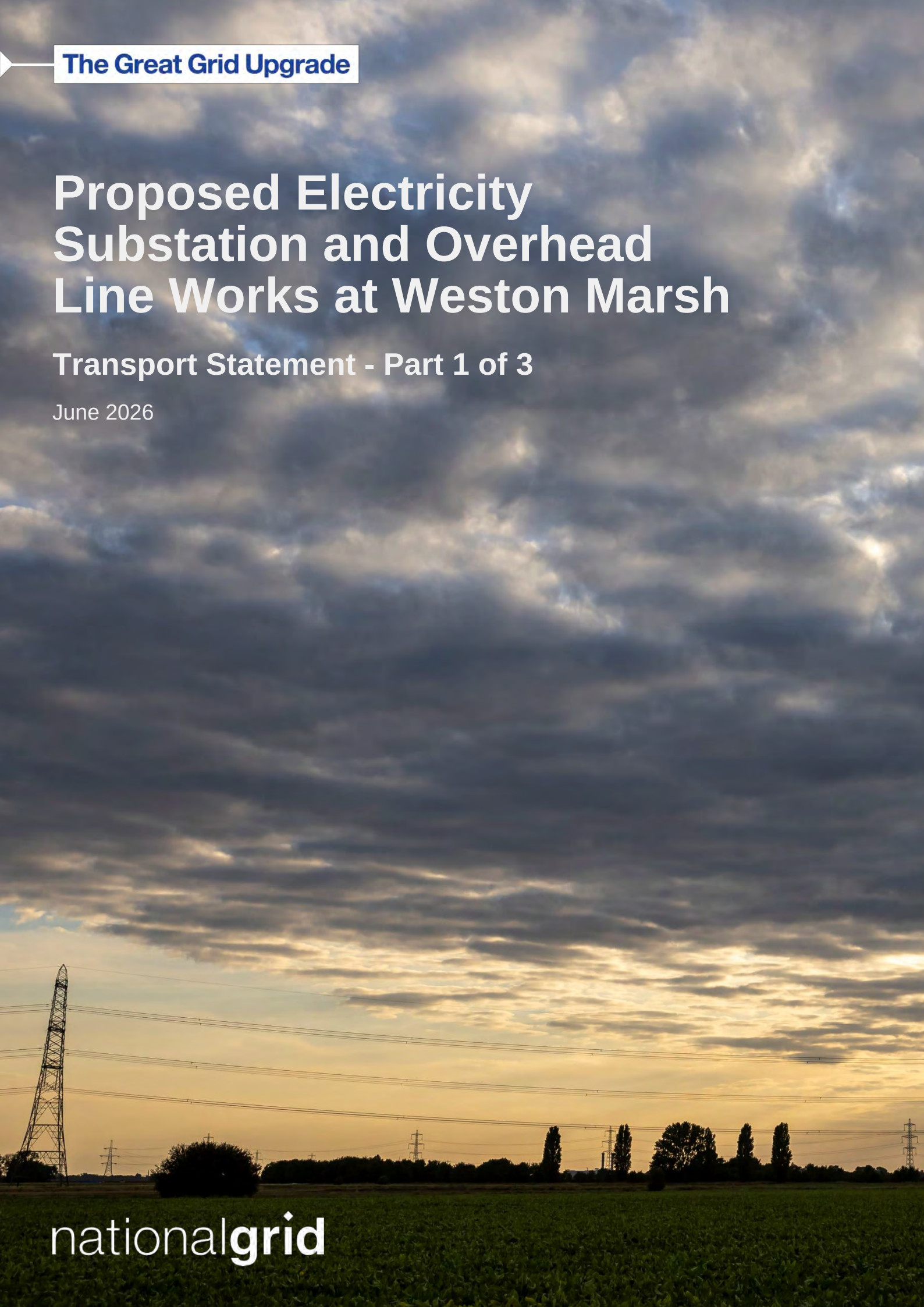
The Great Grid Upgrade

Proposed Electricity Substation and Overhead Line Works at Weston Marsh

Transport Statement - Part 1 of 3

June 2026



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Contents

1. Introduction

1.1 Overview

1.1.1 This Transport Statement has been prepared on behalf of National Grid Electricity Transmission plc (National Grid).

1.1.2 National Grid are proposing to undertake works to construct a new electricity substation, new sections of overhead line and modification of existing overhead lines south west of the Spalding Tee-Point in the Weston Marsh area, within the administrative boundary of South Holland District Council (SHDC) in Lincolnshire.

1.2 Summary of the Scheme

1.2.1 In totality, the Scheme consists of four components, each planned to be progressed via separate consenting routes. These are summarised in **Table 1.1**.

Table 1.1 Components of the Scheme

Works Required	Consenting Regime
Construction of the new Air Insulated Substation (AIS) – 400 kV Weston Marsh Substation A, associated landscaping and environmental mitigation works, drainage, highways and other associated works.	Town and Country Planning Act 1990 (TCPA) (Ref 1) Component referred to as '**Substation Works'**
Construction of new sections of overhead line to connect the new substation into the existing 4ZM overhead line. Removal of a section of the existing 4ZM overhead line. Other associated works.	Section 37 of the Electricity Act 1989 (Ref 2) and deemed consent pursuant to section 90(2) of the Town and Country Planning Act 1990 Component referred to as '**S37 4ZM Overhead Line Works**'
Construction of a new section of overhead line to connect the existing 2WS overhead line into the new substation. Removal of a section of the existing 2WS overhead line. Other associated works.	Section 37 of the Electricity Act 1989 and deemed consent pursuant to section 90(2) of the Town and Country Planning Act 1990 Component referred to as '**S37 2WS Overhead Line Works**'
Reconductoring works required on the existing 4ZM overhead line. Two spans of temporary overhead lines.	Town and Country (General Permitted Development) (England) Order 2015 (Ref 3) and The Overhead Lines (Exemption) (England and Wales) Regulations 2009 (Ref 4) Component referred to as '**Exempt Overhead Line Works'**

1.2.2 The Substation Works will require consent from SHDC under the TCPA.

1.2.3 The S37 4ZM Overhead Line Works and S37 2WS Overhead Line Works (collectively referred to as 'the S37 Overhead Line Works') will require consent from the Secretary of State for Energy Security and Net Zero under Section 37 of the Electricity Act 1989 (Section 37).

1.2.4 The Exempt Overhead Line Works constitute permitted development under Part 15 Class B of the Town and Country Planning (General Permitted Development) (England) Order 2015 and The Overhead Lines (Exemption) (England and Wales) Regulations 2009.

1.2.5 The Scheme Site Boundary, which consists of the land required to construct and operate the Scheme in its entirety, is illustrated on **Figure 1**. The areas of land required to construct and operate each individual component described in **Table 1.1** are also illustrated on **Figure 1**.

1.2.6 The Scheme in its totality is a standalone development to enable connection of the Outer Dowsing Offshore Wind Farm to the national electricity transmission system. Each component stated in **Table 1.1** above is required for the Scheme to fully function as part of the national electricity transmission system (NETS).

1.3 Purpose of this report

1.3.1 This Transport Statement has been prepared in support of the necessary consent applications required to deliver the Scheme. It has been informed by engagement between National Grid and the relevant consenting authorities.

1.3.2 The purpose of this report is to provide the transport context for the Scheme including setting out the transport baseline and forecast transport impacts of the Substation Works and S37 Overhead Line Works.

1.3.3 The Transport Statement considers the Substation Works as well the S37 Overhead Line Works. This reflects the fact that whilst individual components of the Scheme will be subject to separate consenting processes, the construction strategy has been developed holistically. Elements of proposed temporary construction works (e.g. compounds, haul roads etc.) would be utilised to deliver all components of the Scheme. Therefore, it is not considered practicable to isolate projected construction traffic flows for each component of the works and a holistic approach considering the Scheme in its entirety presents a reasonable worst case scenario. Traffic impacts associated with the Exempt Overhead Line Works are anticipated to be low and not have a material impact on operation of the highway network. The associated traffic flows are not included in the assessment.

1.3.4 At submission of the applications for the S37 Overhead Line Works the Secretary of State (SoS) for the Department for Energy Security and Net Zero (DESNZ) is required to make a screening decision for developments that fall under Schedule 2 of the Electricity Works (Environmental Impact Assessment) Regulations 2017.

1.4 Structure

1.4.1 This report is structured as follows:

1) Legislative and Policy Framework – This section provides an overview of the legislation, national, regional and local policy of relevance to this Transport Statement.
2) Methodology – This section details the scope of the report, study area, data collection that has informed the report, the approach and any assumptions and limitations.
3) Baseline and Evaluation – This section details the existing context of the Scheme and surrounding transport networks.
4) Impacts and Mitigation – This section details the transport proposals associated with the Scheme and provides an assessment of impacts originating from the Scheme and whether they can be satisfactorily accommodated on the local transport network. It also refers to the **Outline Construction Traffic Management Plan** (OCTMP) which sets out measures to manage construction traffic impact.
5) Summary – This section provides a summary of the outcomes of this Transport Statement.

2. Legislative and Policy Framework

2.1 Legislation and National Policy

2.1.1 The revised National Planning Policy Framework (NPPF) (Ref 545) was published in December 2024 and further amended on 7 February 2025. It sets out the overarching planning policies and principles for England and provides high-level guidance upon the application of transport policy in the context of development schemes.

2.1.2 Paragraph 161 of the NPPF confirms the framework's support for the transition to net zero by 2050 whilst taking full account of changing climate impacts. It states that:

> *"The planning system … should help to: shape places in ways that contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience...and support renewable and low carbon energy and associated infrastructure."*

2.1.3 Section 9 of the NPPF promotes sustainable transport and the need for transport issues to be considered from the earliest stages of development proposals. It should be ensured that appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location. As part of this, NPPF notes that transport solutions should realise opportunities from existing or proposed transport infrastructure.

2.1.4 Paragraph 115 identifies that it should be ensured that "*any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree through a vision-led approach*".

2.1.5 Paragraph 116 states that "*Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network, following mitigation, would be severe, taking into account all reasonable future scenarios*".

2.1.6 Paragraph 118 requires that "*all developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a vision-led transport statement or transport assessment so that the likely impacts of the proposal can be assessed and monitored*".

2.1.7 This Transport Statement is prepared in accordance with NPPF. It sets out the forecast traffic impacts and assesses the likely impacts on the local highway network. Travel for construction workers is included in the accompanying OCTMP and will be further developed for the final CTMP.

2.1.8 Legislation and national policy relevant to the Scheme and this report is described further in the Planning, Design and Access Statement (TCPA application) and Section 37 Statement (S37 applications).

2.2 Regional and Local Policy

2.2.1 Regional and local plans or policies relevant to this assessment are as follows:

1) **Lincolnshire County Council's Local Transport Plan 5 (Adopted 2022)** (Ref 6). LTP5 covers short, medium and longer term horizons (2022-2050) for transport and highways for the County. It sets out Lincolnshire's Integrated Transport Strategy and a Delivery and Implementation Plan identifying interventions for a number of areas, as well as presenting supporting modal strategies and details of monitoring and evaluating the LTP. Key themes of LTP5 are supporting economic growth, future ready, green transport, promote thriving environments, supporting safety, security and a healthy lifestyle, promoting high aspirations and improve quality of life.

2) **Central Lincolnshire Local Plan (Adopted April 2023)** (Ref 7). Policy S47 – Accessibility and Transport sets out the requirements for an efficient and safe transport network, inclusive of strategic and public community transport infrastructure and services; and Policy S48 – Walking and Cycling Infrastructure: requires existing and new active travel infrastructure to be protected, maintained and improved.

3) **South East Lincolnshire Local Plan 2011-2036 (Adopted March 2019)** (Ref 8). The Local Plan aims to ensure the needs for home, jobs, shops and infrastructure will be met. Policy 33 – Delivering a More Sustainable Transport Network encourages the protection of existing footpaths, cycle routes and Public Rights of Way (PRoW) from development.

4) **Boston Transport Strategy 2016-2036** (Ref 9). The strategy helps to address existing transport and travel issues in Boston and help support proposals for significant growth in the short, medium and long term. The strategy includes support for development of the Boston Distributor Road.

5) **Spalding Transport Strategy 2018-2036** (Ref 10). The strategy provides an approach to the improvement and provision of transport and access for the town and surrounding area. The strategy addresses existing issues and supports proposals for significant growth in the town in the short, medium and long term. The strategy covers provision of improved and sustainable transport policy, services and infrastructure.

2.2.2 With respect to transport, the above Local Plans and transport strategies have a number of common themes including developing and maintaining safe and efficient transport networks to provide access for all and prioritising sustainable travel modes to encourage greener travel choices and healthy lifestyles.

2.2.3 The Scheme supports the introduction of low-carbon technologies to reduce reliance on fossil fuels. While construction of the new Weston Marsh Substation A and associated overhead lines will result in a temporary increase in traffic, this will be managed to maintain efficient operation of the highway network. Mitigation measures will be identified where required and designed to appropriate design standards to ensure road safety. Impacts to pedestrians and cyclists and users of PRoWs will be minimised as far as practicable.

3. Methodology

3.1 Scope of the Assessment

3.1.1 The scope of this assessment has been informed through consultation and engagement with relevant consultees.

3.1.2 Lincolnshire County Council (LCC) are the local highway authority (LHA) and a statutory consultee for the planning application. A meeting was held with LCC Development Management on 8 January 2026 to provide an overview of the Scheme and set out the forecast transport impacts and proposed scope of assessment. It was agreed that a Transport Statement report would be suitable to accompany the Planning Application.

3.1.3 This Transport Statement focusses on the forecast traffic generation associated with construction of the Substation Works and S37 Overhead Line Works and impacts on the local highway network. Traffic impacts in respect of the construction vehicles associated with the Exempt Overhead Line Works are anticipated to be low and are excluded from this assessment. As a result, where the Scheme is referred to in this assessment, the reference is to the Substation Works and S37 Overhead Line Works only.

3.1.4 The forecast operational vehicles are presented, however, as the trip generation is forecast to be very low, no further assessment is undertaken.

3.2 Study Area

3.2.1 The Study Area comprises the local highway network providing access to the Substation Works and S37 Overhead Line Works sites. The Scheme Site Boundary (the site) is located approximately 8km to the north east of Spalding, as shown on **Figure 2**.

3.2.2 Core access routes to the site comprise the A16 and A17 which run approximately in a north south direction to the west and east of the Scheme Site Boundary respectively and the A151 which connects the A16 and A17 and runs in an approximate east west direction to the south of the site.

3.2.3 Local access routes comprise Stone Gate and Marsh Road, which provide access to the site from the A151 and Spalding respectively. The site and local access roads are shown in more detail on **Figure 3**.

3.3 Data Collection

Desk Study

3.3.1 A desk study was undertaken to provide a review of the transport baseline. This included a review of:

1) Google Maps/Streetview (2023) (Ref 11) – for the highway network and bus / rail timetables;

2) OS mapping – for the highway network, recreational routes and cycle routes;
3) LCC Definitive Map (Ref 12) – for PRoW;
4) Department for Transport (DfT) Traffic Count Data (Ref 13); and
5) Crashmap Accident Data (Ref 14).

Site Surveys

3.3.2 Traffic count surveys were undertaken comprising link counts and junction turning counts as summarised in **Table 3.1** below.

Table 3.1 Traffic Surveys

Location	Survey Type	Date
A151 (between A16 and High Road roundabout)	ATC link count	October 2024
A151 (between High Road roundabout and junction with Stone Gate)	ATC link count	October 2024
A151 (to the east of the junction with Stone Gate)	ATC link count	October 2024
Stone Gate / Marsh Road	Junction turning count	November 2025

3.4 Assessment Approach

3.4.1 This section provides details of the assessment methodology.

Operational Traffic

3.4.2 Forecast operational traffic attributable to the Substation Works would be approximately two vehicles (four trips) a month for routine checks and maintenance. Operational trips relating to the proposed S37 Overhead Line Works will continue as per the existing 4ZM and 2WS overhead lines, which is typically one vehicle (two trips) a year for each pylon required for maintenance.

3.4.3 The forecast volume of operational traffic is therefore considered very low and will have a negligible impact on the transport network, therefore no further assessment is undertaken.

Construction Traffic

3.4.4 Details of construction activities, programme and forecast construction traffic are based on information provided by the Scheme Designers and Contractors.

Construction Strategy

3.4.5 The construction strategy is still in development, however, the latest available information has been used to inform this Transport Statement, such as the current working assumptions that have informed the trip generation and distribution methodology. A reasonable worst-case approach has been adopted to ensure a robust assessment, as summarised below.

3.4.6 Details of where materials and equipment will be sourced are not known at this stage. It is likely that materials and equipment will be sourced from within the UK rather than abroad. For the purposes of this assessment, it is assumed that all materials and equipment will come from the UK and from sources to the west of the Scheme Site Boundary. Heavy Goods Vehicles (HGVs) transporting equipment and materials will use the Strategic Road Network (SRN) with the A16 and A17 to the north west of the Scheme Site Boundary and the A16 and A47 to the south west of the Scheme Site Boundary connecting with the A1 and A1(M) for strategic connections across the country.

3.4.7 HGV and Light Goods Vehicles (LGV) deliveries will be made to the main construction compound via a haul road from Stone Gate to limit HGV movements along narrower rural roads. A new bellmouth access and temporary compound area will be established at the entrance to the haul road from Stone Gate and the haul road built out northwards towards the main construction compounds. The haul road will provide access to both the Substation Works and the S37 Overhead Line Works. Two compounds are proposed at the construction site. To the south east of the new Weston Marsh Substation A, the main construction compound will be used for material laydown and storage. To the north west of the substation, a second compound will be used for staff access, parking, site offices and welfare. From this compound an access track and new bellmouth access with Marsh Road will be constructed. This new track will provide a permanent access to the new Weston Marsh Substation A from Marsh Road. **Figure 4** illustrates the Scheme Site Boundary, compound locations and access routes.

3.4.8 Details of where construction workers will come from to access the Scheme construction site are not known at this stage. For the purposes of this assessment, it is assumed that workers will come from residential areas within a reasonable commute of the Scheme Site Boundary and travel by car or LGV on the most convenient route. A Gravity Model has been developed to distribute workers trips on the highway network as described below. While HGVs will use the haul road from Stone Gate, construction workers cars/vans will use Marsh Road for direct access to the north western compound.

3.4.9 Proposed site working hours are:

1) Monday to Friday 07:00-19:00 hrs; and

2) Saturday, Sundays and Bank Holidays 08:00-17:00 hrs.

3.4.10 However, it is noted that practically, there may be limited activities on Saturdays, Sundays and Bank Holidays, therefore for the purposes of this assessment, construction traffic is considered on a weekday profile. This provides a robust assessment as forecast weekday trips are likely to be higher than at the weekends.

Construction Traffic Generation

3.4.11 Construction traffic generation has been calculated for the Substation Works and S37 Overhead Line Works. For each of these, the number of HGVs and LGVs associated with delivery of equipment and materials has been identified as well as the number of construction workers, assumed to arrive in cars/vans.

3.4.12 An indicative construction programme (**Appendix A**) sets out the overall construction programme from January 2028 to early 2031. The haul road construction is expected to start in January 2028 and main site establishment from April 2028. The main construction works comprising earthworks, foundations, substation and pylon construction is expected to start from mid-2028 with mechanical and electrical installations and overhead line installation from March 2029. Commissioning is expected to be undertaken through 2030 with the works completed by November 2030 and haul road removal and reinstatement in early 2031.

3.4.13 A forecast of construction HGVs and cars/LGVs has been calculated profiled across the construction programme. This is based on material calculations, plant/equipment, temporary works and site support for each element of the works as well as the number of workers on site throughout the programme.

3.4.14 The forecast construction traffic flows are presented as two-way flows for each month throughout the construction programme and converted to average daily flows based on 20 working days per month (i.e. 5 day week) as a worst case. Based on all forecast construction traffic activities across the Scheme, the peak year has been identified as September 2028 to August 2029. Details of the construction traffic forecasts and profiles are provided at **Appendix A**.

3.4.15 For the purposes of this Transport Statement, the forecast daily construction traffic flows during the peak year have been converted into peak hour flows, based on the following methodology:

1) The core working hours for the site are 07:00-19:00 hrs.
2) Construction worker cars/LGVs are assumed to arrive between 06:30-08:00 hrs and depart between 18:00-19:30hrs as not all workers will arrive/depart at the same time. Daily traffic flows are therefore divided by three (representing arrivals over 1.5hrs in the morning and departures over 1.5hrs in the evening) to provide an hourly total. 07:00-08:00 hrs and 18:00-19:00 hrs are identified to be the peak hour for construction workers traffic impact on the highway network as base traffic flows are likely to be higher at these times.
3) HGVs will operate between 08:00-18:00 hrs with vehicle arrivals/departures spread evenly across the day. Daily HGV flows are divided by 10 to calculate hourly flows. 08:00-09:00 hrs and 17:00-18:00 hrs are identified as the peak hour for HGV impact on the highway network as base traffic flows are likely to be highest.

3.4.16 Peak construction traffic has been assigned to construction access routes as set out below.

Construction Access Routes

3.4.17 The assessment has identified three distinct categories of access routes based on their suitability for construction-related traffic:

1) Core Routes (CR) - the A16 and A17 are identified as the main A-roads providing strategic connection across the wider study area and are deemed suitable for use by both construction workers and HGVs.

2) Local Links (LK) - the A151 and Stone Gate are local links providing local access from the main A-roads to the haul route for access to the construction compounds. These have been assessed as generally suitable for HGV access, with localised improvements including widening or provision of passing places.

3) Worker Routes (W) - additional routes through Spalding to Marsh Road and local routes through Moulton, Whaplode and Spalding are identified as worker access routes. These are additional local roads and junctions not promoted for HGV use, but which may be used by workers cars/LGVs for accessing the Works sites.

3.4.18 The methodology for distribution of constructions workers cars/vans and of HGVs/LGVs on these routes is set out below.

Construction Traffic Distribution – HGVs/LGVs

3.4.19 Exact details of sources of construction materials and equipment are not confirmed at this stage, however it is assumed that HGVs and LGVs transporting these will come from the strategic and main road network to the south west and north west of the Scheme Site Boundary.

3.4.20 HGVs and LGVs have been assigned to the highway network. This has been informed by a route analysis using Google Maps (journey planning) with assessment of road attributes to evaluate suitability of routes to accommodate HGV movements, such as road geometry, constraints (width/weight restrictions etc) and to minimise potential impacts to pedestrians/cyclists and vulnerable road users as far as practicable.

3.4.21 Core Routes for HGVs/LGVs are identified as the A16 from the A47 at Peterborough to the south and the A16 from the A17 near Boston to the north. From the A16/A151 Springfields Roundabout, HGVS will use Local Links comprising the A151 and Stone Gate then use the haul road to access the Works site. These routes are illustrated on **Figures 2** and **3**.

Construction Traffic Distribution – Workers Trips

3.4.22 The forecast construction workers' cars/LGVs for the new Weston Marsh Substation A have been distributed on to the local highway network using a combined Gravity Model and access route assessment informed by Google Maps journey planning function, which incorporates representative journey times based on real-time and historic traffic conditions. The Gravity Model analysis employs simplified assumptions and is informed by the most current datasets available. The Gravity Model outputs are presented at **Appendix B** with the methodology detailed below.

3.4.23 An initial catchment area analysis was undertaken using Podaris, a cloud-based planning tool that utilises OpenStreetMap data and incorporates average speed limits along highway links. A 60-minute drive-time catchment from the Scheme Site Boundary was generated as a starting point for further analysis. The Podaris

catchment was then overlaid with Census 2021 Middle Layer Super Output Area (MSOA) boundaries in ArcGIS. The identified MSOAs within this boundary corresponded to a Podaris drive-time catchment of approximately 60–75 minutes.

3.4.24 As the Podaris toolkit is based on static road speed limits, a separate validation exercise was undertaken using a more detailed Google Maps–based assessment. This involved determining typical journey times during morning and evening peak periods along driving routes from the individual MSOAs to the substation. This process was conducted manually. This assessment indicated that actual travel times to the edge of the MSOAs are likely to range between 75 and 90 minutes, accounting for route choice and traffic conditions. The Google Maps journey times broadly support the theoretical journey times derived from Podaris and provides confidence in the reasonableness of the modelled catchment. The final Gravity Model is therefore based on the 75-90 minute drive time catchment during morning and evening peak periods.

3.4.25 The parameters specific to the Gravity Model are detailed in **Table 3.2** below.

Table 3.2 Gravity Model Details

Definition	Explanation
T_{ij} is the flow of goods, people, or services from location *i* to location *j.*	$$T_{ij} = \kappa \times \frac{P_i \times P_j}{d_{ij}^{\beta}}$$
P_i , P_j are the 'masses' of the two locations, typically their population or economic size.	2021 Census population data (sourced from Office for National Statistics at MSOA level) was filtered to determine the populations within the MSOAs for the identified catchment. This analysis is conducted using the ArcGIS Pro package, with results aggregated and reported at the Local Authority level.
d_{ij} is the distance (or travel time) between locations *i* and *j.*	For each MSOA zone, the straight-line distance between the MSOA zone centroid and the substation served as the distance input for the model. Where this direct distance was not representative of the likely travel route (e.g., due to crossing a water body), an intermediate point was introduced to more accurately approximate the actual route alignment.
β the distance decay exponent, controlling how much the flow decreases as distance increases. A higher β means that the flow decreases more rapidly with distance.	Sensitivity testing was conducted on the distance-decay parameter β, using a range of values. Based on professional judgement and a review of the resulting travel patterns relative to distance and population distribution, a value of 1.25 was selected for the final model.
κ is a constant that normalises the model, ensuring that the predicted flows match observed data.	The gravity constant κ was set to 1, reflecting the absence of observed behavioural data for this proposed scheme.

3.4.26 A calibration and validation check has been undertaken by comparing the model outputs against the Construction Industry Training Board (CITB) Workforce Mobility and Skills in the UK Construction Sector (2022) report. The Gravity Model's average distance for the new Weston Marsh Substation A is 19.5 miles which aligns closely with the CITB Average Distance of 20 miles for the East of England giving confidence in the Gravity Model.

3.4.27 The percentage distribution from the Gravity Model for each MSOA was then applied to the forecast construction trips to determine the resulting Workers trips to/from each MSOA.

3.4.28 The resulting trips for each MSOA to the new Weston Marsh Substation A have been assigned to the road network through a comprehensive review of potential access routes using Google Maps to identify options based on the shortest journey times. Where multiple routes offer comparable travel times, trip distribution has been proportionally split across the route options.

3.4.29 Key Worker Routes (W) providing access to the Works sites are:

1) Holbeach Road, Camelgate and Marsh Road (west) from the A16 Springfields Roundabout for areas to the north and south;
2) Commercial Road, Roman Bank and Marsh Road (west) from Spalding and areas to the west; and
3) A151, Stone Gate and Marsh Road from the A17 and areas to the east and south east.

3.4.30 **Appendix B** provides details of the Gravity Model including Podaris catchments, MSOAs, Gravity Model outputs and route assignment.

Abnormal Indivisible Loads (AIL)

3.4.31 No Abnormal Indivisible Loads are required for construction of the Substation Works, S37 Overhead Line Works or Exempt Overhead Line Works, therefore no further assessment of routes is undertaken.

Highway Assessment

Baseline

3.4.32 Baseline traffic flows have been taken from the traffic surveys undertaken in October 2024 and November 2025. The daily traffic flows have been reviewed to determine the morning and evening peak hours for the existing network.

Future Baseline

3.4.33 It is currently anticipated that construction work will commence in January 2028. The construction programme identifies a 39 month programme, ending in March 2031 and peaking in 2029 and is the basis for this assessment.

3.4.34 Baseline traffic flows on the road network are projected to increase year on year. The future baseline traffic flows are calculated for the proposed year of assessment and include traffic growth and forecast traffic from committed developments.

3.4.35 Future year baseline traffic flows for the assessment year of 2029 (peak of construction) have been calculated using growth factors for the geographical area of South Holland from the National Trip End Model using the Trip End Model Presentation Program (TEMPro) as set out in **Table 3.3**. Program outputs are provided in **Appendix C**.

Table 3.3 TEMPro Traffic Growth Factors 2024 - 2029

Peak Hour	TEMPro Factor	
	A Road	Minor Road
AM	1.0417	1.0403
PM	1.0435	1.0420

3.4.36 In addition, traffic flows associated with other developments that are likely to be in operation or construction in 2029 have been considered for addition to the future baseline traffic flows. **Table 3.4** provides the list of developments considered within this assessment and the rationale for their inclusion. Both TCPA and DCO applications have been considered, with the resulting developments identified all Nationally Significant Infrastructure Projects (NSIPs), subject to DCO applications to the Planning Inspectorate (PINS).

Table 3.4 Emerging Developments

Site Details	Planning application and consents information		Traffic and Movement impact
	Ref No	Applicant	
Outer Dowsing, 54 km East of Lincolnshire Coastline in the southern part of the North Sea and covering area of approx. 500 sq km	EN010130	GT R4 Limited (trading as Outer Dowsing Offshore Wind)	This scheme was consented in January 2026. Construction is expected from 2026-2030. Construction traffic access will be from A16, A17 and Marsh Road to the north of Weston Marsh substation, therefore there is likely to be limited interaction with the substation construction traffic. The Transport Assessment (TA) states there will be a maximum 489 and average 91 two-way daily construction vehicles movements on the A16 passing through the Springfield roundabout. The maximum hourly movements are forecast to be 29 HGVs and 14 car/LGVs. Operational traffic is low and has therefore not been considered further. The construction traffic forecast is included in this TS.

Site Details	Planning application and consents information		Traffic and Movement impact
	Ref No	Applicant	
Meridian Solar Farm	EN010169	Meridian Solar	This Scheme application was submitted in March 2026. Construction is expected to peak in 2031. The Environmental Statement Traffic and Access chapter identifies construction traffic impacts from 06:00-07:00 and 19:00-20:00 when background traffic flows are significantly lower; these hours do not coincide with substation assessment hours, therefore they have not been considered further in this assessment. Operational traffic is low and has therefore not been considered further.
Grimsby to Walpole, a new 140km network reinforcement though Lincolnshire which will connect from a new upgraded substation at Grimsby West to a new upgraded Walpole substation	EN020036	National Grid Electricity Transmission	This scheme is at the pre application stage and the DCO is expected to be submitted in summer 2027. Traffic data for the Scheme is not available to be included in this assessment.
Eastern Green Link 3 and Eastern Green Link 4, Land between the east coast of Lincolnshire, the Bilsby area of East Lindsey, Lincolnshire and the areas of Kings Lynn and West Norfolk, Norfolk	EN0210003	National Grid Electricity Transmission	This scheme is at the pre application stage and the DCO is expected to be submitted in late 2026. Traffic data for the Scheme is not available to be included in this assessment.
Weston Marsh to East Leicestershire, a new network reinforcement which will connect to the new Weston Marsh Substation B, via proposed overhead lines running on an east-west alignment	EN0210007	National Grid Electricity Transmission	This scheme is at the pre application stage, and the DCO is expected to be submitted in 2028. Traffic data for the Scheme is not available to be included in this assessment.

PRoW Assessment

3.4.37 A review of local Public Rights of Way (PRoW) has been undertaken to identify any routes impacted by the proposed Scheme. Where the Substation Works or S37 Overhead Line Works interacts with a PRoW, measures are identified to enable safe access for users. A qualitative assessment of the impact to users is undertaken based on the scale and duration of the measures.

3.5 Assumptions and Limitations

3.5.1 There are a number of assumptions and limitations associated with the assessment presented within this Transport Statement:

1) Baseline traffic flows are taken from traffic survey data collected during the periods defined above. Traffic flows can vary day to day based on a range of factors. The traffic data was collected during periods considered to be reflective of typical conditions and agreed with LCC.
2) Information presented in relation to construction traffic forecasts is based on the information currently available.
3) Emerging developments have been identified, however, DCO applications have not been submitted and therefore have not been considered further in this Transport Statement.

4. Baseline and Evaluation

4.1 Introduction

4.1.1 This section provides a summary of the existing context of the Scheme Site Boundary highlighting its location and surrounding transport networks.

4.2 Local Area Context

4.2.1 The Scheme Site Boundary is located approximately 0.6km north of Weston, 1.6 km east of Surfleet Seas End, and 2 km west of Moulton Seas End. The Scheme Site Boundary is centred on National Grid Reference 529308, 328090 and includes Marsh Road and Stone Gate for construction and operational access purposes.

4.2.2 The Scheme is located within a countryside landscape, surrounded by farmland. The existing 4ZM overhead line crosses the Scheme Site Boundary from north west to south east towards the northern edge and the existing 2WS overhead line runs north to south to the south of the Scheme Site Boundary.

4.2.3 The River Welland flows broadly parallel to the Scheme Site Boundary approximately 1 km to the west.

4.2.4 The location of the Scheme Site Boundary is shown in **Figures 1** and **2**.

4.3 Local Highway Network

4.3.1 The A16 provides a strategic connection to the Scheme Site Boundary from the north and south. At its northern end, the A16 connects to the A180/M180 near Grimsby and at its southern end the A47 near Peterborough. In the vicinity of the Scheme Site Boundary, it is a single carriageway running in a north–south direction, passing predominantly through rural area, generally subject to the national speed limit (60 mph). The route has no pedestrian infrastructure (footways) and no street lighting except at junctions.

4.3.2 The A17 provides strategic access running approximately in a north west to south east direction and connecting with the A16 to the south of Boston and to the A47 near Kings Lynn. In the vicinity of the Scheme Site Boundary, the A17 is a single carriageway through countryside and subject to the national speed limit (60 mph). The route has no pedestrian infrastructure and street lighting is present near some junctions.

4.3.3 The A151 forms an east west link between A16 and A17 connecting local roads to the Scheme Site Boundary. The A151 is generally a single carriageway road subject to varying speed limits, with sections of road at 40 mph and 50 mph through rural areas and 30 mph through built up areas of Whaplode and Holbeach. A footway or shared footway/cycleway is provided on the northern side of the road through much of its length and street lighting is generally provided at junctions and through built up areas. From the roundabout junction with High Road to the junction with Stone Gate, the A151 is subject to the national speed limit (60 mph) with no pedestrian infrastructure.

4.3.4 Stone Gate provides direct access to the Scheme Site Boundary. It is a narrow single carriageway road running in a north–south direction, connecting to the A151 at its southern end and passing through rural countryside, with open fields on both sides for most of its length. The road is subject to the national speed limit (60 mph) and does not have pedestrian infrastructure or street lighting along its length. The carriageway is approximately 5 m wide with no road markings. Due to its rural setting and limited width, opportunities for overtaking are minimal, and there are no designated passing places or bus stops, with limited visibility in some sections due to bends and roadside vegetation. The route primarily serves local access needs, including agricultural and rural properties.

4.3.5 Marsh Road provides direct access to the Scheme Site Boundary . It is a narrow single carriageway road running in a north–south direction and broadly runs parallel to the River Welland. To the north of the Scheme Site Boundary it provides local access only, to the south of the Scheme Site Boundary it connects with Stone Gate and then continues south west adjacent to the River Welland passing under the A16 and connecting with routes into Spalding. The route passes through countryside landscape with open fields on both sides. The road serves local access needs including industrial and residential buildings and holiday properties. The carriageway is approximately 5 m wide and is subject to the national speed limit (60 mph). There are no road markings, footways, street lighting, or designated passing places along its length.

4.3.6 **Figures 2** and **3** show the Scheme Site Boundary with respect to the strategic and local highway network. The Strategic Road Network (SRN), operated by National Highways, does not pass within the vicinity of the Scheme Site Boundary.

Key junctions

A16 / A151 Springfields Roundabout

4.3.7 The A16/A151 Springfields Roundabout is a large four arm roundabout. Recent improvement works implemented in 2023/24 widened the approach arms to provide three lane entry and two lane exit on the A16 approaches and two lane entry on the A151 and Holbeach Lane approaches as well as two/three lanes circulatory carriageway. The improvement works also included pedestrian and cycle provision at the junction including dropped kerb crossings over each approach arm. Street lighting is provided at the junction.

A151 / Stone Gate / High Road Staggered Priority Junction

4.3.8 The A151/Stone Gate/High Road junction forms a priority controlled staggered junction with right turn lanes; the A151 comprising the major road, Stone Gate, a minor arm to the north and High Road a minor arm to the south. A refuge island is provided for pedestrian crossing over the A151 with footways on the Stone Gate approach and a shared footway/cycleway on the southern side of the A151 connecting with High Road. Street lighting is provided at the junction.

Stone Gate / Marsh Road Priority Junction

4.3.9 The Stone Gate/Marsh Road junction is a three arm priority controlled junction. Stone Gate to Marsh Road (west) forms the major road with Marsh Road (north) the minor road. Both Stone Gate and Marsh Road are narrow roads with Marsh Road (north)

flaring at the junction to enable larger vehicles to turn. There are no footways or street lighting at the junction.

4.4 Public Transport

4.4.1 The nearest bus stops to the Scheme Site Boundary are on High Road in Weston, located approx. 6 km from the Scheme, which is outside the 400 m acceptable walking distances to bus stops set out by Active Travel England guidelines (Ref 15). These provide access to approximately two bus services per hour running in each direction between Spalding and Kings Lynn Interchange.

4.4.2 The nearest rail station is located in Spalding, approximately 8 km from the Scheme Site Boundary. This is over the 800 m walking distance identified by the Active Travel England (Ref 15) as the maximum acceptable walking distance to a rail station for commuting.

4.4.3 Therefore, it is unlikely that public transport (bus or rail) will be used to access the construction site. Walking, Wheeling, Cycling and PRoW.

4.4.4 As noted above, the local highway network includes a shared footway/cycleway on the northern side of the A151 between the A16 and the High Road roundabout and on its southern side to the east of the junction with Stone Gate. There are no footways or cycle provision on the A151 between the roundabout junction with High Road and the junction with Stone Gate and similarly there is no provision on Stone Gate or Marsh Road.

4.4.5 **Figure 5** shows the PRoW network in the vicinity of the Scheme Site Boundary. A number of footpaths and bridleways run adjacent to the River Welland approximately 1 km to the west of the Scheme Site Boundary. From the River Welland, Footpath Wstn/8/1 broadly runs in an east west direction to Marsh Road. From Marsh Road Footpath Wstn/7/1 continues in an approximate east west direction towards Western Barn House and Footpath Moul/2/1 follows Lord's Drain in a north south direction and follows field boundaries to join Carrington Road to the east of the Scheme Site Boundary.

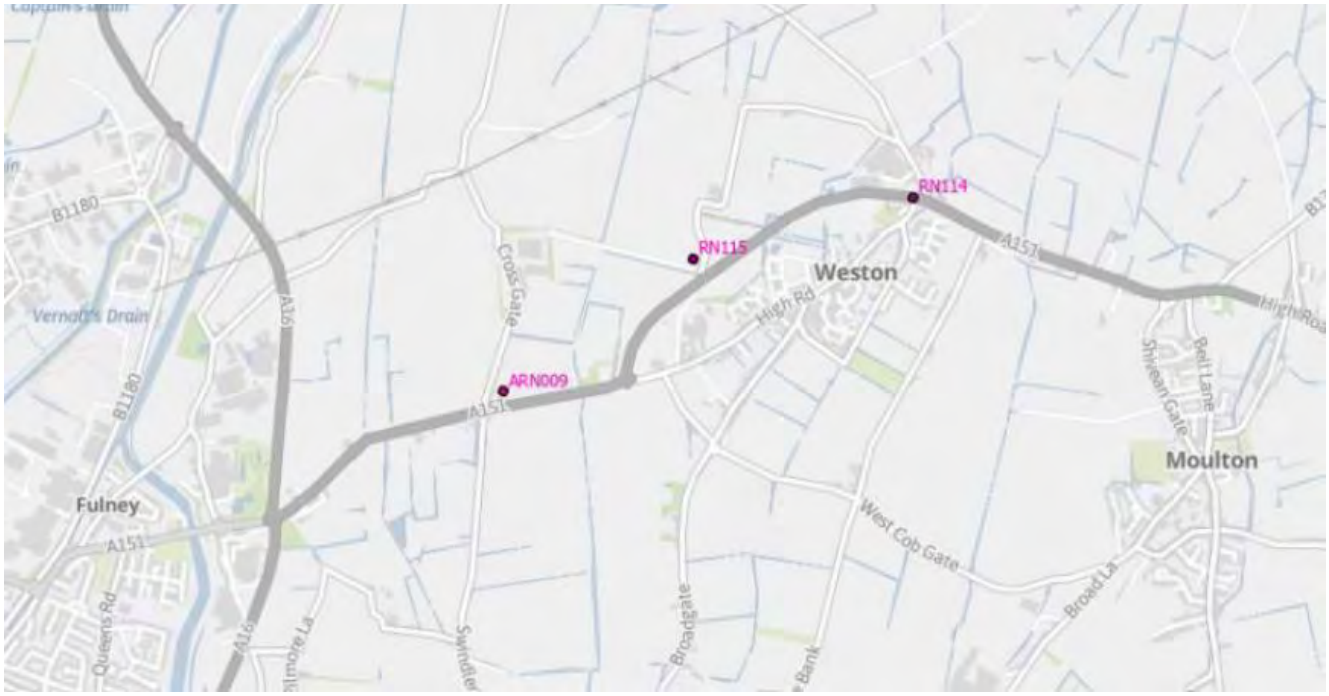
4.5 Baseline Traffic Data

4.5.1 Baseline traffic surveys were undertaken in October 2024, comprising automatic traffic counts (ATC). Two 7-day ATCs were undertaken, the first commencing 21/10/2024 and the second commencing 28/10/2024. These comprised one week during school term time and one week during school half term holidays for comparison purposes. The week with the highest 7-day average was during term time and represents a 'neutral' traffic data collection period and has been used for the analysis. The traffic survey data is provided in **Appendix D**.

4.5.2 **Image 4.1** shows the survey locations conducted on A151.

1) ARN009;
2) RN115; and
3) RN114.

Image 4.1 Survey Count Location



4.5.3 Analysis showed the highest 7-day average is for the week commencing 28th October 2024 as the busiest week across the three locations surveyed. All three ATC sites identified the AM peak to be between 08:00 hrs to 09:00 hrs and the PM peak to be 17:00hrs to 18:00 hrs.

4.5.4 Fully classified turning counts and queue length surveys were undertaken at the junction of Stone Gate and Marsh Road on Wednesday 5th November 2025 between 06:00hrs and 20:00hrs. The date was chosen to reflect a 'neutral' day in line with best practise.

4.5.5 The traffic data shows the hourly traffic flows on the A151 at approximately 1000-1200 vehicles in the 07:00-08:00 hrs, 08:00-09:00 hrs and 17:00-18:00 hrs peak hours with hourly flows lower from 18:00-19:00 hrs. Flows are slightly higher at site ARN009 closer to the A16 and a little less at RN115 and RN114 where the A151 bypasses Weston.

4.5.6 A summary of the baseline AM peak hours (07:00-08:00 hrs and 08:00-09:00 hrs) and the PM peak hours (17:00-18:00 hrs and 18:00-19:00 hrs) for highway links within the study area are provided in **Table 4.1**. The data confirms the AM peak hour as 08:00-09:00 hrs and PM peak hour as 17:00-18:00 hrs.

4.5.7 **Table 4.1** includes the peak hour total traffic and total HGV movements from the survey data. Typically, there are approximately 150 HGVs on the A151 in each hour in the AM peak hours and 75-100 HGVs in the PM peak hours.

4.5.8 Stone Gate and Marsh Road have very low traffic volumes with typically 10 to 15 vehicles on the network during the AM and PM peak hours. Although the highest flows occur between 07:00-0800 hrs in the AM and 18:00-19:00 hrs in the PM, the difference between these numbers is minimal.

Table 4.1 2024 Traffic Flow Data (in vehicles)

Link Description	AM Peak Period				PM Peak Period			
	07:00-08:00hrs		08:00-09:00hrs		17:00-18:00hrs		18:00-19:00hrs	
	Total Trips	Total HGV	Total Trips	Total HGV	Total Trips	Total HGV	Total Trips	Total HGV
A151 (LK79) ARN009	1177	145	**1224**	**143**	**1336**	**108**	975	77
A151 (LK86) RN115	949	154	**972**	**158**	**1071**	**89**	725	70
A151 (W41) RN114	1003	132	**1065**	**143**	**1124**	**85**	775	58
Stone Gate (LK66)*	8	0	**6**	**0**	**3**	**0**	17	0
Marsh Road (LK65)*	16	0	**14**	**2**	**8**	**0**	5	0
Marsh Road (W) (W40)*	12	0	**16**	**2**	**11**	**0**	18	0

**2025 survey data presented and considered representative of 2024 given the low count*

4.5.9 In addition to the surveyed data, a DfT traffic counter (Ref.: 99187) located on the A16 to the north of the Springfields Roundabout has been used to determine traffic flows on the A16. A manual count was undertaken in 2023 and these flows factored up to represent 2024 traffic flows. The 2024 annual average daily traffic flows are 23,919 total vehicles. The hourly flows during the AM peak periods comprise 1777 total vehicles and 258 HGVs from 07:00-08:00 hrs and 1824 total vehicles and 282 HGVs from 08:00-09:00 hrs. The hourly flows during the PM peak periods comprise 1879 total vehicles and 123 HGVs from 17:00-18:00 hrs and 1386 total vehicles and 124 HGVs from 17:00-18:00 hrs.

4.5.10 Baseline traffic flows are presented in **Image 4.2** to **Image 4.5** below.

4.5.11 As identified at **Section 3.4** the 2029 Future Baseline traffic flows comprise applying traffic growth and adding committed development traffic to the Baseline traffic flows. These are presented in **Image 4.6** to **Image 4.9** below.

Image 4.2 2024 Baseline AM (07:00 to 08:00hrs) flows

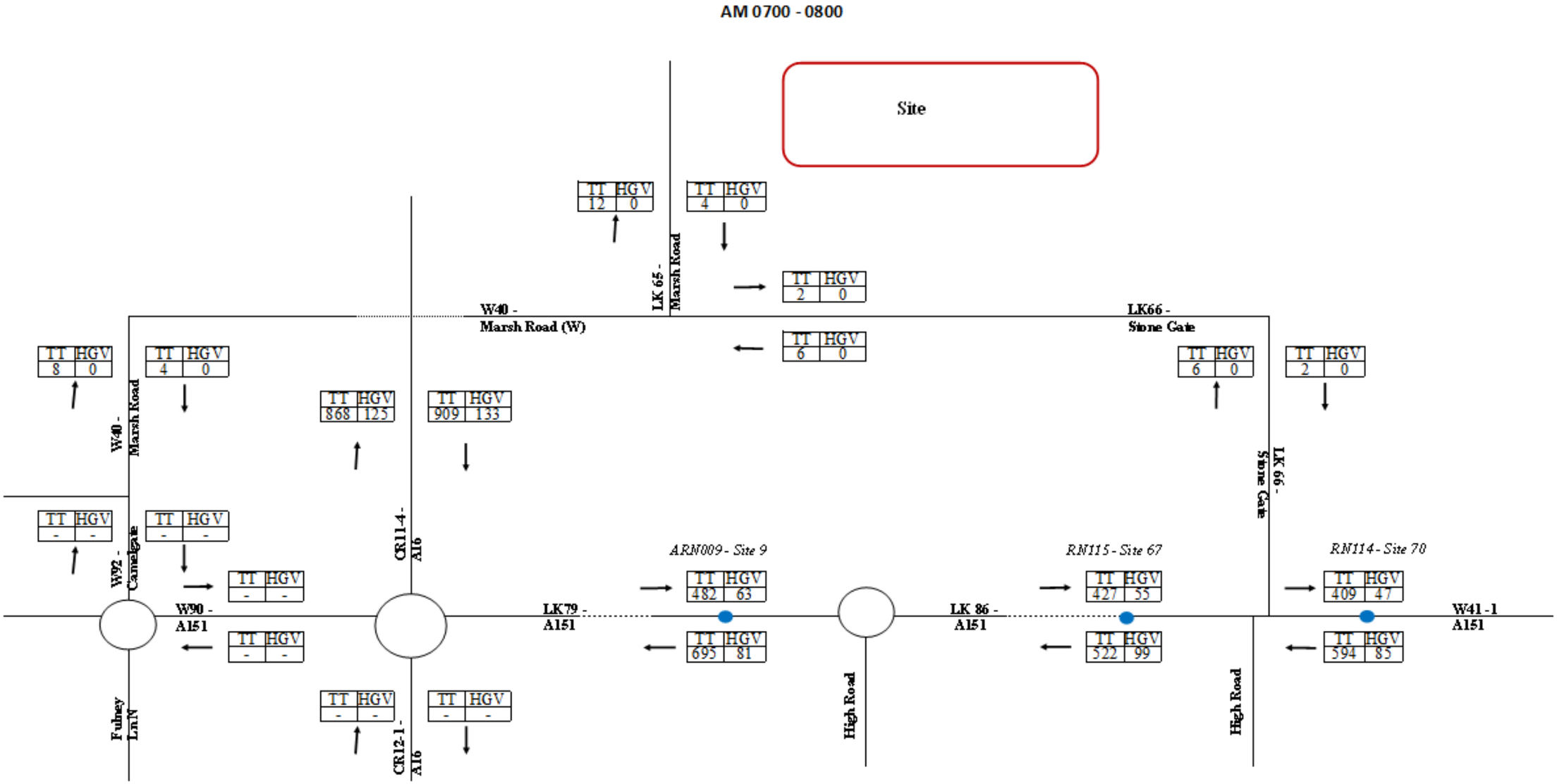


Image 4.3 2024 Baseline AM (08:00 to 09:00hrs) flow

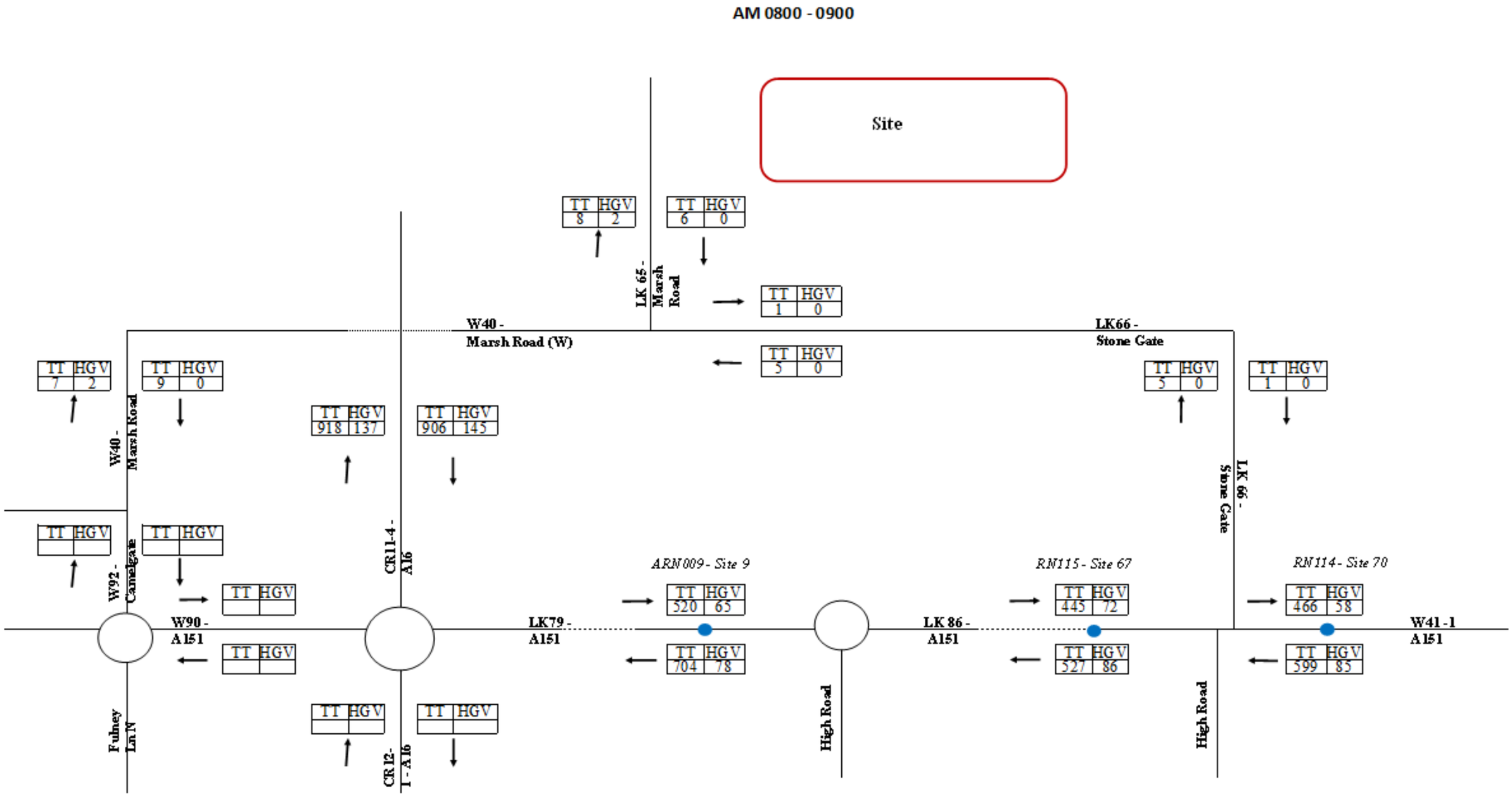


Image 4.4 2024 Baseline PM (17:00 to 18:00hrs) flow

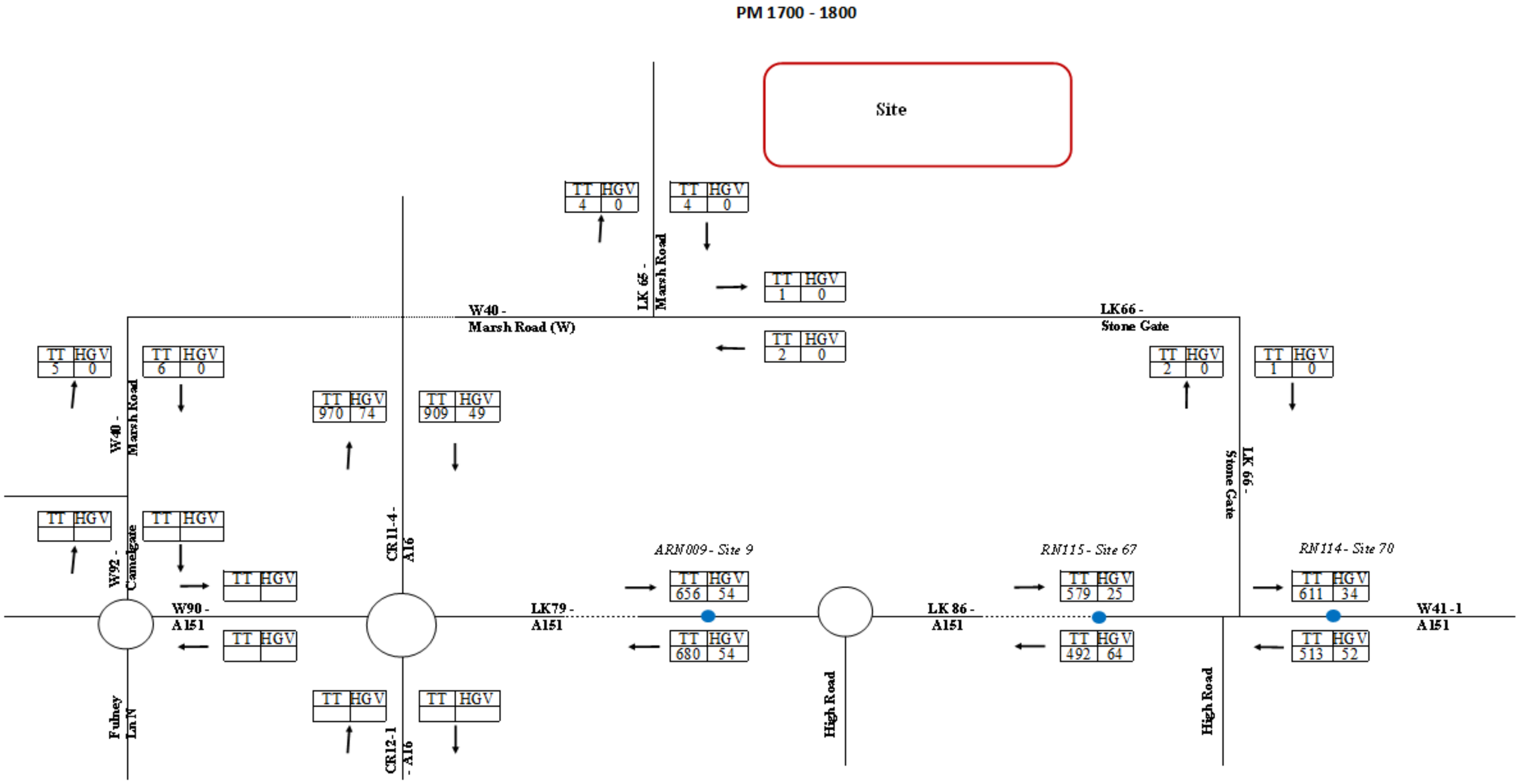


Image 4.5 2024 Baseline PM (18:00 to 19:00hrs) flow

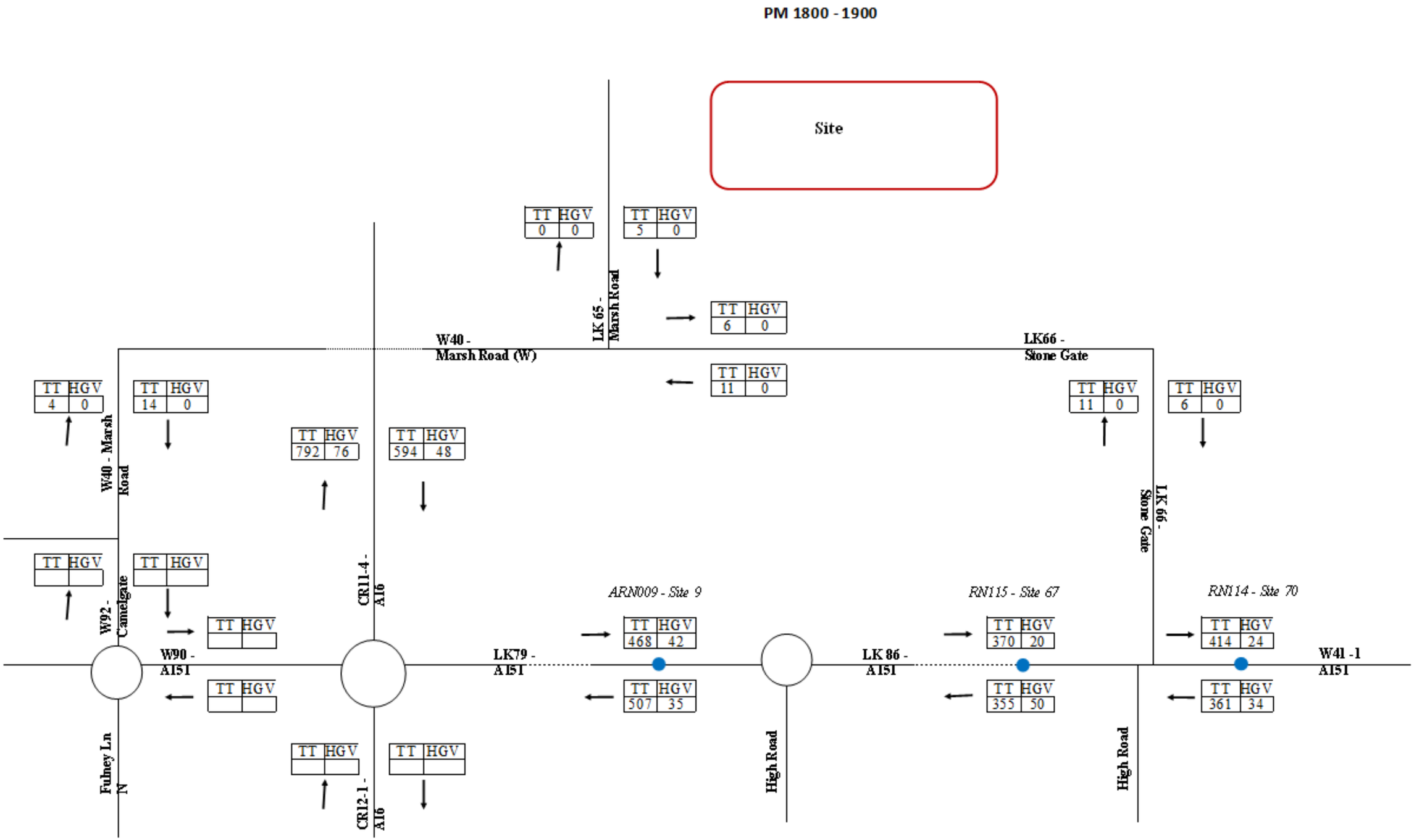


Image 4.6 2029 Future Base Year AM (07:00 to 08:00hrs) hour

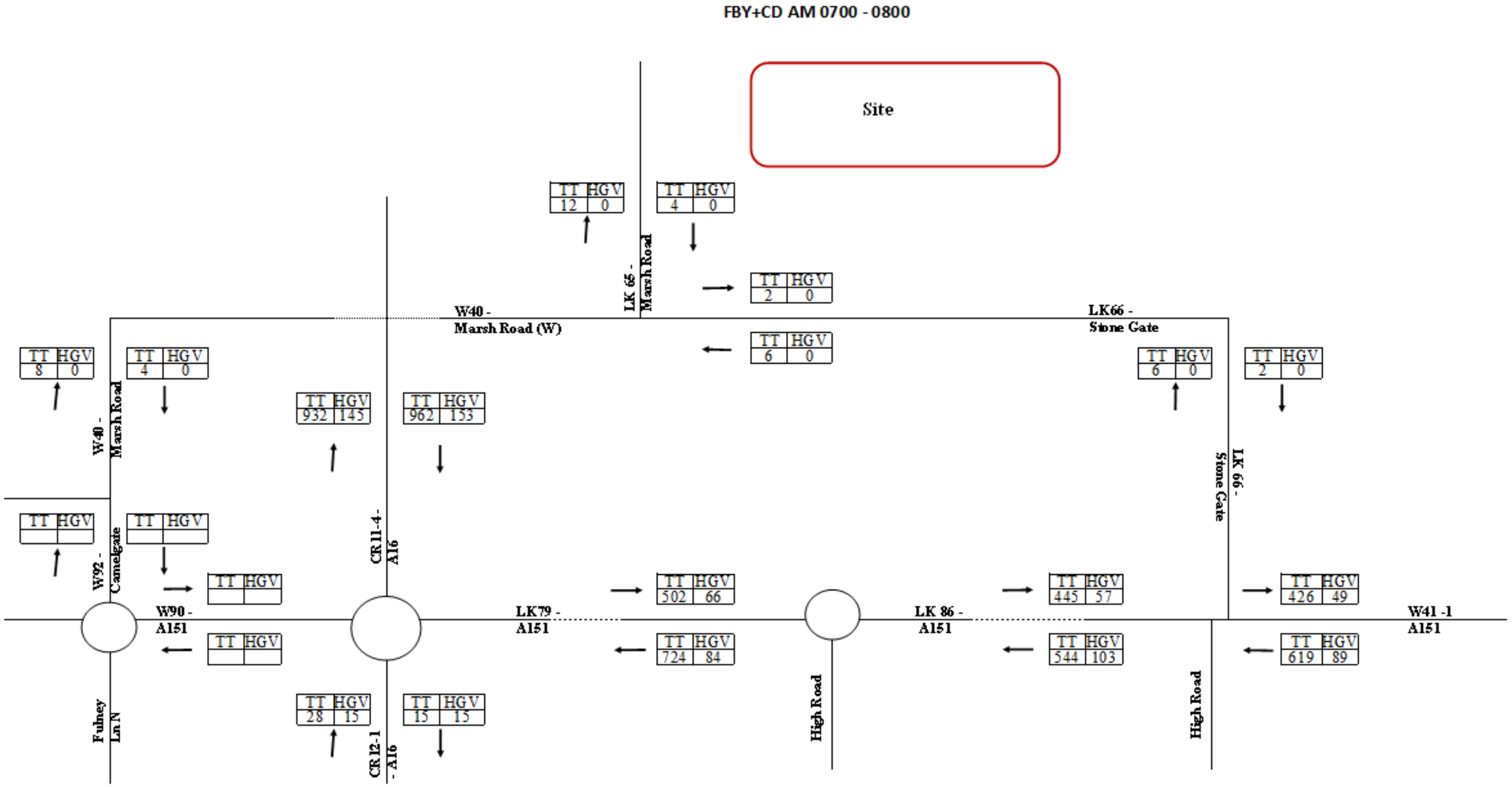


Image 4.7 2029 Future Base Year AM (08:00 to 09:00hrs) hour

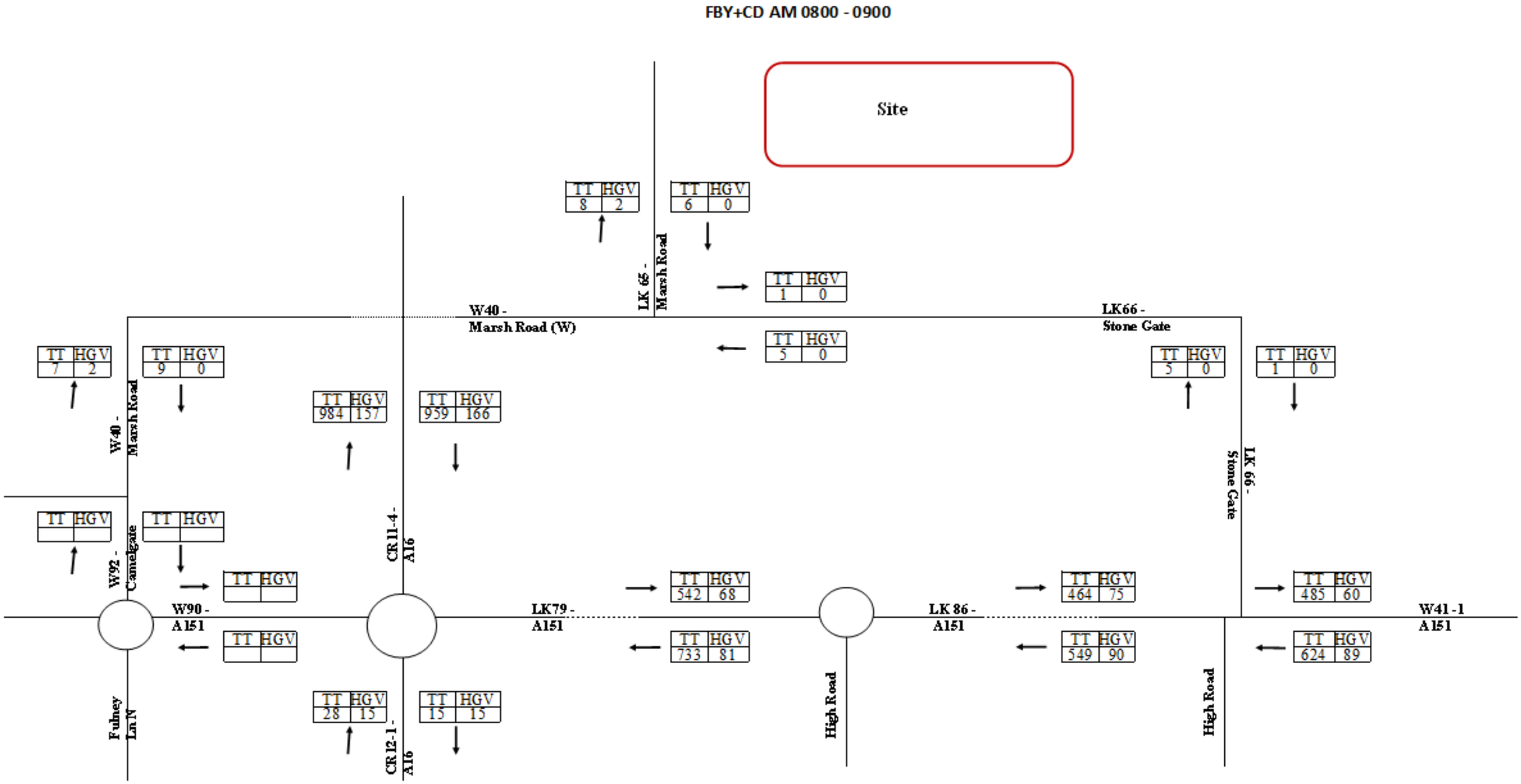


Image 4.8 2029 Future Base Year PM (17:00 to 18:00hrs) hour

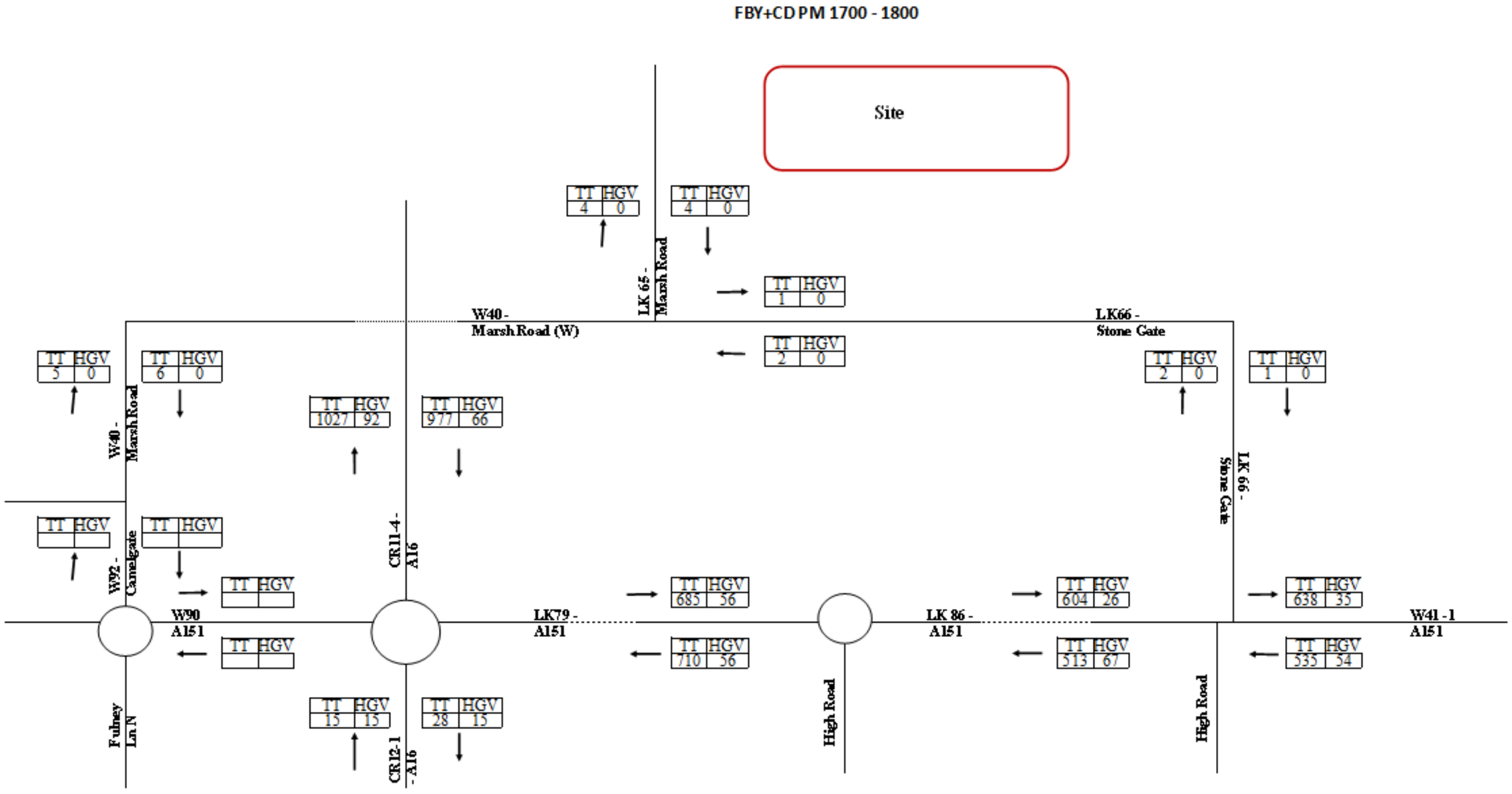
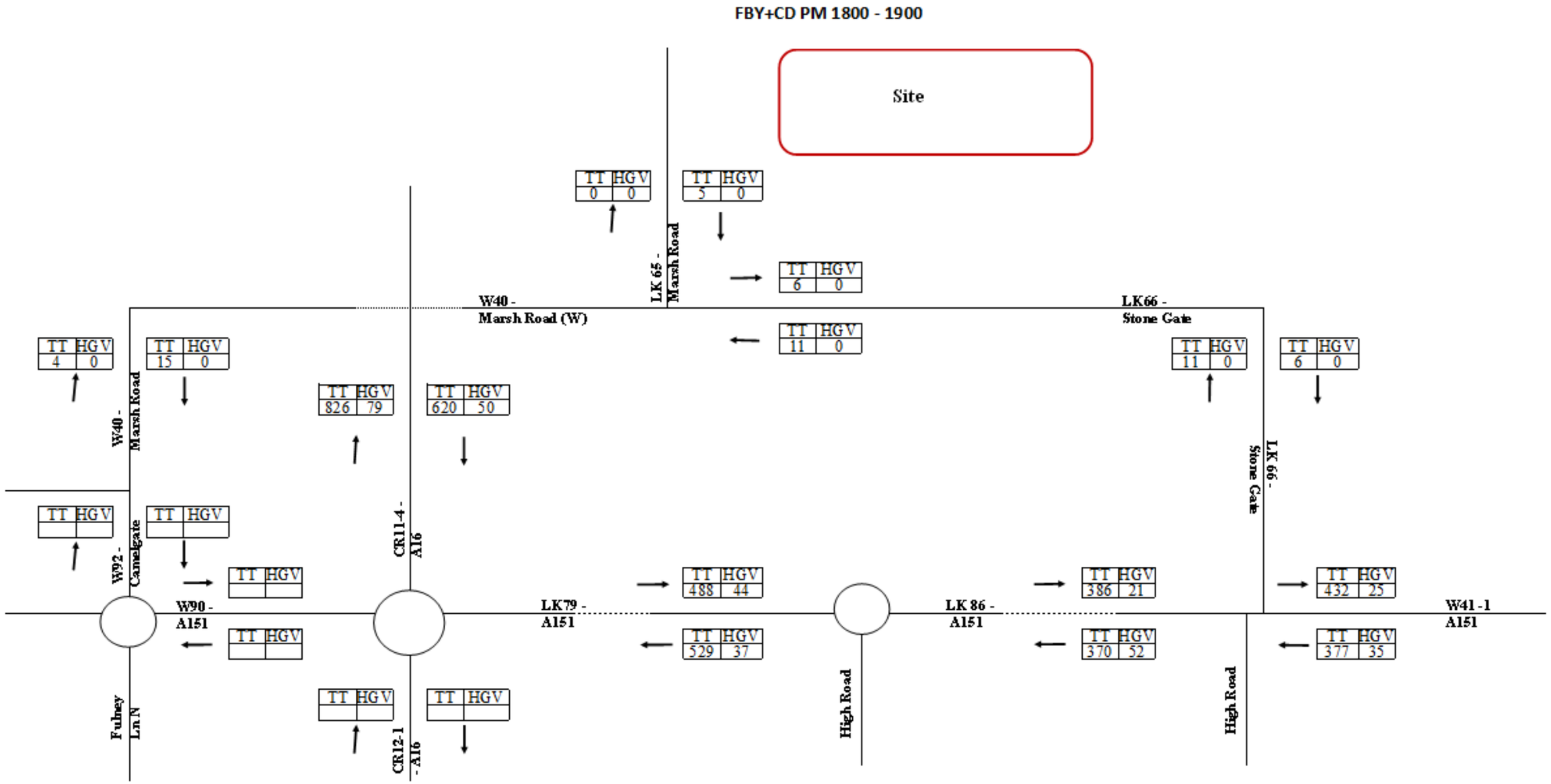


Image 4.9 2029 Future Base Year PM (18:00 to 19:00hrs) hour



4.5.12 A review of personal injury accident data has been undertaken using information from Crashmap (Ref 14) for the latest available five-year period 2018 – 2024, excluding 2020 and 2021 due to the impact of COVID-19 on travel patterns and traffic volumes.

4.5.13 **Image 4.10** and **Image 4.11** show the location and severity of personal injury accidents over the five years for the highway network in the vicinity of the Scheme Site Boundary, comprising the A16, A151 and local roads to the north east of Spalding, in Weston and Moulton. In total, 68 accidents were recorded, comprising 15 accidents resulting in serious injury and 53 resulting in slight injuries. No fatal injury accidents were recorded.

4.5.14 The accidents are spread across the local highway network with no significant clusters. The majority of recorded accidents are on the A16 and A151 rather than local roads. One slight injury accident was recorded on Marsh Road and one slight injury accident recorded at the junction of Stone Gate with A151. Slight clusters are noted at junctions including the A16 Springfields Roundabout, A16 Pinchbeck Roundabout and A151/B1357 priority junction at Moulton.

4.5.15 Of the recorded accidents, seven resulted in injuries to pedestrians; one serious injury accident on the A151, one slight injury accident on the A16 and five slight injury accidents in north east Spalding. In addition, three resulted in injuries to cyclists; one slight injury accident in Weston, one at the West Marsh Road roundabout in Spalding and one serious injury accident at the Springfields Roundabout. Again, these accidents involving pedestrians and cyclists are spread across the local highway network with no clusters indicating potential issues for these road users.

4.5.16 Based on the high level review of accidents, there does not appear to be clusters of accidents indicating road safety issues with the current road layout.

Image 4.10 Accident Data (Source: Crashmap)

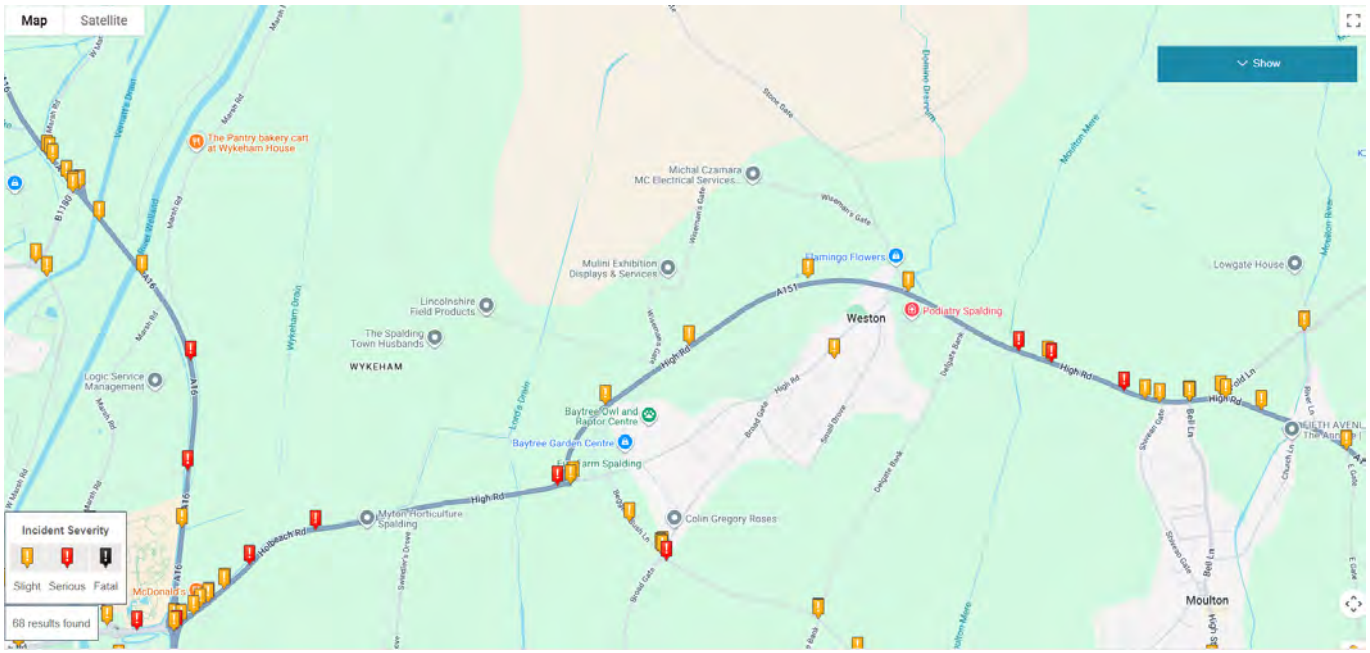
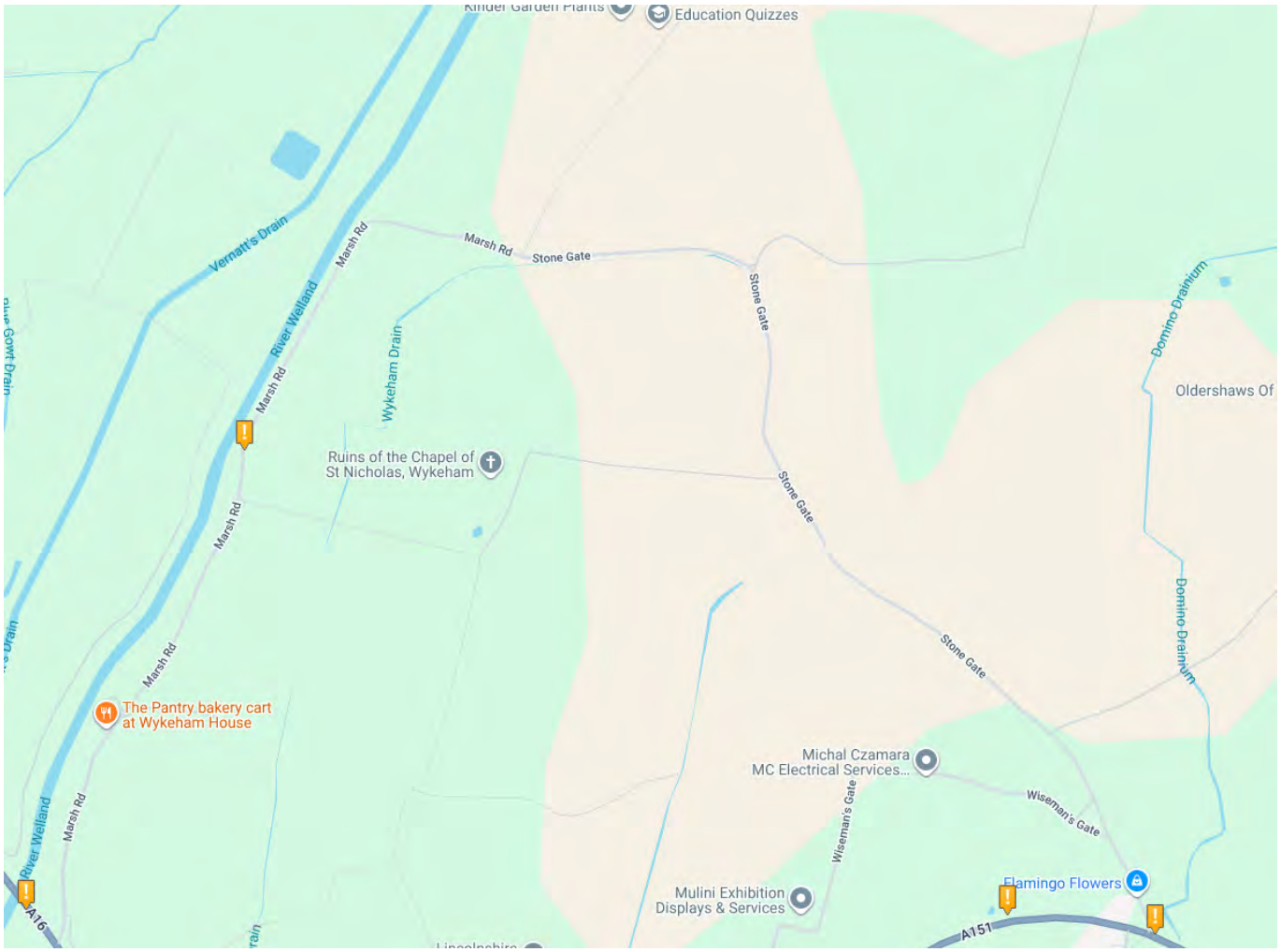


Image 4.11 Accident Data (Source: Crashmap)



5. Impacts and Highway Interventions

5.1 The Scheme

5.1.1 Details of the Substation Works and S37 Overhead Line Works in relation to transport impacts are provided below.

5.1.2 The construction of the Substation Works will generate the peak traffic generation. Construction traffic estimates have been forecast for the associated works required for the proposed Substation Works and S37 Overhead Line Works. This includes HGVs and LGVs transporting materials/equipment to/from the site as well as construction workers vehicles.

5.1.3 As identified at paragraphs 3.4.2 and 3.4.3 forecast traffic flows during operation are forecast to be very low and are not assessed further.

Substation Works

5.1.4 **Figure 4** shows the proposed Substation Works Site Boundary and key components from a transport and highways perspective. Details of the proposed permanent works are set out in the Planning, Design and Access Statement (TCPA application) and Section 37 Statement (S37 applications) and aspects material to this Transport Statement comprise:

1) Construction of Weston Marsh A 400kV Substation.
2) Construction of a new bellmouth and 390m permanent access track to the substation from Marsh Road.
3) Associated permanent drainage, environmental mitigation and landscaping works as part of the new Substation provision.

5.1.5 Temporary works to enable construction of the Scheme comprise:

1) Construction of a new bellmouth access and 7.5m wide temporary haul road running 2.6km from Stone Gate to the Substation Works site.
2) Provision of a temporary compound at the junction of the haul road with Stone Gate to provide a self-contained temporary unit and staff parking.
3) Provision of a temporary compound to the north west of the substation site, including site cabins, welfare facilities and parking for workers cars/vans.
4) Provision of the main construction compound to the south east of the substation for material / equipment laydown and storage.
5) Localised highway interventions on Stone Gate including road widening and potential ditch realignment.
6) Temporary diversion of footpath PRoW Wstn 7/1.

S37 Overhead Line Works

5.1.6 **Figure 1** shows the proposed S37 Overhead Line Works Site Boundaries. The proposed permanent works comprise:

1) Removal of four pylons and connecting overhead lines on the existing 4ZM and 2WS overhead line.

2) Provision of new gantries within the new Weston Marsh Substation A and seven new pylons and new overhead lines to connect the new Weston Marsh Substation A to the existing 4ZM and 2WS overhead lines.

5.1.7 The temporary haul road and compound sites established for construction of the Substation Works will also provide access and working areas for construction of the S37 Overhead Line Works.

Permanent Access Proposals

5.1.8 Access to the new Weston Marsh Substation A will be provided via a new access track from Marsh Road. This will be 390m long and x7.3m wide suitable for access by occasional maintenance cars/vans. At the new access junction with Marsh Road, the access track flares to enable vehicles to turn in and out and provides 4.5m x 160m visibility in each direction for turning vehicles. Details of the proposed highway works are provided on Drawing Reference PDD-1009944-HWY-867 at **Appendix E**. Swept path analysis shows 4x4 cars turning in and out of the junction to demonstrate feasibility of the proposed layout.

Temporary Access Proposals

5.1.9 A temporary haul road from Stone Gate will provide access to the construction site for HGVs and LGVs. Stone Gate is a narrow rural road therefore highway improvements are proposed to enable HGVs to access the site safely. Details of the proposed highway mitigation works are provided on Drawing Reference PDD-100944-HWY-946 at **Appendix E**. Localised widening is provided on Stone Gate at various locations to provide an approximate 6m road width suitable for two way vehicle movements, as agreed with LCC.

5.1.10 At the haul road access junction with Stone Gate, the haul road flares to enable vehicles to turn in and out and provides 4.5m x 160m visibility in each direction. Swept path analysis of 16.15m low loaders has been undertaken to demonstrate the feasibility of the worst case construction vehicles likely to be using the routes, as shown on Drawing Reference PDD-100944-HWY-945. Details of the forecast HGVs using Stone Gate is presented in **Section 5.2** below.

5.1.11 In addition to the haul road, workers' cars/vans will also be able to use Marsh Road and the permanent access track described above to access the temporary construction compound to the west of the new Weston Marsh Substation A. In addition to site offices and welfare facilities, the temporary construction compound will provide parking for construction workers cars/vans to be sufficient to ensure parking does not occur on Stone Gate or Marsh Road.

Public Rights of Way

5.1.12 The Scheme Site Boundary crosses public footpaths Wstn/7/1 and Wstn/8/1.

5.1.13 Environmental mitigation comprising new planting is proposed within fields surrounding PRoW Wstn/8/1. This will not impact the PRoW and footpath access will be retained through construction and operation.

5.1.14 PRoW Wstn/7/1 passes close to the Weston Marsh Substation A Works and under the S37 Overhead Line Works as well as crossing a proposed drainage channel diversion route. Therefore, temporary suspension and diversion of approximately 980m of the existing PRoW route will be required during construction. Two options are currently identified for diversion of the PRoW as shown on **Figure 6**. The proposed temporary diversions will route to the north of the existing 4ZM overhead line with the preferred option routing along a private road and the alternative option routing adjacent to the existing field boundary and both options returning along Marsh Road for connections to footpath Wstn/8/1. The diversions will result in an additional 600-750 m walking distance for users of the PRoW throughout the duration of the proposed construction works. Following construction, the footpath route will be reinstated along its original route including provision for crossing over the diverted drain.

5.1.15 Details of the proposed temporary suspension and diversion will be agreed with the LCC PRoW Officer. General measures include the provision of signage to inform users of the details of the suspension and diversion route as well as the timing of the suspension and appropriate construction site contact details. Condition surveys may be undertaken prior to construction to record the state of the PRoW and diverted route and identify any impact resulting from construction activity and to inform reinstatement measures as required.

5.2 Trip Generation and Distribution

5.2.1 Operational traffic for both the Substation Works and S37 Overhead Line Works are forecast to be very low (approximately four trips a month for routine checks and maintenance at the new Weston Marsh Substation A and typically two trips a year for maintenance at each pylon). On this basis, no further assessment has been undertaken.

5.2.2 Trip generation associated with construction of the Substation Works and S37 Overhead Line Works are presented below based on the methodology set out at **Section 3.4**.

Forecast Traffic Generation

Substation Works/S37 Overhead Line Works

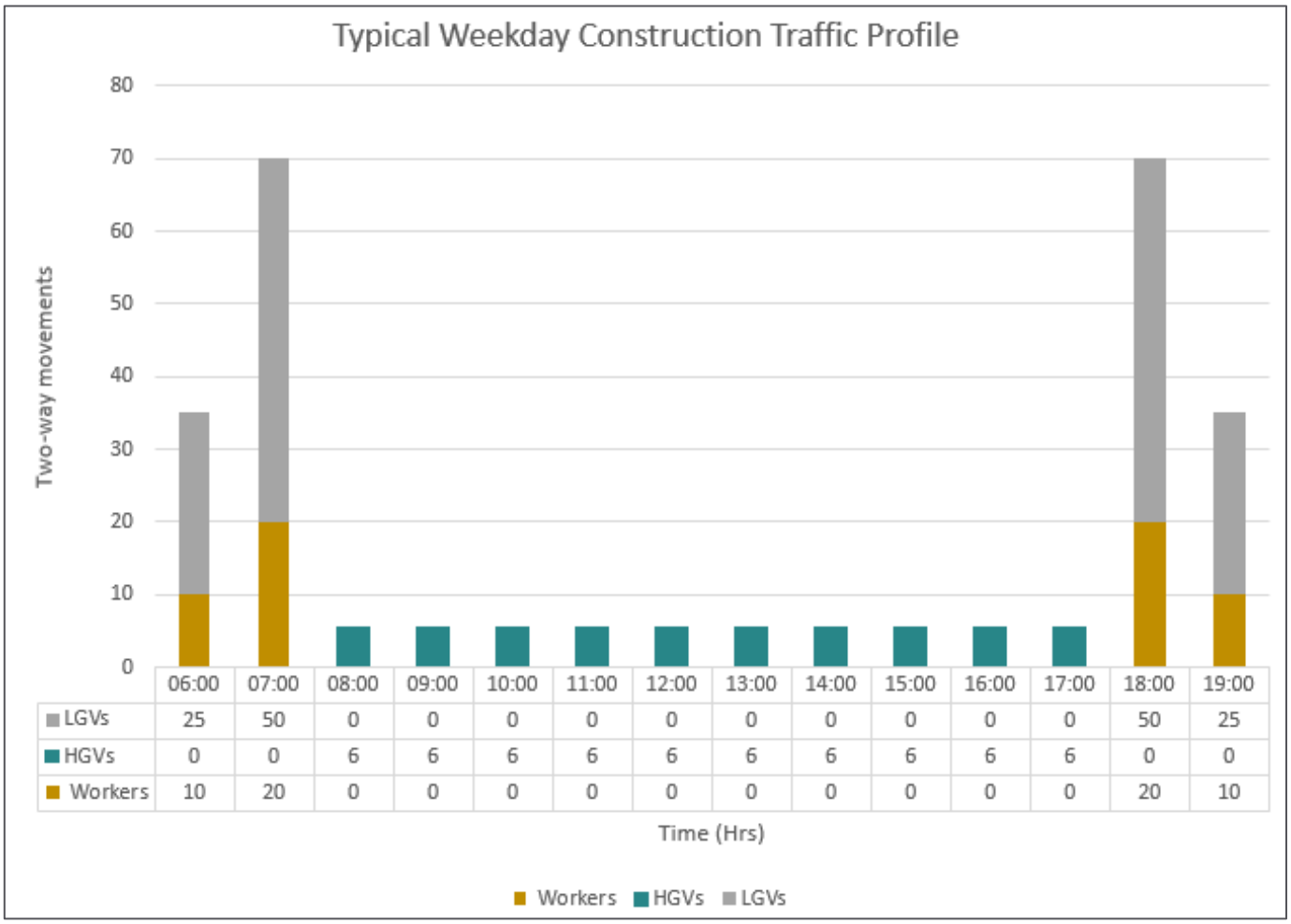
5.2.3 The daily forecast construction traffic flows have been used to determine the peak forecast construction traffic activities across the Scheme as set out in **Section 3.4**. The peak year has been identified as September 2028 to August 2029 with 264 annual average daily construction traffic movements. This comprises 55 HGV movements, 150 LGVs and 60 construction workers cars/vans on average daily during the peak year of construction. The peak daily construction traffic flows are then used to determine the peak hourly flows.

5.2.4 As previously stated at **Section 3.4**, construction workers' cars/LGVs are forecast to arrive at the start of the working day and leave at the end of the day.

Construction LGVs bringing in materials/equipment will also likely arrive at the start of the day and leave at the end. The Scheme's traffic peak hour is calculated to be 07:00 to 08:00 hrs for cars/LGVs in the AM and 18:00 to 19:00 hrs in the PM. Construction HGVs have been profiled to arrive and depart across a 10 hour working day from 08:00 to 18:00 hrs.

5.2.5 **Image 5.1** below shows the development traffic profile across a typical working weekday for construction workers and HGVs. A total of 20 workers cars/vans and 50 LGVs will be added on to the network during the 07:00-08:00 hrs development AM peak and 20 Workers cars/vans and 50 LGVs added during the 18:00-19:00 hrs PM development peak. It is noted that these cars/LGVs avoid the network peak hours of 08:00-09:00 hrs and 17:00-18:00 hrs. During the day, 6 HGV movements will be added to the network each hour, including in the network peak hours 08:00-09:00 hrs and 17:00-18:00 hrs.

Image 5.1 Construction Traffic Profile



	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00
LGVs	25	50	0	0	0	0	0	0	0	0	0	0	50	25
HGVs	0	0	6	6	6	6	6	6	6	6	6	6	0	0
Workers	10	20	0	0	0	0	0	0	0	0	0	0	20	10

Construction Traffic Routes

5.2.6 As identified at **Section 3.4** construction HGV and LGVs will access the site from the A16.

5.2.7 At the A16 / A151 Springfields roundabout HGVs and LGVs will travel east on the A151, turn onto Stone Gate and then to the haul road. Within each hour between 08:00 to 18:00 hours there is forecast to be 3 HGVs arrivals to and 3 HGVs departures from the site. During the peak hour between 07:00 to 08:00 hrs and 18:00 to 19:00 hrs there is forecast to be 50 LGVs entering and 50 LGVs leaving respectively.

5.2.8 Workers' cars/vans will arrive in the AM and depart in the PM. They will access the site via a number of routes. During the peak hour between 07:00 to 08:00 hrs there is forecast to be 20 Workers arrivals and from 18:00 to 19:00 hrs there is forecast to be 20 Workers leaving. The key workers' construction traffic is assigned based on the Gravity Model via the following routes:

1) 75% from the A16 and Spalding - traffic routing is via Camelgate / Roman Bank and the western section of Marsh Road traveling under the A16 and
2) 25% from the A17 and local roads to the south and east - traffic routing is via the A151, Stone Gate and Marsh Road

5.2.9 **Image 5.2** to **Image 5.5** show the forecast construction traffic flow diagrams during the AM and PM peak periods.

Image 5.2 Construction Traffic AM Peak Hour (07:00 – 08:00hrs)

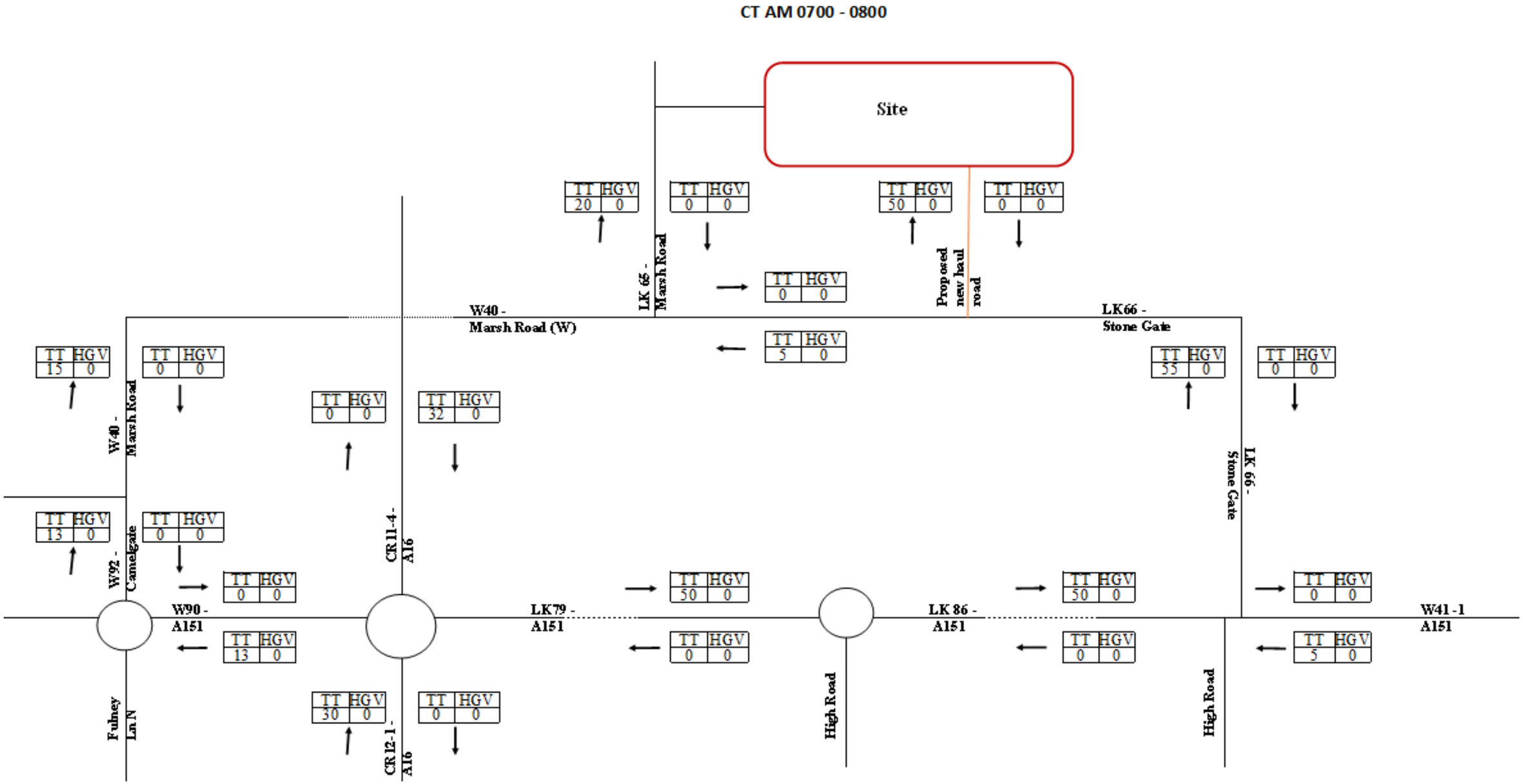


Image 5.3 Construction Traffic AM Peak Hour (08:00 – 09:00hrs)

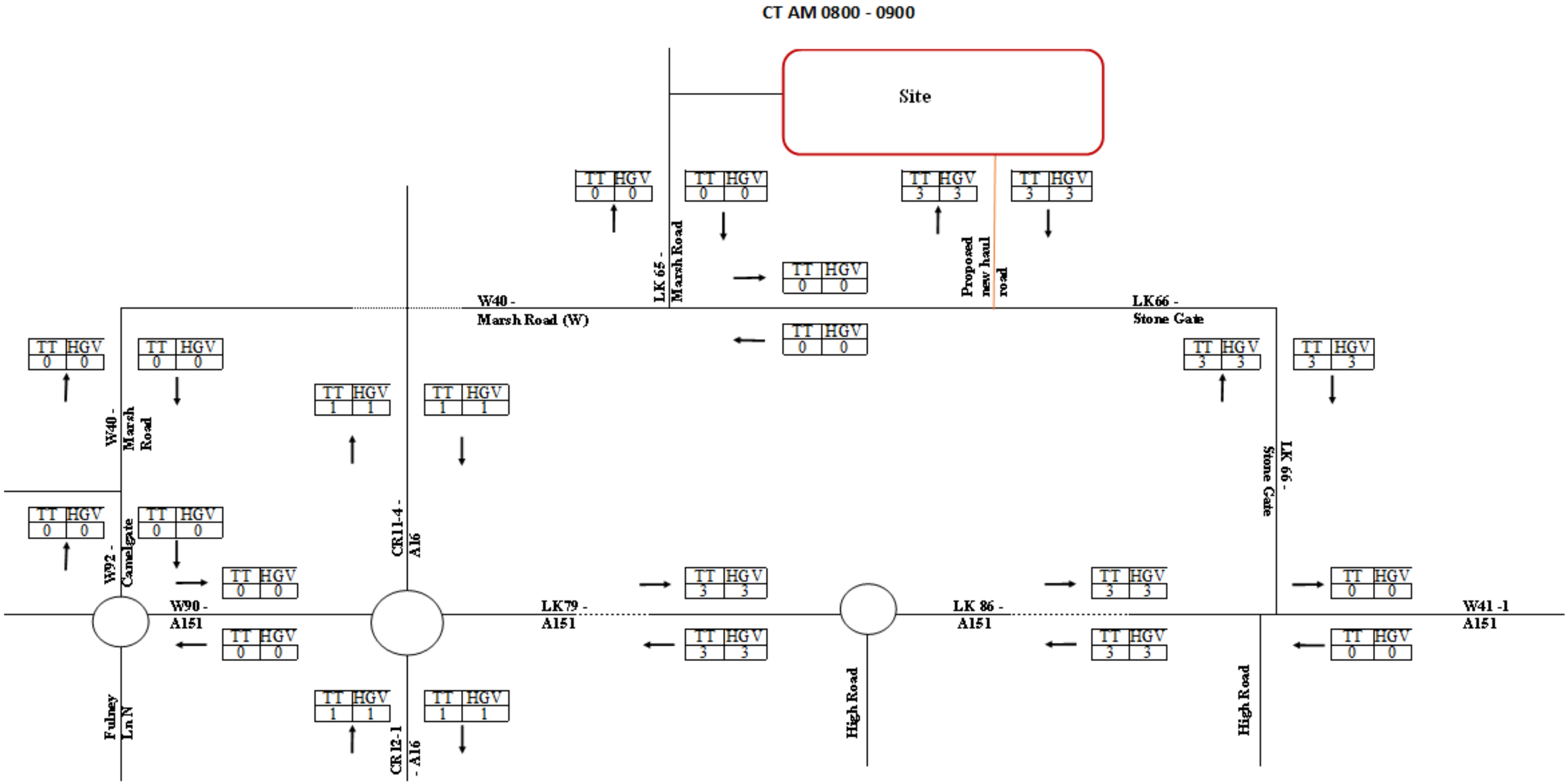


Image 5.4 Construction Traffic PM Peak Hour (17:00 – 18:00 hrs)

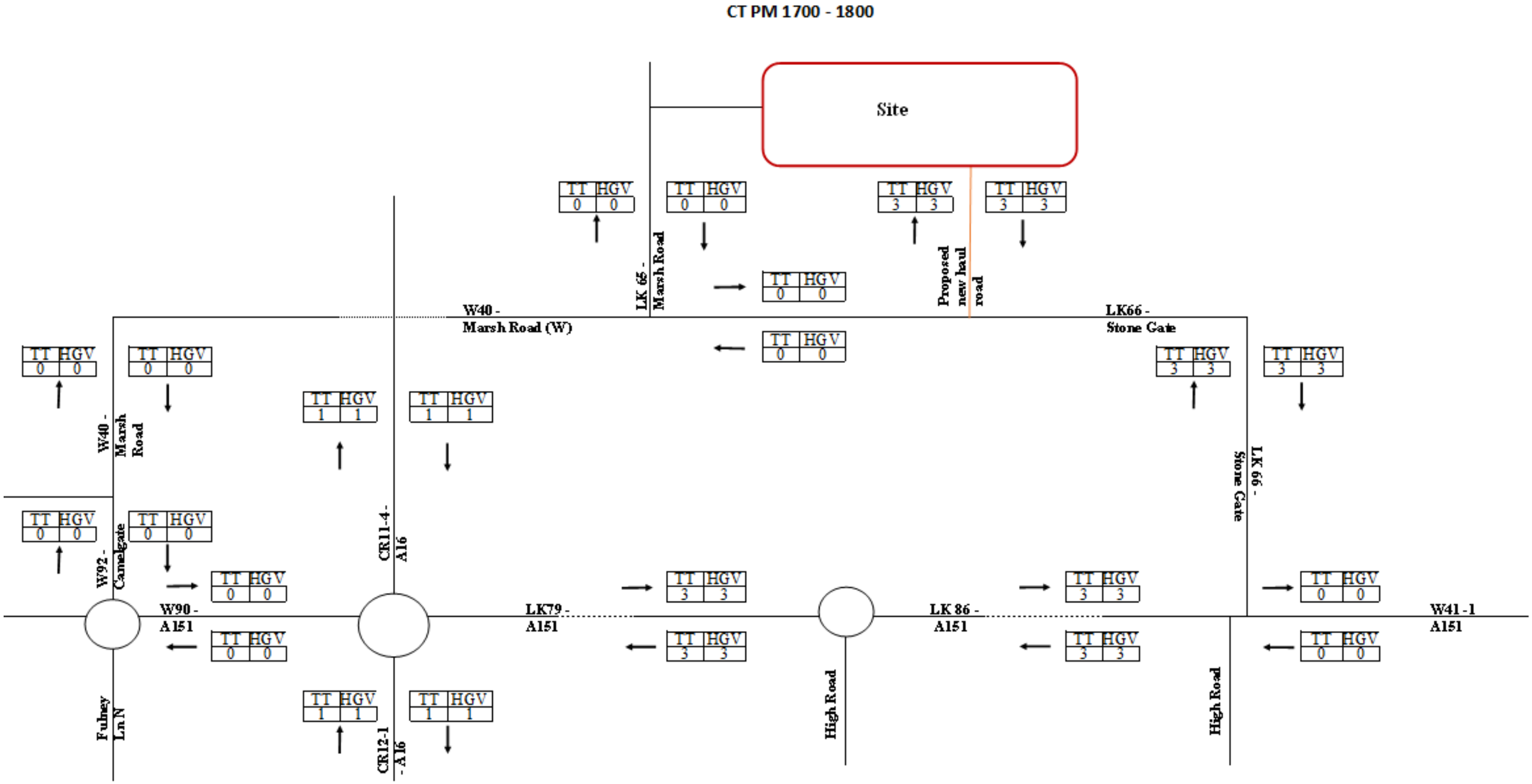
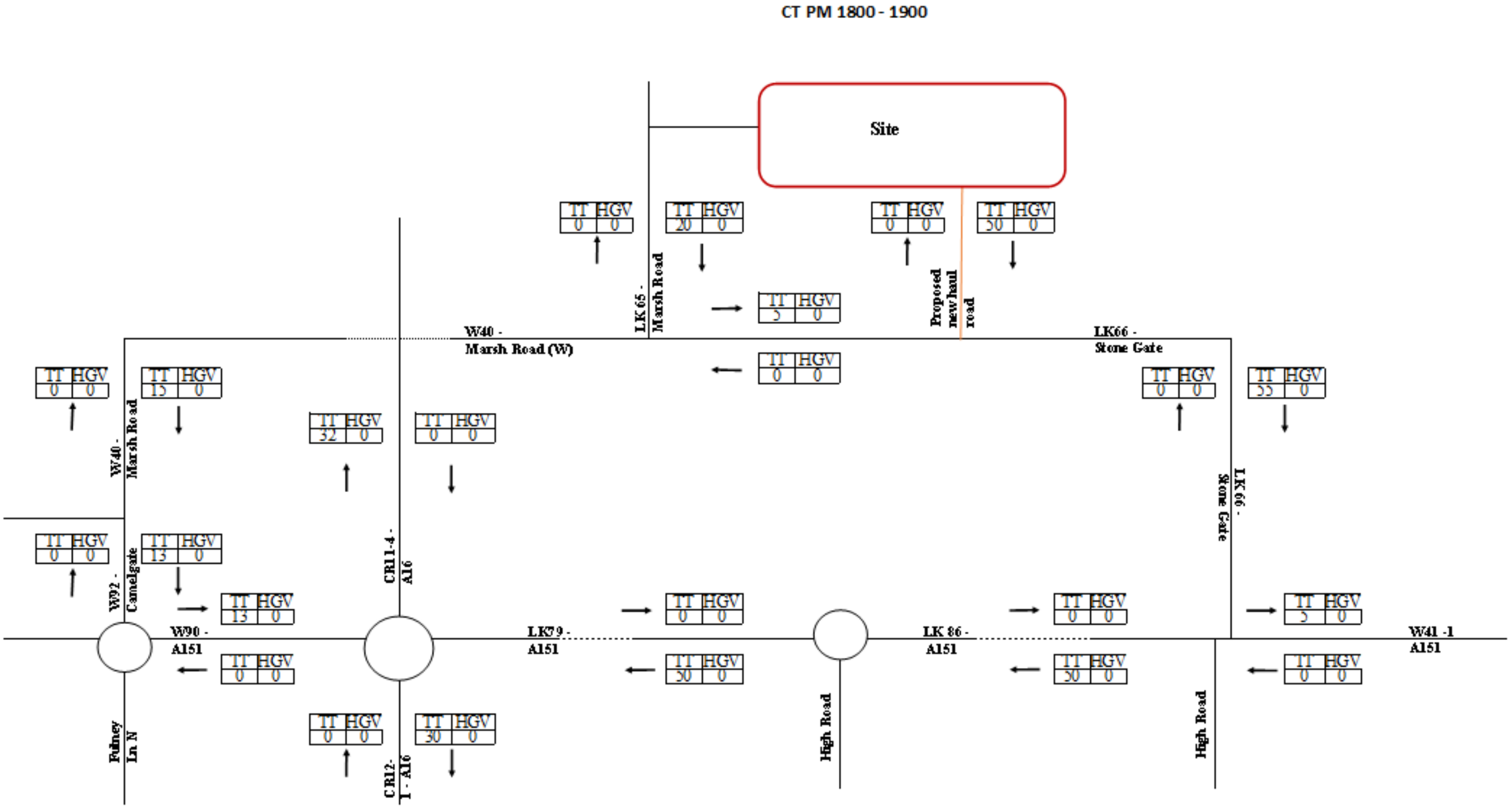


Image 5.5 Construction Traffic PM Peak Hour (18:00 – 19:00hrs)



5.3 Assessment

5.3.1 **Table 5.1** below shows the 2024 Base traffic flows, the 2029 Future Baseline traffic flows, the forecast Scheme construction traffic flows and the calculated percentage increase resulting from construction of the Scheme for each of the highway links providing access. The traffic flows in the AM peak hours 07:00 to 08:00 hrs and 08:00 to 09:00 hrs and the PM peak hours 17:00 to 18:00 hrs and 18:00 to 19:00 hrs are presented within the table, representing both the base network and development peak hours.

Table 5.1 Peak Period Construction Traffic Impact

Link ID	Road Name	2024 Base Traffic Flows (Vehicles) Two-way movements	2029 Future Baseline Flows (Vehicles) Two-way movements	Construction Traffic Two-way movements	Construction traffic % impact on 2029 future baseline flows
AM Peak Period (07:00 – 08:00hrs)					
CR11-4	A16	1777	1894	32	1.7%
LK79	A151	1177	1226	50	4.1%
LK86	A151	949	989	50	5.0%
W41-1	A151	1003	1045	5	0.4%
LK66	Stone Gate	8	8	55	655.9%
LK65	Marsh Road	16	17	20	120.2%
W40	Marsh Road (W)	12	12	15	122.2%
AM Peak Period (08:00 – 09:00hrs)					
CR11-4	A16	1824	1943	3	0.1%
LK79	A151	1224	1275	6	0.4%
LK86	A151	972	1013	6	0.5%
W41-1	A151	1065	1109	0	0.0%
LK66	Stone Gate	6	6	6	87.4%
LK65	Marsh Road	14	15	0	0.0%

Link ID	Road Name	2024 Base Traffic Flows (Vehicles) Two-way movements	2029 Future Baseline Flows (Vehicles) Two-way movements	Construction Traffic Two-way movements	Construction traffic % impact on 2029 future baseline flows
W40	Marsh Road (W)	16	17	0	0.0%
PM Peak Period (17:00 – 18:00hrs)					
CR11-4	A16	1879	2004	3	0.1%
LK79	A151	1336	1394	6	0.4%
LK86	A151	1071	1118	6	0.5%
W41-1	A151	1124	1173	0	0.0%
LK66	Stone Gate	3	3	6	63.6%
LK65	Marsh Road	8	8	0	0.0%
W40	Marsh Road (W)	11	11	0	0.0%
PM Peak Period (18:00 – 19:00hrs)					
CR11-4	A16	1386	1446	32	2.2%
LK79	A151	975	1017	50	4.9%
LK86	A151	725	757	50	6.6%
W41-1	A151	775	809	5	0.6%
LK66	Stone Gate	17	18	55	308.2%
LK65	Marsh Road	5	5	20	383.9%
W40	Marsh Road (W)	18	19	15	81.3%

5.3.2 As shown, the percentage impact of construction traffic on the main roads is generally low. The percentage impact on the A16 and A151 is below 5% during the AM and PM peak hours, except on the A151 (LK86) from 18:00-19:00 hrs when base flows are lower therefore the percentage impact is slightly higher. It is considered this level of impact falls within normal day to day variation of traffic flows, therefore, the likely impact on operation of the local highway will be immaterial.

5.3.3 While the percentage differences on Stone Gate and Marsh Road are much higher, the overall construction traffic flows are modest and the impact is considered unlikely to impact on highway operation and therefore has not been assessed further.

5.3.4 It is noted that the higher construction traffic impacts from 07:00-08:00 hrs and 18:00-19:00 hrs comprise workers cars and LGVs only.

5.3.5 Local junctions including the A16 / A151 Springfields Roundabout and the A151 / Stone Gate priority-controlled junction were discussed with LCC. Both junctions are understood to currently operate satisfactorily with recent improvement works implemented at the A16 / A151 Springfields Roundabout to improve capacity. Based on the forecast development impact, these junctions are considered suitable to accommodate the forecast development construction traffic and no operational issues are expected. On this basis, further assessments of these junctions are not considered necessary.

5.3.6 As stated at **Paragraph 4.1.8**, temporary highway improvements are proposed on Stone Gate to facilitate safer movement of HGVs during construction. These improvements comprise localised widening to provide 6m width to enable two HGVs to pass.

5.4 Construction Traffic Management Plan

5.4.1 Construction Traffic Management Plans (CTMPs) are prepared to demonstrate that a proposed development is planning and managing construction traffic / logistics appropriately. A CTMP aims to manage the impact of construction traffic (particularly during peak periods), reducing congestion and emissions arising from a proposed development whilst ensuring improved vehicle safety for both site staff and surrounding populations and properties. The appointed Main Works Contractor(s) will be responsible for implementing the measures outlined in the CTMP.

5.4.2 At this stage, an OCTMP accompanies the Planning Application and will be updated and agreed with LCC into a Final CTMP as secured through an appropriate planning condition and prior to construction works starting on the site.

6. Summary

6.1.1 This Transport Statement is submitted in support of the planning application for the Substation Works for development of the new Weston Marsh Substation A (the Substation Works). The purpose of this report is to provide the transport context for the Scheme including setting out the transport baseline and forecast transport impacts of the Substation Works. For completeness, it includes forecast impacts associated with the S37 Overhead Line Works. Traffic impacts associated with the Exempt Overhead Line Works are anticipated to be low and not have a material impact on operation of the highway network. Therefore, the associated traffic flows are not included in the assessment.

6.1.2 This Transport Statement is prepared in accordance with National and Local policy, supporting the Scheme which provides infrastructure to help transition towards net zero. While construction of the Substation Works and S37 Overhead Line Works will result in a temporary increase in traffic, this will be managed to maintain efficient operation of the highway network. Mitigation measures will be identified where required and designed to appropriate design standards to ensure road safety. Impacts to walkers, wheelers, cyclists and users of PRoWs will be minimised as far as practicable.

6.1.3 Traffic impacts resulting from operation of the new Weston Marsh Substation A and associated overhead lines are considered to be immaterial and therefore have not been assessed within this Transport Statement. The key impacts are from construction of the Scheme and it is these impacts that have been considered in this Transport Statement.

6.1.4 The study area comprises the local highway network providing access for construction of the Substation Works and S37 Overhead Line Works sites. Core access routes comprise the A16 and A17 which run in an approximate north south direction to the west and east of the construction site respectively and the A151 which connects the A16 and A17 and runs in an approximate east west direction to the south of the construction site. Local access routes comprise Stone Gate and Marsh Road which provide access to the construction site from the A151 and Spalding respectively.

6.1.5 A baseline review has been undertaken including collection of traffic survey data in 2024 and 2025 to establish baseline traffic flows. LCC, as local highway authority has stated the highway network currently operates well with recent improvements at the A16 Springfield Roundabout providing improved capacity. In addition, a review of accident data shows no specific clusters or issues on the local highway network. The Scheme is located outside generally acceptable walking distances from bus stops and rail stations, therefore, it is considered unlikely that public transport will be used to access the construction site. There is limited pedestrian and cycle infrastructure on local roads providing access to the Scheme, and two PRoWs are crossed by the Scheme Site Boundary.

6.1.6 Details of the current construction programme and works activities have been provided to establish construction traffic impacts. Construction of the Scheme is expected to be undertaken from January 2028 to early 2031. The peak year for construction traffic is September 2028 to August 2029 with 265 annual average daily

construction traffic movements. This comprises 55 HGV movements, 150 LGVs and 60 construction workers cars/vans on average daily during the peak year of construction.

6.1.7 Based on the forecast daily flows and construction operations, a total of 20 workers cars/vans and 50 LGVs will be added on to the network during the 07:00-08:00 hrs development AM peak and the 18:00-19:00 hrs development PM peak. It is noted that these cars/LGVs avoid the network peak hours of 08:00-09:00 hrs and 17:00-18:00 hrs. During the day, 6 HGV movements will be added to the network each hour, including in the network peak hours 08:00-09:00 hrs and 17:00-18:00 hrs. On the basis of the forecast hourly construction traffic flows and their hours of impact it is not considered that this will result in severe impact on operation of the local highway network.

6.1.8 Temporary highway improvement works have been identified on Stone Gate to enable construction HGVs to access the construction site with swept path analysis provided to confirm feasibility of vehicle movements.

6.1.9 Temporary suspension and diversion of PRoW Ref Wstn/7/1 is required to maintain safe movement of pedestrians during construction. Details of this will be agreed with the local highway authority and measures in place to advise users of the PRoW.

6.1.10 An OCTMP accompanies the TCPA application submission. This comprises a set of measures designed to be implemented by a site contractor to effectively manage the traffic generated by the construction phase of the proposals and will include measures relating to construction workers travel to the construction site. The OCTMP will be developed and agreed with LCC prior to the start of construction works.

6.1.11 On the basis of this assessment, it is considered that the Scheme can be satisfactorily accommodated on the local transport network.

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Figures

Figure 1 Scheme Site Boundary

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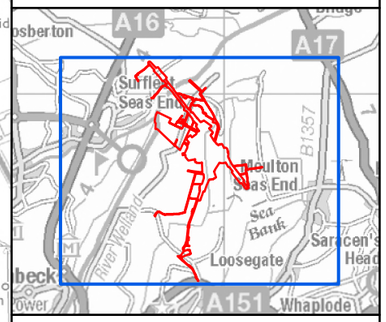

Legend

- Scheme Site Boundary
- Substation Works Site Boundary
- S37 OHL Works Site Boundary
- Exempt Overhead Line Works Site Boundary
- S37 - 4ZM - OHL Works Site Boundary
- S37 - 2WS - OHL Works Site Boundary

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Rev	Date	Description	GIS	Chk	App
A	05/05/2026	First Issue	MM	JH	SB

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Purpose: TRAFFIC AND TRANSPORT

Scheme: PROPOSED ELECTRICITY SUBSTATION AND OVERHEAD LINE WORKS AT WESTON MARSH

Document Title: FIGURE 1 SCHEME SITE BOUNDARY

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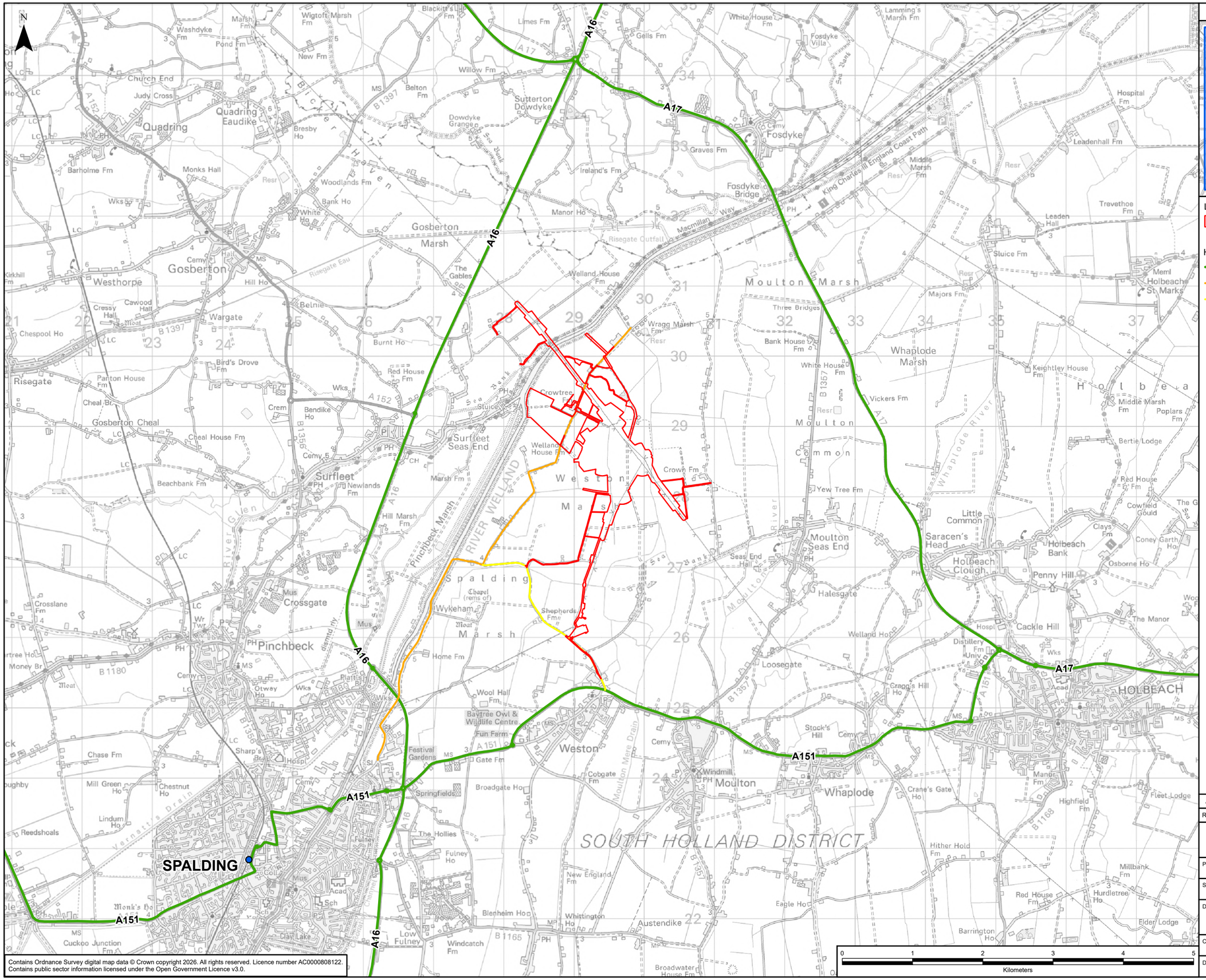
Figure 2 Site Location and Wider Context



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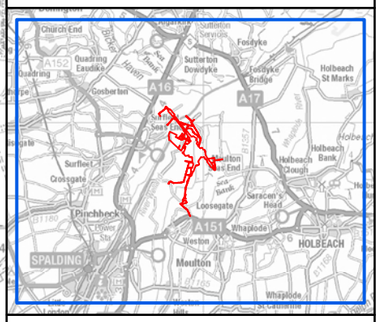

Legend

- Scheme Site Boundary
- Railway Station

Highways Links

- A Road
- Marsh Road
- Stone Gate

Rev	Date	Description	GIS	Chk	App
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Purpose: TRAFFIC AND TRANSPORT

Scheme: PROPOSED ELECTRICITY SUBSTATION AND OVERHEAD LINE WORKS AT WESTON MARSH

Document Title: FIGURE 2 SITE LOCATION AND WIDER CONTEXT

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Figure 3 Local Highway Network

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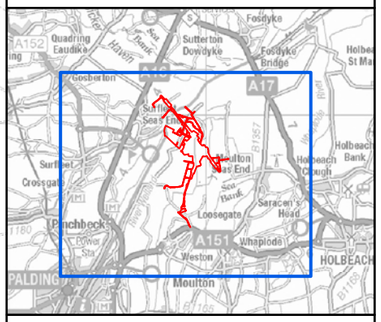

Legend

- Scheme Site Boundary

Highways Links

- A Road
- Marsh Road
- Stone Gate

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Purpose: TRAFFIC AND TRANSPORT

Scheme: PROPOSED ELECTRICITY SUBSTATION AND OVERHEAD LINE WORKS AT WESTON MARSH

Document Title: FIGURE 3 LOCAL HIGHWAY NETWORK

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Figure 4 Proposed TCPA Works Site

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Woad Farm
Roseliegh House
Marsh Drove
Ppg Sta
Willow
Wragg Marsh House
Old Three Tuns Farm
Sea Bank
Sugar Lees Farm
Elder
Elder
Elder
Lord's Drain
The Spinney
Wragg Marsh
Dike
Ppg Sta
School House
Surfleet Bank
Sea Bank
Vernatt's Bridge
NTL Sluice
Reservoir
Crowtree Farm
Bottom Yard
Welland House Farm
LK65
Pickmere
Weston Marsh
28
29
30
31
7
4
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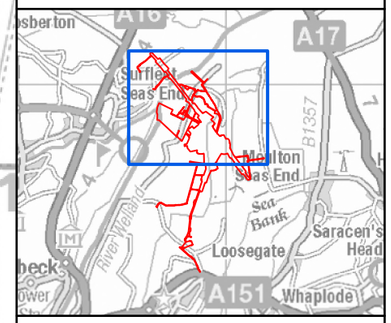

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Legend
- Scheme Site Boundary
- TCPA Substation Site Boundary

Proposed TCPA Substation Works Site
- Indicative Construction Compound
- Substation Boundary
- Indicative Access Route - Stone
- Indicative Access Route - Trackway
- Indicative Maintenance Access
- Indicative Permanent Substation Access Route

Local Highways Network
- Marsh Road

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Rev	Date	Description	GIS	Chk	App
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Purpose: TRAFFIC AND TRANSPORT

Scheme: PROPOSED ELECTRICITY SUBSTATION AND OVERHEAD LINE WORKS AT WESTON MARSH

Document Title: FIGURE 4 PROPOSED TCPA WORKS SITE

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White House Farm
Marsh House Farm
LK65
LK66
Top Yard
Lord's Drain
Dominorum Drain
St Lambert's Hall
St Lambert's Cottages
Hall Gate
Stone Gate
Shepherds Farm
Wiseman's Gate
Chestnut House
Wimberley Hall Farm
Low Gate
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27
26
4
6
3

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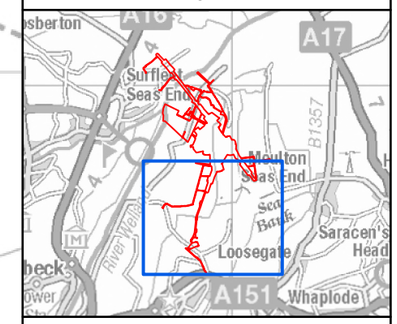

Legend
- Scheme Site Boundary
- TCPA Substation Site Boundary

Proposed TCPA Substation Works Site
- Indicative Construction Compound
- Bellmouths
- Indicative Access Route - Stone
- Indicative Access Route - Trackway
- Indicative Maintenance Access

Local Highways Network
- Marsh Road
- Stone Gate

Rev	Date	Description	GIS	Chk	App
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Purpose: TRAFFIC AND TRANSPORT

Scheme: PROPOSED ELECTRICITY SUBSTATION AND OVERHEAD LINE WORKS AT WESTON MARSH

Document Title: FIGURE 4 PROPOSED TCPA WORKS SITE

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