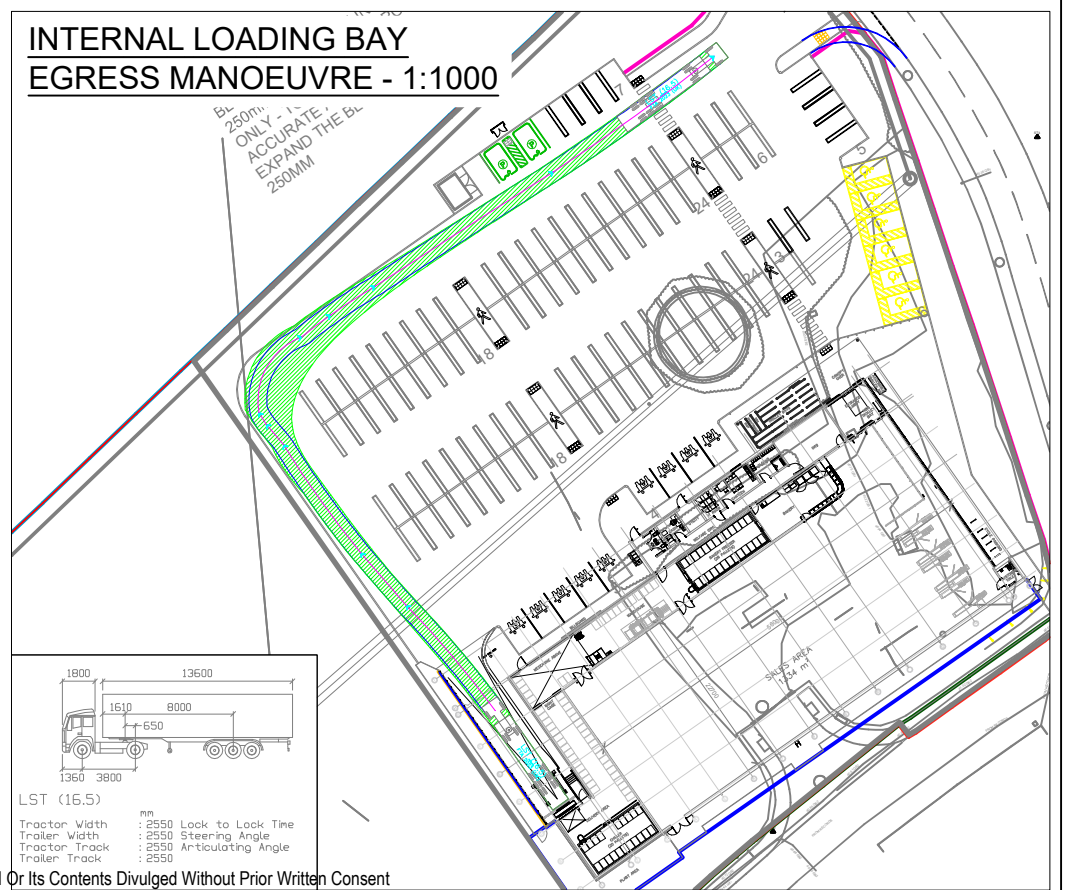
NORTHBOUND SITE EGRESS - 1:500



INTERNAL LOADING BAY ACCESS MANOEUVRE - 1:1000



INTERNAL LOADING BAY EGRESS MANOEUVRE - 1:1000



LST (16.5)
 Tractor Width : 2550 mm
 Trailer Width : 2550 mm
 Tractor Track : 2550 mm
 Trailer Track : 2550 mm

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Rev	Description	Date	By
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
REVISIONS			

Client Name:			
Drawn By:	LD	Date:	25.09.2024
Checked:	JL	Scale@A3:	AS STATED
Approved:	JL	Status:	PLANNING

Project Title:		LIDL, LAMPETER	
Drawing Title:		SWEEP PATH ANALYSIS - 16.5m ARTICULATED HGV Based on 3384 P412 Proposed Setting out Plan	
Drawing No.	SCP/240833/ATR02	Rev.	-

Office of Origin: Manchester Tel: 0161 832 4400
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APPENDIX 6

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 01 - RETAIL
Category : C - DISCOUNT FOOD STORES

MULTI-MODAL TOTAL VEHICLESSelected regions and areas:

02	SOUTH EAST	
	SO SLOUGH	1 days
	WS WEST SUSSEX	3 days
03	SOUTH WEST	
	SM SOMERSET	1 days
	WL WILTSHIRE	1 days
04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	1 days
	NF NORFOLK	1 days
05	EAST MIDLANDS	
	LN LINCOLNSHIRE	1 days
	NN NORTH NORTHAMPTONSHIRE	2 days
	NT NOTTINGHAMSHIRE	1 days
06	WEST MIDLANDS	
	WM WEST MIDLANDS	2 days
	WO WORCESTERSHIRE	2 days
08	NORTH WEST	
	GT WARRINGTON	1 days
09	NORTH	
	NB NORTHUMBERLAND	1 days
	TW TYNE & WEAR	1 days
10	WALES	
	CF CARDIFF	1 days
11	SCOTLAND	
	AD ABERDEEN CITY	1 days
	SR STIRLING	1 days

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

Primary Filtering selection:

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

Parameter: Retail floor area
 Actual Range: 900 to 1690 (units: sqm)
 Range Selected by User: 390 to 1870 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/16 to 21/09/23

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

Selected survey days:

Monday	2 days
Tuesday	7 days
Wednesday	3 days
Thursday	7 days
Friday	3 days

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

Selected survey types:

Manual count	22 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town Centre	7
Suburban Area (PPS6 Out of Centre)	5
Edge of Town	6
Neighbourhood Centre (PPS6 Local Centre)	4

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

Selected Location Sub Categories:

Industrial Zone	4
Development Zone	1
Residential Zone	3
Retail Zone	6
Built-Up Zone	2
High Street	1
No Sub Category	5

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

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	29 days - Selected
Servicing vehicles Excluded	18 days - Selected

Secondary Filtering selection:Use Class:

E(a) 22 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Secondary Filtering selection (Cont.):Population within 1 mile:

1,001 to 5,000	1 days
5,001 to 10,000	2 days
10,001 to 15,000	5 days
15,001 to 20,000	2 days
20,001 to 25,000	4 days
25,001 to 50,000	7 days
50,001 to 100,000	1 days

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

Population within 5 miles:

5,001 to 25,000	1 days
25,001 to 50,000	2 days
50,001 to 75,000	3 days
75,001 to 100,000	5 days
125,001 to 250,000	6 days
250,001 to 500,000	3 days
500,001 or More	2 days

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

Car ownership within 5 miles:

0.6 to 1.0	8 days
1.1 to 1.5	13 days
2.1 to 2.5	1 days

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

Petrol filling station:

Included in the survey count	0 days
Excluded from count or no filling station	22 days

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

Travel Plan:

Not Known	1 days
Yes	6 days
No	15 days

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

PTAL Rating:

No PTAL Present	22 days
-----------------	---------

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

Covid-19 Restrictions	Yes	At least one survey within the selected data set was undertaken at a time of Covid-19 restrictions
-----------------------	-----	--

LIST OF SITES relevant to selection parameters

1	AD-01-C-02	LIDL		ABERDEEN CITY
	GREENWELL ROAD			
	ABERDEEN			
	Suburban Area (PPS6 Out of Centre)			
	Industrial Zone			
	Total Retail floor area:	1650 sqm		
	Survey date: WEDNESDAY	09/06/21		Survey Type: MANUAL
2	CA-01-C-01	LIDL		CAMBRIDGESHIRE
	CROMWELL ROAD			
	WISBECH			
	Edge of Town			
	Retail Zone			
	Total Retail floor area:	913 sqm		
	Survey date: FRIDAY	21/10/16		Survey Type: MANUAL
3	CF-01-C-01	LIDL		CARDIFF
	EAST TYNDALL STREET			
	CARDIFF			
	Suburban Area (PPS6 Out of Centre)			
	Development Zone			
	Total Retail floor area:	1407 sqm		
	Survey date: THURSDAY	29/06/17		Survey Type: MANUAL
4	GT-01-C-01	LIDL		WARRINGTON
	FENNEL STREET			
	WARRINGTON			
	Edge of Town Centre			
	Retail Zone			
	Total Retail floor area:	1000 sqm		
	Survey date: THURSDAY	15/04/21		Survey Type: MANUAL
5	LN-01-C-01	LIDL		LINCOLNSHIRE
	RICHMOND DRIVE			
	SKEGNESS			
	Edge of Town Centre			
	Built-Up Zone			
	Total Retail floor area:	1424 sqm		
	Survey date: TUESDAY	19/07/16		Survey Type: MANUAL
6	NB-01-C-01	LIDL		NORTHUMBERLAND
	SCHALKSMUHLE ROAD			
	BEDLINGTON			
	Edge of Town Centre			
	No Sub Category			
	Total Retail floor area:	1425 sqm		
	Survey date: MONDAY	12/06/17		Survey Type: MANUAL
7	NF-01-C-01	LIDL		NORFOLK
	AYLSHAM ROAD			
	NORWICH			
	Neighbourhood Centre (PPS6 Local Centre)			
	No Sub Category			
	Total Retail floor area:	1690 sqm		
	Survey date: FRIDAY	29/11/19		Survey Type: MANUAL
8	NN-01-C-02	LIDL		NORTH NORTHAMPTONSHIRE
	MARINERS WAY			
	KETTERING			
	Edge of Town Centre			
	Retail Zone			
	Total Retail floor area:	1375 sqm		
	Survey date: MONDAY	27/06/22		Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

9	NN-01-C-04 NEWTON ROAD RUSHDEN	LIDL		NORTH NORTHAMPTONSHIRE
	Edge of Town Centre Residential Zone Total Retail floor area:		1424 sqm	
	Survey date: TUESDAY		19/07/16	Survey Type: MANUAL
10	NT-01-C-01 CHAPEL LANE BINGHAM	LIDL		NOTTINGHAMSHIRE
	Edge of Town Industrial Zone Total Retail floor area:		1424 sqm	
	Survey date: FRIDAY		15/07/16	Survey Type: MANUAL
11	SM-01-C-01 SEAWARD WAY MINEHEAD	LIDL		SOMERSET
	Edge of Town No Sub Category Total Retail floor area:		1407 sqm	
	Survey date: THURSDAY		22/06/17	Survey Type: MANUAL
12	SO-01-C-01 BATH ROAD SLOUGH SLOUGH RETAIL PARK Suburban Area (PPS6 Out of Centre) Retail Zone Total Retail floor area:	LIDL	1100 sqm	
	Survey date: THURSDAY		22/09/22	Survey Type: MANUAL
13	SR-01-C-01 PLAYERS ROAD STIRLING	LIDL		STIRLING
	Edge of Town Centre Built-Up Zone Total Retail floor area:		1424 sqm	
	Survey date: THURSDAY		01/06/17	Survey Type: MANUAL
14	TW-01-C-01 EDGEFIELD AVENUE NEWCASTLE FAWDON Neighbourhood Centre (PPS6 Local Centre) No Sub Category Total Retail floor area:	ALDI	1548 sqm	
	Survey date: TUESDAY		30/04/19	Survey Type: MANUAL
15	WL-01-C-02 HUNGERDOWN LANE CHIPPENHAM	LIDL		WILTSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Retail floor area:		1325 sqm	
	Survey date: TUESDAY		09/05/23	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

16	WM-01-C-01	LIDL	WEST MIDLANDS
	MACKADOWN LANE		
	BIRMINGHAM		
	KITT'S GREEN		
	Neighbourhood Centre (PPS6 Local Centre)		
	No Sub Category		
	Total Retail floor area:	1341 sqm	
	Survey date: TUESDAY	12/07/16	Survey Type: MANUAL
17	WM-01-C-02	LIDL	WEST MIDLANDS
	HIGH STREET		
	WEST BROMWICH		
	GUNS VILLAGE		
	Neighbourhood Centre (PPS6 Local Centre)		
	High Street		
	Total Retail floor area:	1341 sqm	
	Survey date: TUESDAY	12/07/16	Survey Type: MANUAL
18	WO-01-C-01	LIDL	WORCESTERSHIRE
	BLACKPOLE ROAD		
	WORCESTER		
	BRICKFIELDS		
	Edge of Town		
	Retail Zone		
	Total Retail floor area:	1424 sqm	
	Survey date: WEDNESDAY	13/07/16	Survey Type: MANUAL
19	WO-01-C-02	LIDL	WORCESTERSHIRE
	WORCESTER ROAD		
	MALVERN		
	Edge of Town Centre		
	Residential Zone		
	Total Retail floor area:	900 sqm	
	Survey date: TUESDAY	26/06/18	Survey Type: MANUAL
20	WS-01-C-05	LIDL	WEST SUSSEX
	WESTHAMPNETT ROAD		
	CHICHESTER		
	Edge of Town		
	Retail Zone		
	Total Retail floor area:	1325 sqm	
	Survey date: THURSDAY	08/09/22	Survey Type: MANUAL
21	WS-01-C-06	LIDL	WEST SUSSEX
	FOUNDRY LANE		
	HORSHAM		
	Suburban Area (PPS6 Out of Centre)		
	Industrial Zone		
	Total Retail floor area:	1000 sqm	
	Survey date: WEDNESDAY	07/09/22	Survey Type: MANUAL
22	WS-01-C-07	LIDL	WEST SUSSEX
	NEWLANDS ROAD		
	BOGNOR REGIS		
	Edge of Town		
	Industrial Zone		
	Total Retail floor area:	1410 sqm	
	Survey date: THURSDAY	21/09/23	Survey Type: MANUAL

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

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
AN-01-C-02	Not previously used survey
AN-01-C-03	Not previously used survey
BC-01-C-02	Non Lidl
BE-01-C-01	Not previously used survey
BM-01-C-01	Non Lidl
CA-01-C-02	Non Lidl
DE-01-C-01	Not previously used survey

MANUALLY DESELECTED SITES (Cont.)

Site Ref	Reason for Deselection
DH-01-C-01	Non Lidl
DL-01-C-01	Not previously used survey
DL-01-C-03	Not previously used survey
DN-01-C-01	Non Lidl
IS-01-C-01	Non Lidl
KE-01-C-01	Non Lidl
LU-01-C-02	Non Lidl
MG-01-C-01	Not previously used survey
MR-01-C-01	Not previously used survey
NN-01-C-01	Non Lidl
NY-01-C-03	Non Lidl
TW-01-C-02	Non Lidl
TY-01-C-02	Not previously used survey
WS-01-C-01	Not previously used survey
WS-01-C-03	Not previously used survey
WS-01-C-04	Non Lidl
WX-01-C-01	Non Lidl

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES

MULTI-MODAL TOTAL VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 2.87

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. RFA	Trip Rate	No. Days	Ave. RFA	Trip Rate	No. Days	Ave. RFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	4	1293	0.483	4	1293	0.039	4	1293	0.522
07:00 - 08:00	22	1331	0.816	22	1331	0.253	22	1331	1.069
08:00 - 09:00	22	1331	4.461	22	1331	3.050	22	1331	7.511
09:00 - 10:00	22	1331	5.701	22	1331	5.021	22	1331	10.722
10:00 - 11:00	22	1331	6.442	22	1331	5.858	22	1331	12.300
11:00 - 12:00	22	1331	6.965	22	1331	6.811	22	1331	13.776
12:00 - 13:00	22	1331	7.046	22	1331	6.971	22	1331	14.017
13:00 - 14:00	22	1331	6.814	22	1331	7.296	22	1331	14.110
14:00 - 15:00	22	1331	7.272	22	1331	7.105	22	1331	14.377
15:00 - 16:00	22	1331	7.060	22	1331	7.132	22	1331	14.192
16:00 - 17:00	22	1331	7.156	22	1331	7.320	22	1331	14.476
17:00 - 18:00	22	1331	6.585	22	1331	7.224	22	1331	13.809
18:00 - 19:00	22	1331	5.673	22	1331	6.097	22	1331	11.770
19:00 - 20:00	22	1331	4.123	22	1331	4.703	22	1331	8.826
20:00 - 21:00	22	1331	2.654	22	1331	3.269	22	1331	5.923
21:00 - 22:00	22	1331	1.117	22	1331	1.749	22	1331	2.866
22:00 - 23:00	21	1351	0.039	21	1351	0.335	21	1351	0.374
23:00 - 24:00									
Total Rates:			80.407			80.233			160.640

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.

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Parameter summary

Trip rate parameter range selected:	900 - 1690 (units: sqm)
Survey date date range:	01/01/16 - 21/09/23
Number of weekdays (Monday-Friday):	22
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	24

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

S|C|P

APPENDIX 7

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.5.2.1013 © Copyright TRL Limited, 2019
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Filename: 240833-Lidl_Lampeter_Site Access Junction.j9
 Path: C:\00 User Saving Area\JC
 Report generation date: 15/10/2024 15:57:34

- »2026 Baseline + Lidl, AM
- »2026 Baseline + Lidl, PM
- »2026 Baseline + Lidl, Sat
- »2031 Baseline + Lidl, AM
- »2031 Baseline + Lidl, PM
- »2031 Baseline + Lidl, Sat

Summary of junction performance

	AM					PM					Sat				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
2026 Baseline + Lidl															
Stream B-C	D1	0.0	7.55	0.04	A	D2	0.1	7.71	0.10	A	D3	0.2	8.62	0.14	A
Stream B-A		0.1	12.51	0.07	B		0.2	13.78	0.17	B		0.3	15.78	0.23	C
Stream C-AB		0.2	5.46	0.09	A		0.4	4.96	0.15	A		0.4	5.43	0.18	A
2031 Baseline + Lidl															
Stream B-C	D4	0.0	7.59	0.04	A	D5	0.1	7.76	0.10	A	D6	0.2	8.71	0.14	A
Stream B-A		0.1	12.96	0.07	B		0.2	14.11	0.17	B		0.3	16.28	0.23	C
Stream C-AB		0.2	5.26	0.09	A		0.4	4.90	0.15	A		0.5	5.40	0.18	A

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

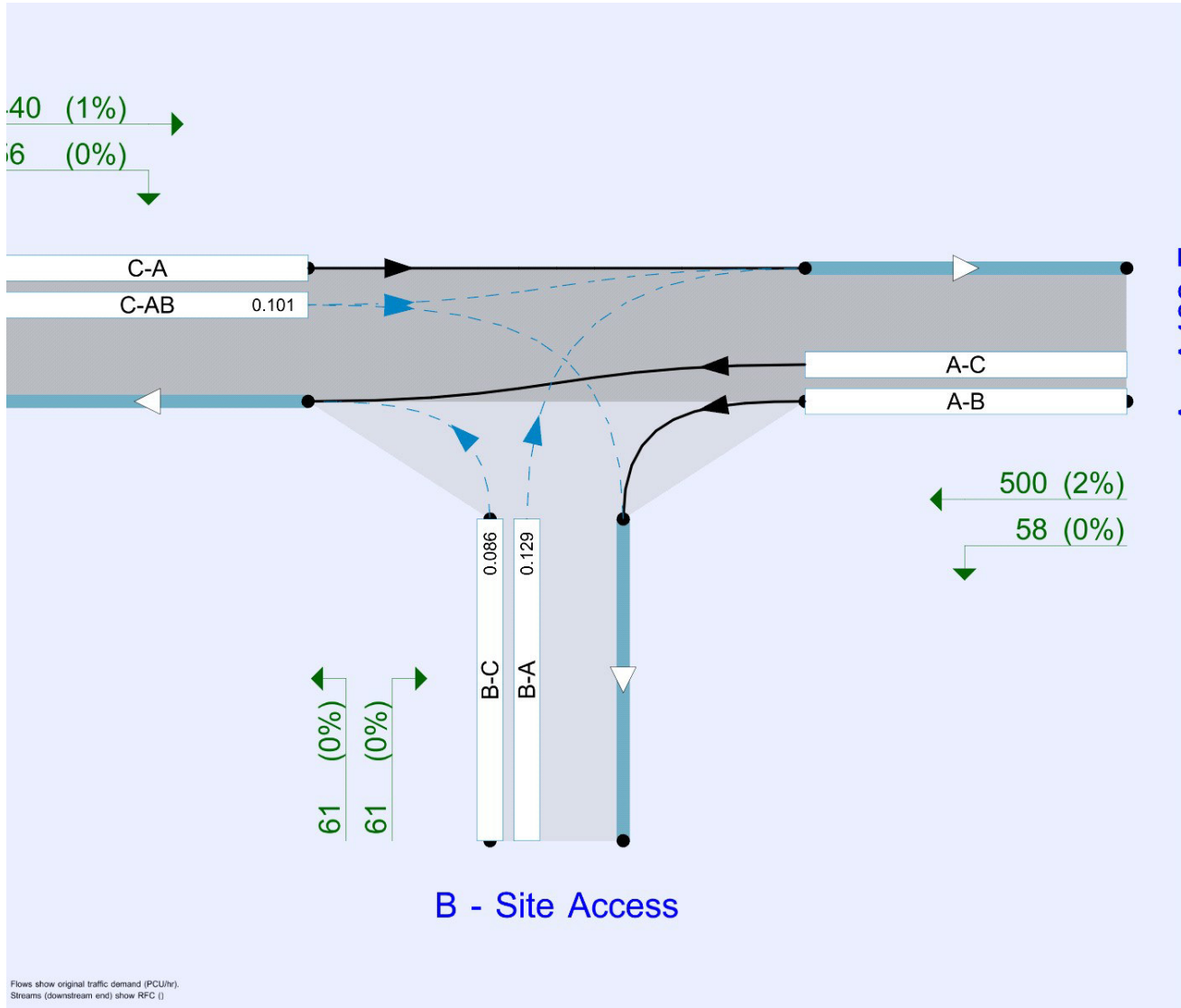
File summary

File Description

Title	
Location	
Site number	
Date	22/08/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	SCP-RD-Junction\Junctions shared
Description	

Units

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



Flows show original traffic demand (PCU/hr).
Streams (downstream end) show RFC (.)
The junction diagram reflects the last run of Junctions.

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2026 Baseline + Lidl	AM	ONE HOUR	07:45	09:15	15
D2	2026 Baseline + Lidl	PM	ONE HOUR	16:45	18:15	15
D3	2026 Baseline + Lidl	Sat	ONE HOUR	11:45	13:15	15
D4	2031 Baseline + Lidl	AM	ONE HOUR	07:45	09:15	15
D5	2031 Baseline + Lidl	PM	ONE HOUR	16:45	18:15	15
D6	2031 Baseline + Lidl	Sat	ONE HOUR	11:45	13:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2026 Baseline + Lidl, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.71	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A482 E		Major
B	Site Access		Minor
C	A482 W		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - A482 W	7.00			52.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane Width (Left) (m)	Lane Width (Right) (m)	Visibility to left (m)	Visibility to right (m)
B - Site Access	Two lanes	3.00	3.00	19	40

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	503	0.088	0.222	0.139	0.317
B-C	649	0.095	0.241	-	-
C-B	604	0.224	0.224	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2026 Baseline + Lidl	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A482 E		✓	552	100.000
B - Site Access		✓	40	100.000
C - A482 W		✓	375	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A482 E	B - Site Access	C - A482 W
From	A - A482 E	0	30	522
	B - Site Access	20	0	20
	C - A482 W	346	29	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A482 E	B - Site Access	C - A482 W
From	A - A482 E	0	0	8
	B - Site Access	0	0	0
	C - A482 W	1	0	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
07:45-08:00	A - A482 E	416	416
	B - Site Access	30	30
	C - A482 W	282	282
08:00-08:15	A - A482 E	496	496
	B - Site Access	36	36
	C - A482 W	337	337
08:15-08:30	A - A482 E	608	608
	B - Site Access	44	44
	C - A482 W	413	413
08:30-08:45	A - A482 E	608	608
	B - Site Access	44	44
	C - A482 W	413	413
08:45-09:00	A - A482 E	496	496
	B - Site Access	36	36
	C - A482 W	337	337
09:00-09:15	A - A482 E	416	416
	B - Site Access	30	30
	C - A482 W	282	282

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.04	7.55	0.0	A
B-A	0.07	12.51	0.1	B
C-AB	0.09	5.46	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	15	547	0.028	15	0.0	6.766	A
B-A	15	371	0.041	15	0.0	10.104	B
C-AB	35	698	0.050	35	0.1	5.449	A
C-A	247			247			
A-B	23			23			
A-C	393			393			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	18	527	0.034	18	0.0	7.076	A
B-A	18	345	0.052	18	0.1	10.996	B
C-AB	46	719	0.064	46	0.1	5.372	A
C-A	291			291			
A-B	27			27			
A-C	469			469			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	22	499	0.044	22	0.0	7.552	A
B-A	22	310	0.071	22	0.1	12.504	B
C-AB	65	750	0.087	65	0.2	5.283	A
C-A	348			348			
A-B	33			33			
A-C	575			575			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	22	499	0.044	22	0.0	7.553	A
B-A	22	310	0.071	22	0.1	12.513	B
C-AB	65	750	0.087	65	0.2	5.286	A
C-A	348			348			
A-B	33			33			
A-C	575			575			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	18	527	0.034	18	0.0	7.078	A
B-A	18	345	0.052	18	0.1	11.008	B
C-AB	46	719	0.064	46	0.1	5.381	A
C-A	291			291			
A-B	27			27			
A-C	469			469			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	15	547	0.028	15	0.0	6.770	A
B-A	15	371	0.041	15	0.0	10.120	B
C-AB	35	698	0.050	35	0.1	5.457	A
C-A	247			247			
A-B	23			23			
A-C	393			393			

2026 Baseline + Lidl, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.45	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2026 Baseline + Lidl	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A482 E		✓	429	100.000
B - Site Access		✓	96	100.000
C - A482 W		✓	537	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A482 E	B - Site Access	C - A482 W
From	A - A482 E	0	48	381
	B - Site Access	48	0	48
	C - A482 W	491	46	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A482 E	B - Site Access	C - A482 W
From	A - A482 E	0	0	3
	B - Site Access	0	0	0
	C - A482 W	0	0	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A - A482 E	323	323
	B - Site Access	72	72
	C - A482 W	404	404
17:00-17:15	A - A482 E	386	386
	B - Site Access	86	86
	C - A482 W	483	483
17:15-17:30	A - A482 E	472	472
	B - Site Access	106	106
	C - A482 W	591	591
17:30-17:45	A - A482 E	472	472
	B - Site Access	106	106
	C - A482 W	591	591
17:45-18:00	A - A482 E	386	386
	B - Site Access	86	86
	C - A482 W	483	483
18:00-18:15	A - A482 E	323	323
	B - Site Access	72	72
	C - A482 W	404	404

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.10	7.71	0.1	A
B-A	0.17	13.78	0.2	B
C-AB	0.15	4.96	0.4	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	36	563	0.064	36	0.1	6.829	A
B-A	36	374	0.097	36	0.1	10.626	B
C-AB	65	792	0.082	64	0.2	4.945	A
C-A	339			339			
A-B	36			36			
A-C	287			287			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	43	545	0.079	43	0.1	7.171	A
B-A	43	349	0.124	43	0.1	11.765	B
C-AB	88	832	0.106	88	0.2	4.840	A
C-A	394			394			
A-B	43			43			
A-C	343			343			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	53	520	0.102	53	0.1	7.701	A
B-A	53	314	0.168	53	0.2	13.753	B
C-AB	130	890	0.146	129	0.4	4.742	A
C-A	461			461			
A-B	53			53			
A-C	419			419			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	53	520	0.102	53	0.1	7.706	A
B-A	53	314	0.168	53	0.2	13.783	B
C-AB	130	890	0.146	130	0.4	4.748	A
C-A	461			461			
A-B	53			53			
A-C	419			419			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	43	545	0.079	43	0.1	7.179	A
B-A	43	349	0.124	43	0.1	11.799	B
C-AB	89	833	0.107	89	0.2	4.851	A
C-A	394			394			
A-B	43			43			
A-C	343			343			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	36	563	0.064	36	0.1	6.842	A
B-A	36	374	0.097	36	0.1	10.668	B
C-AB	65	793	0.082	66	0.2	4.957	A
C-A	339			339			
A-B	36			36			
A-C	287			287			

2026 Baseline + Lidl , Sat

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.85	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2026 Baseline + Lidl	Sat	ONE HOUR	11:45	13:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A482 E		✓	543	100.000
B - Site Access		✓	122	100.000
C - A482 W		✓	475	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A482 E	B - Site Access	C - A482 W
From	A - A482 E	0	58	485
	B - Site Access	61	0	61
	C - A482 W	419	56	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A482 E	B - Site Access	C - A482 W
From	A - A482 E	0	0	4
	B - Site Access	0	0	0
	C - A482 W	0	0	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
11:45-12:00	A - A482 E	409	409
	B - Site Access	92	92
	C - A482 W	358	358
12:00-12:15	A - A482 E	488	488
	B - Site Access	110	110
	C - A482 W	427	427
12:15-12:30	A - A482 E	598	598
	B - Site Access	134	134
	C - A482 W	523	523
12:30-12:45	A - A482 E	598	598
	B - Site Access	134	134
	C - A482 W	523	523
12:45-13:00	A - A482 E	488	488
	B - Site Access	110	110
	C - A482 W	427	427
13:00-13:15	A - A482 E	409	409
	B - Site Access	92	92
	C - A482 W	358	358

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.14	8.62	0.2	A
B-A	0.23	15.78	0.3	C
C-AB	0.18	5.43	0.4	A
C-A				
A-B				
A-C				

Main Results for each time segment

11:45 - 12:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	46	539	0.085	46	0.1	7.285	A
B-A	46	361	0.127	45	0.1	11.375	B
C-AB	74	738	0.100	73	0.2	5.410	A
C-A	284			284			
A-B	44			44			
A-C	365			365			

12:00 - 12:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	55	517	0.106	55	0.1	7.788	A
B-A	55	333	0.164	55	0.2	12.900	B
C-AB	99	768	0.129	99	0.3	5.386	A
C-A	328			328			
A-B	52			52			
A-C	436			436			

12:15 - 12:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	67	485	0.138	67	0.2	8.609	A
B-A	67	295	0.227	67	0.3	15.727	C
C-AB	144	811	0.177	143	0.4	5.397	A
C-A	379			379			
A-B	64			64			
A-C	534			534			

12:30 - 12:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	67	485	0.139	67	0.2	8.619	A
B-A	67	295	0.228	67	0.3	15.785	C
C-AB	144	812	0.177	144	0.4	5.406	A
C-A	379			379			
A-B	64			64			
A-C	534			534			

12:45 - 13:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	55	517	0.106	55	0.1	7.802	A
B-A	55	333	0.165	55	0.2	12.961	B
C-AB	100	769	0.130	100	0.3	5.398	A
C-A	327			327			
A-B	52			52			
A-C	436			436			

13:00 - 13:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	46	539	0.085	46	0.1	7.301	A
B-A	46	361	0.127	46	0.1	11.442	B
C-AB	74	739	0.100	74	0.2	5.428	A
C-A	284			284			
A-B	44			44			
A-C	365			365			

2031 Baseline + Lidl, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.70	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2031 Baseline + Lidl	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A482 E		✓	559	100.000
B - Site Access		✓	40	100.000
C - A482 W		✓	429	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A482 E	B - Site Access	C - A482 W
From	A - A482 E	0	30	529
	B - Site Access	20	0	20
	C - A482 W	400	29	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A482 E	B - Site Access	C - A482 W
From	A - A482 E	0	0	4
	B - Site Access	0	0	0
	C - A482 W	1	0	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
07:45-08:00	A - A482 E	421	421
	B - Site Access	30	30
	C - A482 W	323	323
08:00-08:15	A - A482 E	503	503
	B - Site Access	36	36
	C - A482 W	386	386
08:15-08:30	A - A482 E	615	615
	B - Site Access	44	44
	C - A482 W	472	472
08:30-08:45	A - A482 E	615	615
	B - Site Access	44	44
	C - A482 W	472	472
08:45-09:00	A - A482 E	503	503
	B - Site Access	36	36
	C - A482 W	386	386
09:00-09:15	A - A482 E	421	421
	B - Site Access	30	30
	C - A482 W	323	323

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.04	7.59	0.0	A
B-A	0.07	12.96	0.1	B
C-AB	0.09	5.26	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	15	545	0.028	15	0.0	6.783	A
B-A	15	364	0.041	15	0.0	10.302	B
C-AB	37	726	0.051	37	0.1	5.248	A
C-A	286			286			
A-B	23			23			
A-C	398			398			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	18	525	0.034	18	0.0	7.099	A
B-A	18	337	0.053	18	0.1	11.277	B
C-AB	50	753	0.066	50	0.1	5.143	A
C-A	336			336			
A-B	27			27			
A-C	476			476			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	22	496	0.044	22	0.0	7.586	A
B-A	22	300	0.073	22	0.1	12.954	B
C-AB	72	793	0.091	72	0.2	5.023	A
C-A	400			400			
A-B	33			33			
A-C	582			582			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	22	496	0.044	22	0.0	7.587	A
B-A	22	300	0.073	22	0.1	12.964	B
C-AB	72	793	0.091	72	0.2	5.029	A
C-A	400			400			
A-B	33			33			
A-C	582			582			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	18	525	0.034	18	0.0	7.104	A
B-A	18	337	0.053	18	0.1	11.291	B
C-AB	50	753	0.067	50	0.1	5.153	A
C-A	335			335			
A-B	27			27			
A-C	476			476			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	15	545	0.028	15	0.0	6.790	A
B-A	15	364	0.041	15	0.0	10.318	B
C-AB	37	726	0.052	38	0.1	5.256	A
C-A	285			285			
A-B	23			23			
A-C	398			398			

2031 Baseline + Lidl, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.44	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2031 Baseline + Lidl	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A482 E		✓	440	100.000
B - Site Access		✓	96	100.000
C - A482 W		✓	559	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A482 E	B - Site Access	C - A482 W
From	A - A482 E	0	48	392
	B - Site Access	48	0	48
	C - A482 W	513	46	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A482 E	B - Site Access	C - A482 W
From	A - A482 E	0	0	3
	B - Site Access	0	0	0
	C - A482 W	0	0	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A - A482 E	331	331
	B - Site Access	72	72
	C - A482 W	421	421
17:00-17:15	A - A482 E	396	396
	B - Site Access	86	86
	C - A482 W	503	503
17:15-17:30	A - A482 E	484	484
	B - Site Access	106	106
	C - A482 W	615	615
17:30-17:45	A - A482 E	484	484
	B - Site Access	106	106
	C - A482 W	615	615
17:45-18:00	A - A482 E	396	396
	B - Site Access	86	86
	C - A482 W	503	503
18:00-18:15	A - A482 E	331	331
	B - Site Access	72	72
	C - A482 W	421	421

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.10	7.76	0.1	A
B-A	0.17	14.11	0.2	B
C-AB	0.15	4.90	0.4	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	36	561	0.064	36	0.1	6.857	A
B-A	36	370	0.098	36	0.1	10.758	B
C-AB	67	802	0.083	66	0.2	4.889	A
C-A	354			354			
A-B	36			36			
A-C	295			295			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	43	542	0.080	43	0.1	7.208	A
B-A	43	344	0.125	43	0.1	11.959	B
C-AB	91	845	0.108	91	0.2	4.781	A
C-A	411			411			
A-B	43			43			
A-C	352			352			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	53	517	0.102	53	0.1	7.755	A
B-A	53	308	0.172	53	0.2	14.077	B
C-AB	136	905	0.150	135	0.4	4.680	A
C-A	480			480			
A-B	53			53			
A-C	432			432			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	53	517	0.102	53	0.1	7.760	A
B-A	53	308	0.172	53	0.2	14.112	B
C-AB	136	906	0.150	136	0.4	4.688	A
C-A	480			480			
A-B	53			53			
A-C	432			432			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	43	542	0.080	43	0.1	7.214	A
B-A	43	344	0.126	43	0.1	11.997	B
C-AB	92	845	0.109	93	0.2	4.793	A
C-A	411			411			
A-B	43			43			
A-C	352			352			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	36	560	0.064	36	0.1	6.867	A
B-A	36	370	0.098	36	0.1	10.802	B
C-AB	67	803	0.084	68	0.2	4.901	A
C-A	354			354			
A-B	36			36			
A-C	295			295			

2031 Baseline + Lidl, Sat

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.85	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2031 Baseline + Lidl	Sat	ONE HOUR	11:45	13:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A482 E		✓	558	100.000
B - Site Access		✓	122	100.000
C - A482 W		✓	496	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A482 E	B - Site Access	C - A482 W
From	A - A482 E	0	58	500
	B - Site Access	61	0	61
	C - A482 W	440	56	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A482 E	B - Site Access	C - A482 W
From	A - A482 E	0	0	2
	B - Site Access	0	0	0
	C - A482 W	1	0	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
11:45-12:00	A - A482 E	420	420
	B - Site Access	92	92
	C - A482 W	373	373
12:00-12:15	A - A482 E	502	502
	B - Site Access	110	110
	C - A482 W	446	446
12:15-12:30	A - A482 E	614	614
	B - Site Access	134	134
	C - A482 W	546	546
12:30-12:45	A - A482 E	614	614
	B - Site Access	134	134
	C - A482 W	546	546
12:45-13:00	A - A482 E	502	502
	B - Site Access	110	110
	C - A482 W	446	446
13:00-13:15	A - A482 E	420	420
	B - Site Access	92	92
	C - A482 W	373	373

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.14	8.71	0.2	A
B-A	0.23	16.28	0.3	C
C-AB	0.18	5.40	0.5	A
C-A				
A-B				
A-C				

Main Results for each time segment

11:45 - 12:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	46	537	0.086	46	0.1	7.327	A
B-A	46	357	0.129	45	0.1	11.547	B
C-AB	76	747	0.101	75	0.2	5.376	A
C-A	298			298			
A-B	44			44			
A-C	376			376			

12:00 - 12:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	55	513	0.107	55	0.1	7.847	A
B-A	55	328	0.167	55	0.2	13.175	B
C-AB	103	780	0.132	102	0.3	5.349	A
C-A	343			343			
A-B	52			52			
A-C	449			449			

12:15 - 12:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	67	481	0.140	67	0.2	8.701	A
B-A	67	288	0.233	67	0.3	16.213	C
C-AB	150	826	0.182	149	0.5	5.362	A
C-A	396			396			
A-B	64			64			
A-C	551			551			

12:30 - 12:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	67	480	0.140	67	0.2	8.712	A
B-A	67	288	0.233	67	0.3	16.278	C
C-AB	150	826	0.182	150	0.5	5.372	A
C-A	396			396			
A-B	64			64			
A-C	551			551			

12:45 - 13:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	55	513	0.107	55	0.1	7.862	A
B-A	55	328	0.167	55	0.2	13.234	B
C-AB	103	780	0.132	104	0.3	5.368	A
C-A	343			343			
A-B	52			52			
A-C	449			449			

13:00 - 13:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	46	536	0.086	46	0.1	7.344	A
B-A	46	356	0.129	46	0.2	11.615	B
C-AB	76	748	0.102	77	0.2	5.399	A
C-A	297			297			
A-B	44			44			
A-C	376			376			

S|C|P

APPENDIX 8

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.5.2.1013 © Copyright TRL Limited, 2019
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Filename: 240833-Lidl_Lampeter_Junctions.j9
 Path: C:\00 User Saving Area\JC
 Report generation date: 15/10/2024 16:01:48

- »2026 Baseline , AM
- »2026 Baseline , PM
- »2026 Baseline , Sat
- »2031 Baseline, AM
- »2031 Baseline , PM
- »2031 Baseline , Sat
- »2026 Baseline + Lidl, AM
- »2026 Baseline + Lidl, PM
- »2026 Baseline + Lidl , Sat
- »2031 Baseline + Lidl, AM
- »2031 Baseline + Lidl, PM
- »2031 Baseline + Lidl, Sat

Summary of junction performance

	AM					PM					Sat				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
2026 Baseline															
Stream B-C	D1	0.5	11.33	0.30	B	D2	0.4	8.95	0.31	A	D3	0.5	9.08	0.32	A
Stream B-A		0.4	14.97	0.26	B		0.2	15.36	0.19	C		0.0	13.29	0.04	B
Stream C-AB		0.8	8.08	0.37	A		1.5	9.44	0.49	A		1.1	8.69	0.43	A
2031 Baseline															
Stream B-C	D4	0.5	11.52	0.30	B	D5	0.5	9.42	0.32	A	D6	0.5	9.37	0.33	A
Stream B-A		0.4	15.39	0.27	C		0.2	15.83	0.20	C		0.0	13.60	0.04	B
Stream C-AB		0.9	8.24	0.38	A		1.6	9.75	0.51	A		1.2	8.93	0.45	A
2026 Baseline + Lidl															
Stream B-C	D7	1.9	20.59	0.62	C	D8	0.6	10.49	0.34	B	D9	0.6	10.78	0.36	B
Stream B-A		0.5	21.77	0.34	C		0.3	16.59	0.20	C		0.0	14.12	0.04	B
Stream C-AB		0.9	8.36	0.38	A		1.6	9.67	0.51	A		1.3	9.26	0.46	A
2031 Baseline + Lidl															
Stream B-C	D10	1.7	18.63	0.62	C	D11	0.6	10.52	0.35	B	D12	0.6	10.34	0.37	B
Stream B-A		0.6	23.67	0.35	C		0.3	18.04	0.21	C		0.0	15.00	0.04	B
Stream C-AB		1.0	8.45	0.39	A		1.7	9.57	0.53	A		1.4	9.40	0.48	A

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

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

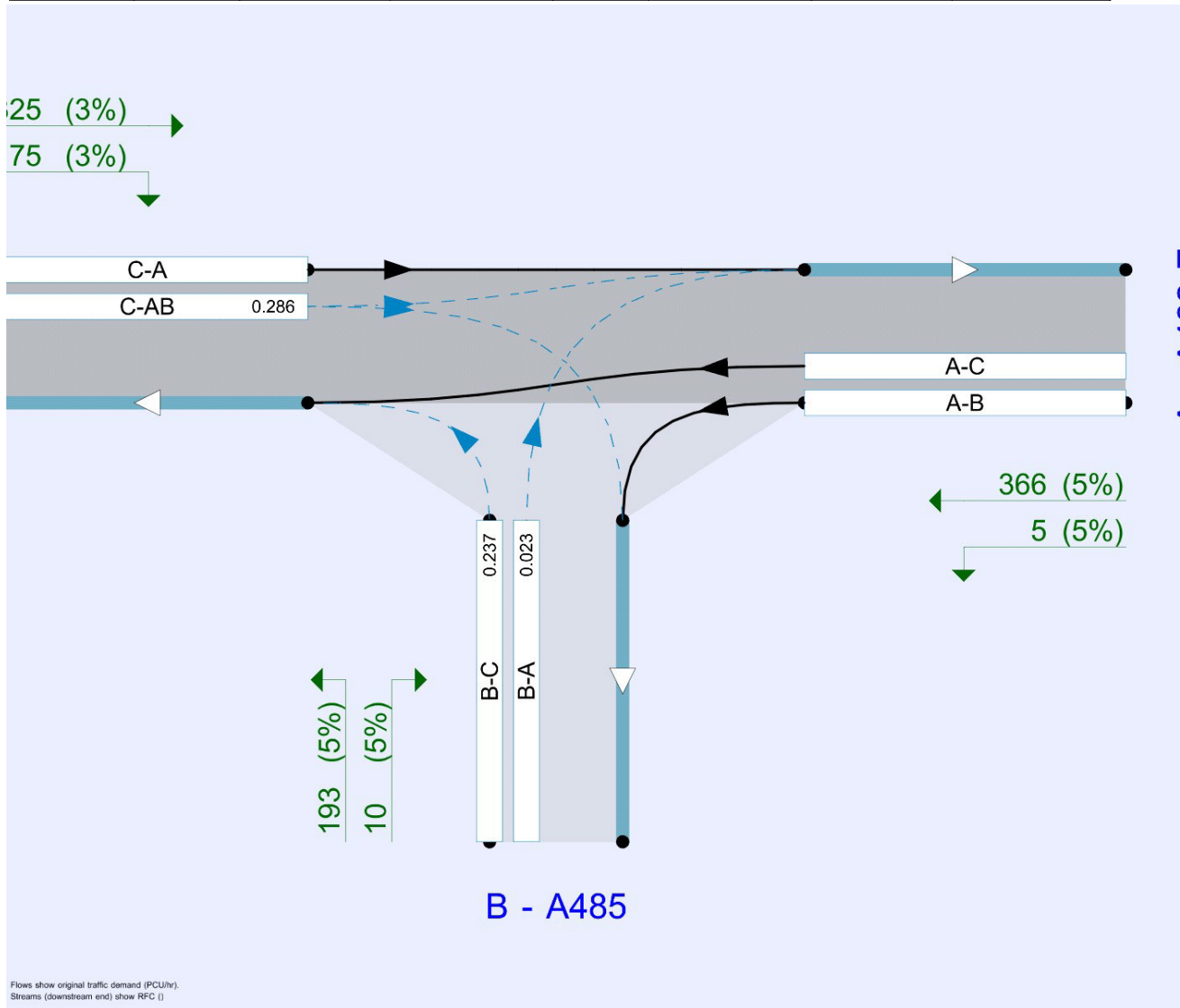
File summary

File Description

Title	
Location	
Site number	
Date	22/08/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	SCP-RD-Junction\Junctions shared
Description	

Units

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



Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2026 Baseline	AM	ONE HOUR	07:45	09:15	15
D2	2026 Baseline	PM	ONE HOUR	16:45	18:15	15
D3	2026 Baseline	Sat	ONE HOUR	11:45	13:15	15
D4	2031 Baseline	AM	ONE HOUR	07:45	09:15	15
D5	2031 Baseline	PM	ONE HOUR	16:45	18:15	15
D6	2031 Baseline	Sat	ONE HOUR	11:45	13:15	15
D7	2026 Baseline + Lidl	AM	ONE HOUR	07:45	09:15	15
D8	2026 Baseline + Lidl	PM	ONE HOUR	16:45	18:15	15
D9	2026 Baseline + Lidl	Sat	ONE HOUR	11:45	13:15	15
D10	2031 Baseline + Lidl	AM	ONE HOUR	07:45	09:15	15
D11	2031 Baseline + Lidl	PM	ONE HOUR	16:45	18:15	15
D12	2031 Baseline + Lidl	Sat	ONE HOUR	11:45	13:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2026 Baseline , AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - A485 - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		5.23	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A482 E		Major
B	A485		Minor
C	A482 W		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - A482 W	6.50			40.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - A485	One lane plus flare	7.00	4.00	4.00	3.00	3.00	✓	1.00	100	24

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	488	0.087	0.220	0.138	0.314
B-C	686	0.103	0.260	-	-
C-B	597	0.226	0.226	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2026 Baseline	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A482 E		✓	272	100.000
B - A485		✓	231	100.000
C - A482 W		✓	400	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A - A482 E	B - A485	C - A482 W	
From	A - A482 E	0	63	209
	B - A485	78	0	153
	C - A482 W	251	149	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A - A482 E	B - A485	C - A482 W	
From	A - A482 E	0	5	20
	B - A485	1	0	24
	C - A482 W	2	3	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
07:45-08:00	A - A482 E	205	205
	B - A485	174	174
	C - A482 W	301	301
08:00-08:15	A - A482 E	245	245
	B - A485	208	208
	C - A482 W	360	360
08:15-08:30	A - A482 E	299	299
	B - A485	254	254
	C - A482 W	440	440
08:30-08:45	A - A482 E	299	299
	B - A485	254	254
	C - A482 W	440	440
08:45-09:00	A - A482 E	245	245
	B - A485	208	208
	C - A482 W	360	360
09:00-09:15	A - A482 E	205	205
	B - A485	174	174
	C - A482 W	301	301

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.30	11.33	0.5	B
B-A	0.26	14.97	0.4	B
C-AB	0.37	8.08	0.8	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	115	611	0.188	114	0.3	8.955	A
B-A	59	384	0.153	58	0.2	11.116	B
C-AB	155	682	0.228	154	0.4	6.989	A
C-A	146			146			
A-B	47			47			
A-C	157			157			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	138	593	0.232	137	0.4	9.795	A
B-A	70	362	0.194	70	0.2	12.446	B
C-AB	198	700	0.283	198	0.5	7.371	A
C-A	161			161			
A-B	57			57			
A-C	188			188			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	168	563	0.299	168	0.5	11.301	B
B-A	86	329	0.261	85	0.3	14.900	B
C-AB	266	725	0.367	265	0.8	8.049	A
C-A	174			174			
A-B	69			69			
A-C	230			230			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	168	562	0.300	168	0.5	11.331	B
B-A	86	329	0.261	86	0.4	14.969	B
C-AB	267	725	0.368	267	0.8	8.083	A
C-A	174			174			
A-B	69			69			
A-C	230			230			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	138	592	0.232	138	0.4	9.848	A
B-A	70	361	0.194	71	0.2	12.521	B
C-AB	199	700	0.284	200	0.6	7.415	A
C-A	161			161			
A-B	57			57			
A-C	188			188			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	115	611	0.189	116	0.3	9.023	A
B-A	59	384	0.153	59	0.2	11.198	B
C-AB	156	682	0.228	156	0.4	7.044	A
C-A	145			145			
A-B	47			47			
A-C	157			157			

2026 Baseline , PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - A485 - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		5.20	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2026 Baseline	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A482 E		✓	277	100.000
B - A485		✓	213	100.000
C - A482 W		✓	522	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A482 E	B - A485	C - A482 W
From	A - A482 E	0	35	242
	B - A485	50	0	163
	C - A482 W	336	186	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A482 E	B - A485	C - A482 W
From	A - A482 E	0	5	0
	B - A485	0	0	0
	C - A482 W	7	3	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A - A482 E	209	209
	B - A485	160	160
	C - A482 W	393	393
17:00-17:15	A - A482 E	249	249
	B - A485	191	191
	C - A482 W	469	469
17:15-17:30	A - A482 E	305	305
	B - A485	235	235
	C - A482 W	575	575
17:30-17:45	A - A482 E	305	305
	B - A485	235	235
	C - A482 W	575	575
17:45-18:00	A - A482 E	249	249
	B - A485	191	191
	C - A482 W	469	469
18:00-18:15	A - A482 E	209	209
	B - A485	160	160
	C - A482 W	393	393

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.31	8.95	0.4	A
B-A	0.19	15.36	0.2	C
C-AB	0.49	9.44	1.5	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	123	621	0.197	122	0.2	7.191	A
B-A	38	350	0.107	37	0.1	11.479	B
C-AB	215	726	0.296	213	0.6	7.307	A
C-A	178			178			
A-B	26			26			
A-C	182			182			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	147	606	0.242	146	0.3	7.829	A
B-A	45	325	0.138	45	0.2	12.831	B
C-AB	281	753	0.373	279	0.9	7.961	A
C-A	189			189			
A-B	31			31			
A-C	218			218			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	179	582	0.308	179	0.4	8.926	A
B-A	55	290	0.190	55	0.2	15.293	C
C-AB	387	790	0.490	385	1.4	9.318	A
C-A	187			187			
A-B	39			39			
A-C	266			266			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	179	582	0.309	179	0.4	8.953	A
B-A	55	289	0.190	55	0.2	15.364	C
C-AB	388	791	0.491	388	1.5	9.443	A
C-A	186			186			
A-B	39			39			
A-C	266			266			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	147	605	0.242	147	0.3	7.861	A
B-A	45	324	0.139	45	0.2	12.906	B
C-AB	282	754	0.374	284	0.9	8.103	A
C-A	188			188			
A-B	31			31			
A-C	218			218			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	123	621	0.198	123	0.2	7.231	A
B-A	38	349	0.108	38	0.1	11.561	B
C-AB	216	727	0.298	217	0.6	7.425	A
C-A	177			177			
A-B	26			26			
A-C	182			182			

2026 Baseline , Sat

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - A485 - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		4.06	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2026 Baseline	Sat	ONE HOUR	11:45	13:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A482 E		✓	349	100.000
B - A485		✓	181	100.000
C - A482 W		✓	455	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To		
	A - A482 E	B - A485	C - A482 W
A - A482 E	0	5	344
B - A485	10	0	171
C - A482 W	292	163	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A482 E	B - A485	C - A482 W
A - A482 E	0	0	0
B - A485	0	0	0
C - A482 W	2	1	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
11:45-12:00	A - A482 E	263	263
	B - A485	136	136
	C - A482 W	343	343
12:00-12:15	A - A482 E	314	314
	B - A485	163	163
	C - A482 W	409	409
12:15-12:30	A - A482 E	384	384
	B - A485	199	199
	C - A482 W	501	501
12:30-12:45	A - A482 E	384	384
	B - A485	199	199
	C - A482 W	501	501
12:45-13:00	A - A482 E	314	314
	B - A485	163	163
	C - A482 W	409	409
13:00-13:15	A - A482 E	263	263
	B - A485	136	136
	C - A482 W	343	343

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.32	9.08	0.5	A
B-A	0.04	13.29	0.0	B
C-AB	0.43	8.69	1.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

11:45 - 12:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	129	619	0.208	128	0.3	7.318	A
B-A	8	345	0.022	7	0.0	10.656	B
C-AB	180	692	0.260	178	0.5	7.087	A
C-A	163			163			
A-B	4			4			
A-C	259			259			

12:00 - 12:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	154	604	0.254	153	0.3	7.975	A
B-A	9	319	0.028	9	0.0	11.609	B
C-AB	233	712	0.327	232	0.7	7.608	A
C-A	176			176			
A-B	4			4			
A-C	309			309			

12:15 - 12:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	188	585	0.322	188	0.5	9.058	A
B-A	11	282	0.039	11	0.0	13.271	B
C-AB	319	741	0.430	317	1.1	8.620	A
C-A	182			182			
A-B	6			6			
A-C	379			379			

12:30 - 12:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	188	585	0.322	188	0.5	9.081	A
B-A	11	282	0.039	11	0.0	13.293	B
C-AB	319	742	0.430	319	1.1	8.689	A
C-A	182			182			
A-B	6			6			
A-C	379			379			

12:45 - 13:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	154	604	0.254	154	0.3	8.005	A
B-A	9	318	0.028	9	0.0	11.638	B
C-AB	234	713	0.328	235	0.7	7.691	A
C-A	175			175			
A-B	4			4			
A-C	309			309			

13:00 - 13:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	129	619	0.208	129	0.3	7.360	A
B-A	8	344	0.022	8	0.0	10.688	B
C-AB	181	693	0.261	182	0.5	7.166	A
C-A	162			162			
A-B	4			4			
A-C	259			259			

2031 Baseline, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - A485 - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		5.34	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2031 Baseline	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A482 E		✓	281	100.000
B - A485		✓	234	100.000
C - A482 W		✓	414	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To		
	A - A482 E	B - A485	C - A482 W
A - A482 E	0	65	216
B - A485	81	0	153
C - A482 W	260	154	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A482 E	B - A485	C - A482 W
A - A482 E	0	5	21
B - A485	1	0	24
C - A482 W	2	3	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
07:45-08:00	A - A482 E	212	212
	B - A485	176	176
	C - A482 W	312	312
08:00-08:15	A - A482 E	253	253
	B - A485	210	210
	C - A482 W	372	372
08:15-08:30	A - A482 E	309	309
	B - A485	258	258
	C - A482 W	456	456
08:30-08:45	A - A482 E	309	309
	B - A485	258	258
	C - A482 W	456	456
08:45-09:00	A - A482 E	253	253
	B - A485	210	210
	C - A482 W	372	372
09:00-09:15	A - A482 E	212	212
	B - A485	176	176
	C - A482 W	312	312

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.30	11.52	0.5	B
B-A	0.27	15.39	0.4	C
C-AB	0.38	8.24	0.9	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	115	608	0.189	114	0.3	9.019	A
B-A	61	383	0.159	60	0.2	11.228	B
C-AB	162	685	0.237	161	0.4	7.036	A
C-A	149			149			
A-B	49			49			
A-C	163			163			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	138	588	0.234	137	0.4	9.890	A
B-A	73	360	0.202	73	0.3	12.646	B
C-AB	208	704	0.295	207	0.6	7.452	A
C-A	164			164			
A-B	58			58			
A-C	194			194			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	168	557	0.303	168	0.5	11.466	B
B-A	89	326	0.274	89	0.4	15.306	C
C-AB	280	730	0.384	279	0.9	8.203	A
C-A	176			176			
A-B	72			72			
A-C	238			238			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	168	556	0.303	168	0.5	11.516	B
B-A	89	325	0.274	89	0.4	15.388	C
C-AB	281	731	0.384	280	0.9	8.244	A
C-A	175			175			
A-B	72			72			
A-C	238			238			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	138	587	0.234	138	0.4	9.949	A
B-A	73	359	0.203	73	0.3	12.730	B
C-AB	208	705	0.296	210	0.6	7.502	A
C-A	164			164			
A-B	58			58			
A-C	194			194			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	115	607	0.190	116	0.3	9.089	A
B-A	61	383	0.159	61	0.2	11.319	B
C-AB	163	686	0.238	164	0.4	7.097	A
C-A	149			149			
A-B	49			49			
A-C	163			163			

2031 Baseline , PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - A485 - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		5.44	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2031 Baseline	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A482 E		✓	285	100.000
B - A485		✓	218	100.000
C - A482 W		✓	536	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To		
	A - A482 E	B - A485	C - A482 W
A - A482 E	0	36	249
B - A485	51	0	167
C - A482 W	345	191	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A482 E	B - A485	C - A482 W
A - A482 E	0	0	6
B - A485	0	0	3
C - A482 W	7	3	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A - A482 E	215	215
	B - A485	164	164
	C - A482 W	404	404
17:00-17:15	A - A482 E	256	256
	B - A485	196	196
	C - A482 W	482	482
17:15-17:30	A - A482 E	314	314
	B - A485	240	240
	C - A482 W	590	590
17:30-17:45	A - A482 E	314	314
	B - A485	240	240
	C - A482 W	590	590
17:45-18:00	A - A482 E	256	256
	B - A485	196	196
	C - A482 W	482	482
18:00-18:15	A - A482 E	215	215
	B - A485	164	164
	C - A482 W	404	404

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.32	9.42	0.5	A
B-A	0.20	15.83	0.2	C
C-AB	0.51	9.75	1.6	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	126	619	0.203	125	0.3	7.481	A
B-A	38	347	0.111	38	0.1	11.620	B
C-AB	223	729	0.306	221	0.6	7.376	A
C-A	180			180			
A-B	27			27			
A-C	187			187			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	150	603	0.249	150	0.3	8.177	A
B-A	46	321	0.143	46	0.2	13.078	B
C-AB	292	757	0.386	291	0.9	8.087	A
C-A	190			190			
A-B	32			32			
A-C	224			224			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	184	578	0.318	183	0.5	9.388	A
B-A	56	284	0.198	56	0.2	15.749	C
C-AB	405	796	0.509	402	1.6	9.588	A
C-A	185			185			
A-B	40			40			
A-C	274			274			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	184	577	0.318	184	0.5	9.422	A
B-A	56	283	0.198	56	0.2	15.834	C
C-AB	406	797	0.510	406	1.6	9.750	A
C-A	184			184			
A-B	40			40			
A-C	274			274			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	150	603	0.249	151	0.3	8.215	A
B-A	46	320	0.143	46	0.2	13.164	B
C-AB	294	759	0.387	296	1.0	8.250	A
C-A	188			188			
A-B	32			32			
A-C	224			224			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	126	619	0.203	126	0.3	7.527	A
B-A	38	346	0.111	39	0.1	11.727	B
C-AB	225	730	0.308	226	0.7	7.507	A
C-A	179			179			
A-B	27			27			
A-C	187			187			

2031 Baseline , Sat

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - A485 - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		4.22	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2031 Baseline	Sat	ONE HOUR	11:45	13:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A482 E		✓	359	100.000
B - A485		✓	186	100.000
C - A482 W		✓	468	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A482 E	B - A485	C - A482 W
From	A - A482 E	0	5	354
	B - A485	10	0	176
	C - A482 W	300	168	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A482 E	B - A485	C - A482 W
From	A - A482 E	0	0	1
	B - A485	0	0	1
	C - A482 W	2	1	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
11:45-12:00	A - A482 E	270	270
	B - A485	140	140
	C - A482 W	352	352
12:00-12:15	A - A482 E	323	323
	B - A485	167	167
	C - A482 W	421	421
12:15-12:30	A - A482 E	395	395
	B - A485	205	205
	C - A482 W	515	515
12:30-12:45	A - A482 E	395	395
	B - A485	205	205
	C - A482 W	515	515
12:45-13:00	A - A482 E	323	323
	B - A485	167	167
	C - A482 W	421	421
13:00-13:15	A - A482 E	270	270
	B - A485	140	140
	C - A482 W	352	352

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.33	9.37	0.5	A
B-A	0.04	13.60	0.0	B
C-AB	0.45	8.93	1.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

11:45 - 12:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	133	617	0.215	131	0.3	7.476	A
B-A	8	341	0.022	7	0.0	10.779	B
C-AB	187	695	0.270	185	0.5	7.152	A
C-A	165			165			
A-B	4			4			
A-C	267			267			

12:00 - 12:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	158	602	0.263	158	0.4	8.180	A
B-A	9	314	0.029	9	0.0	11.791	B
C-AB	243	716	0.340	242	0.7	7.720	A
C-A	177			177			
A-B	4			4			
A-C	318			318			

12:15 - 12:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	194	582	0.333	193	0.5	9.345	A
B-A	11	276	0.040	11	0.0	13.577	B
C-AB	334	746	0.448	332	1.2	8.850	A
C-A	181			181			
A-B	6			6			
A-C	390			390			

12:30 - 12:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	194	582	0.333	194	0.5	9.373	A
B-A	11	276	0.040	11	0.0	13.603	B
C-AB	335	746	0.448	335	1.2	8.929	A
C-A	181			181			
A-B	6			6			
A-C	390			390			

12:45 - 13:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	158	602	0.263	159	0.4	8.214	A
B-A	9	314	0.029	9	0.0	11.823	B
C-AB	244	717	0.341	246	0.8	7.814	A
C-A	177			177			
A-B	4			4			
A-C	318			318			

13:00 - 13:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	133	617	0.215	133	0.3	7.520	A
B-A	8	341	0.022	8	0.0	10.811	B
C-AB	188	695	0.271	189	0.5	7.238	A
C-A	164			164			
A-B	4			4			
A-C	267			267			

2026 Baseline + Lidl, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - A485 - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		9.28	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2026 Baseline + Lidl	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A482 E		✓	278	100.000
B - A485		✓	385	100.000
C - A482 W		✓	411	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A482 E	B - A485	C - A482 W
From	A - A482 E	0	63	215
	B - A485	78	0	307
	C - A482 W	259	152	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A482 E	B - A485	C - A482 W
From	A - A482 E	0	5	19
	B - A485	1	0	21
	C - A482 W	2	7	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
07:45-08:00	A - A482 E	209	209
	B - A485	290	290
	C - A482 W	309	309
08:00-08:15	A - A482 E	250	250
	B - A485	346	346
	C - A482 W	369	369
08:15-08:30	A - A482 E	306	306
	B - A485	424	424
	C - A482 W	453	453
08:30-08:45	A - A482 E	306	306
	B - A485	424	424
	C - A482 W	453	453
08:45-09:00	A - A482 E	250	250
	B - A485	346	346
	C - A482 W	369	369
09:00-09:15	A - A482 E	209	209
	B - A485	290	290
	C - A482 W	309	309

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.62	20.59	1.9	C
B-A	0.34	21.77	0.5	C
C-AB	0.38	8.36	0.9	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	231	610	0.379	228	0.7	11.328	B
B-A	59	349	0.168	58	0.2	12.456	B
C-AB	160	685	0.233	158	0.4	7.198	A
C-A	149			149			
A-B	47			47			
A-C	162			162			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	276	588	0.470	275	1.0	13.863	B
B-A	70	313	0.224	70	0.3	14.902	B
C-AB	205	704	0.291	204	0.6	7.606	A
C-A	165			165			
A-B	57			57			
A-C	193			193			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	338	550	0.614	335	1.8	19.943	C
B-A	86	255	0.337	85	0.5	21.293	C
C-AB	276	730	0.378	275	0.9	8.330	A
C-A	177			177			
A-B	69			69			
A-C	237			237			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	338	549	0.616	338	1.9	20.587	C
B-A	86	253	0.340	86	0.5	21.768	C
C-AB	276	730	0.378	276	0.9	8.356	A
C-A	176			176			
A-B	69			69			
A-C	237			237			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	276	586	0.471	279	1.1	14.321	B
B-A	70	311	0.225	71	0.3	15.189	C
C-AB	205	704	0.292	207	0.6	7.632	A
C-A	164			164			
A-B	57			57			
A-C	193			193			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	231	609	0.380	233	0.8	11.614	B
B-A	59	347	0.169	59	0.2	12.635	B
C-AB	161	686	0.234	161	0.4	7.252	A
C-A	149			149			
A-B	47			47			
A-C	162			162			

2026 Baseline + Lidl, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - A485 - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		5.64	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2026 Baseline + Lidl	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A482 E		✓	287	100.000
B - A485		✓	227	100.000
C - A482 W		✓	547	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To		
	A - A482 E	B - A485	C - A482 W
A - A482 E	0	35	252
B - A485	50	0	177
C - A482 W	356	191	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A482 E	B - A485	C - A482 W
A - A482 E	0	4	2
B - A485	3	0	11
C - A482 W	1	7	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A - A482 E	216	216
	B - A485	171	171
	C - A482 W	412	412
17:00-17:15	A - A482 E	258	258
	B - A485	204	204
	C - A482 W	492	492
17:15-17:30	A - A482 E	316	316
	B - A485	250	250
	C - A482 W	602	602
17:30-17:45	A - A482 E	316	316
	B - A485	250	250
	C - A482 W	602	602
17:45-18:00	A - A482 E	258	258
	B - A485	204	204
	C - A482 W	492	492
18:00-18:15	A - A482 E	216	216
	B - A485	171	171
	C - A482 W	412	412

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.34	10.49	0.6	B
B-A	0.20	16.59	0.3	C
C-AB	0.51	9.67	1.6	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	133	619	0.215	132	0.3	8.191	A
B-A	38	344	0.109	37	0.1	12.053	B
C-AB	226	735	0.308	224	0.6	7.365	A
C-A	185			185			
A-B	26			26			
A-C	190			190			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	159	602	0.264	159	0.4	9.007	A
B-A	45	317	0.142	45	0.2	13.593	B
C-AB	297	764	0.389	296	0.9	8.068	A
C-A	195			195			
A-B	31			31			
A-C	227			227			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	195	576	0.338	194	0.6	10.447	B
B-A	55	279	0.197	55	0.2	16.497	C
C-AB	413	804	0.514	410	1.6	9.570	A
C-A	189			189			
A-B	39			39			
A-C	277			277			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	195	576	0.338	195	0.6	10.489	B
B-A	55	279	0.198	55	0.3	16.587	C
C-AB	414	805	0.515	414	1.6	9.669	A
C-A	188			188			
A-B	39			39			
A-C	277			277			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	159	602	0.264	160	0.4	9.056	A
B-A	45	316	0.142	45	0.2	13.690	B
C-AB	298	765	0.390	301	1.0	8.151	A
C-A	193			193			
A-B	31			31			
A-C	227			227			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	133	618	0.216	134	0.3	8.250	A
B-A	38	343	0.110	38	0.1	12.146	B
C-AB	228	736	0.310	229	0.7	7.458	A
C-A	184			184			
A-B	26			26			
A-C	190			190			

2026 Baseline + Lidl , Sat

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - A485 - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		4.63	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D9	2026 Baseline + Lidl	Sat	ONE HOUR	11:45	13:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A482 E		✓	361	100.000
B - A485		✓	198	100.000
C - A482 W		✓	486	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To		
	A - A482 E	B - A485	C - A482 W
A - A482 E	0	5	356
B - A485	10	0	188
C - A482 W	316	170	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A482 E	B - A485	C - A482 W
A - A482 E	0	2	6
B - A485	1	0	12
C - A482 W	2	7	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
11:45-12:00	A - A482 E	272	272
	B - A485	149	149
	C - A482 W	366	366
12:00-12:15	A - A482 E	325	325
	B - A485	178	178
	C - A482 W	437	437
12:15-12:30	A - A482 E	397	397
	B - A485	218	218
	C - A482 W	535	535
12:30-12:45	A - A482 E	397	397
	B - A485	218	218
	C - A482 W	535	535
12:45-13:00	A - A482 E	325	325
	B - A485	178	178
	C - A482 W	437	437
13:00-13:15	A - A482 E	272	272
	B - A485	149	149
	C - A482 W	366	366

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.36	10.78	0.6	B
B-A	0.04	14.12	0.0	B
C-AB	0.46	9.26	1.3	A
C-A				
A-B				
A-C				

Main Results for each time segment

11:45 - 12:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	142	616	0.230	140	0.3	8.451	A
B-A	8	338	0.022	7	0.0	11.009	B
C-AB	193	703	0.275	191	0.5	7.396	A
C-A	172			172			
A-B	4			4			
A-C	268			268			

12:00 - 12:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	169	602	0.281	169	0.4	9.305	A
B-A	9	309	0.029	9	0.0	12.107	B
C-AB	252	726	0.348	251	0.8	7.995	A
C-A	185			185			
A-B	4			4			
A-C	320			320			

12:15 - 12:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	207	581	0.356	206	0.6	10.742	B
B-A	11	269	0.041	11	0.0	14.083	B
C-AB	348	758	0.459	346	1.3	9.195	A
C-A	187			187			
A-B	6			6			
A-C	392			392			

12:30 - 12:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	207	581	0.356	207	0.6	10.781	B
B-A	11	269	0.041	11	0.0	14.119	B
C-AB	349	759	0.460	349	1.3	9.260	A
C-A	186			186			
A-B	6			6			
A-C	392			392			

12:45 - 13:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	169	601	0.281	170	0.4	9.353	A
B-A	9	309	0.029	9	0.0	12.142	B
C-AB	253	727	0.348	255	0.8	8.054	A
C-A	184			184			
A-B	4			4			
A-C	320			320			

13:00 - 13:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	142	616	0.230	142	0.3	8.510	A
B-A	8	337	0.022	8	0.0	11.046	B
C-AB	195	704	0.276	196	0.6	7.473	A
C-A	171			171			
A-B	4			4			
A-C	268			268			

2031 Baseline + Lidl, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - A485 - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		8.82	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D10	2031 Baseline + Lidl	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A482 E		✓	287	100.000
B - A485		✓	388	100.000
C - A482 W		✓	425	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A482 E	B - A485	C - A482 W
From	A - A482 E	0	65	222
	B - A485	81	0	307
	C - A482 W	268	157	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A482 E	B - A485	C - A482 W
From	A - A482 E	0	13	13
	B - A485	8	0	8
	C - A482 W	4	4	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
07:45-08:00	A - A482 E	216	216
	B - A485	292	292
	C - A482 W	320	320
08:00-08:15	A - A482 E	258	258
	B - A485	349	349
	C - A482 W	382	382
08:15-08:30	A - A482 E	316	316
	B - A485	427	427
	C - A482 W	468	468
08:30-08:45	A - A482 E	316	316
	B - A485	427	427
	C - A482 W	468	468
08:45-09:00	A - A482 E	258	258
	B - A485	349	349
	C - A482 W	382	382
09:00-09:15	A - A482 E	216	216
	B - A485	292	292
	C - A482 W	320	320

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.62	18.63	1.7	C
B-A	0.35	23.67	0.6	C
C-AB	0.39	8.45	1.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	231	608	0.380	229	0.7	10.174	B
B-A	61	348	0.175	60	0.2	13.450	B
C-AB	167	689	0.243	165	0.4	7.146	A
C-A	153			153			
A-B	49			49			
A-C	167			167			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	276	585	0.471	275	0.9	12.465	B
B-A	73	313	0.233	72	0.3	16.122	C
C-AB	215	708	0.303	214	0.6	7.589	A
C-A	167			167			
A-B	58			58			
A-C	200			200			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	338	547	0.618	335	1.7	18.071	C
B-A	89	255	0.349	88	0.6	23.140	C
C-AB	290	735	0.395	289	0.9	8.402	A
C-A	178			178			
A-B	72			72			
A-C	244			244			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	338	546	0.619	338	1.7	18.635	C
B-A	89	253	0.352	89	0.6	23.666	C
C-AB	291	736	0.395	291	1.0	8.452	A
C-A	177			177			
A-B	72			72			
A-C	244			244			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	276	584	0.473	279	1.0	12.852	B
B-A	73	311	0.234	74	0.3	16.445	C
C-AB	215	709	0.304	217	0.6	7.650	A
C-A	167			167			
A-B	58			58			
A-C	200			200			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	231	607	0.381	232	0.7	10.412	B
B-A	61	347	0.176	61	0.2	13.651	B
C-AB	168	689	0.244	169	0.5	7.214	A
C-A	152			152			
A-B	49			49			
A-C	167			167			

2031 Baseline + Lidl, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - A485 - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		5.71	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D11	2031 Baseline + Lidl	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A482 E		✓	295	100.000
B - A485		✓	232	100.000
C - A482 W		✓	560	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A482 E	B - A485	C - A482 W
From	A - A482 E	0	36	259
	B - A485	51	0	181
	C - A482 W	365	195	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A482 E	B - A485	C - A482 W
From	A - A482 E	0	3	3
	B - A485	9	0	9
	C - A482 W	0	0	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A - A482 E	222	222
	B - A485	175	175
	C - A482 W	422	422
17:00-17:15	A - A482 E	265	265
	B - A485	209	209
	C - A482 W	503	503
17:15-17:30	A - A482 E	325	325
	B - A485	255	255
	C - A482 W	617	617
17:30-17:45	A - A482 E	325	325
	B - A485	255	255
	C - A482 W	617	617
17:45-18:00	A - A482 E	265	265
	B - A485	209	209
	C - A482 W	503	503
18:00-18:15	A - A482 E	222	222
	B - A485	175	175
	C - A482 W	422	422

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.35	10.52	0.6	B
B-A	0.21	18.04	0.3	C
C-AB	0.53	9.57	1.7	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	136	617	0.221	135	0.3	8.125	A
B-A	38	341	0.113	38	0.1	12.912	B
C-AB	234	738	0.317	231	0.6	7.087	A
C-A	188			188			
A-B	27			27			
A-C	195			195			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	163	599	0.271	162	0.4	8.967	A
B-A	46	314	0.146	46	0.2	14.636	B
C-AB	308	768	0.400	306	1.0	7.815	A
C-A	196			196			
A-B	32			32			
A-C	233			233			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	199	573	0.348	199	0.6	10.473	B
B-A	56	274	0.205	56	0.3	17.928	C
C-AB	429	810	0.530	426	1.7	9.427	A
C-A	187			187			
A-B	40			40			
A-C	285			285			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	199	572	0.348	199	0.6	10.523	B
B-A	56	274	0.205	56	0.3	18.041	C
C-AB	431	811	0.531	430	1.7	9.567	A
C-A	186			186			
A-B	40			40			
A-C	285			285			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	163	599	0.272	163	0.4	9.020	A
B-A	46	313	0.147	46	0.2	14.752	B
C-AB	309	770	0.402	312	1.0	7.953	A
C-A	194			194			
A-B	32			32			
A-C	233			233			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	136	616	0.221	137	0.3	8.187	A
B-A	38	340	0.113	39	0.1	13.022	B
C-AB	235	739	0.318	237	0.7	7.200	A
C-A	186			186			
A-B	27			27			
A-C	195			195			

2031 Baseline + Lidl, Sat

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - A485 - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		4.64	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D12	2031 Baseline + Lidl	Sat	ONE HOUR	11:45	13:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A482 E		✓	371	100.000
B - A485		✓	203	100.000
C - A482 W		✓	500	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A482 E	B - A485	C - A482 W
From	A - A482 E	0	5	366
	B - A485	10	0	193
	C - A482 W	325	175	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A482 E	B - A485	C - A482 W
From	A - A482 E	0	5	5
	B - A485	5	0	5
	C - A482 W	3	3	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
11:45-12:00	A - A482 E	279	279
	B - A485	153	153
	C - A482 W	376	376
12:00-12:15	A - A482 E	334	334
	B - A485	182	182
	C - A482 W	449	449
12:15-12:30	A - A482 E	408	408
	B - A485	224	224
	C - A482 W	551	551
12:30-12:45	A - A482 E	408	408
	B - A485	224	224
	C - A482 W	551	551
12:45-13:00	A - A482 E	334	334
	B - A485	182	182
	C - A482 W	449	449
13:00-13:15	A - A482 E	279	279
	B - A485	153	153
	C - A482 W	376	376

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.37	10.34	0.6	B
B-A	0.04	15.00	0.0	B
C-AB	0.48	9.40	1.4	A
C-A				
A-B				
A-C				

Main Results for each time segment

11:45 - 12:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	145	614	0.237	144	0.3	8.017	A
B-A	8	334	0.023	7	0.0	11.570	B
C-AB	202	706	0.286	199	0.6	7.304	A
C-A	175			175			
A-B	4			4			
A-C	276			276			

12:00 - 12:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	174	599	0.290	173	0.4	8.865	A
B-A	9	305	0.029	9	0.0	12.768	B
C-AB	264	730	0.361	263	0.8	7.952	A
C-A	186			186			
A-B	4			4			
A-C	329			329			

12:15 - 12:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	212	578	0.368	212	0.6	10.301	B
B-A	11	264	0.042	11	0.0	14.958	B
C-AB	365	763	0.478	363	1.4	9.293	A
C-A	185			185			
A-B	6			6			
A-C	403			403			

12:30 - 12:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	212	578	0.368	212	0.6	10.340	B
B-A	11	263	0.042	11	0.0	14.997	B
C-AB	366	764	0.479	366	1.4	9.395	A
C-A	184			184			
A-B	6			6			
A-C	403			403			

12:45 - 13:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	174	599	0.290	174	0.4	8.912	A
B-A	9	304	0.030	9	0.0	12.810	B
C-AB	265	731	0.362	267	0.9	8.059	A
C-A	185			185			
A-B	4			4			
A-C	329			329			

13:00 - 13:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	145	614	0.237	146	0.3	8.077	A
B-A	8	333	0.023	8	0.0	11.612	B
C-AB	203	707	0.287	204	0.6	7.403	A
C-A	174			174			
A-B	4			4			
A-C	276			276			

S|C|P

APPENDIX 9

A482 LAMPETER, WALES
Proposed New Foodstore Development

Road Safety Audit – Stage 1

Final Report

October 2024

TBL19/490

REPORT APPROVAL

Project Details

Project Title	A482 Lampeter, Wales		
Project Subtitle	Proposed New Foodstore Development		
Road Safety Audit	Stage 1		
Document Reference	TBL19/490 Rev 0	Audit Brief Date	12 th September 2024
Overseeing Organisation	Carmarthenshire County Council		
Design Organisation	Tom King	SCP	
Client	-	Lidl Great Britain Ltd	
Maintaining Agent Details	-	-	

Approvals

This document requires the following approvals:

Name	Title
Sarah Bowie	Audit Team Leader
Mario Gatti	Audit Team Member

Distribution

This document has also been distributed to:

Name	Title & Organisation
Joanne Ibbotson	Associate Director - SCP

1 INTRODUCTION

1.1 The Scheme and its Purpose

The proposals are associated with the development of an existing vacant site for a new Lidl foodstore on A482 Lampeter, Wales. The proposed priority access junction is to be sited on the western side of A482.

The proposals consist of:

- 2.4m x 43m visibility splays;
- 4.5m wide proposed access road;
- 2 x 3.0m wide proposed egress lanes.

1.2 Terms of Reference & Audit Report

The Road Safety Audit Brief was approved and issued by Tom King of the Design Organisation. The RSA team has been approved by the Design Organisation.

Table 1 - Audit Team Membership

Membership	Name	Details
Audit Team Leader	Sarah Bowie	IEng, MICE, FIHE, MCIHT, MSoRSA, HE RSA Cert Comp
Audit Team Member	Mario Gatti	BSc Civ Eng, MCIHT, MSoRSA, HE RSA Cert Comp

The Road Safety Audit was undertaken in accordance with the requirements of GG 119. No additional audit requirements were requested. The audit comprised of an examination of the brief and the documents provided to the Audit Team, listed in **Appendix A**.

The audit took place at Taylor Bowie Ltd Cambridgeshire office during September/October 2024 and all Audit Team Members examined the site together in daylight hours on the afternoon of Thursday 26th September 2024 between the times of 1700 and 1800hrs. The weather during the site visit was cold and cloudy. The carriageway was dry. Traffic flows at all times within the site extents were light. Ten pedestrians (8 x school children and 2 adult joggers) and no cyclists were observed during the site visit.

The scheme has been examined, and this report compiled only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the designs to any other criteria.

No Departures from Standards (DfS) have been provided to the Audit Team. It is important that if there are any DfS, then they are submitted to the Overseeing Organisation (OO) as soon as possible with appropriate mitigating measures for the OO to approve.

The Audit Team were not provided with any information regarding signage, carriageway surfacing specification or drainage for this stage of audit.

All Problems and Recommendations are referenced to the design drawings and the locations have been indicated on the A4 plan supplied for use by the Audit Team in **Appendix B** (where applicable).

1.3 Audit Administration

Issues identified during the audit and site visit which the Terms of Reference exclude from this report, but which the audit team wishes to draw to the attention of the OO, will be set out in a separate letter. These issues could include maintenance items and operational issues.

The Audit Team have not identified any issues during this Stage 1 RSA and site visit that are considered to be outside the Terms of Reference.

2 ITEMS RAISED AT PREVIOUS ROAD SAFETY AUDITS

No previous Road Safety Audits have been undertaken on these proposals.

3 ITEMS RAISED AT THIS STAGE 1 ROAD SAFETY AUDIT

3.1 Local Alignment

No Problems identified in this category at this Stage 1 Road Safety Audit.

3.2 General

PROBLEM	1
Location	General, throughout the scheme extents
Summary	Insufficient drainage may result in single vehicle loss of control type collisions.
<p>Whilst there is existing drainage provision along A482, this may not be sufficient or appropriate for the proposals.</p> <p>Lack of surface water drainage may result in surface water ponding with the potential slide risk for vehicles during wet and subsequent cold/freezing weather conditions. This may increase the risk of single vehicle loss of control type collisions.</p>	
RECOMMENDATION	
<p>The Audit Team recommend that at the next stage of design, new drainage appropriate for the proposed highway works is incorporated into the scheme proposals.</p>	

3.3 Junctions

PROBLEM	2
Location	Proposed development junction
Summary	Reduced visibility splay may increase the risk of pull out type collisions or vehicle to pedestrian type collisions.
<p>The scheme drawing indicates that a visibility splay of 2.4m x 43m is proposed from the proposed development access junction.</p>	

The site visit has established that the achievable visibility splay may be impacted upon by the presence of existing vegetation and fence along the western boundary of the development site.

A lack of visibility may increase the risk of pull out type collisions.

RECOMMENDATION

The Audit Team recommend that the achievable visibility splay is not compromised.

PROBLEM	3
Location	Development access junction
Summary	Pull out type collisions.
<p>The site visit has established that there is a significant level difference between A482 mainline carriageway and the proposed development site.</p> <p>Vehicles waiting to emerge onto the mainline from a standing start could experience difficulties due to the difference in levels. This could impact upon a driver's ability to see clearly when looking to the left and right on approach to the junction exit and may increase the risk of vehicle to vehicle or vehicle to pedestrian pull out type collisions.</p>	
RECOMMENDATION	
<p>The Audit Team recommend that at the detailed design stage a dwell/plateau should be provided for the development site junction where it meets the development access road.</p>	

3.4 Walking, Cycling and Horse Riding

PROBLEM	4
Location	Proposed development junction
Summary	Compromised pedestrian to driver intervisibility may result in vehicle to pedestrian type collisions.
<p>The site visit has established that the pedestrian to driver intervisibility when looking to the left from the northern kerblines of the proposed pedestrian crossing facility may be impacted upon by the presence of existing vegetation and fence.</p>	

A lack of intervisibility to the left may increase the risk of pedestrians crossing into the path of vehicles entering the development access junction and sustaining injury.

RECOMMENDATION

The Audit Team recommend that adequate and compliant pedestrian to driver intervisibility splay is achieved for pedestrians waiting to cross the development access junction.


3.5 Traffic Signs, Carriageway Markings and Lighting

PROBLEM	5
Location	General, throughout the scheme extents
Summary	Conspicuity of proposed measures during the hours of darkness.
<p>The site visit has established that there is currently street lighting along A482. However, the current levels of lighting may not be sufficient for the measures proposed. A lack of street lighting may increase the risk of dark collisions in the vicinity of the junction.</p>	
RECOMMENDATION	
<p>The Audit Team recommend that checks are undertaken at detailed design to ensure the lighting levels throughout the scheme extents are sufficient and that appropriate lighting is included as part of the proposals.</p>	

END OF PROBLEMS IDENTIFIED & RECOMMENDATIONS OFFERED IN THIS STAGE 1 ROAD SAFETY AUDIT

4 AUDIT TEAM STATEMENT

We certify that this Road Safety Audit has been carried out in accordance with GG 119.

AUDIT TEAM LEADER	
Name	Sarah Bowie - IEng, MICE, FIHE, MCIHT, MSoRSA, HE RSA Cert Comp
Signed	
Position	Director
Organisation	Taylor Bowie Ltd
Date	17 th October 2024

AUDIT TEAM MEMBER	
Name	Mario Gatti - BSc Civ Eng, MCIHT, MSoRSA, HE RSA Cert Comp
Signed	
Position	Associate Consultant
Organisation	Taylor Bowie Ltd
Date	17 th October 2024

APPENDIX A

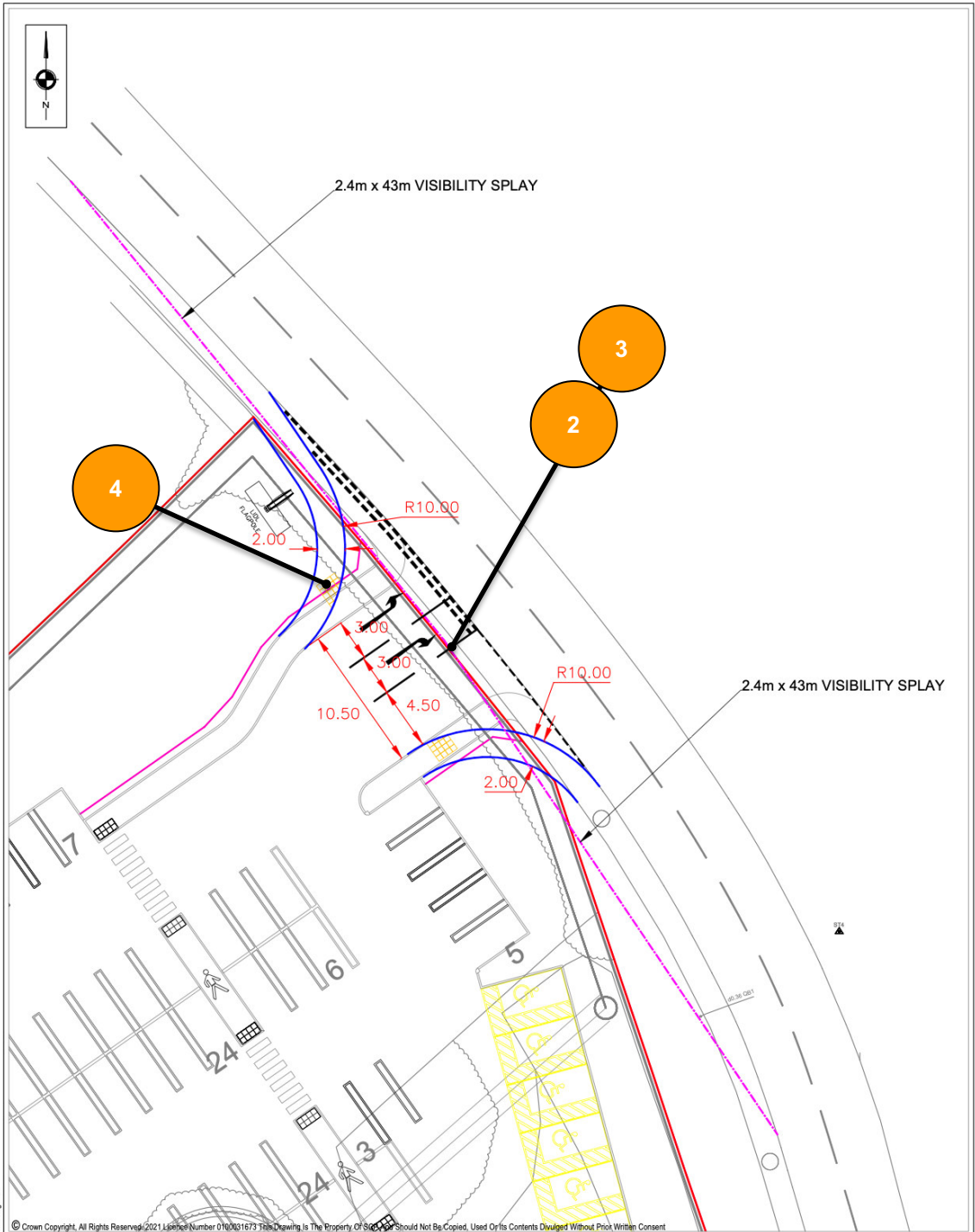
Documents Forming the Audit Brief

Drawings:

DRAWING NO.	TITLE
3384 P411	Proposed GA Site Plan
SCP/240833/ATR02	Swept Path Analysis – 16.5m Articulated HGV
SCP/240833/SK02	Proposed Site Access Arrangement

APPENDIX B

Problem Location Plan



M:\Job Library\25240833 - LIDL Lampeter\Drawings in Progress

© Crown Copyright. All Rights Reserved. 2021. Licence Number 0100031673. This Drawing is the Property of SCP. It Should Not Be Copied, Used Or Its Contents Divulged Without Prior Written Consent.

Rev	Description	Date	By

Client Name:				Project Title:	
Drawn By: LD				Date: 25.09.2024	
Checked: JI		Scale: BA3		Drawing Title:	
Approved: JI		Status: PLANNING		PROPOSED SITE ACCESS ARRANGEMENT Based on 3384 P412 Proposed Setting out Plan	
				Drawing No. SCP/240833/SK02	
				Rev. -	

Project Title:		LIDL LAMPETER	
Drawing Title:		PROPOSED SITE ACCESS ARRANGEMENT Based on 3384 P412 Proposed Setting out Plan	
Drawing No.:		SCP/240833/SK02	
Rev.:		-	

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S|C|P

APPENDIX 10

Technical Note

Proposed New Foodstore Development, A482, Lampeter Stage 1 Road Safety Audit - Designer's Response

Our reference: JC/240833/DR01 – Rev00

Author: JC

Date: 15 October 2024

Reviewed: JI

Date: 17 October 2024

INTRODUCTION

1. This technical Note has been prepared to respond to the issues raised in the Taylor Bowie Road Safety Audit, Stage 1 (ref: TBL19/490) into the proposals for a priority access junction as part of a new foodstore development on the A482, Lampeter.
2. Five problems were raised by the audit team following their site visit. Our response to each problem is provided underneath each one.

PROBLEM 1 – GENERAL

Problem

3. The Audit Team were concerned that 'whilst there is existing drainage provision along A482, this may not be sufficient or appropriate for the proposals. Lack of surface water drainage may result in surface water ponding with the potential slide risk for vehicles during wet and subsequent cold/freezing weather conditions. This may increase the risk of single vehicle loss of control type collisions'.

Recommendation

4. The Audit Team recommend that at the next stage of design, new drainage appropriate for the proposed highway works is incorporated into the scheme proposals.

Response

5. Accepted. This is a matter that will be resolved at the detailed design stage.

PROBLEM 2 – JUNCTIONS

Problem

6. The Audit Team were concerned that 'the achievable visibility splay may be impacted upon by the presence of existing vegetation and fence along the western boundary of the development site. A lack of visibility may increase the risk of pull out type collisions.'

Recommendation

7. The Audit Team recommend that the achievable visibility splay is not compromised.

Response

8. Accepted. Drawing number SCP/240833/SK02 illustrates visibility splays of 2.4m by 43m which are associated with a 30mph speed limit. As can be seen, the visibility splays can be achieved and there will be no obstruction within the visibility splays. Lidl would be prepared to accept a condition confirming visibility splay provision in perpetuity.

PROBLEM 3 – JUNCTIONS

Problem

9. 'The site visit has established that there is a significant level difference between A482 mainline carriageway and the proposed development site. Vehicles waiting to emerge onto the mainline from a standing start could experience difficulties due to the difference in levels. This could impact upon a driver's ability to see clearly when looking to the left and right on approach to the junction exit and may increase the risk of vehicle to vehicle or vehicle to pedestrian pull out type collisions.'

Recommendation

10. The Audit Team recommend that at the detailed design stage a dwell/plateau should be provided for the development site junction where it meets the development access road.

Response

11. Noted. This will be taken forward as part of the detailed design stage. Lidl's specification is for gradients on all access roads and footways to be no steeper than 1:21.

PROBLEM 4 – WALKING, CYCLING AND HORSE RIDING

Problem

12. 'The site visit has established that the pedestrian to driver intervisibility when looking to the left from the northern kerblines of the proposed pedestrian crossing facility may be impacted upon by the presence of existing vegetation and fence. A lack of intervisibility to the left may increase the risk of pedestrians crossing into the path of vehicles entering the development access junction and sustaining injury.'

Recommendation

13. The Audit Team recommend that adequate and compliant pedestrian to driver intervisibility splay is achieved for pedestrians waiting to cross the development access junction.

Response

14. Accepted. The fence and vegetation along the western boundary will be removed prior to the priority access becoming operational and therefore there will be no obstruction in visibility. Again, this will be covered by condition.

PROBLEM 5 – TRAFFIC SIGNS, CARRIAGEWAY MARKINGS AND LIGHTING

Problem

15. 'The site visit has established that there is currently street lighting along A482. However, the current levels of lighting may not be sufficient for the measures proposed. A lack of street lighting may increase the risk of dark collisions in the vicinity of the junction.'

Recommendation

16. The Audit Team recommend that checks are undertaken at detailed design to ensure the lighting levels throughout the scheme extents are sufficient and that appropriate lighting is included as part of the proposals.

Response

17. Accepted. Checks will be undertaken to ensure that adequate lighting levels are provided throughout the scheme extents. This concern will be addressed at the detailed design stage.

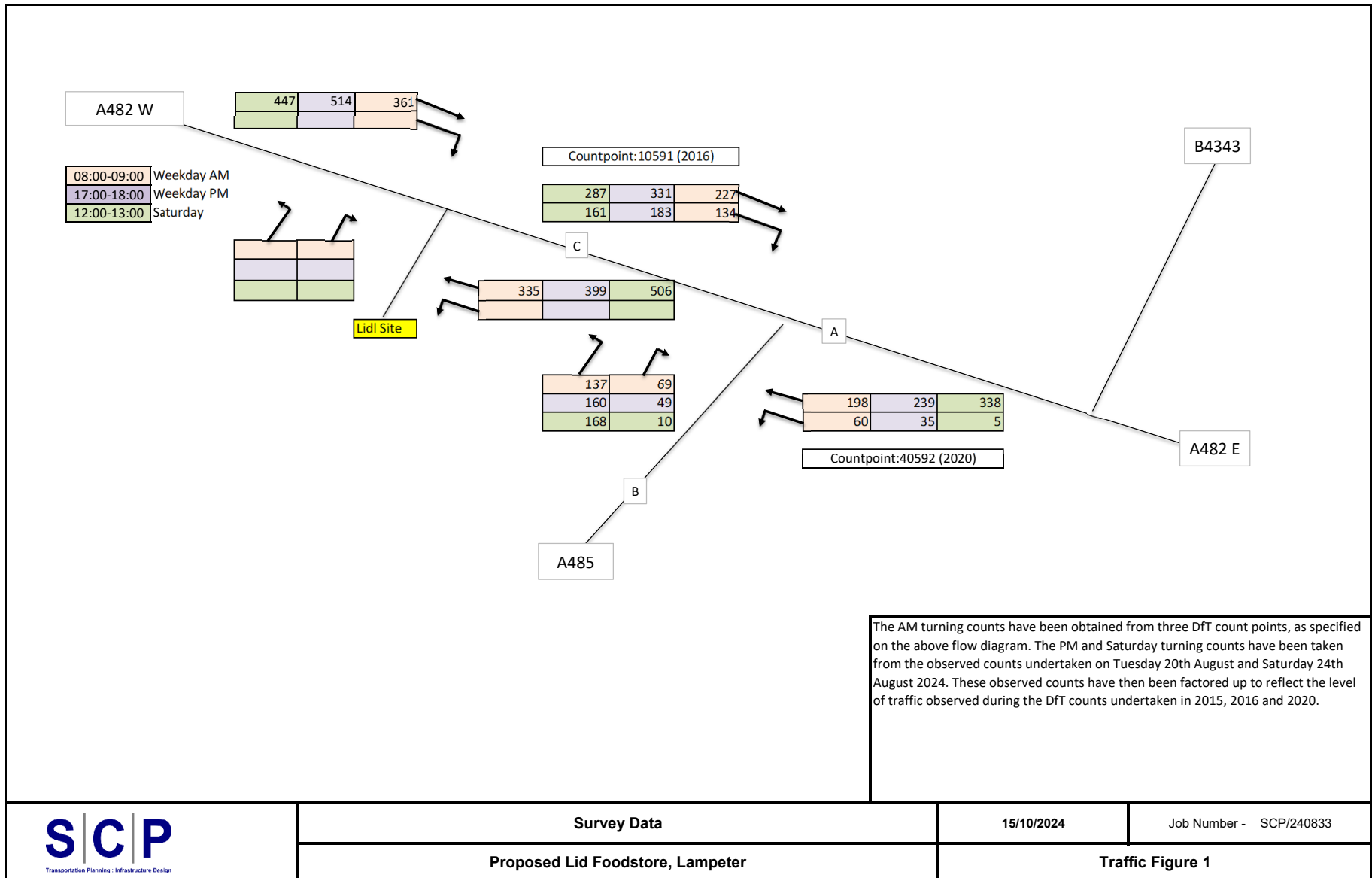
**END OF PROBLEMS IDENTIFIED IN THE UPDATED STAGE 1 ROAD SAFETY AUDIT AND
DESIGNER'S RESPONSES TO THOSE PROBLEMS.**

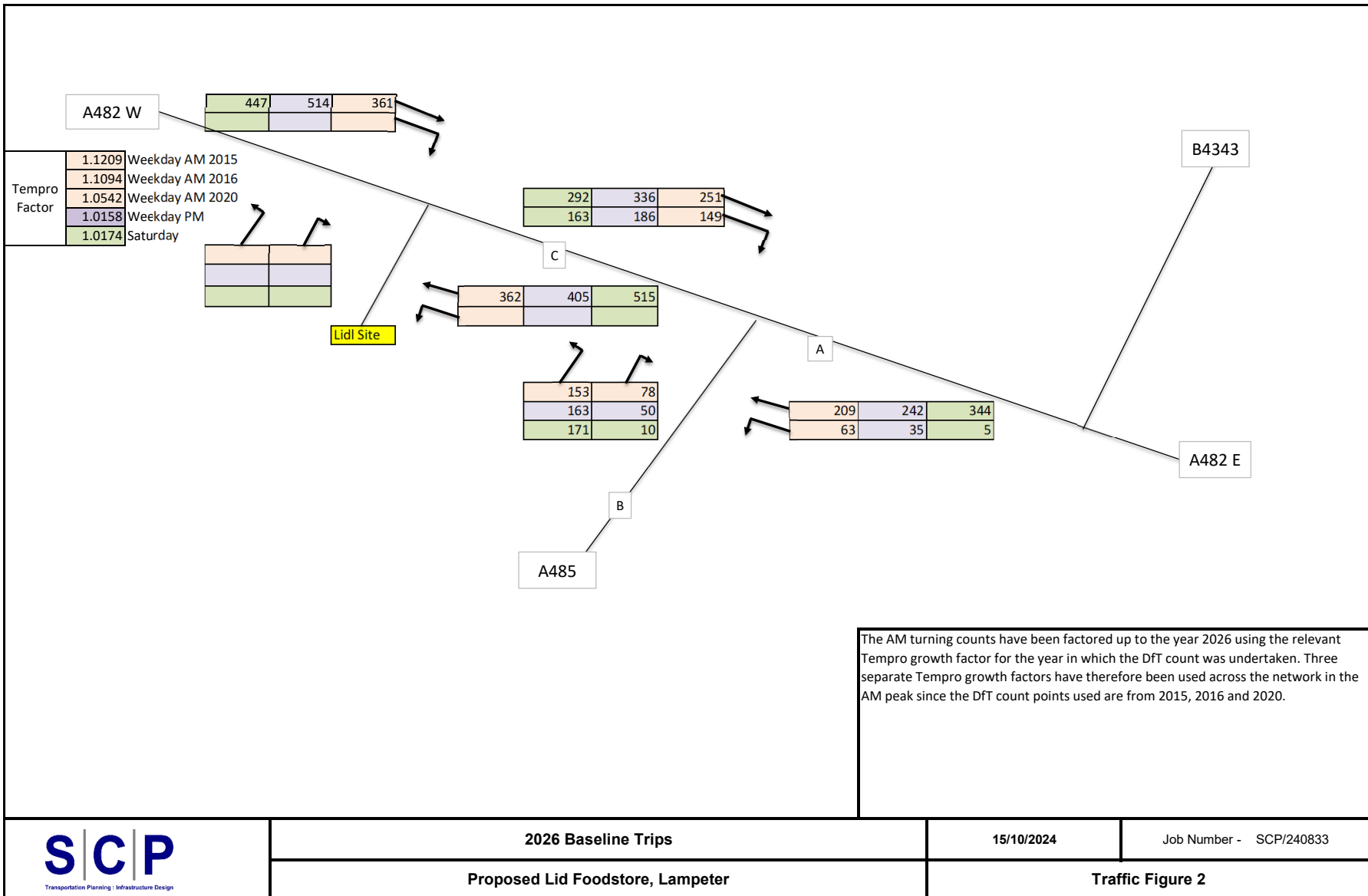
CONCLUSIONS

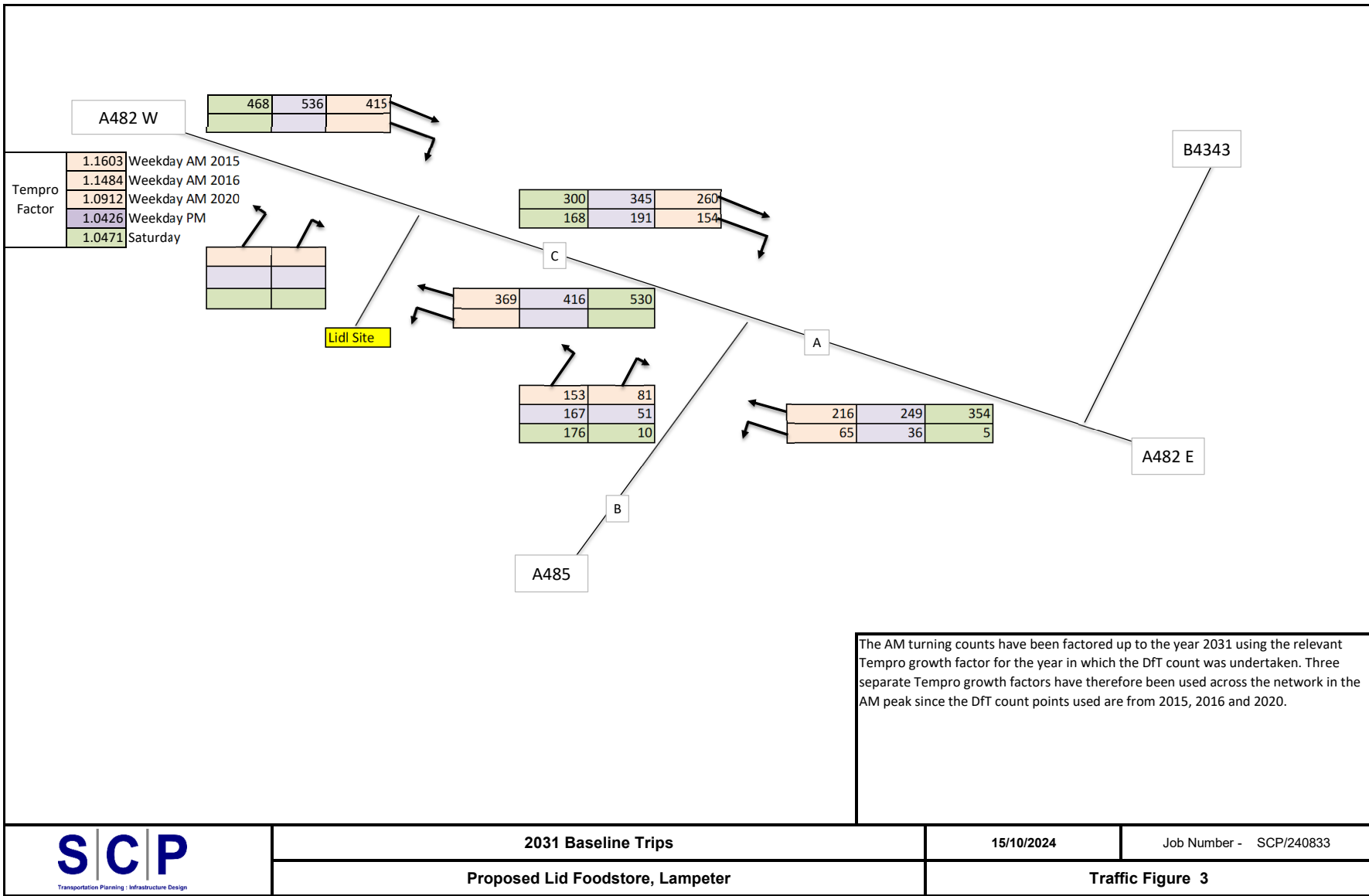
18. The Road Safety Audit has not identified any insurmountable problems and we therefore conclude that the proposals at drawing SCP/240833/SK02 are capable of being supported by Carmarthenshire County Council (CCC) as highway authority and that the scheme can therefore form part of the Section 278 detailed design process between CCC and the applicant, Lidl GB.

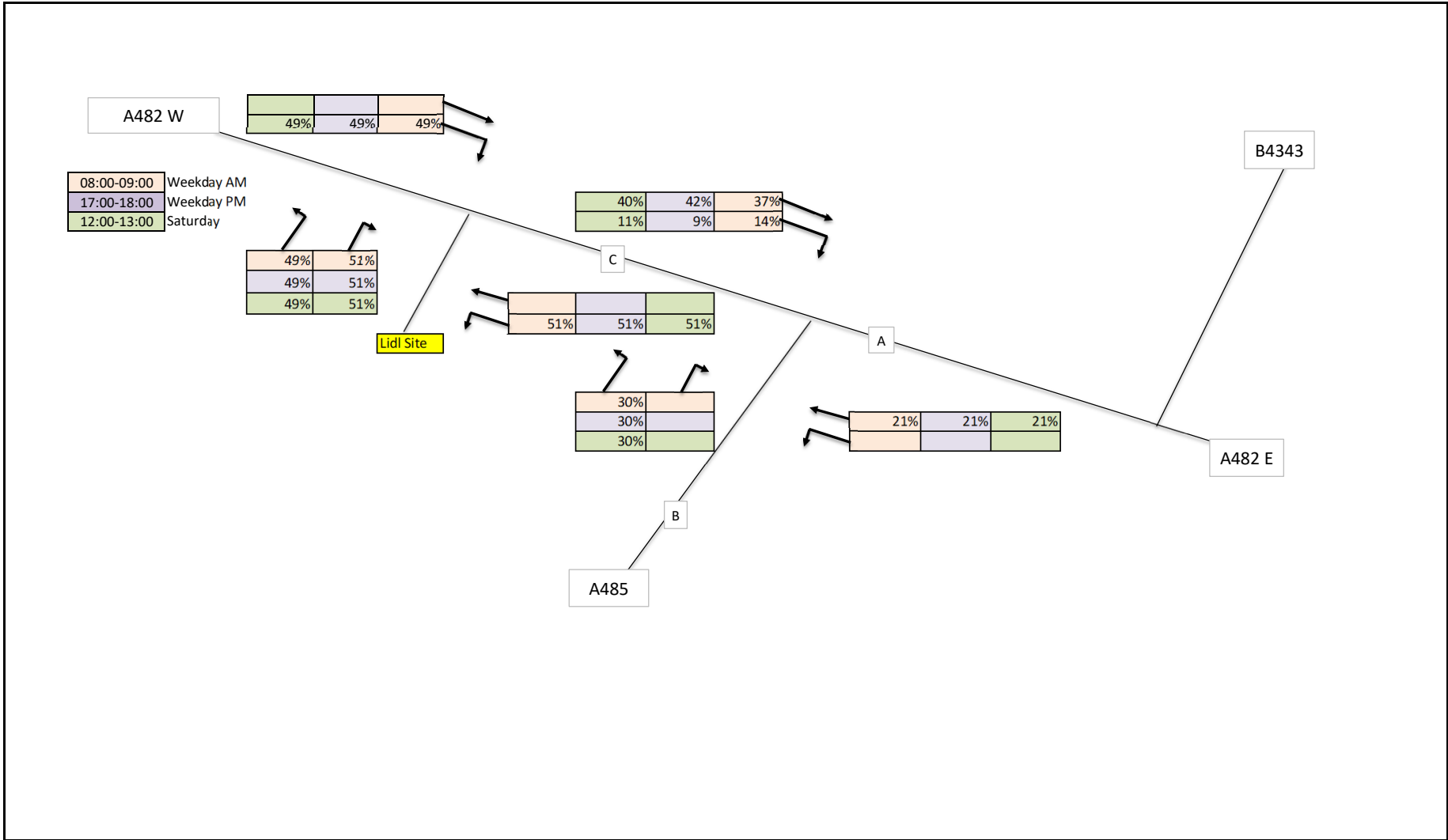
S|C|P


TRAFFIC FLOW FIGURES

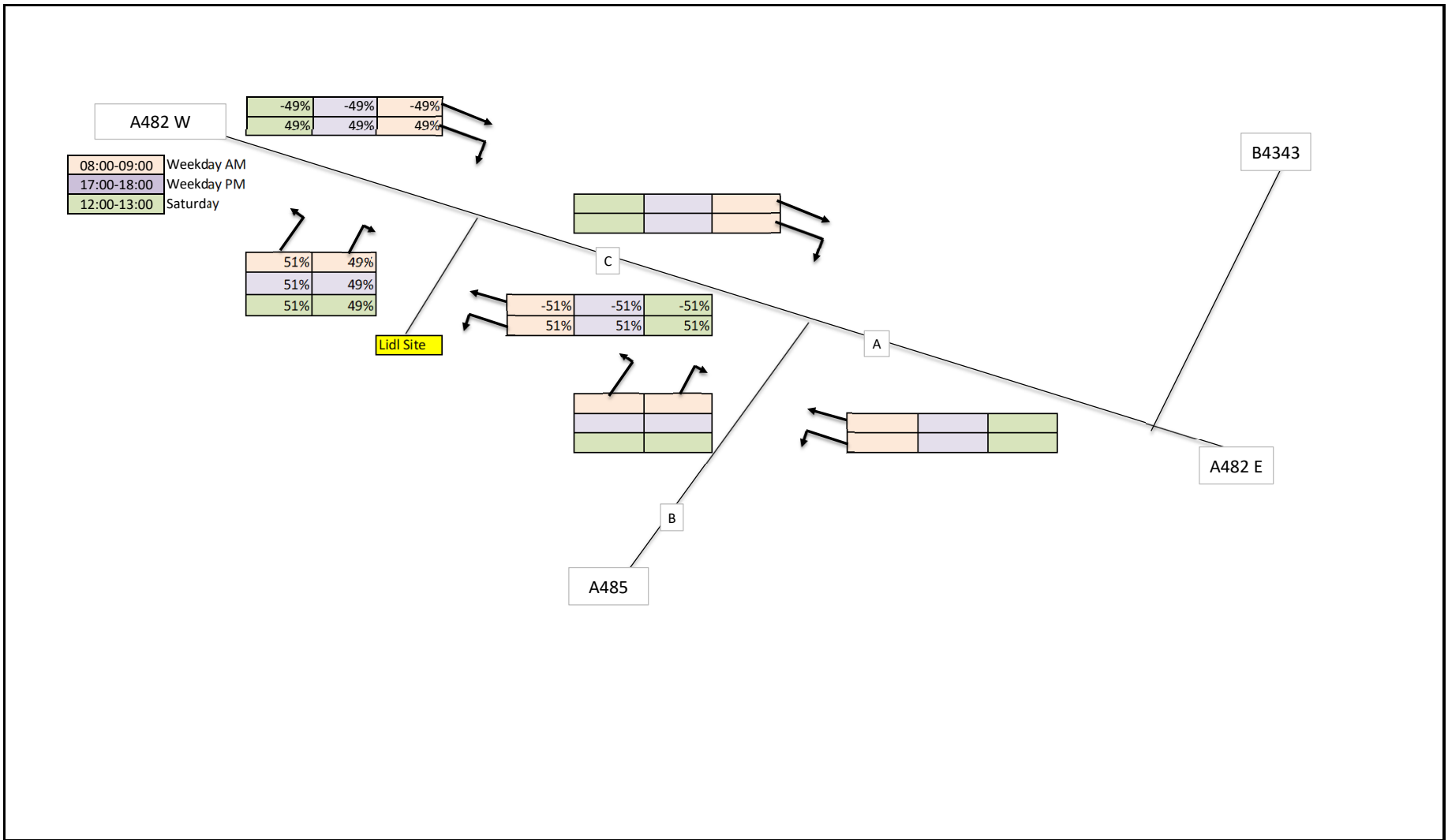


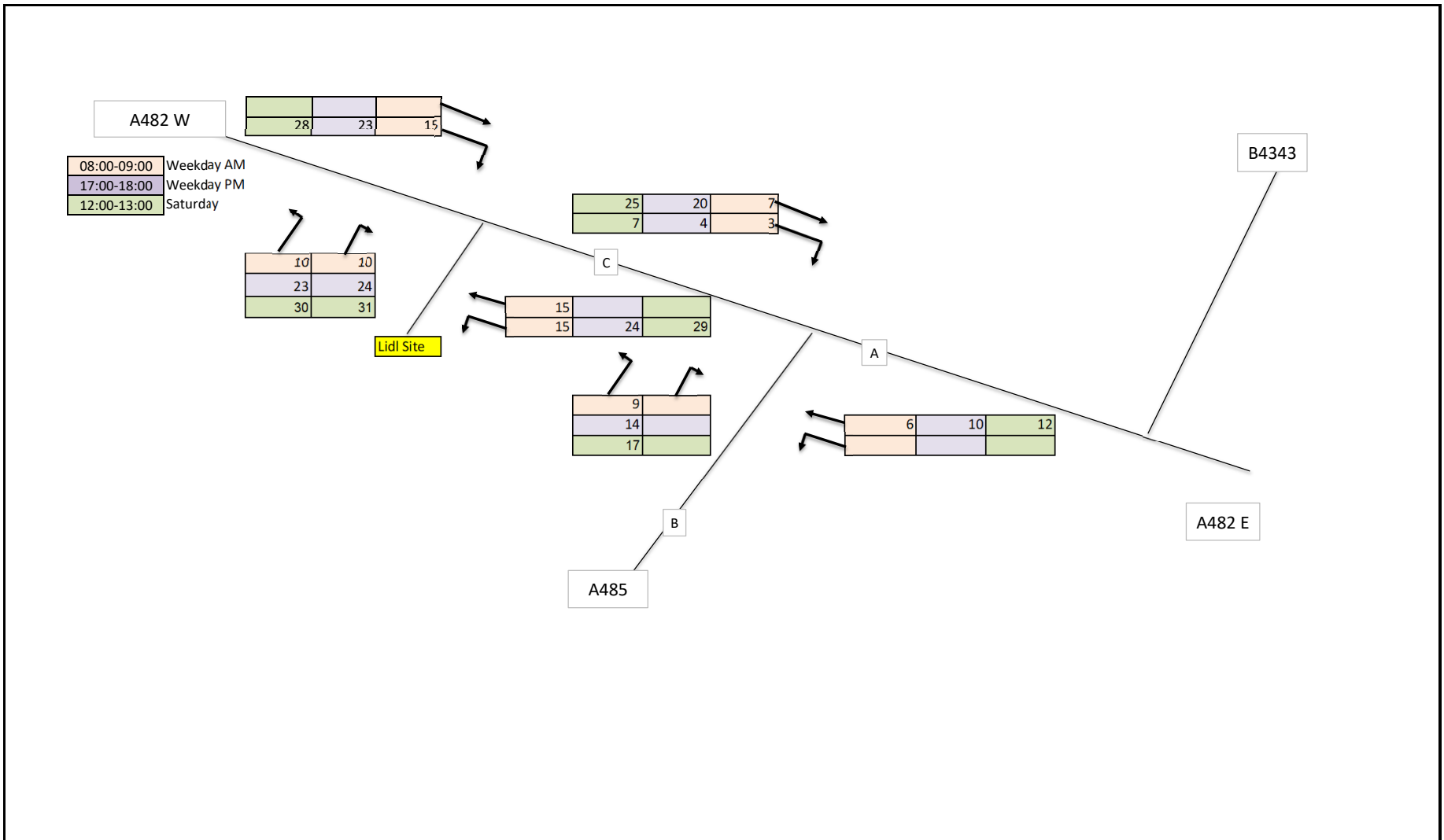





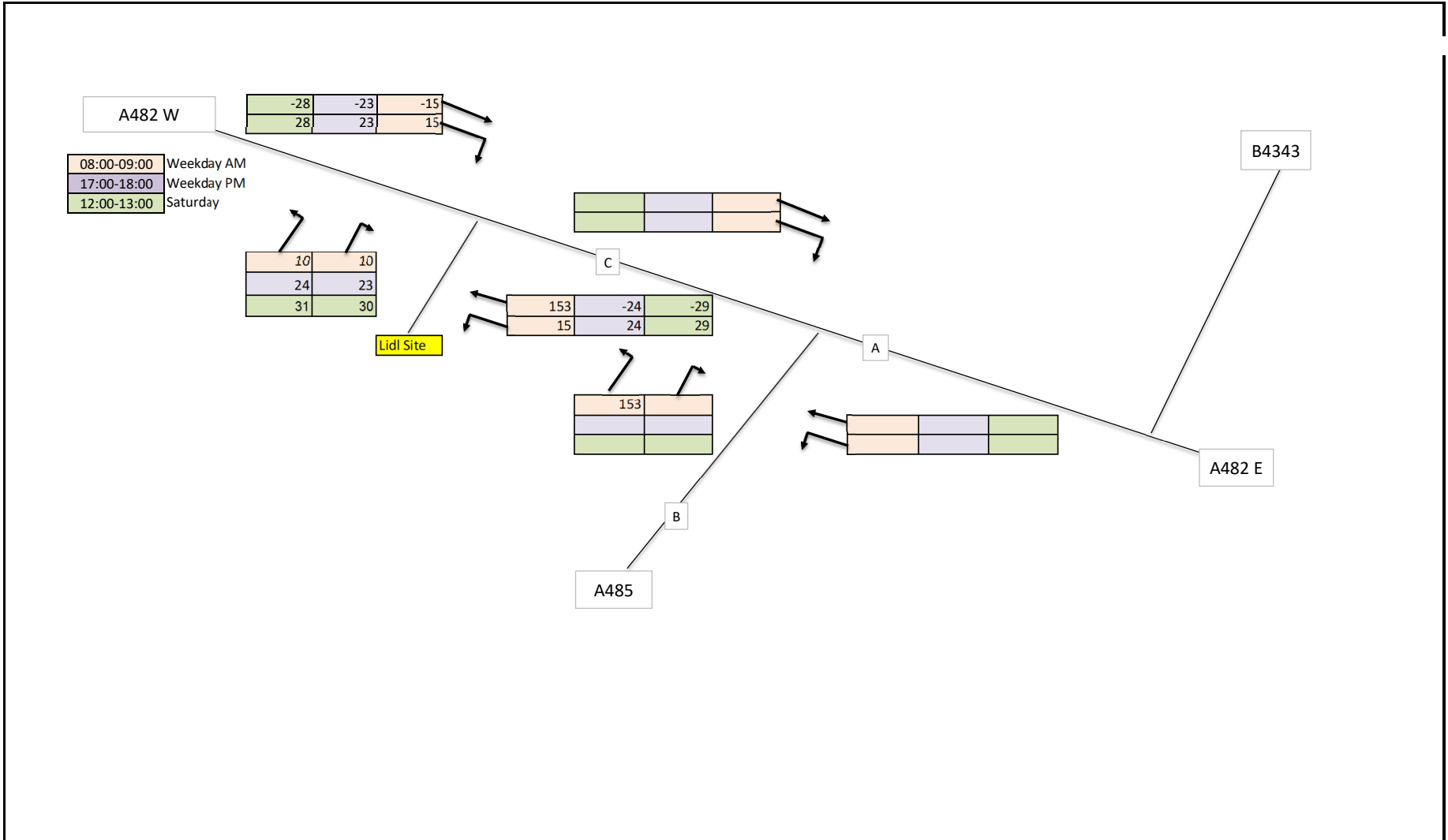



 <small>Transportation Planning - Infrastructure Design</small>	Primary Distribution	15/10/2024	Job Number - SCP/240833
	Proposed Lid Foodstore, Lampeter	Traffic Figure 4	

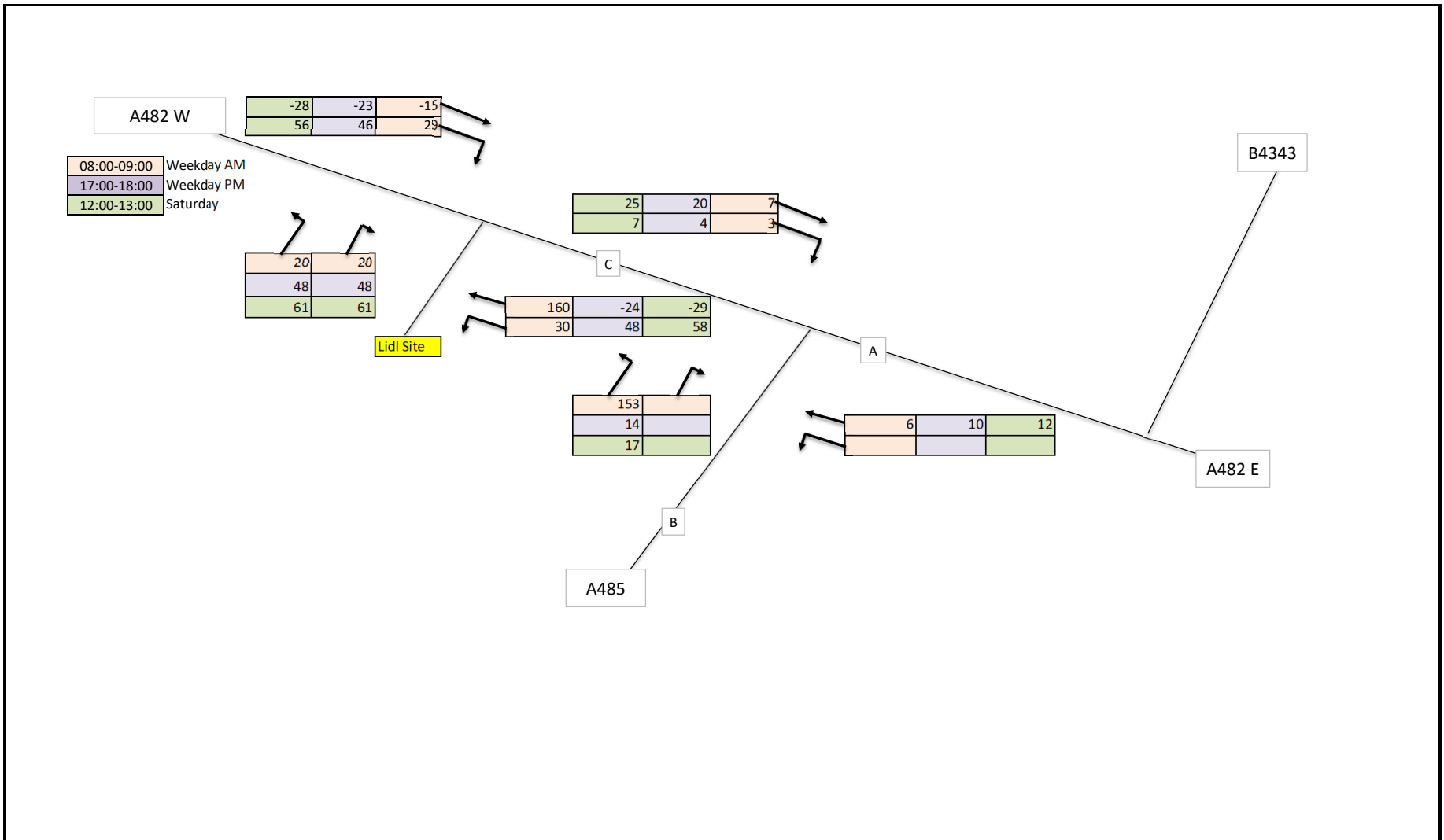





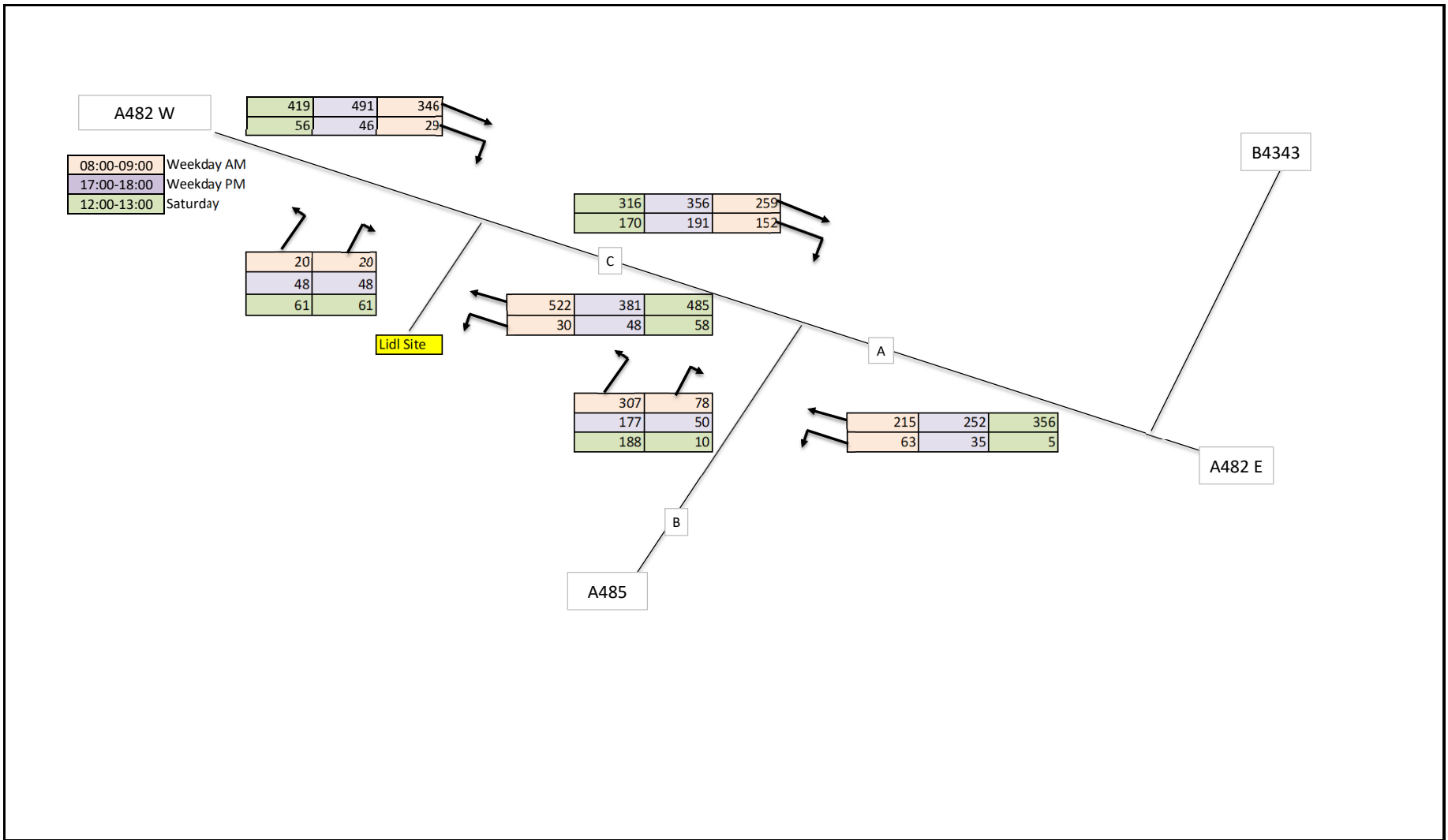
 <small>Transportation Planning - Infrastructure Design</small>	Primary Trip Assignment	15/10/2024	Job Number - SCP/240833
	Proposed Lid Foodstore, Lampeter	Traffic Figure 6	




 <small>Transportation Planning Infrastructure Design</small>	Pass By Trip Assignment	15/10/2024	Job Number - SCP/240833
	Proposed Lid Foodstore, Lampeter	Traffic Figure 7	



 <small>Transportation Planning Infrastructure Design</small>	Total Lidl Trips	15/10/2024	Job Number - SCP/240833
	Proposed Lid Foodstore, Lampeter	Traffic Figure 8	



 <small>Transportation Planning Infrastructure Design</small>	2026 Baseline Trips + Lidl Trips	15/10/2024	Job Number - SCP/240833
	Proposed Lid Foodstore, Lampeter	Traffic Figure 9	

