



Hamble Airfield

Transport Assessment

CEMEX

i-Transport Ref: BH/IN/ITB13040-004 B R

Date: 30 November 2021

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## Quality Management

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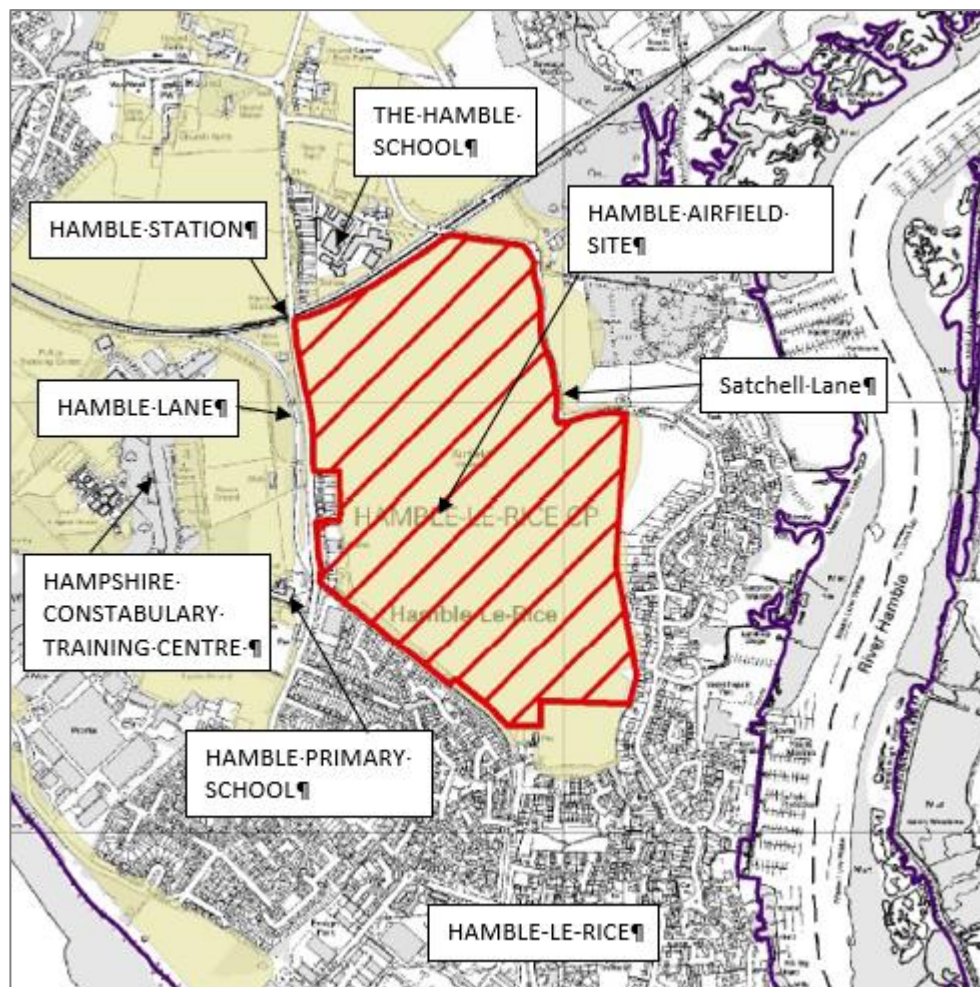
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## SECTION 1 Introduction

### 1.1 Overview

- 1.1.1 i-Transport has been appointed by CEMEX to provide highway and transport advice in relation to the proposed extraction of minerals from land at Hamble Airfield. The site location is shown on **Image 1.1**, whilst the proposed site plan is included as **Appendix A**.

**Image 1.1 Site Location**



Source: Map from Hampshire Minerals and Waste Plan (2013) with Consultants Annotations

- 1.1.2 The site is located to the north of Hamble and has an area of approximately 62 hectares. The existing residential area of Hamble-le-Rice lies to the south and east of the site and the B3397 Hamble Lane forms the western boundary. To the north of the site is Hamble Railway Station which lies on the Portsmouth to Southampton Railway Line and Hamble Community College is further to the north.

1.1.3 The development proposal is for the temporary erection of a new processing plant and related infrastructure, to extract approximately 1.7 million tonnes of sand and gravel. The site will be progressively restored for nature conservation and public access through backfilling with inert restoration materials and in-situ overburden soils.

1.1.4 The site is identified in the adopted Hampshire County Council Minerals and Waste Plan (2013) for extraction of 1.5 million tonnes of sharp sand and gravel. The principle of mineral extraction (and thus the associated vehicle movements) from the site has therefore already been considered by Hampshire County Council (HCC).

## 1.2 Scope and Structure

1.2.1 In line with NPPF requirements, this Transport Assessment (TA) has been produced in accordance with the guidance contained in the National Planning Practice Guidance.

1.2.2 The National Planning Policy Framework (NPPF) outlines four key transport 'tests' for development in its Paragraph 110 which are broadly comparable to local policy requirements.

1.2.3 In transport terms, the policy framework requires development sites to demonstrate that:

- Safe and suitable access to the site can be achieved for all users;
- Appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;
- The roads, parking areas, other transport elements of the scheme are in accordance with prevailing design guidance; and
- 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 against to an acceptable degree.

1.2.4 Paragraph 111 of the NPPF confirms 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 would be severe.”***

1.2.5 The TA has been produced to assess the proposal against these policy requirements.

1.2.6 The Transport Assessment has been influenced by pre-application discussions with Hampshire County Council (HCC), the local highway authority, and has been subject to HCC's Pre-App Design Review Process. A copy of the relevant correspondence is provided at **Appendix B**.

1.2.7 The remainder of this TA is structured as follows:

- **Section 2** provides an overview of relevant national and local transport policies;
- **Section 3** summarises the existing transport conditions in the vicinity of the site;
- **Section 4** sets out the details of the development proposal;
- **Section 5** sets out the methodology for assessing the impact of the proposal and the impact resulting from the development;
- **Section 6** provides an assessment of the environmental impact of the proposed development; and
- **Section 7** provides a summary and conclusion.



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## SECTION 2 Policy Context

2.1.1 This section of TA summarises the national and local transport policies which provide the context for the transport appraisal of the development.

### 2.2 National Transport Policy

#### National Planning Policy Framework (NPPF)

2.2.1 The NPPF sets out the Government's planning policies and how these are expected to be applied. Paragraph 11 of the NPPF sets out that there is a presumption in favour of sustainable development:

***"At the heart of the National Planning Policy Framework is a presumption in favour of sustainable development, which should be seen as the golden thread running through both plan-making and decision-taking."***

2.2.2 The Framework states that all developments that generate significant amounts of movement should be supported by a Transport Statement or a Transport Assessment and a Travel Plan (ref. paragraph 113).

2.2.3 In terms of specific transport policies within the NPPF, paragraph 110 states that decisions should take account of whether:

- appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;
- safe and suitable access to the site can be achieved for all users;
- the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code; and
- 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

#### Planning Practice Guidance

2.2.4 The Planning Practice Guidance (PPG) provides advice on when transport assessments, transport statements and travel plans are required and, what they should contain. Details regarding the overarching principles and information relating to each document are provided within the PPG.

## 2.3 Local Policy

### Hampshire Local Transport Plan 2011-2031

2.3.1 Hampshire's Local Transport Plan (LTP) sets out how transport can provide for safe, efficient and reliable travel and transport around a prospering and sustainable Hampshire to 2031 and beyond.

2.3.2 The Local Transport Plan sets out the three main priorities for the transport network in Hampshire:

- 1 ***"To support economic growth by ensuring the safety, soundness and efficiency of the transport network in Hampshire;***
- 2 ***Provide a safe, well-maintained and more resilient road network in Hampshire at the basic transport infrastructure of the county on which all forms of transport directly or indirectly depend, and key to continued casualty reduction; and***
- 3 ***Manage traffic to maximise the efficiency of existing network capacity, improving journey time reliability and reducing emissions, thereby supporting the efficient and sustainable movement of people and goods."***

2.3.3 These main priorities are supported by 14 policy objectives which are set out under five broad themes, as follows:

- ***"Supporting the economy through resilient highways;***
- ***Management of traffic;***
- ***The role of public transport;***
- ***Quality of life and place; and***
- ***Transport and growth areas."***

2.3.4 Specifically with regards to HGVs one of the core challenges identified in the policy document is:

***"Managing and mitigating the impacts of increasing traffic, including HGV movements on core routes and in more rural areas".***

### Hampshire Minerals and Waste Plan (October 2013)

2.3.5 Hampshire County Council, Portsmouth City Council, Southampton City Council, New Forest National Park Authority and the South Downs National Park Authority (the 'Hampshire Authorities') have produced the Hampshire, Portsmouth, Southampton, New Forest National Park and South Downs National Park Minerals and Waste Plan (the 'Hampshire Minerals and Waste Plan') in partnership.

2.3.6 Hamble Airfield is considered to be the best option for providing a local supply of sharp sand and gravel. Section 3 of Policy 20 *Local Land-Won Aggregates* states:

***“An adequate and steady supply of locally extracted sand and gravel will be provided by maintaining a landbank of permitted sand and gravel reserves sufficient for at least seven years from...”***

***3. new sand and gravel extraction sites, provided the proposals address the development considerations outlined in ‘Appendix A - Site allocations’: ...***

***iii. Hamble Airfield, Hamble’le’Rice (sharp sand and gravel) (Inset Map 9) – 1.50 million tonnes”***

2.3.7 The transport related site-specific development considerations listed in Appendix A of the Plan state:

- ***“Safe and satisfactory access to ensure provision is made for vulnerable highway users and the impact on peak flows is managed.***
- ***Traffic issues including consideration of school traffic and pedestrians, particularly at Hamble Community Sports College and Hamble Primary, and management of traffic and congestion on Hamble Lane”.***

### Eastleigh Borough Local Plan (Saved Policies) 2001-2011

2.3.8 Local policy is set out in the saved policies of the Eastleigh Borough Local Plan which was adopted in May 2006. Whilst the Local Plan is now out of date, in May 2009 the Secretary of State ‘saved’ a selection of policies which remain in full force and effect.

2.3.9 In terms of transport and accessibility, the Local Plan seeks to reduce the need to travel; promote measures increase the use of public transport and improve walking and cycling; improve highway safety; and ensure that development is located so that it is accessible by non-car modes.

### Eastleigh Borough Local Plan review (2016-2036)

2.3.10 2.3.7 Eastleigh Borough Council is in the process of preparing a new Local Plan, which sets the vision and framework for future development of the borough to 2036 and address local housing, community as well as strategic infrastructure need.

2.3.11 Draft Policy DM13 *General Development Criteria – Transport* states that:

***'All new development must have safe and convenient access to the highway network and make provision for access to, and by, other transport modes including public transport and cycle and pedestrian routes as appropriate.***

...

***Development proposals (above a specific size to be determined by the Council) that will generate vehicle movements likely to have an adverse impact on traffic conditions beyond the immediate vicinity of the development site must be subject to Transport Assessment and will be required to incorporate and implement mitigation measures such as:***

- ***provision of / contribution towards on and off-site highway improvements such as junction improvements and potentially new road links where appropriate***
- ***on-site pedestrian, cycle and public transport infrastructure where appropriate • contributions towards relevant off-site sustainable transport infrastructure and service improvements***
- ***on-site measures aimed at increasing uptake of non-car travel options (e.g. Travel Plans<sup>53</sup>) to reduce car use***

***New development intended to serve or accommodate large numbers of people will only be permitted in locations that as well as having adequate road access, or will have as a result of the development, are or can be served by means of transport other than the private car, including bus, train, cycle and pedestrian access'***

2.3.12 The draft Local Plan identifies that Hamble Lane is the only link that provides access to Hamble. It is identified as having peak hour congestion and thus notes that improvements are likely to be required.

### Eastleigh Strategic Transport Study (2015)

2.3.13 The Eastleigh Strategic Transport Study identifies the need for the potential strategic transport infrastructure improvements required to be delivered over the Local Plan period to 2036.

2.3.14 The study identifies the A3025 Hamble Lane as a corridor of interest requiring capacity improvements. The study sets out 'Do Minimum' (signalisation schemes) and 'Do Maximum' (signalisation and lane widening schemes) options for improvement at the Tesco junction, Jurd Way junction and Portsmouth Road junction and evaluates them against a set criterion in relation to design compliance, traffic impacts, environmental impacts, land requirements and scheme costs.

## 2.4 Summary

2.4.1 The site is allocated in the Hampshire Minerals and Waste Plan and is considered to be the best option for providing a local supply of sharp sand and gravel.

2.4.2 The NPPF confirms that there is a presumption in favour of sustainable development. Taken together, national and local transport planning policy requires new development to be accessible by a range of modes of transport including walking, cycling and public transport, so as to minimise the number and length of car journeys.

2.4.3 Safe and suitable access to sites should be achieved for all people. Account should be taken of whether the opportunities for sustainable transport modes have been taken up, depending on the nature and location of the site, to ensure the need to travel will be minimised and the use of sustainable transport modes can be maximised. The assessment should take account of whether improvements can be undertaken within the transport network that cost-effectively limit the significant impacts of the development, and that development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe.

2.4.4 The subsequent sections of the TA describe how the proposed development complies with these local and national transport planning policy considerations.

## SECTION 3 Existing Transport Conditions

### 3.1 Site Location

3.1.1 A site location plan is provided as **Image 1.1**. The site is located to the north of Hamble and has an area of approximately 62 hectares. The existing residential area of Hamble-le-Rice lies to the south and east of the site and the B3397 Hamble Lane forms the western boundary. To the north of the site is Hamble Railway Station which lies on the Portsmouth to Southampton Railway Line and Hamble Community College is further to the north.

### 3.2 Local Highway Network

3.2.1 Hamble Lane forms the western boundary of the site. Hamble Lane is a single carriageway road, measuring approximately 9.5m in width, with a 30mph speed limit and has street lighting. It generally runs in a north south alignment and connects to the train station and roundabout providing access to Netley via Hound Road and onwards towards the A3024 and A27 via Windhover Roundabout to the north. To the south, Hamble Lane leads into Hamble-le-Rice.

3.2.2 There are currently no parking facilities along the site frontage on Hamble Lane.

3.2.3 The Site also fronts onto Satchell Lane, which is a single carriageway road with a 30mph speed limit. Satchell Lane is rural in nature and there are a number of bends along the frontage.

3.2.4 Automatic Traffic Count (ATC) surveys were undertaken on Hamble Lane in May 2017. Given the COVID-19 pandemic and associated travel restrictions, it has not been possible to obtain new traffic data during the preparation of the application. As such, unadjusted growth rates have been obtained using TEMPRO and applied to the traffic flows to represent 'neutral 2021 conditions'. Analysis of the survey data identified that the peak hours on the local highway network are 08:00 to 09:00 and from 18:00 to 19:00. The survey was undertaken approximately 65m to the north of the access to Hampshire Constabulary's Training Centre.

3.2.5 A Summary of the observed and 2021 two-way vehicle movements on Hamble Lane in the vicinity of the proposed access is summarised in **Table 3.1**.

**Table 3.1 Peak Traffic Flows – Hamble Lane**

Location	Morning Peak (08:00-09:00)			Evening Peak (18:00-19:00)		
	North	South	Two-Way	North	South	Two-Way
2017 Observed Flows	447	820	1,267	612	693	1,304
2021 Flows	480	862	1,342	645	731	1,375

Source: May 2017 ATC Traffic Survey (5-day Average)

3.2.6 As shown in **Table 3.1**, the existing traffic flow on Hamble Lane is circa 1,342 – 1,375 two-way movements during the morning and evening peak periods. This equates to 22-23 vehicle movements every minute.

3.2.7 The recorded mean and 85th percentile speeds obtained from the ATC surveys on Hamble Lane are summarised in **Table 3.2**.

**Table 3.2 Summary of Recorded Speed Data**

Location	Speed	Northbound (mph)	Southbound (mph)
Hamble Lane	Mean	34.0	34.2
	85th Percentile	40.3	39.4

Source: Traffic Surveys

#### Pedestrian / Cycle Use of Hamble Lane

3.2.8 A survey of pedestrian movements on the existing shared use footway / cycleway adjacent to Hamble Lane was undertaken to consider the adequacy of the pedestrian facilities at the proposed access. The results are summarised in **Table 3.3**. The survey was undertaken on Thursday 13 July 2017, during school term time.

3.2.9 The survey identified the peak pedestrian and cycle periods are between:

- Morning Peak – 08:00 - 09:00; and
- Evening Peak - 15:00 – 16:00.

**Table 3.3: Summary of Pedestrian Survey Data**

	Morning Peak Hour (08:00 – 09:00)		Evening Peak Hour (15:00 – 16:00)	
	Pedestrians	Cycles	Pedestrians	Cycles
Southbound	4	12	61	14
Northbound	53	13	7	12
Two-Way	57	25	68	26

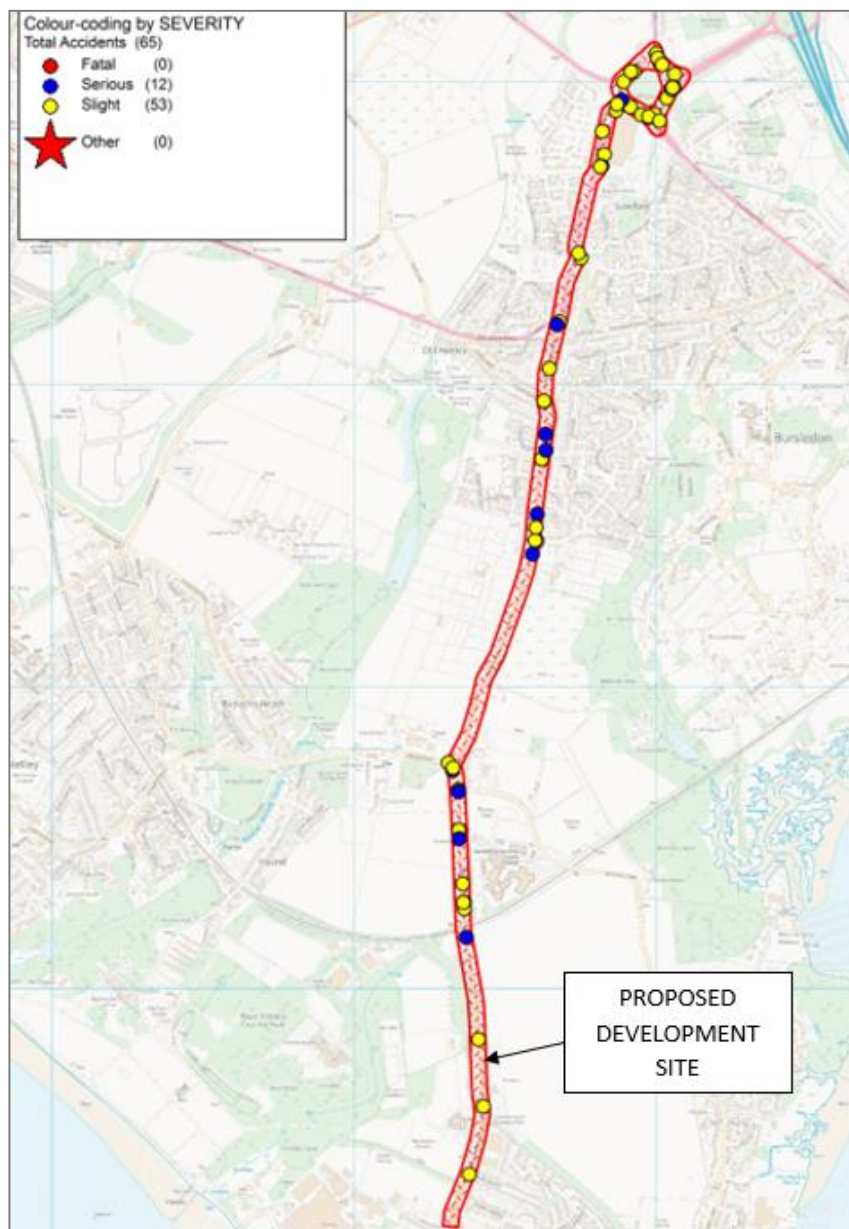
Source: 2017 Pedestrian / cycle traffic surveys

3.2.10 As summarised in **Table 3.3**, in the morning peak period, the majority (approx. 80%) of pedestrian and cycle movements are northbound on Hamble Lane. In the evening peak, the majority (approx. 82%) of pedestrian and cycle movements are southbound on Hamble Lane. The direction and timing of pedestrian and cycle movements appears to coincide with the start and finish times of The Hamble School, located to the north of the proposed minerals site. The school day starts at 08:30 and finishes at 14:55.

### Highway Safety

- 3.2.11 Personal Injury Accident data has been obtained from the Hampshire Constabulary for the five-year period between 1 January 2016 to 31 December 2020.
- 3.2.12 The data covers a study area consisting of the extent of Hamble Lane, from and including Windhover Roundabout to the north to the priority junction with Kings Avenue to the south. The study area and the location of accidents is illustrated in **Image 3.1**.
- 3.2.13 A total of 65 accidents were recorded in the study area during the recent five-year period, consisting of 12 serious accidents and 53 accidents of a slight nature.

Image 3.1 PIA Extent



Source: Hampshire Constabulary



- 
- 3.2.14 A total of 65 collisions have been recorded in the latest-five-year period within the study area, comprising of 53 slight and 12 serious severities.
- 3.2.15 A copy of the full PIA data is included as **Appendix C**, whilst a summary of the personal injury accident data analysis in the vicinity of the proposed development is provided below.
- 3.2.16 The following text provides a description of the 16 accidents which occurred in close proximity to the site access (between the Hamble Lane / Hound Lane Roundabout and the priority junction with Sydney Avenue):
- Three collisions, all slight in nature occurred at the junction between Hamble Lane and Satchell Lane. One was a shunt type collision and resulted in a slight injury, another collision recorded as slight in nature occurred when a car entered the roundabout into the path of a bicycle travelling on the roundabout. The third collision, which was serious in nature occurred when a cyclist tried to mount the pavement and lost control causing them to fall off.
  - Two collisions occurred at the Satchell Lane / Hamble Lane priority junction. One was a shunt type collision resulting in a slight injury, whilst the other occurred when a car turning right out of Satchell Lane onto Hamble Lane and failed to see a motorcycle travelling along Hamble Lane and collided resulting in a serious injury;
  - Two collisions occurred at the signalized pedestrian crossing on Hamble Lane in the vicinity of Hamble School. One was recorded as slight in nature when a car travelling north failed to stop for a pedestrian using the crossing, whilst the second which was recorded as serious in nature occurred when a pedestrian crossed into the path of an oncoming vehicle when the pedestrian light was on red;
  - Circa 50m to the north of the entrance to Broad Way, a collision recorded as serious in nature occurred when a motorcycle clipped a kerb and caused the rider to fall from the bike;
  - One collision which was recorded as slight in nature occurred adjacent to Broadway when a pedestrian stepped out into the road in front of an oncoming car;

- Three collisions occurred in proximity to the egress from Broad Way, all of which were slight in nature. One occurred when a car exiting Broad Way onto Hamble Lane failed to give way to a cyclist travelling south along Hamble Road, whilst another other occurred when a pedestrian walking on the footway suddenly stepped out into the carriageway into the path of an oncoming vehicle. The third occurred when a car leaving Broad Way collided with a cyclist travelling north on cycleway along Hamble Lane.
- A serious collision occurred approximately 50m to the south of the railway bridge when a car towing a trailer and travelling south along the B3397 Hamble Lane overtook a cyclist. As the car pulled back in the trailer hit the cyclist;
- One collision occurred approximately 100m to the south of the access (to the south of the access to the police training centre) when a car travelling south misjudged the edge of the carriageway, lost control and collided with a tree on the verge.
- One collision which was slight in nature occurred when a car pulling out of Hamble Self Storage failed to give way to a cyclist travelling along the cycleway on Hamble Lane; and
- The final collision occurred at the junction between Verdon Avenue and Hamble Lane occurred when a vehicle exiting Verdon Avenue pulled out onto Hamble Lane into the path of an oncoming motorcycle.

3.2.17 It is noted that there have been no accidents involving large vehicles (3.5T and over).

3.2.18 As such, the latest available accident record does not highlight any existing highway defects or safety issues that would be exacerbated by the proposed development.

### 3.3 **Walking and Cycling**

3.3.1 A continuous shared use footway/cycleway (the Dani King cycleway) is provided on the eastern side of Hamble Lane along the site frontage. To the south of Hamble Railway Station there is also a shared use footway/cycleway along the western side of Hamble Lane, providing an additional facility for pedestrians and cyclists between the Rail Station and Hampshire Constabulary's training facilities. There is an uncontrolled pedestrian crossing with dropped kerbs, tactile paving and a pedestrian refuge island approximately 35m to the north of the access to Hampshire Constabulary's Training Centre.

- 3.3.2 Hamble Lane also provides direct cycle access to National Cycle Route 2, as shown in **Image 3.2** which is a long distance route between Dover and St Austell, however, in the vicinity of the site, it provides access to centre of Hamble-Le-Rice to the south east and Netley to the west. Continuing west the route provides access to Weston, Woolston and Southampton via a network to traffic free and on-road routes.

**Image 3.2 Extract of National Cycle Route 2**



Source: Sustrans National Cycle Network Map

### 3.4 Public Transport Accessibility

#### Bus

- 3.4.1 The nearest bus stop to the site is located on the B3397 Hamble Lane, approximately 200m south from the site access.
- 3.4.2 The bus stops in both directions consist of a flag and pole and provide timetable information. The northbound bus stop also provides seating. The bus stops are served by route 6 between Southampton City Centre and Hamble-le-Rice village centre.
- 3.4.3 A summary of the bus routes and service frequency is outlined in **Table 3.3**

**Table 3.3 Summary of Local Bus Services**

Route	Destination	Service Frequency		
		Weekday	Saturday	Sunday
6	Southampton City Centre – Hamble	Every 30 minutes	Every hour	-

Source: Traveline [accessed September 2021]

- 3.4.4 The first service arrives at the bus stops near the site at 06:18 from Hamble and 05:57 from Southampton. The last service departing leaves the stops nearest the site at 21:37 to Hamble and 21:45 to Southampton. Consequently, it can be seen that the site can be accessed by a frequent service which operates from early in the morning to late in the evening and could be used by staff and/or visitors to access the site.

### **Rail**

- 3.4.5 Hamble Railway Station is located approximately 300m north of the site access. The station is managed by South Western Railway who operate the majority of services and provides for journeys towards a range of destinations which include London Victoria, London Waterloo, Bournemouth, Manchester, Salisbury, Portsmouth, Cardiff and Brighton. A summary of the service frequency is outlined in **Table 3.4**.

**Table 3.4 Summary of Train Service Frequency**

Destination	Service Frequency (Weekdays)	
	Peak	Off-Peak
Southampton Central	1 per hour	1 per hour
Portsmouth & Southsea	1 per hour	1 per hour

Source: National Rail

- 3.4.6 Hamble station has step-free access and 4 bike storage spaces.
- 3.4.7 As such it can be seen that staff and visitors travelling to the site would have good opportunities to travel by rail services.

## **3.5 Summary**

- 3.5.1 Pedestrian and cycle facilities within the vicinity of the site are typical of a suburban area and provide good and continuous access to the surrounding areas of Hamble. The site is within walking and cycling distance of a large area of Hamble as well as the adjacent areas of Netley and thus there are good opportunities for staff and visitors to access the site on foot or by bike.

- 3.5.2 There are also good public transport opportunities to access the site with frequent bus services and regular trains, both of which can be accessed by foot or bicycle.
- 3.5.3 Hamble Lane along the site frontage accommodates two-way traffic flows of circa 1,300 – 1,400 vehicles in the peak hours with recorded 85<sup>th</sup> percentile speeds of circa 40mph in both directions. The latest available accident record does not highlight any existing highway defects or safety issues that would be exacerbated by the proposed development.

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## SECTION 4      Development Proposals

### 4.1      Overview

4.1.1      The development proposal is for the temporary erection of a new processing plant and related infrastructure, to extract approximately 1.6million tonnes of sand and gravel. The site will be progressively restored for nature conservation and public access through backfilling with inert restoration materials and using in-situ overburden soils.

### 4.2      Access Strategy

#### Vehicular Access

4.2.1      It is proposed to provide a new entrance to the extraction site from Hamble Lane towards the southern extent of the site frontage, which will take the form of a simple priority junction.

4.2.2      The location of the access has been carefully selected to minimise the impact on trees along Hamble Lane and the site frontage and the proposed access arrangements have been subject to a Pre-Application Design Review (PADR) with HCC which has informed the design of the access. Through the PADR process the design of the access has evolved to help address comments raised. The PADR report prepared by HCC as well as a designer's response, setting out the subsequent changes and justification for the location of the access, is provided at **Appendix B**.

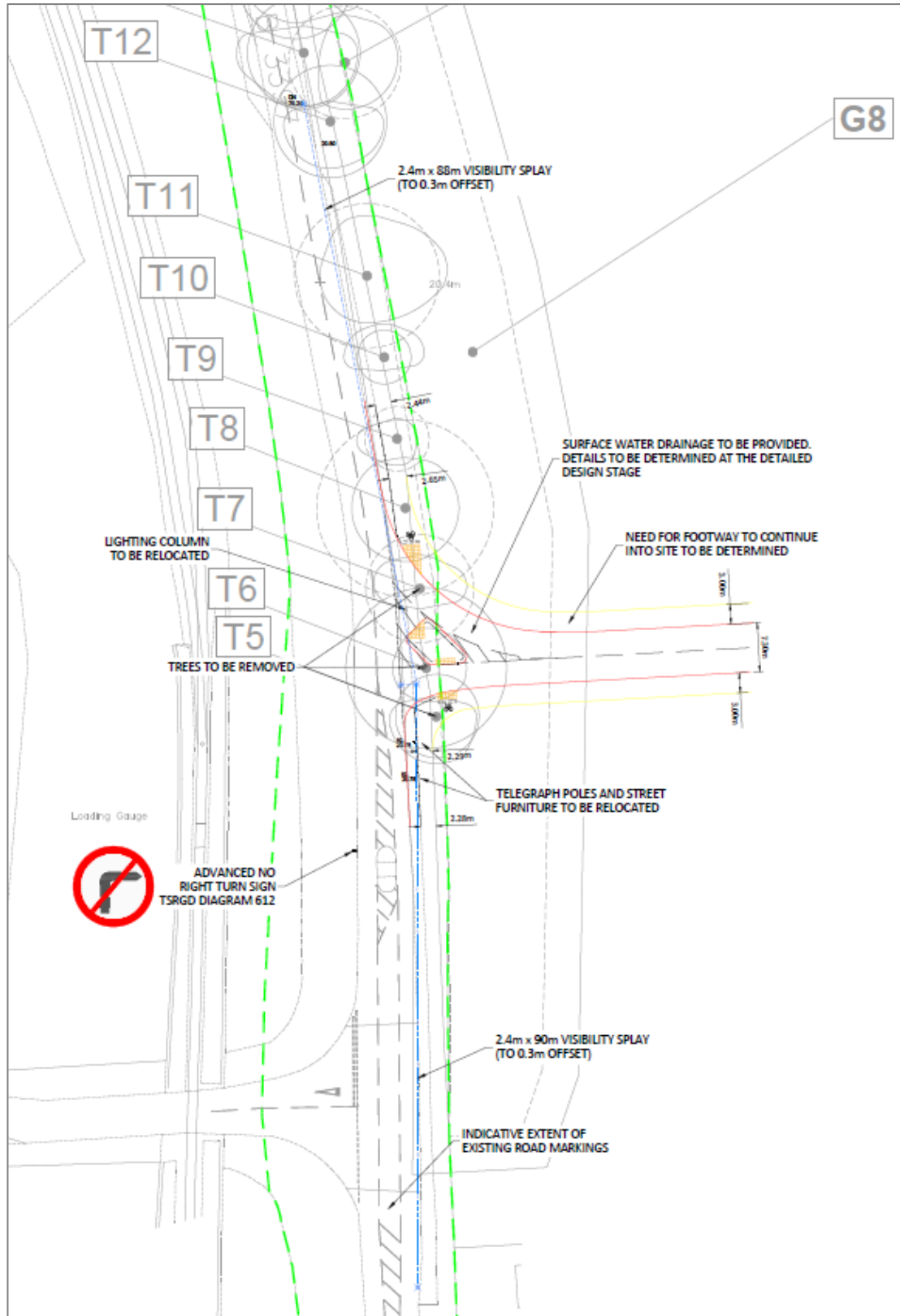
4.2.3      It is intended that all HGVs arriving and departing the site would arrive and depart to the north (towards the M27). As such, the access has been designed to help physically prevent any vehicles arriving or departing from the south.

4.2.4      The proposed access has width of 7.3m and has a kerb radius of 4.0m to the left / south of the junction to help physically prevent HGVs from turning left out of the junction, whilst still enabling cars and small commercial vehicles such as panel vans to turn south towards Hamble.

4.2.5      As it is intended that all vehicles will arrive from the north (with the exception of emergency vehicles), the radius of the site entrance has been informed by swept path analysis and would enable large vehicles to undertake a 'left-in' manoeuvre without issue.

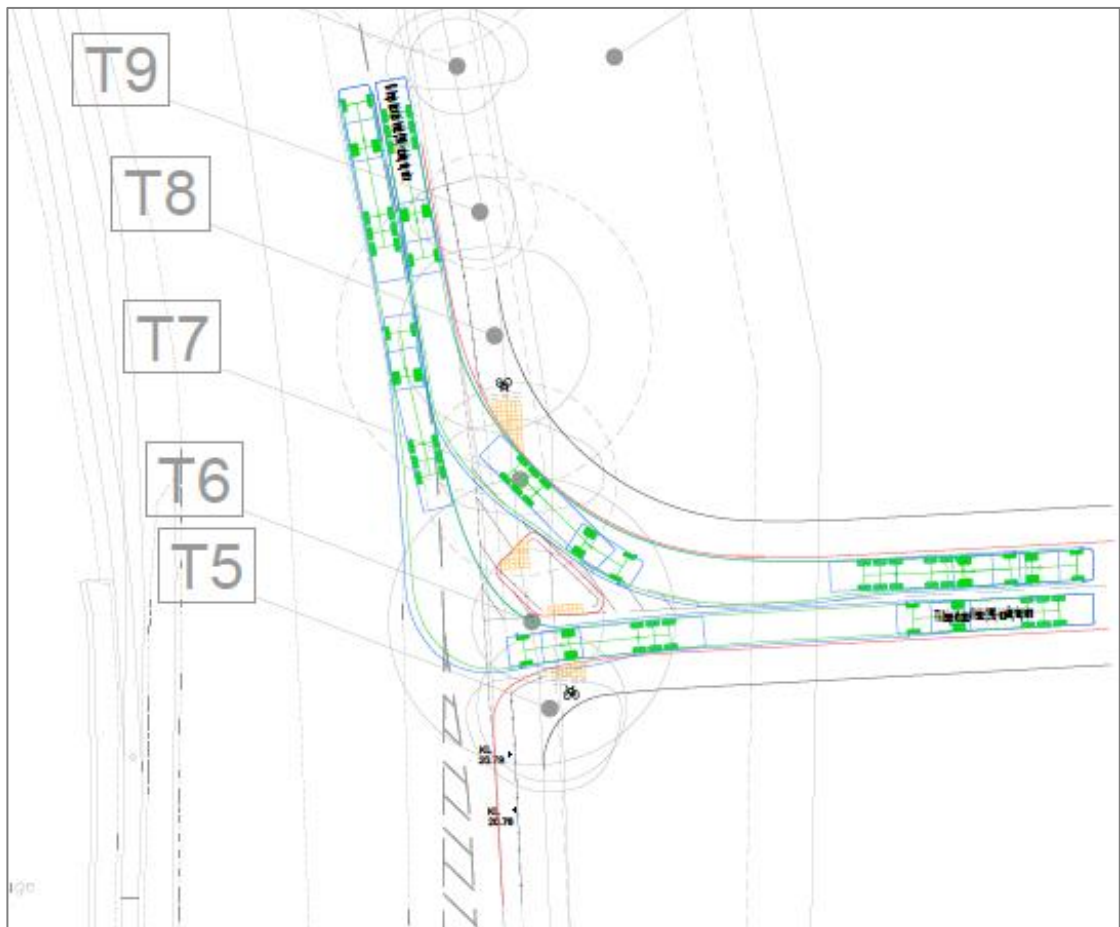
4.2.6      The proposed site access arrangement is shown on **drawing ITB13040-SK-006 Rev B** and extracted as **Image 4.1**.

Image 4.1: Extract of Proposed Site Access Arrangement



- 4.2.7 Visibility slays have been calculated based on observed vehicle speeds (**Table 3.2**) and HCC's updated TG3 guidance. The data shows that 85%ile speeds of 40.3mph were recorded for vehicles travelling northbound and 39.4mph for vehicles travelling southbound. The weather was unknown during the period the surveys were undertaken, therefore, to ensure a robust access design, in accordance with guidance set out in CA185, 4kph (2.5mph) has been added to the recoded vehicle speeds. HCC's visibility tool calculator has been used to determine the required visibility slays (based on parameters for speeds >64kph), which shows that a visibility of 2.4m x 115m is required to the south of the access, while a visibility splay of 2.4m x 111m is required to the north. These visibility slays are shown on **drawing ITB13040-SK-006 Rev B** and extracted as **Image 4.1** above.
- 4.2.8 Swept path analysis has also been undertaken to demonstrate that the largest vehicles anticipated to be used on the site are able to undertake the left-in and right-out manoeuvres. This is shown on **drawing ITB13040-SK-002C** extracted as **Image 4.2** below.

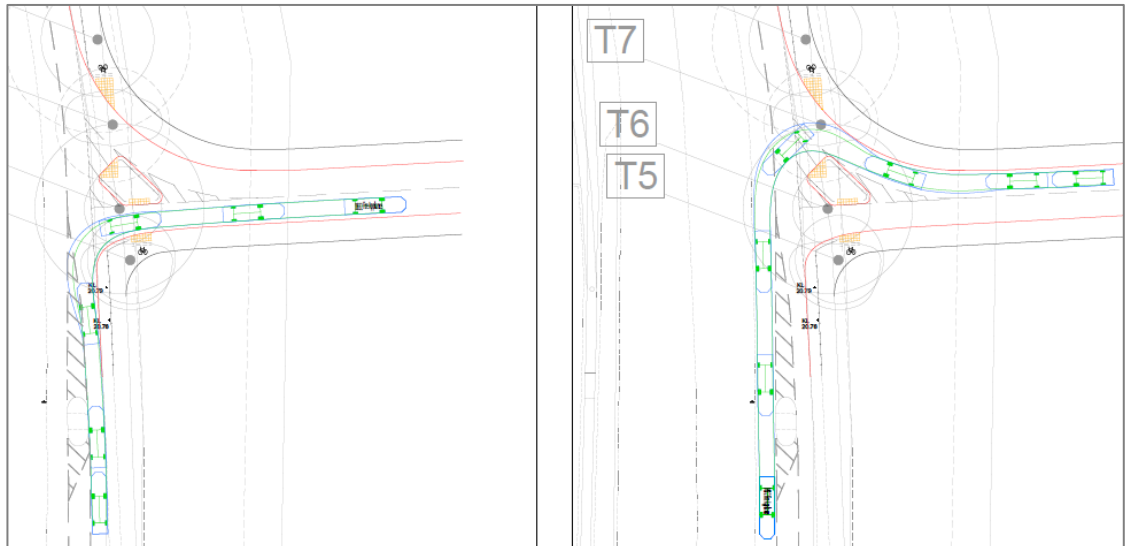
**Image 4.2: Extract of Swept Path Analysis of Proposed Access - Articulated Vehicle**





- 4.2.9 Through pre-application discussions with HCC it was identified that the nearest Fire Station is located in Hamble to the south of the proposed development site, as such, the access has been designed to accommodate a fire tender turning right into the site and left-out. This is demonstrated on drawing **ITB13040-SK-004B** extracted as **Image 4.3** below.

**Image 4.3: Extract of Swept Path Analysis of Proposed Access – Fire Tender**



### Pedestrian / Cycle

- 4.2.10 It is proposed that pedestrian and cycle access would be gained from Hamble Lane adjacent to the vehicular access. As with the vehicular access arrangements, the pedestrian and cycle access arrangements have been subject to pre-application discussions and the PADR process with HCC and take on board comments raised at these stages.
- 4.2.11 There is currently a shared footway / cycleway along the eastern side of Hamble Lane with a width of circa 2.2m – 2.6m. In the vicinity of the new bell mouth, it is proposed to widen the footway / cycleway to 3.0m. The shared footway / cycleway with a width of 3.0m would then continue into the site.
- 4.2.12 Widening the footway / cycleway in the vicinity of the proposed crossing point across the site access provides users with greater space to manoeuvre around any other potential crossing users. It is also proposed to provide pedestrian guard-railing on both sides of the junction to ensure pedestrians / cyclists cross the access road where safe crossing facilities are provided.
- 4.2.13 A pedestrian / cycle refuge island is proposed in the centre of the access road to help facilitate pedestrians and cyclists to cross. The proposed refuge measures approximately 7m x 5m, with an area of 26m<sup>2</sup> within the pedestrian guard railing. As such there is a large useable area for

pedestrians / cyclists to manoeuvre and pass one another. This is considered sufficient given the proposed level of pedestrian / cycle demand outlined in **Section 3.2**.

- 4.2.14 An independent Road Safety Audit has also been undertaken on the proposed site access and all matters raised have been addressed in the designer's response. A copy of the Road Safety Audit is included in the correspondence with HCC included as **Appendix B**.

## 4.3 **Internal Layout**

### Car Parking Provision

- 4.3.1 There are no specific standards set out in Eastleigh Borough Council's or HCC's parking standards for aggregate sites.
- 4.3.2 It is proposed to provide a total of 20 car parking spaces for the development. This proposed level of parking provides sufficient spaces for operational staff and visitors to the site. As such the proposed level of parking is in line with the operational needs of the site and will prevent any overspill onto the highway.

### Cycle Parking

- 4.3.3 As outlined above, there are no specific standards set out in EBC's or HCC's Parking Standards for aggregate sites, therefore, an individual assessment has been undertaken for the site.
- 4.3.4 It is proposed to provide cycle parking for 10 bicycles, positioned in a location which is overlooked by the onsite offices.
- 4.3.5 It is anticipated that up to 7 staff plus visitors could be working on the site at peak times, as such, the proposed level of cycle parking would allow for all staff to travel by bicycle. This is likely to be more than the number of staff/visitors cycling to the site, thus ensuring sufficient provision to encourage travel by sustainable modes.

### Internal Movement and Circulation

- 4.3.6 Swept Path Analysis of the proposed site layout has been undertaken using a cement mixer, 14.1m articulated vehicle and a rigid 8-wheel tipper in line with the traffic routes identified on the site layout, these are shown on drawing **ITB13040-GA-001** and **GA-002**. These swept paths demonstrate that vehicles can circulate around the site as intended without any issues.

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## SECTION 5 Traffic Impact Assessment

### 5.1 Introduction

5.1.1 This section of the report provides an assessment of the proposed development traffic impact on the local highway network.

### 5.2 Existing Conditions

5.2.1 To determine the existing baseline traffic conditions, a series of Automatic Traffic Count (ATC) surveys were undertaken on the Hamble Lane corridor between 2016 and 2017. Surveys were undertaken at the following locations:

- Hamble Lane in vicinity of proposed access;
- Hamble Lane north of Hound Road;
- Hamble Lane north of A3025 Portsmouth Road; and
- Hamble Lane north of the Tesco roundabout.

5.2.2 The surveys on Hamble Lane in the vicinity of the site access were undertaken in May 2017, whilst the surveys at the remainder of the locations were undertaken in April 2016. Whilst it is acknowledged that these traffic surveys are older than those typically considered acceptable by HCC, given the ongoing COVID-19 pandemic during the preparation of this application and the associated travel restrictions, it has not been possible to collect new traffic data. A robust methodology has however been used to account for traffic growth. This is explained further below.

5.2.3 Turning counts were also undertaken at the Hamble Lane / Hound Road roundabout in April 2018.

5.2.4 The peak hours identified by the surveys were:

- Morning Peak Hour – 08:00-09:00; and
- Evening Peak Hour – 18:00-19:00.

5.2.5 The 2021 baseline traffic conditions have been calculated using TEMPRO growth rates and the addition of committed developments (see **Section 5.5** for further details), the results are summarised in **Table 5.1** for all vehicles and **Table 5.2** for HGV movements.

**Table 5.1: Summary of Two-Way Total Traffic Flows on Hamble Lane - 2021**

Link	Morning Peak (08:00 – 09:00)	Evening Peak (18:00 – 19:00)	Daily Traffic (AADT) (00:00 – 00:00)
Hamble Lane in vicinity of proposed access	1,342	1,375	16,129
Hamble Lane north of Hound Road	1,734	1,660	21,555
Hamble Lane north of A3025 Portsmouth Road	2,523	2,404	32,987
Hamble Lane north of Tesco Access	2,264	2,101	32,641

Source: 2016/2017 ATC Traffic Surveys (5-day average)

**Table 5.2: Summary of Two-Way HGV Movements of Hamble Lane - 2021**

Link	Morning Peak (08:00 – 09:00)	Evening Peak (18:00 – 19:00)	Daily Traffic (AADT) (00:00 – 00:00)
Hamble Lane in vicinity of proposed access	53	21	672
Hamble Lane north of Hound Road	36	30	358
Hamble Lane north of A3025 Portsmouth Road	76	77	820
Hamble Lane north of Tesco Access	68	57	445

Source: 2016/2017 ATC Traffic Surveys (5-day average)

- 5.2.6 The above data provides a robust assessment as the COVID-19 pandemic has seen an increasing shift towards home working for businesses throughout the country and early indications are suggesting that home working is likely to play a larger role in the economy moving onward into the future, i.e. in a 'post covid-19' world. This would mean that traffic flows on Hamble Lane will not have grown from the pre-pandemic recorded levels (which has been assumed in the above traffic forecasts).

### 5.3 Proposed Development – Trip Generation

- 5.3.1 CEMEX have provided information on the number of daily HGV trips likely to be generated by the site over the life of the proposed development.
- 5.3.2 It is anticipated that the proposed development would commence in 2023, and would take up to 11 years to complete, thus cease generating HGV movements up to 2034. The phases of the development in terms of the HGV generation are set out below:

- Traffic Phase 1: Year 1-2 – Export only;
- Traffic Phase 2: Years 3 – 7 – Export and infill; and
- Traffic Phase 3: Years 8 – 11 – Infill only.

5.3.3 The indicative number of daily HGV movements associated with the aforementioned is summarised in **Table 5.3**.

**Table 5.3: Indicative Operational HGV Movements for Hamble Airfield for Standalone CEMEX operation**

Activity	Daily Vehicle Movements (HGV)					
	Traffic Phase 1		Traffic Phase 2		Traffic Phase 3	
	In	Out	In	Out	In	Out
Export of Aggregates	45	45	45	45	0	0
Delivery of Infill	0	0	27	27	45	45
Total HGV Movements	45	45	72	72	45	45
Total HGV Movements	90		144		90	

Source: Hamble Airfield Development Brief

5.3.4 **Table 5.3** shows that the proposed development is anticipated to generate circa 90 two-way vehicle movements per day in year 1 and 2 and years 8-11 and 144 two-way movements in years 3-7 across the day.

5.3.5 The estimated number of movements set out above are based on 20 tonne capacity aggregate tippers. It is possible that some of the exports and deliveries would use larger vehicles, with greater capacity. Furthermore, some vehicles will be backloaded (i.e. vehicles arriving with deliveries of infill will also leave the site with exports of aggregates) and as such will reduce the number of movements to and from the site. Therefore, the figures presented represent a worst-case traffic scenario in terms of the number of movements.

5.3.6 The proposals for extraction and infill have also already been considered by the Local Highway Authority at the Examination into the Hampshire Minerals and Waste Plan (albeit at a high level) and found to be acceptable.

5.3.7 CEMEX has collected traffic data from similar aggregate extraction sites, this data has been analysed to calculate an indicative HGV flow profile across the day, as shown in **Table 5.4**. It is noted that profile in Table 5.4 shows that a very small proportion of vehicles (0.8%) are likely to occur between 06:00-07:00, however, as the proposed development site is not anticipated to open until 07:00, these associated vehicle movements have been moved to the 07:00-08:00 time period instead. The indicative flow profile has been applied to the anticipated number of daily vehicle movements as summarised in **Table 5.5**.

**Table 5.4: Typical CEMEX HGV Profile**

Time	Trip Profile
06:00 - 07:00	0.8%
07:00 - 08:00	17.4%
08:00 - 09:00	11.7%
09:00 - 10:00	13.3%
10:00 - 11:00	11.0%
11:00 - 12:00	8.7%
12:00 - 13:00	6.8%
13:00 - 14:00	8.6%
14:00 - 15:00	10.4%
15:00 - 16:00	7.9%
16:00 - 17:00	3.3%
17:00 - 18:00	0.1%
18:00 - 19:00	0.0%
Total Trips	100%

Source: CEMEX Quarry data and Consultant's Calculations

**Table 5.5: Indicative HGV Movements Throughout the Day**

Time	Trip Profile	Number of two-way trips per hour		
		Traffic Phase 1	Traffic Phase 2	Traffic Phase 3
06:00-07:00	0%	0	0	0
07:00-08:00	18%	17	26	17
08:00-09:00	12%	11	17	11
09:00-10:00	13%	12	19	12
10:00-11:00	11%	10	16	10
11:00-12:00	9%	8	12	8
12:00-13:00	7%	6	10	6
13:00-14:00	9%	8	12	8
14:00-15:00	10%	9	15	9
15:00-16:00	8%	7	11	7
16:00-17:00	3%	3	5	3
17:00-18:00	0%	0	0	0
18:00-19:00	0%	0	0	0
Daily Total	100%	90	144	90

Source: CEMEX Quarry data and Consultant's Calculations

- 5.3.8** **Table 5.5** indicates that the peak hour for the proposed development traffic is likely to be between 07:00 – 08:00. This is prior to the network peak of 08:00-09:00.
- 5.3.9** Based on the indicative flow profile, the development proposal is anticipated to generate circa 17 two-way vehicle movements in years 1 and 2 (traffic phase 1) and years 8-12 (traffic phase 3) and 26 two-way movements in years 3-7 (traffic phase 2) in the morning development peak hour. This equates to circa one HGV movement every three minutes and circa one HGV movement every two minutes respectively. During the morning network peak hour, the development proposal is anticipated to generate circa 11 two-way vehicle movements in traffic phases 1 and 3 and 17 two-way movements in traffic phase 2. This equates to on average circa one HGV movement every five minutes and one HGV movement every three minutes respectively.
- 5.3.10** HGV movements associated with aggregate quarries are typically lower in the afternoon and evening. It is not anticipated that there will be any two-way vehicle movements generated by the proposed development after 17:00, therefore, there will be no HGV movements associated with the site in the network evening peak hour of 18:00-19:00.

5.3.11 There are also likely to be a small number of staff and visitors travelling to / from the site each day. The site will provide 20 parking spaces (as shown on the proposed layout included as **Appendix A**), whilst it is not anticipated that all of these spaces would be used each day, in order to provide a robust assessment, it has been assumed that 20 staff / visitors will arrive during the morning network peak and leave during the evening network peak. In reality, this is unlikely to be the case as the site will be operational prior to the morning network peak.

## 5.4 Distribution and Assignment

5.4.1 As outlined above, all HGV traffic arriving at the site will travel to / from the north of the site along Hamble Lane, arriving and departing from the site via the M27 Junction 8.

5.4.2 Whilst it is not yet known where the proposed staff working at the site will travel from, for the purpose of the assessment it has been assumed that given the arrangement of the junction, all staff would enter the site from the north via Hamble Lane.

## 5.5 Future Assessment Years

5.5.1 The traffic impact has been assessed for the morning and evening peak hours for the future years of 2023, 2030 and 2034 which coincided with the proposed 'year of opening' and end of traffic phases 2 and 3 respectively.

5.5.2 Given the traffic data for the local highway network dates between 2016 and 2018, the following committed developments have been manually added onto the base traffic flows to account for the development traffic likely to be generated by these consented developments. Traffic flows for the consented developments have been obtained from the Transport Assessments submitted alongside the planning applications:

- Land at Berry Farm, Hamble Lane, Bursledon (Planning Ref: F/17/79863) - Construction of 166 dwellings with associated access off Cunningham Gardens, parking, landscaping and open space following demolition of existing dwellings and former agricultural buildings/workshop
- Land at Satchell Lane (Planning Ref: O/17/80319) - development of up to 70 dwellings with associated access, public open space, landscaping and amenity areas;
- Land to the south of Mallards Road (Planning Ref: O/15/76491) - Construction of up to 80 dwellings including public open space with access as only detailed matter for consideration following demolition of nos. 1 and 3 Mallards Road;



- Land to the North of Cranbury Gardens (Planning Ref: O/15/76883) - Outline application for up to 45no. dwellings including public open space, landscaping and vehicular access from land to the north & Hamble Lane, pedestrian link to Hamble Lane. All detailed matters except for access reserved; and
- Land South of Bursledon Road (Planning Ref: O/15/77121) - Outline application for up to 182 no. dwellings and associated landscaping, open space and infrastructure, and diversion of public right of way, with access from Bursledon Road. (All matters reserved except for access).

5.5.3 Therefore, in total, traffic associated with 543 dwellings has been included within the committed developments. This list of committed developments has been agreed as part of pre-application discussions with HCC, albeit it is noted that the development at Mallards Road has been dismissed at Appeal. For a robust assessment, it has however been retained in the assessment.

5.5.4 The direct inclusion of committed development and the addition of an unadjusted TEMPRO based growth rate will lead to a double counting of traffic, with TEMPRO already including allowances for traffic growth arising from local developments. To remove the potential for double counting of traffic growth, the Alternative Assumptions function within TEMPRO has been used to manually adjust the level of growth, removing/reducing development assumptions from TEMPRO.

5.5.5 **Table 5.6** summarises the existing and adjusted Alternative Assumptions (included in full in **Appendix D**).

**Table 5.6: TEMPRO Assumptions**

Scenario	Area	Existing H/Holds	Future H/Holds	Existing Jobs	Future Jobs
<b>2016-2021</b>					
Existing Assumptions	Eastleigh 015	2680	2839	7003	7178
Alternative Assumptions		2680	2680	7003	7178
<b>2016-2023</b>					
Existing Assumptions	Eastleigh 015	2680	2895	7003	7220
Alternative Assumptions		2680	2680	7003	7220
<b>2016-2030</b>					
Existing Assumptions	Eastleigh 015	2680	3087	7003	7354
Alternative Assumptions		2680	2680	7003	7354
<b>2016-2034</b>					
Existing Assumptions	Eastleigh 015	2680	3194	7003	7438
Alternative Assumptions		2680	2680	7003	7438
<b>2017-2021</b>					
Existing Assumptions	Eastleigh 015	2712	2839	7038	7178
Alternative Assumptions		2712	2712	7038	7178
<b>2017-2023</b>					
Existing Assumptions	Eastleigh 015	2712	2895	7038	7220
Alternative Assumptions		2712	2712	7038	7220
<b>2017-2030</b>					
Existing Assumptions	Eastleigh 015	2712	3087	7038	7354
Alternative Assumptions		2712	2712	7038	7354
<b>2017-2034</b>					
Existing Assumptions	Eastleigh 015	2712	3194	7038	7438
Alternative Assumptions		2712	2712	7038	7438
<b>2018-2021</b>					
Existing Assumptions	Eastleigh 015	2744	2839	7073	7178
Alternative Assumptions		2744	2744	7073	7178
<b>2018-2023</b>					
Existing Assumptions	Eastleigh 015	2744	2895	7073	7220
Alternative Assumptions		2744	2744	7073	7220
<b>2018-2030</b>					
Existing Assumptions	Eastleigh 015	2744	3087	7073	7354
Alternative Assumptions		2744	2744	7073	7354
<b>2018-2034</b>					
Existing Assumptions	Eastleigh 015	2744	3194	7073	7438
Alternative Assumptions		2744	2744	7073	7438

Source: TEMPRO and Consultant

5.5.6 Using this methodology, **Table 5.7** summarises the growth factors which have been applied to the observed traffic flows to derive the 2023, 2030 and 2034 peak hour traffic flows.

**Table 5.7: Traffic Growth Factors**

Growth Period	Morning Peak Growth Rate	Evening Peak Growth Rate
2016-2021	1.0412	1.0389
2016-2023	1.0535	1.0515
2016-2030	1.0865	1.0859
2016-2034	1.1018	1.1022
2017-2021	1.0319	1.0301
2017-2023	1.0441	1.0426
2017-2030	1.0767	1.0766
2017-2034	1.0917	1.0927
2018-2021	1.0230	1.0217
2018-2023	1.035	1.0339
2018-2030	1.0671	1.0675
2018-2034	1.0819	1.0834

Source: TEMPRO 7.2c

## 5.6 Traffic Impact Assessment

5.6.1 **Table 5.8** summarises the likely traffic impact of the development on the local highway network compared to 2023, 2030 and 2034 future total baseline traffic flows during network peak periods, whilst **Table 5.9** summaries the percentage impact on HGV flows. Annual Average Daily Traffic Flows have also been provided.

**Table 5.8: Local Traffic Impact – Total Traffic Flows**

Link	Morning Peak (08:00 – 09:00)			Evening Peak (17:00 – 18:00)			Annual Average Daily Traffic (00:00-00:00)		
	Base Flow	Dev Traffic	Impact (%)	Base Flow	Dev Traffic	Impact (%)	Base Flow	Dev Traffic	Impact (%)
	<b>2023</b>								
Hamble Lane in vicinity of proposed access	1358	31	2.3%	1392	20	1.44%	16333	130	0.8%
Hamble Lane north of Hound Road	1753	31	1.8%	1691	20	1.18%	21809	130	0.6%
Hamble Lane north of A3025 Portsmouth Road	2551	31	1.2%	2451	20	0.82%	33391	130	0.4%
Hamble Lane north of Tesco Access	2289	31	1.4%	2142	20	0.93%	33040	130	0.4%
	<b>2030</b>								
Hamble Lane in vicinity of proposed access	1399	37	2.6%	1436	20	1.39%	16908	184	1.1%
Hamble Lane north of Hound Road	1803	37	2.1%	1740	20	1.15%	22529	184	0.8%
Hamble Lane north of A3025 Portsmouth Road	2627	37	1.4%	2527	20	0.79%	34536	184	0.5%
Hamble Lane north of Tesco Access	2357	37	1.6%	2208	20	0.91%	34171	184	0.5%
	<b>2034</b>								
Hamble Lane in vicinity of proposed access	1418	31	2.2%	1457	20	1.37%	17192	130	0.8%
Hamble Lane north of Hound Road	1827	31	1.7%	1764	20	1.13%	22883	130	0.6%
Hamble Lane north of A3025 Portsmouth Road	2662	31	1.2%	2563	20	0.78%	35100	130	0.4%
Hamble Lane north of Tesco Access	2389	31	1.3%	2239	20	0.89%	34727	130	0.4%

Source: Consultants Calculations based on factored 2016/2017 5-day average ATC traffic flows

**Table 5.9: Local Traffic Impact – HGV Flows**

Link	Morning Peak (08:00 – 09:00)			Evening Peak (17:00 – 18:00)			Annual Average Daily Traffic (00:00-00:00)		
	Base Flow	Dev Traffic	Impact (%)	Base Flow	Dev Traffic	Impact (%)	Base Flow	Dev Traffic	Impact (%)
	<b>2023</b>								
Hamble Lane in vicinity of proposed access	53	11	20.7%	21	0	0.0%	681	90	13.2%
Hamble Lane north of Hound Road	37	11	29.8%	30	0	0.0%	363	90	24.8%
Hamble Lane north of A3025 Portsmouth Road	77	11	14.3%	78	0	0.0%	831	90	10.8%
Hamble Lane north of Tesco Access	68	11	16.1%	58	0	0.0%	450	90	20.0%
	<b>2030</b>								
Hamble Lane in vicinity of proposed access	55	17	31.0%	22	0	0.0%	705	144	20.4%
Hamble Lane north of Hound Road	38	17	44.7%	31	0	0.0%	376	144	38.3%
Hamble Lane north of A3025 Portsmouth Road	79	17	21.4%	80	0	0.0%	861	144	16.7%
Hamble Lane north of Tesco Access	71	17	24.1%	60	0	0.0%	467	144	30.9%
	<b>2034</b>								
Hamble Lane in vicinity of proposed access	56	11	19.8%	22	0	0.0%	717	90	12.5%
Hamble Lane north of Hound Road	39	11	28.5%	32	0	0.0%	382	90	23.5%
Hamble Lane north of A3025 Portsmouth Road	80	11	13.7%	82	0	0.0%	876	90	10.3%
Hamble Lane north of Tesco Access	72	11	15.4%	61	0	0.0%	475	90	19.0%

Source: Consultants Calculations based on factored 2016/2017 5-day average ATC traffic flows

5.6.2 It can be seen from **Table 5.8** that the traffic associated with the proposed development would have a maximum impact on two-way total traffic flows on the local highway network of 2.6% in the morning peak and typically less than 1% throughout the day on Hamble Lane in the vicinity of the site access in the future year of 2030. There would be limited impact in the evening peak as the development traffic is only associated with staff.

5.6.3 **Table 5.9** indicates that the proposed development would have a maximum impact on two-way HGV flows on the local highway network of 44.7% in the morning peak and 38.3% throughout the day on Hamble Lane north of the Hound Road roundabout in the future year of 2030. Consequently, it can be seen that the proposed development would approximately double the number of HGV movements occurring on Hamble Lane north of Hound Road between years 3-7 of operation, however, the fairly large percentage increases are in part a result of the relatively low existing numbers of HGVs using Hamble Lane. On the remainder of the Hamble Lane corridor, the development impact in terms of the increase in HGVs would vary between circa 10-30% in the future years.

## 5.7 Junction Capacity Analysis

5.7.1 Operational assessments have been undertaken at the following locations as per the pre-application discussions held with HCC:

- Hamble Lane / Proposed Site Access; and
- Hamble Lane / Hound Road Roundabout;

5.7.2 The capacity assessments have been based of the turning count flows obtained and have been factored to represent future years with the manual addition of committed development flows.

5.7.3 The modelling assessments have been undertaken for the following scenarios:

- 2023 'without development' i.e. allowing for background traffic growth and the identified committed development;
- 2030 'without development' i.e. allowing for background traffic growth and the identified committed development;
- 2034 'without development' i.e. allowing for background traffic growth and the identified committed development;
- 2023 'with development' i.e. allowing for background traffic growth, committed development and the development proposal;

- 2030 'with development' i.e. allowing for background traffic growth, committed development and the development proposal; and
- 2034 'with development' i.e. allowing for background traffic growth, committed development and the development proposal.

### Proposed Site Access

5.7.4 The operation of the proposed access junction has been assessed using TRL's 'Junctions 10' traffic modelling software for the proposed Opening Year at 2023 and the further assessment years of 2030 and 2034. **Table 5.10** summarises the assessment whilst the full model outputs are included as **Appendix E**.

**Table 5.10 Proposed Access Junction Capacity Assessment – Site Access**

Junction Arm	Morning Peak			Evening Peak		
	Queue (veh)	Delay (secs)	RFC	Queue (veh)	Delay (secs)	RFC
<b>2023 With Development</b>						
Proposed Access	<1	40	0.06	<1	25	0.13
Hamble Lane	0	0	0.00	0	0	0
<b>2030 With Development</b>						
Proposed Access	<1	45	0.10	<1	27	0.14
Hamble Lane	0	0	0.00	0	0	0
<b>2034 With Development</b>						
Proposed Access	<1	44	0.06	<1	28	0.15
Hamble Lane	0	0	0.00	0	0	0

Source: Junctions 10

5.7.5 The assessment indicates that the proposed site access junction would operate within capacity during the weekday morning peak hours. The maximum Ratio of Flow to Capacity (RFC) is 0.15 which occurs on the proposed access road arm. This results in a queue of less than one vehicle and an estimated average delay of some 28 seconds. As the junction is designed to prevent vehicles turning right into the proposed access from Hamble Lane (south), the proposed access has no quantifiable impact on the operation of Hamble Lane during the peak hours.

### Hamble Lane / Hound Road Roundabout

5.7.6 The operation of the Hamble Lane / Hound Road Roundabout (for its existing arrangement) has been assessed using TRL's 'Junctions 10' traffic modelling software. **Table 5.11** summarises the assessment whilst the full model outputs are included as **Appendix E**.

**Table 5.11 Proposed Access Junction Capacity Assessment – Hamble Lane / Hound Road**

Junction Arm	Morning Peak			Evening Peak		
	Queue (veh)	Delay (secs)	RFC	Queue (veh)	Delay (secs)	RFC
<b>2023 Without Development</b>						
Hamble Lane North	2	6	0.63	2	7	0.67
Hamble Lane South	1	3	0.43	1	5	0.56
Hound Road	2	9	0.62	1	7	0.53
<b>2030 Without Development</b>						
Hamble Lane North	2	7	0.65	2	7	0.69
Hamble Lane South	1	4	0.44	1	5	0.58
Hound Road	2	9	0.65	1	8	0.55
<b>2034 Without Development</b>						
Hamble Lane North	2	7	0.66	2	8	0.70
Hamble Lane South	1	4	0.45	1	5	0.59
Hound Road	2	10	0.66	1	8	0.56
<b>2023 With Development</b>						
Hamble Lane North	2	7	0.65	2	7	0.67
Hamble Lane South	1	3	0.43	1	5	0.57
Hound Road	2	9	0.63	1	8	0.53
<b>2030 With Development</b>						
Hamble Lane North	2	7	0.68	2	7	0.69
Hamble Lane South	1	4	0.45	1	5	0.59
Hound Road	2	10	0.66	1	8	0.56
<b>2034 With Development</b>						
Hamble Lane North	2	8	0.69	2	8	0.70
Hamble Lane South	1	4	0.45	2	5	0.60
Hound Road	2	10	0.66	1	9	0.57

Source: Junctions 10

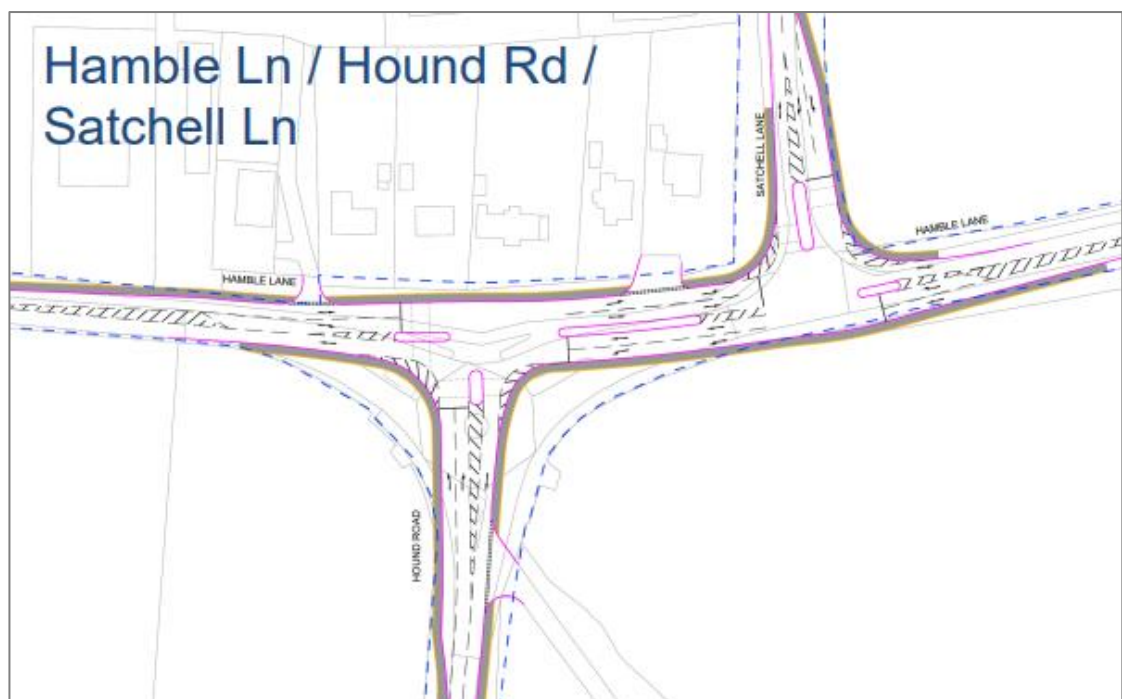
- 5.7.7 The assessment indicates that the Hamble Lane / Hound Road junction would operate well within capacity during the weekday morning peak hour. The maximum Ratio of Flow to Capacity (RFC) is 0.70 which occurs on the Hamble Lane north arm in the evening peak. This results in a queue of two vehicles and an estimated delay of some 8 seconds per vehicle. The proposed development would have a very small impact on the operation of the junction, with a maximum RFC increase of 0.03 on the Hamble Lane north arm in the morning peak period



(and a corresponding increase in delay of less than 1 second). As such, it can be seen that the proposed development would have an immaterial impact on queuing and delay.

5.7.8 It is noted that as part of the Hamble Lane Improvement Scheme (further details provided in **Section 5.8**), there is a concept scheme for the Hamble Lane / Hound Road junction to be upgraded to a signalised junction which incorporates Satchell Lane, as part of further complementary improvement works to improve the operation the Hamble Lane corridor (see **Image 5.1** below). As previously identified, the proposed development would have only a very small impact on the operation of the local highway network, which would remain the case even if the junction were upgraded.

**Image 5.1: Potential Hamble Lane / Hound Road Improvement**



Source: Hampshire County Council Hamble Lane Consultation Exhibition Slides

## 5.8 Hamble Lane North Improvements

5.8.1 It is acknowledged that Hamble Lane can suffer from congestion during the peak periods of the day. To help address this Hampshire County Council has come up with a package of measures to improve Hamble Lane in terms of performance/capacity.

5.8.2 The proposed improvement scheme has been developed which aims to:

- Improve traffic flow and reduce journey time delays along Hamble Lane;
- Ensure that the environmental impact of the scheme is mitigated as far as possible; and

- Reduce reliance on the private car by increasing the use of sustainable modes for journeys to/from Hamble.

5.8.3 The main focus is on the northern section of Hamble Lane between the Windhover Roundabout and the Pound Road junction, but the scheme also looks at complementary measures on the wider network and further south on Hamble Lane.

5.8.4 The package of improvements have been approved by County Council's Executive Member for Environment and Transport (EMET) (in March 2019), and the County Council remains committed to delivering these improvements. However, funding for the identified improvements has yet to be secured.

5.8.5 Consequently, given the proposed development would have a (small) impact on Hamble Lane to the north of the site, CEMEX would be willing to provide a reasonable and proportional contribution towards the improvements identified.

## 5.9 **Summary**

5.9.1 The results of the traffic impact analysis demonstrate that the proposed development will have only a very small impact on the operation of the local highway network. All of the junctions are anticipated to operate within capacity during the peak periods, with the development having a negligible impact on queueing and delays.

5.9.2 Against this background, it can be seen that the development generated traffic can be accommodated on the local highway network in the vicinity of the site and the residual impacts of the development fall far short of the 'severe' test set by the National Planning Policy Framework.

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## SECTION 6 Environmental Impacts

### 6.1 Introduction

6.1.1 This section of the Report considers some of the likely environmental traffic impacts of the proposed development. The Institute of Environmental Management and Assessment (IEMA) has prepared 'Guidelines for the Environmental Assessment of Road Traffic' which identifies the following potential impacts:

- Severance;
- Driver Delay;
- Pedestrian Delay;
- Pedestrian Amenity;
- Fear and Intimidation;
- Accidents and Safety;
- Hazardous Loads; and
- Dust and Dirt.

6.1.2 These matters have been considered further in this section of the report.

6.1.3 Table 5.8 and Table 5.9 in the previous section of the report summarise the Annual Average Daily Traffic (AADT) increases for both Total Vehicles and HGV movements on the roads surrounding the development.

### 6.2 Severance

6.2.1 Severance is the perceived division that can occur within a community when it becomes separated by a major traffic route. The assessment of severance pays full regard to specific local conditions, in particular the location of pedestrian routes to key local facilities and whether crossing facilities are provided or not.

6.2.2 The IEMA Guidelines suggest that a 30%, 60% and 90% increase in total traffic flow will respectively have a 'slight', 'moderate' and 'substantial' change in severance. However, allowance needs to be made for the presence of existing crossing facilities.

6.2.3 As demonstrated in Table 5.8 the development will not result in traffic increases throughout the day of more than 1.5% (on Hamble Lane in the vicinity of the proposed access). This is significantly under the 30% threshold identified by the IEMA guidelines as having even a 'slight' change in severance.

6.2.4 It is also noted that there are formal crossing facilities on Hamble Lane to the south of the proposed access which will help enable pedestrians to cross safely and reduce the perception of severance.

### 6.3 Driver Delay

6.3.1 Traffic delays to non-development traffic can occur:

- At the site entrance where there will be additional turning movements;
- On the highways passing the site where there may be additional flow; and
- At key junctions on the nearby highway network.

6.3.2 As summarised in Section 5, the proposed site access junction and the Hamble Lane / Hound Road junction are anticipated to continue operating within their theoretical capacity in the future year scenarios with the proposed development traffic having a negligible impact on their performance during the peak periods.

### 6.4 Pedestrian Delay

6.4.1 The IEMA Guidelines recommend that rather than rely on thresholds of pedestrian delay; the assessor should use judgement to determine whether there will be a significant impact on pedestrian delay.

6.4.2 There is an uncontrolled pedestrian crossing with dropped kerbs, tactile paving and a pedestrian refuge island located circa 50m to the south of the proposed site access on Hamble Lane. There is also a signalised crossing located circa 500m to the south of the proposed access. It is not anticipated that there will be any material increase in traffic to the south of the proposed development, therefore, these pedestrians crossing at these facilities will be unaffected by the development.

6.4.3 To the north of the site there is a toucan crossing located on Hamble Lane in the vicinity of Hamble School. The overall increase in vehicle movements to the north of the site when spread across the day is unlikely to have a material impact on the level of pedestrian delay. That is, there is anticipated to be a maximum of one additional vehicle movement every two minutes on Hamble Lane (During Phase 2 of the development between 07:00-08:00), with much

reduced levels of traffic during other phases and periods of the day. As such, this will not materially impact on the time it takes pedestrians to cross roads surrounding the development.

## 6.5 Pedestrian Amenity

6.5.1 The IEMA Guidelines broadly define pedestrian amenity as the relative pleasantness of a journey. It is affected by traffic flow, traffic composition, pavement width and separation from traffic. A tentative threshold for changes in pedestrian amenity is when traffic flows are halved or doubled.

6.5.2 As set out in **Table 5.8**, the development will not result in traffic increases throughout the day of more than 1.5%. This is significantly under the 50% threshold identified by the IEMA guidelines as a tentative threshold for changes in pedestrian amenity.

6.5.3 Notwithstanding this, as pedestrian amenity is affected by traffic composition, and the proposal will generate HGV movements, pedestrian amenity has been considered further below.

6.5.4 There is a footway on the western side of Hamble Lane and a shared footway / cycleway on the eastern side of Hamble Lane. To the north of the site up to the railway bridge, there is a grass verge which separates the footway and shared footway / cycleway facilities from the road. Signal controlled crossing facilities are provided in the vicinity of The Hamble School.

6.5.5 In the hour when the development generates the most traffic (07:00-08:00), Hamble Lane is anticipated to be used by between 16-27 HGVs from the proposed development (one every two to four minutes). In the evening network peak period, the development is anticipated to generate no additional HGV movements on Hamble Lane.

6.5.6 Therefore, it can be seen that the number of HGV movements will be relatively modest on Hamble Lane.

## 6.6 Fear and Intimidation

6.6.1 A further impact that traffic may have on pedestrians is fear and intimidation. This impact is dependent on the volume of traffic, its HGV composition and its proximity to people and/or the lack of protection caused by factors such as narrow pavement widths. The IEMA Guidelines suggest thresholds based on 18-hour daily flow, 18-hour HGV flow and vehicle speeds, as shown on **Table 6.1**.

**Table 6.1: Fear and Intimidation Thresholds**

Degree of Hazard	Average traffic flow over 18-hour day (vehicle / hour)	Total 18-hour HGV flow	Average speed over 18-hour day (mph)
Extreme	1,800+	3,000+	20+
Great	1,200-1,800	2,000-3,000	15-20
Moderate	600-1,200	1,000-2,000	10-15

Source: IEMA

6.6.2 The average traffic flow over an 18-hour day on Hamble Lane in the vicinity of the proposed site is between 1,200 – 1,800 vehicles per hour, which would indicate great levels of fear and intimidation. The average traffic flow of HGVs is however less than 1,000 vehicles over an 18-hour period, which would indicate moderate levels of fear and intimidation. Whilst the proposed development is anticipated to increase traffic, the development will not result in a change to any of the existing thresholds for fear and intimidation. It is also not anticipated that the proposed development will result in an increase in vehicle speeds.

6.6.3 On this basis, the proposed development is not anticipated to have a material impact in terms of fear and intimidation.

## 6.7 Accidents and Safety

6.7.1 Personal injury accident data for the most recently available five-year period has been obtained and reviewed, as set out in Section 3.2 of this report.

6.7.2 The latest available accident records do not highlight any existing highway defects or safety issues that would be exacerbated by the proposed development.

## 6.8 Hazardous Loads

6.8.1 The IEMA Guidelines acknowledge that most proposals will not result in increases in the number of movements of hazardous / dangerous loads. It is not anticipated that the proposed development will result in vehicle movements containing hazardous / dangerous loads.

## 6.9 Dust and Dirt

6.9.1 Dust and dirt created by traffic can be a problem arising from the operations of certain types of development, notably quarrying and the transport of quarried materials. The guidelines suggest that problems with dust and dirt are unlikely to occur at distances greater than 50m from the road. The impact of dust and dirt will depend on the management practices undertaken on site. The proposed facility will have various management practices in place to manage dust and dirt. From a highway and transport perspective, this will include wheel washing facilities and appropriate measures to cover loads. This will appropriately manage impacts associated with dust and dirt from a highway and transport perspective.

## 6.10 Environmental Impacts Summary

6.10.1 This chapter has assessed the environmental effects of the predicted increases in traffic associated with the proposed development. The long-term operational effects of the development on the transport network and people will be negligible.

6.10.2 A summary of the assessment is tabulated in **Table 6.2**.

**Table 6.2: Summary of Environmental Effects**

Potential impact	Nature of impact	Significance prior to mitigation	Mitigation / Enhancement measures	Residual effect
Severance	Direct	Negligible	Environmental Management Plan and HGV Routing Management Plan	Negligible
Driver Delay	Direct	Negligible		Negligible
Pedestrian Delay	Direct	Negligible		Negligible
Pedestrian Amenity	Direct	Negligible		Negligible
Fear and Intimidation	Direct	Negligible		Negligible
Accidents and Safety	Direct	Negligible		Negligible
Hazardous Loads	Direct	Negligible		Negligible
Dirt on the Highway	Direct	Negligible		Negligible

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## SECTION 7 Summary and Conclusions

### 7.1 Summary

- 7.1.1 i-Transport has been appointed by CEMEX to provide highway and transport advice in relation to the proposed extraction of minerals from land at Hamble Airfield. The development proposal is for the temporary erection of a new processing plant and related infrastructure, to extract approximately 1.6million tonnes of sand and gravel. The site will be progressively restored for nature conservation and public access through backfilling with inert restoration material and in-situ overburden soils.
- 7.1.2 The site is allocated in the Hampshire Minerals and Waste Plan and is identified as being the best option for providing a local supply of sharp sand and gravel.
- 7.1.3 The site is located on the eastern side of Hamble Lane and located to the north of the settlement of Hamble-Le-Rice and to the south of Hamble Railway Station.
- 7.1.4 There are good pedestrian and cycle facilities along the site frontage which provide a connection to the surrounding areas of Hamble. The site is within walking and cycling distance of a large area of Hamble as well as the adjacent areas of Netley and thus there are good opportunities for staff and visitors to access the site on foot or by bike.
- 7.1.5 There are also good public transport opportunities to access the site with frequent bus services and regular trains, both of which can be accessed by foot or bicycle.
- 7.1.6 Hamble Lane along the site frontage accommodates two-way traffic flows of circa 1,300 – 1,400 vehicles in the peak hours with recorded 85<sup>th</sup> percentile speeds of circa 40mph in both directions. The latest available accident record does not highlight any existing highway defects or safety issues that would be exacerbated by the proposed development.
- 7.1.7 Vehicular access to the site will be from Hamble Lane and will take the form of a simple priority junction. The location of the access has been carefully selected to minimise the impact on trees along Hamble Lane and the site frontage and the proposed access arrangements have been subject to a Pre-Application Design Review (PADR) with HCC which has informed the design of the access.
- 7.1.8 It is intended that all HGVs arriving and departing the site would arrive and depart to the north (towards the M27). As such, the access has been designed to help physically prevent any vehicles arriving or departing from the south.



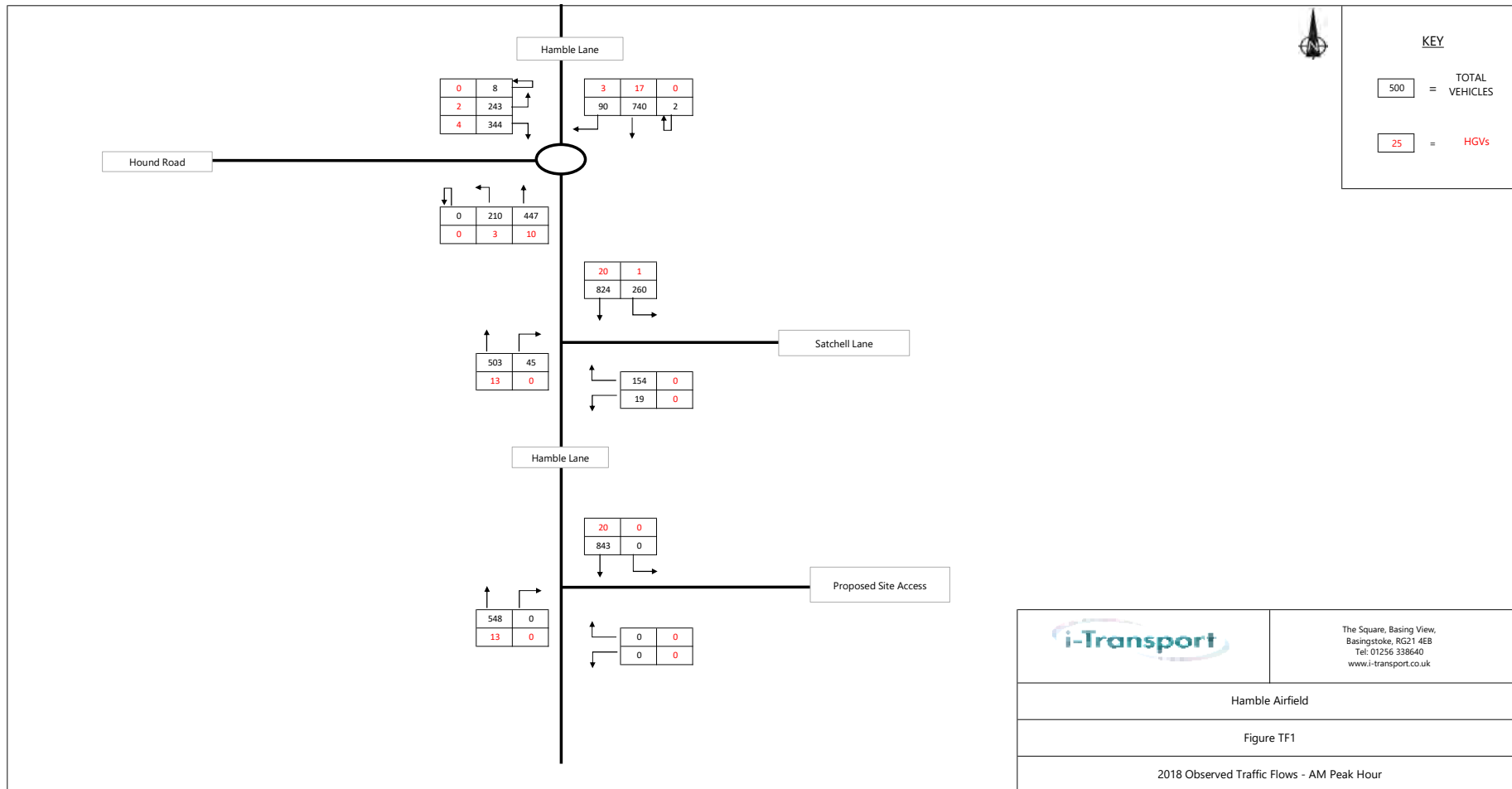
- 7.1.9 Pedestrian and cycle access would be gained from Hamble Lane adjacent to the vehicular access. There is currently a shared footway / cycleway along the eastern side of Hamble Lane with a width of circa 2.2m – 2.6m. In the vicinity of the new bell mouth, it is proposed to widen the footway / cycleway to 3.0m. The shared footway / cycleway with a width of 3.0m would then continue into the site.
- 7.1.10 It is also proposed to provide pedestrian guard-railings on both sides of the junction to ensure pedestrians / cyclists cross the access road where safe crossing facilities are provided. A pedestrian / cycle refuge island is also proposed in the centre of the access road to help facilitate pedestrians and cyclists to cross.
- 7.1.11 Consequently, the proposed access arrangements provide safe access for all users of the site as well as providing safe crossing facilities for pedestrians and cyclists on Hamble Lane.
- 7.1.12 The proposed development is anticipated to generate between 31-40 vehicle movements during the network peak periods, of which 11-20 would be HGV movements.
- 7.1.13 The results of the traffic impact analysis demonstrate that the proposed development will have only a very small impact on the operation of the local highway network. The proposed site access and the Hound Road / Hamble Lane Roundabout to the north of the site are anticipated to operate within capacity during the peak periods, with the development having a negligible impact on queueing and delays.
- 7.1.14 Against this background, it can be seen that the development generated traffic can be accommodated on the local highway network in the vicinity of the site and the residual impacts of the development fall far short of the 'severe' test set by the National Planning Policy Framework.
- 7.1.15 Nevertheless, it is acknowledged that Hamble Lane can suffer from congestion during the peak periods of the day. To help address this Hampshire County Council has come up with a package of measures to improve Hamble Lane in terms of performance/capacity. The main focus is on the northern section of Hamble Lane between the Windhover Roundabout and the Pound Road junction, but the scheme also looks at complementary measures on the wider network and further south on Hamble Lane.
- 7.1.16 Consequently, given the proposed development would have a (small) impact on Hamble Lane to the north of the site, CEMEX would be willing to provide a reasonable and proportional contribution towards the improvements identified.

## 7.2 Conclusions

7.2.1 Having regard to the analysis contained in this document, it is concluded that there are no highway or transport reasons for the proposed development to come forward (*ref: NPPF paragraph 110/111*). The proposed development will:

- Provide safe and acceptable access for all people;
- Provide employees / visitors to the site with appropriate opportunities to travel by sustainable modes of transport;
- Be designed in accordance with prevailing design guidance; and
- Not have a 'severe' residual highways or unacceptable road safety impact.

## FIGURES

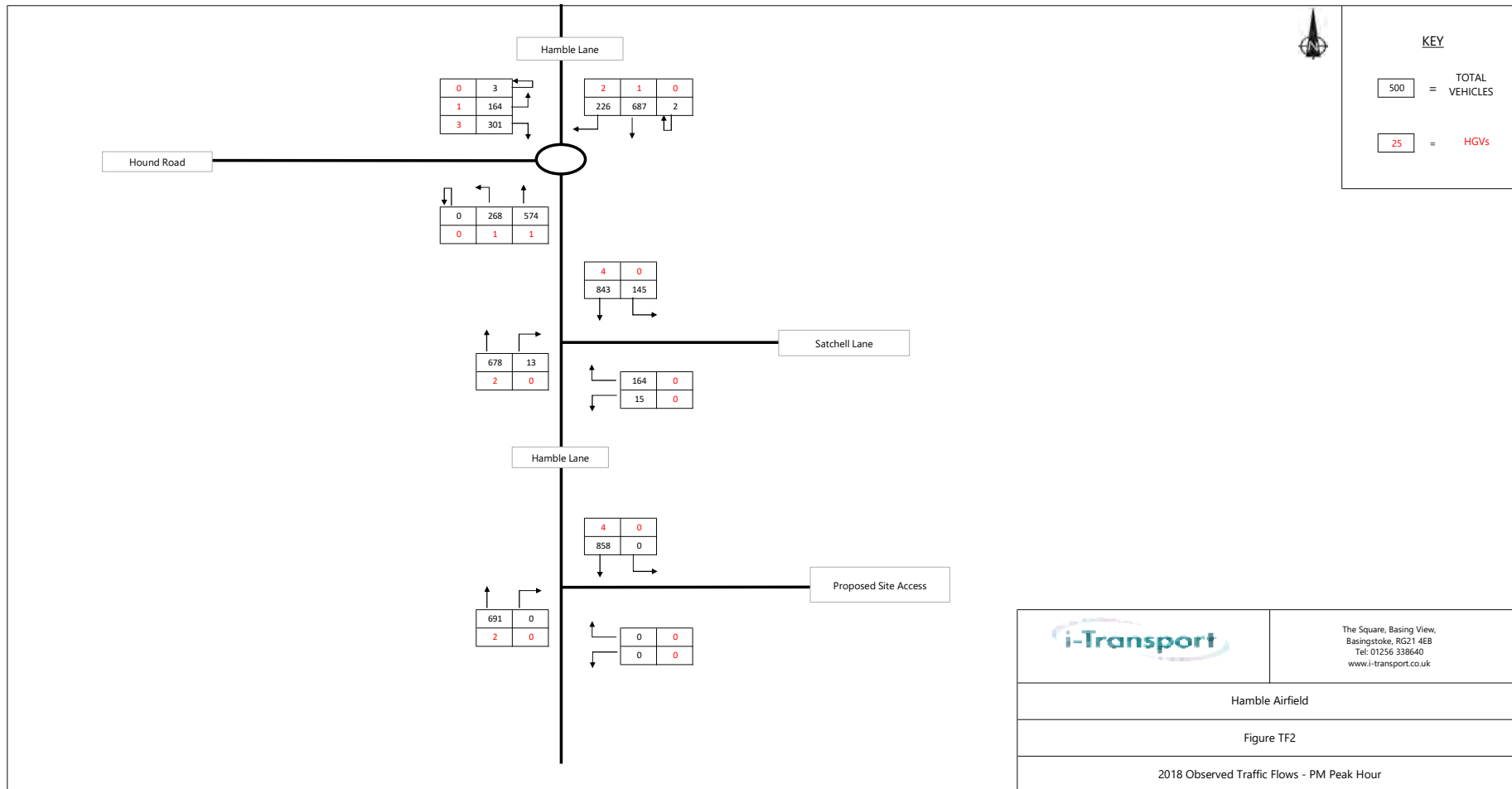


The Square, Basing View,  
Basingstoke, RG21 4EB  
Tel: 01256 338640  
www.i-transport.co.uk

Hamble Airfield

Figure TF1

2018 Observed Traffic Flows - AM Peak Hour

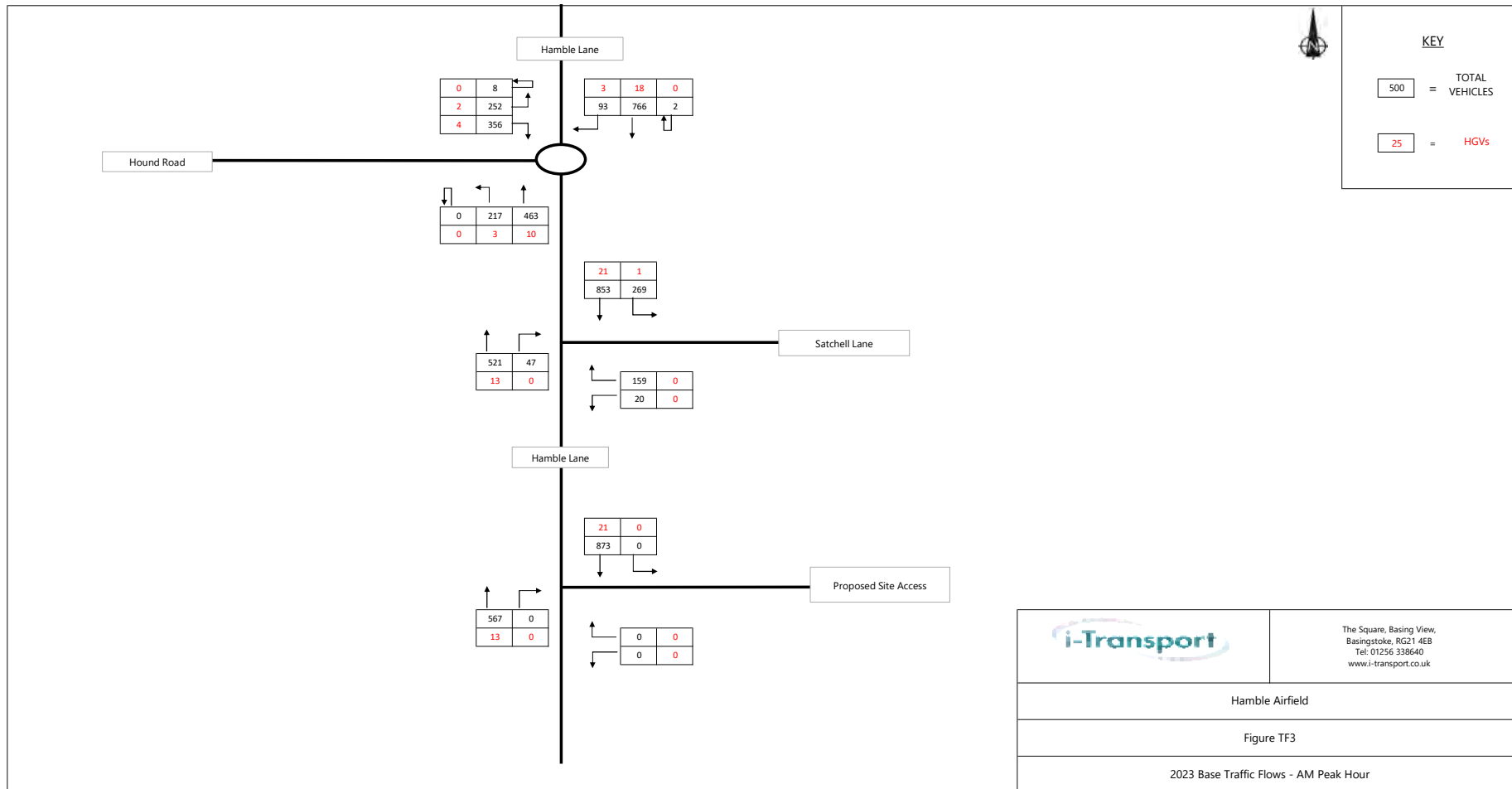


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Figure TF2

2018 Observed Traffic Flows - PM Peak Hour



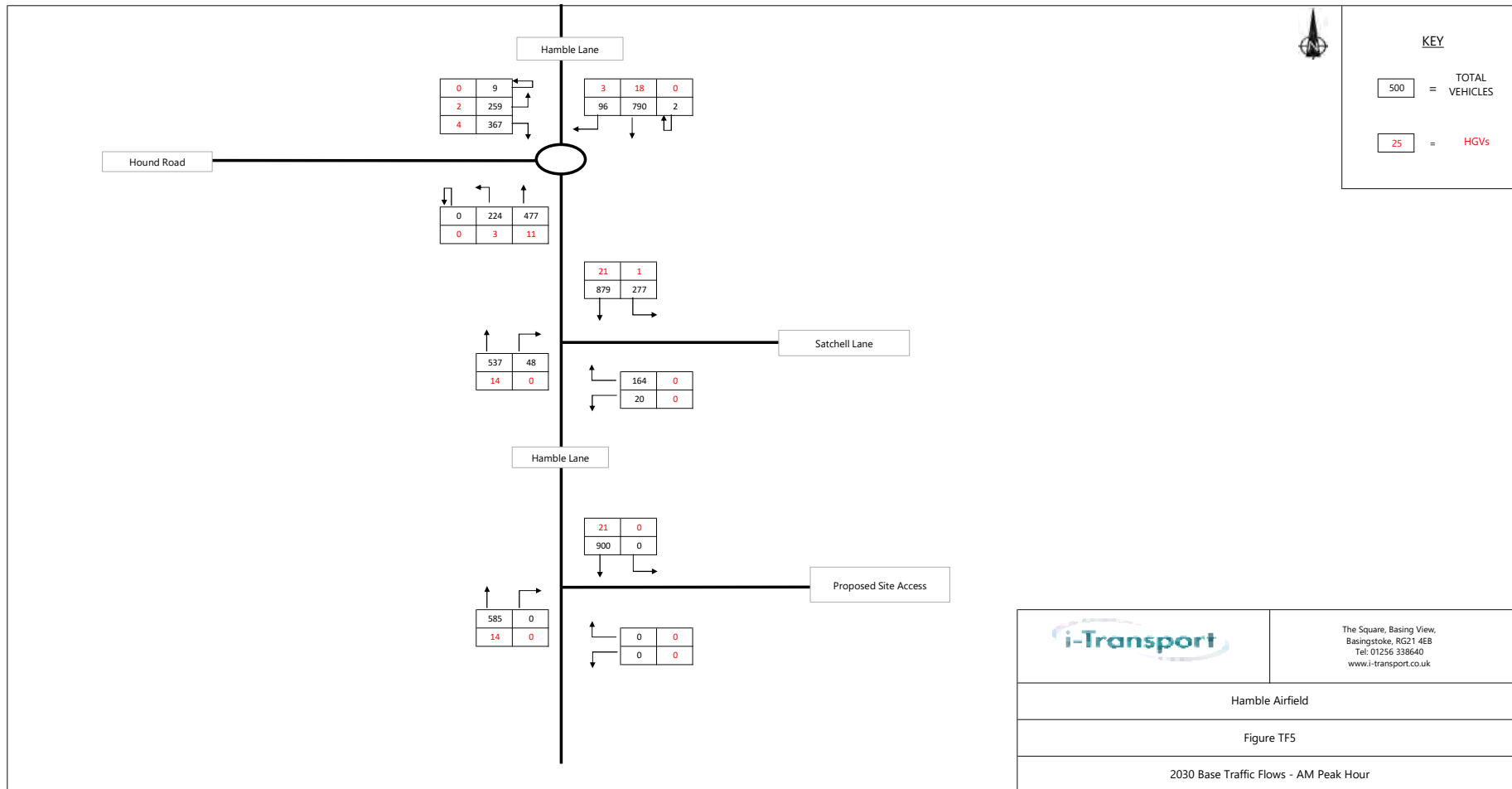
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Hamble Airfield

Figure TF3

2023 Base Traffic Flows - AM Peak Hour





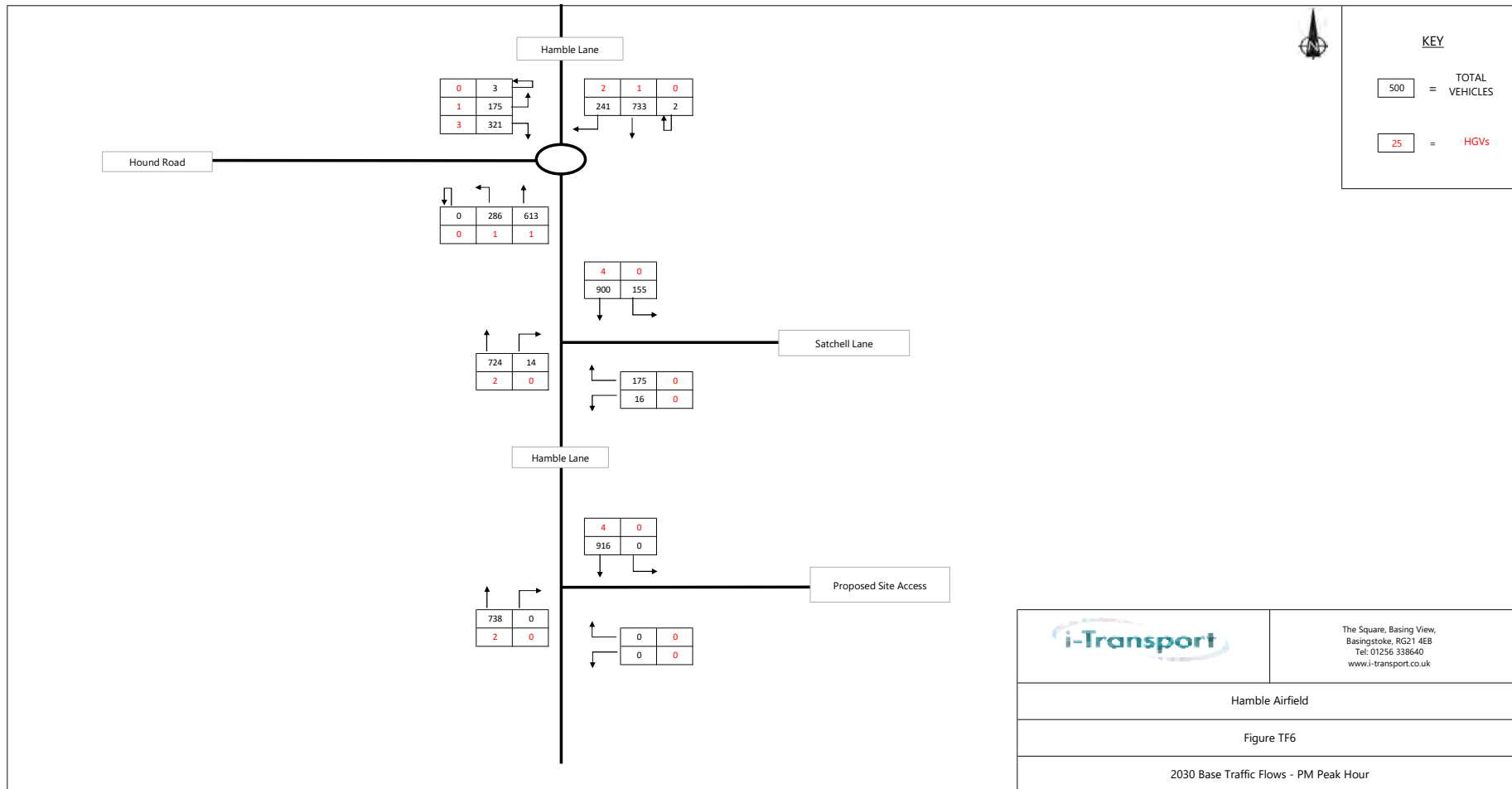
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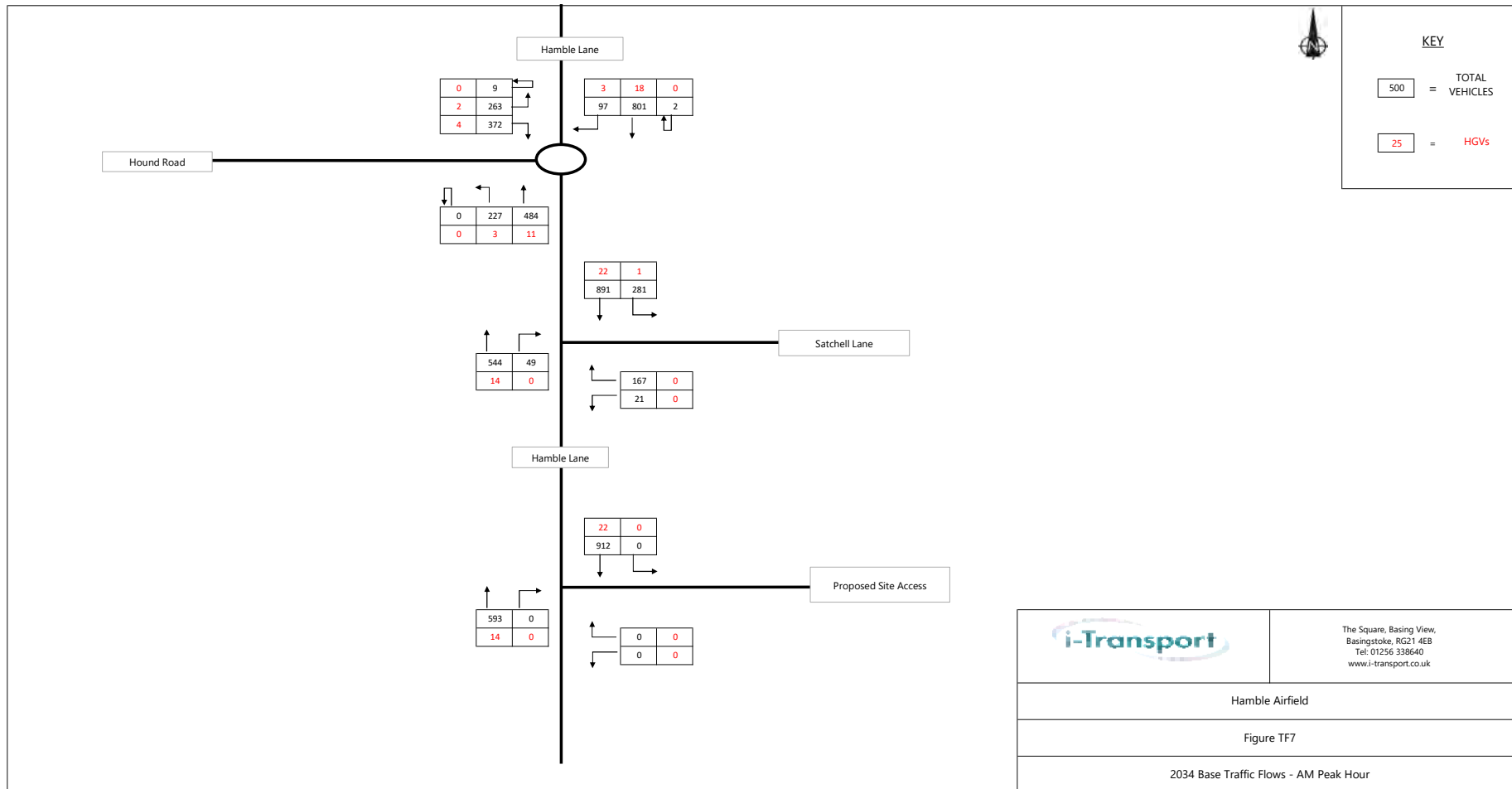
Hamble Airfield

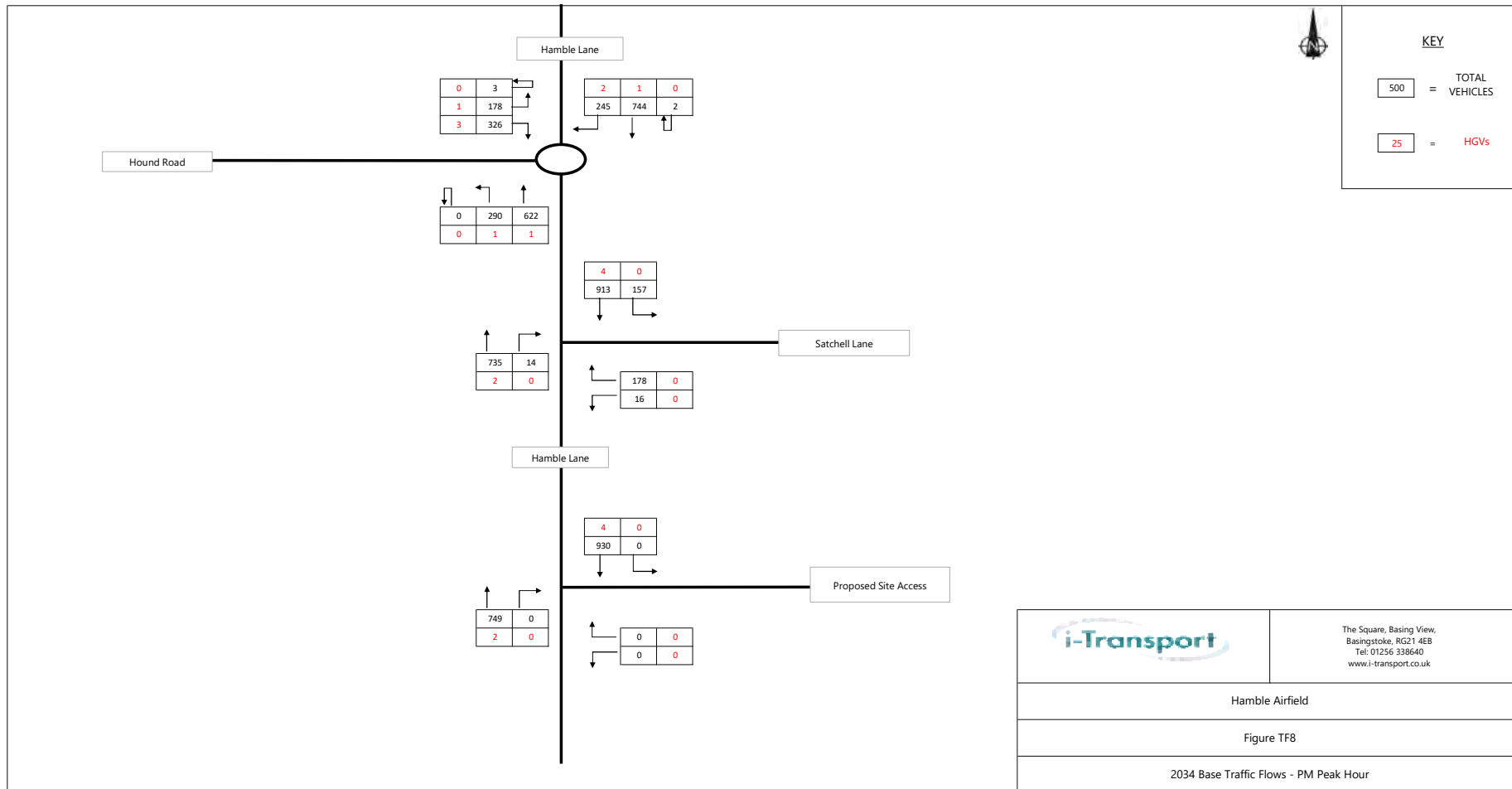
Figure TF5

2030 Base Traffic Flows - AM Peak Hour







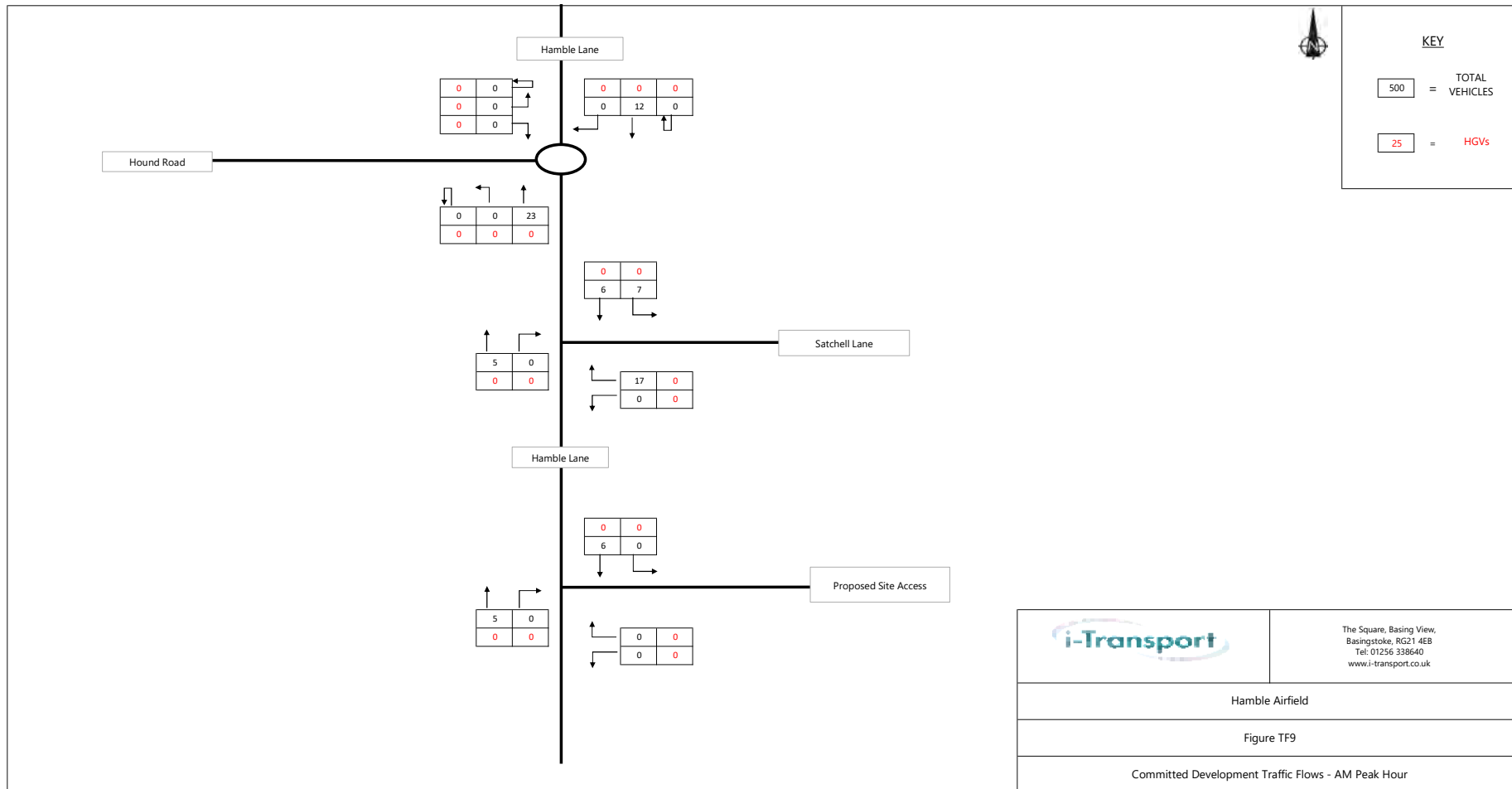


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Hamble Airfield

Figure TF8

2034 Base Traffic Flows - PM Peak Hour

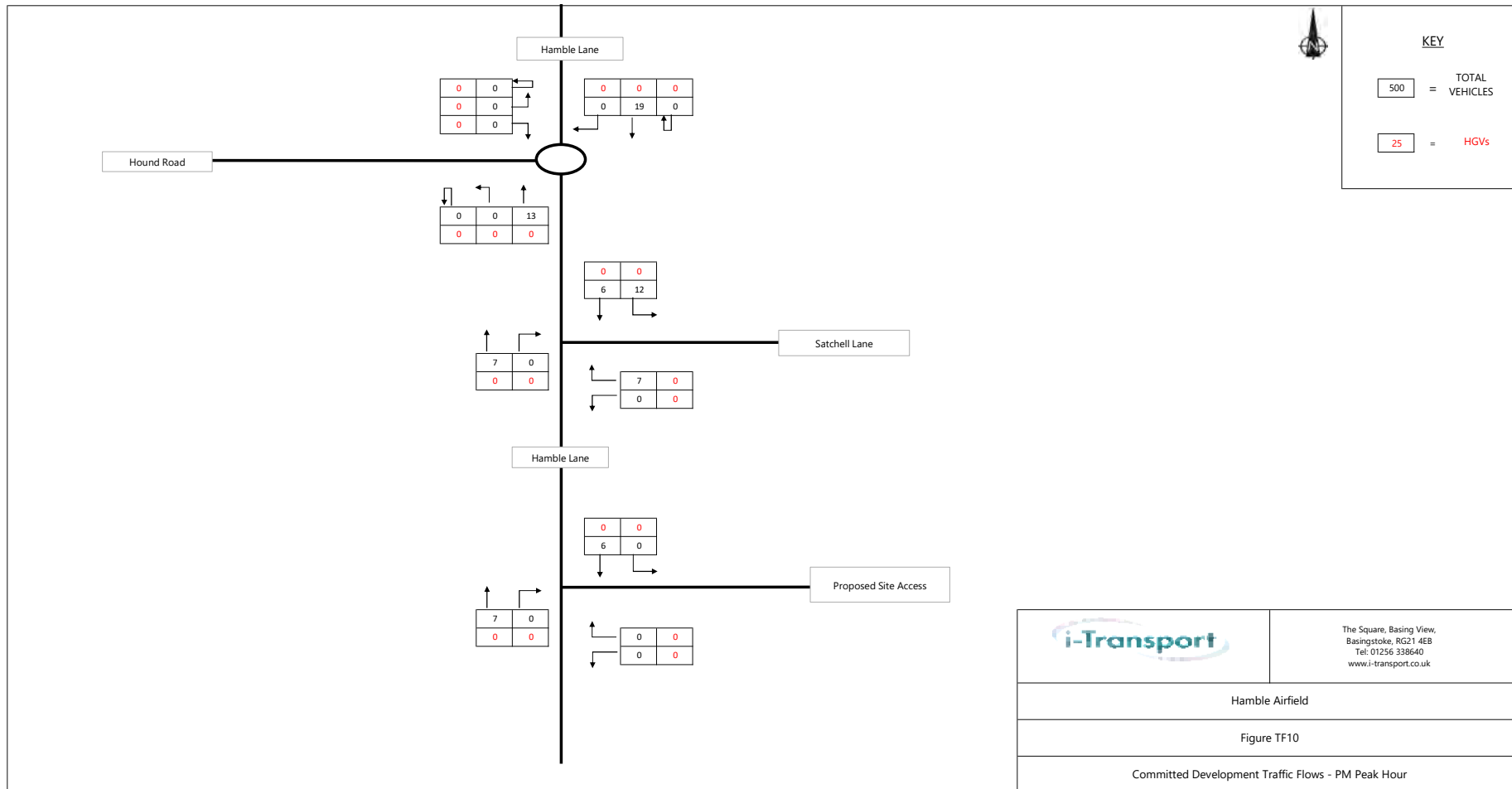


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Hamble Airfield

Figure TF9

Committed Development Traffic Flows - AM Peak Hour

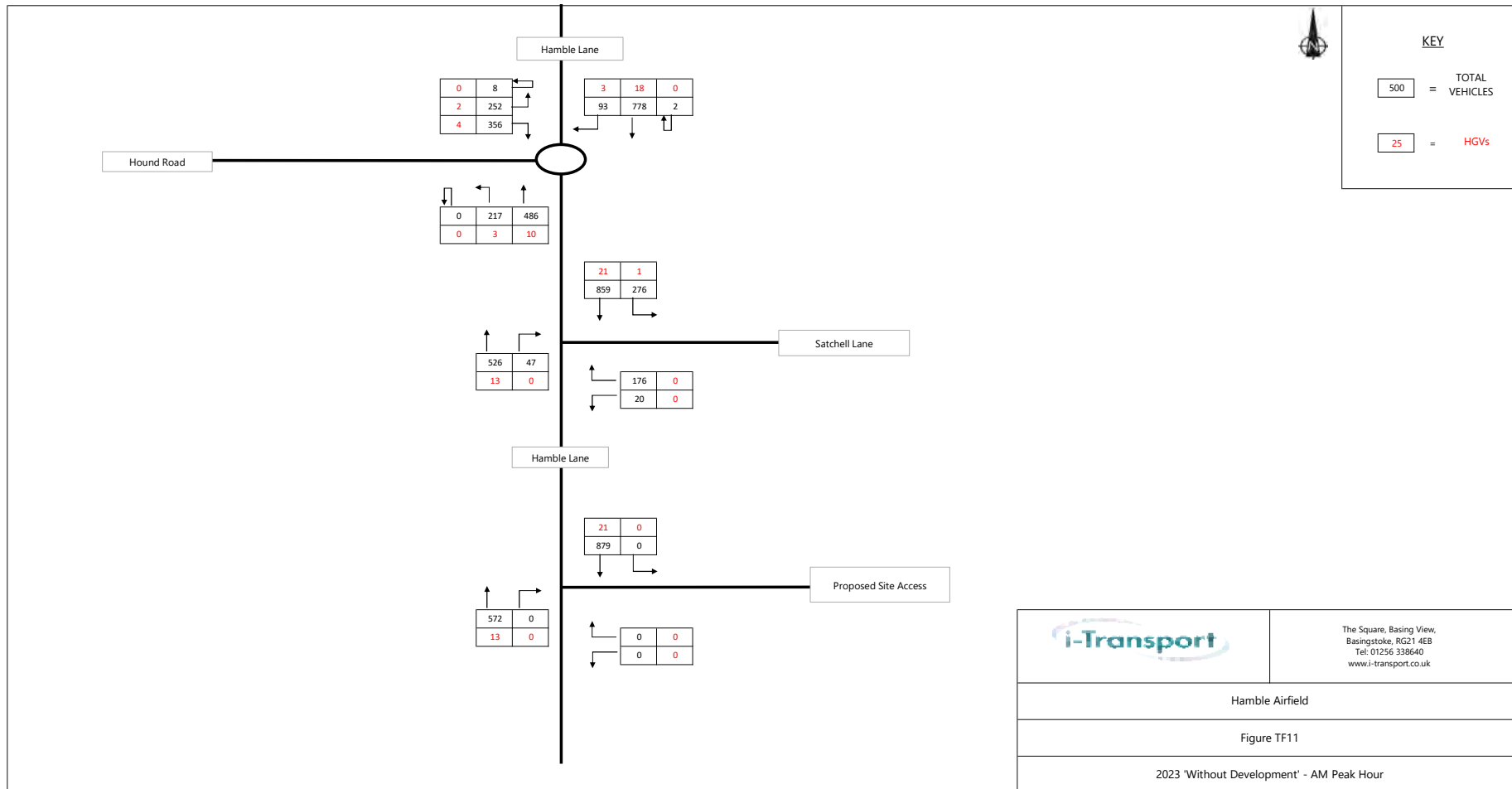


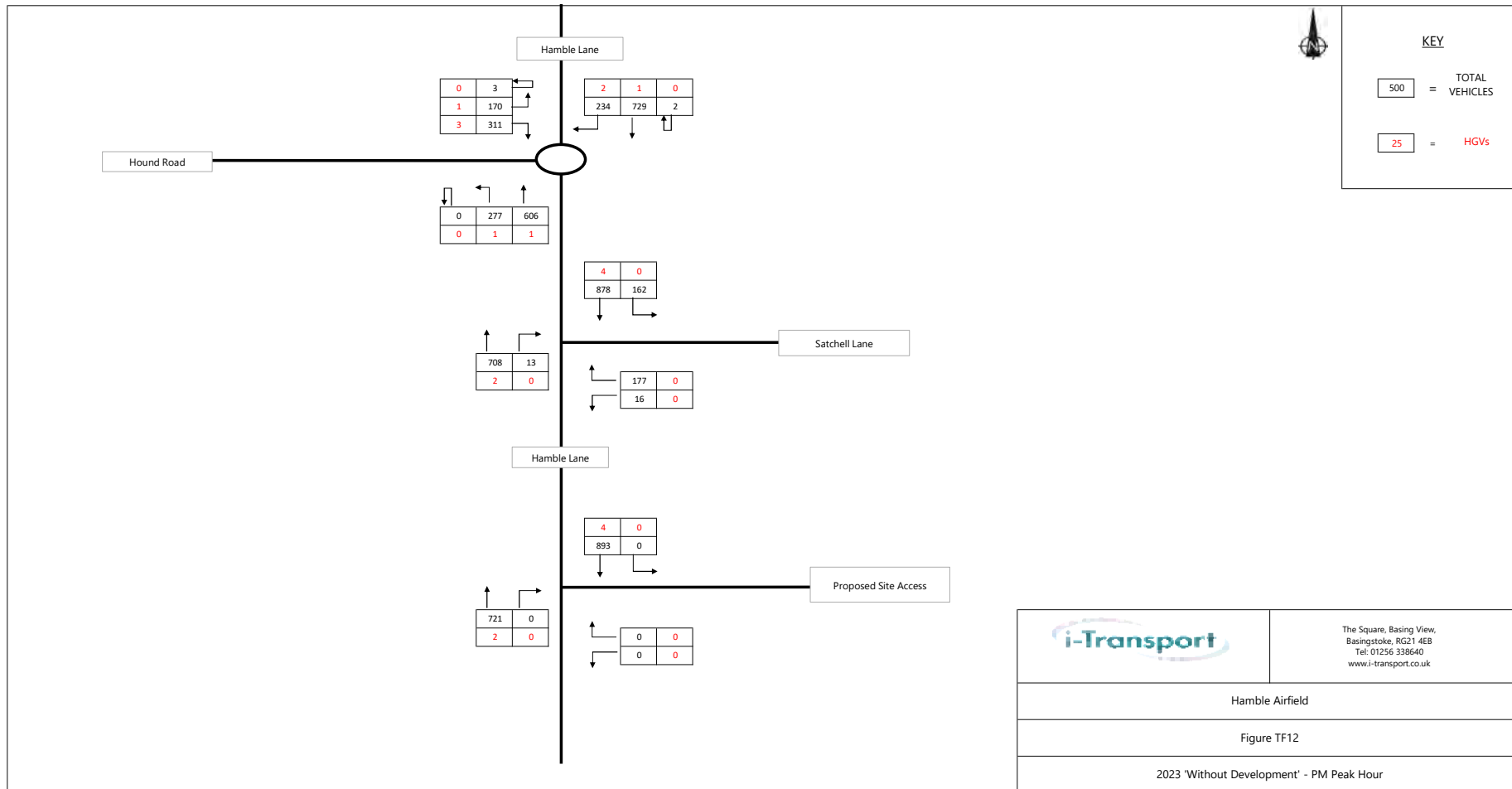
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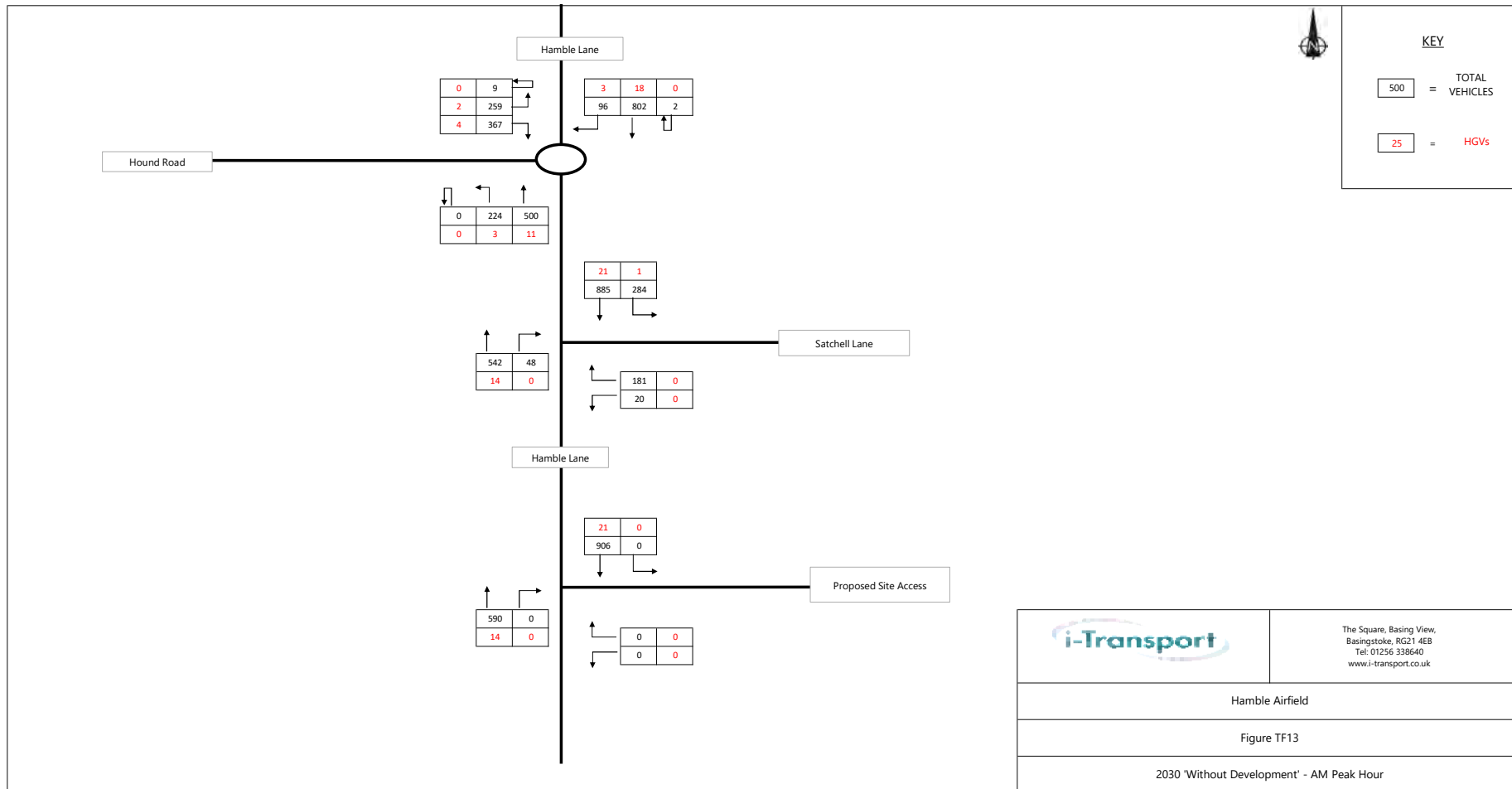
Hamble Airfield

Figure TF10

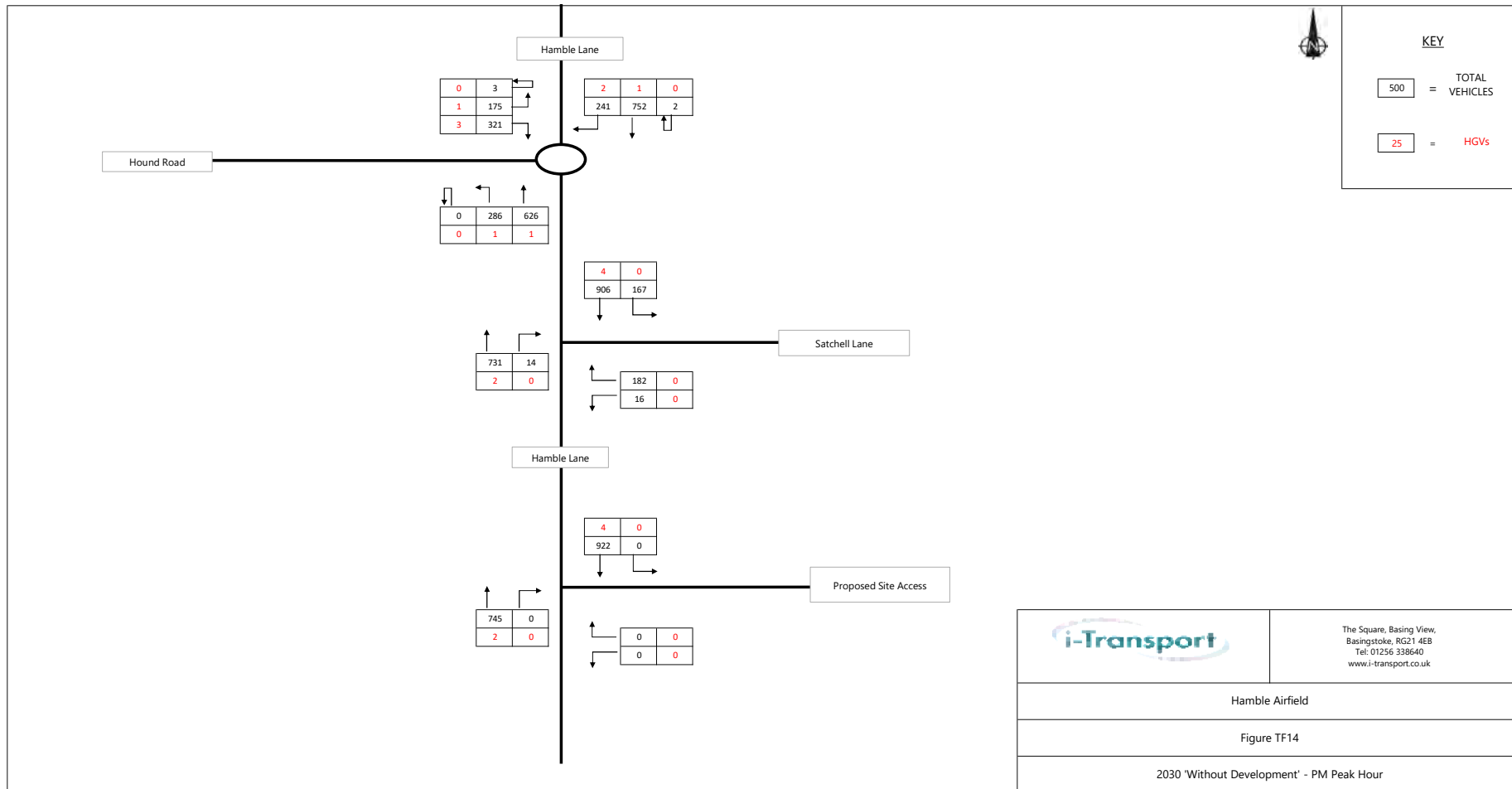
Committed Development Traffic Flows - PM Peak Hour

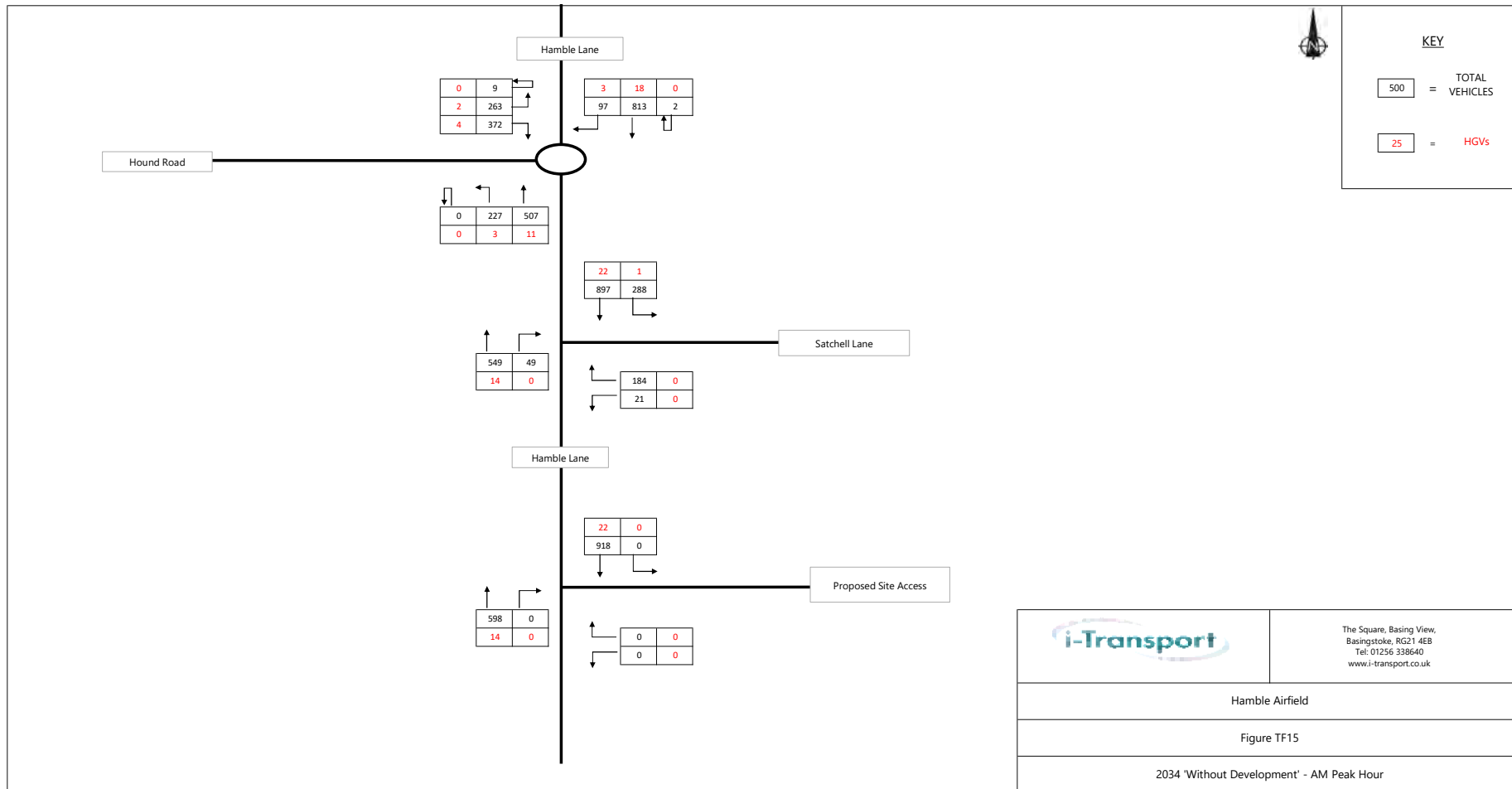


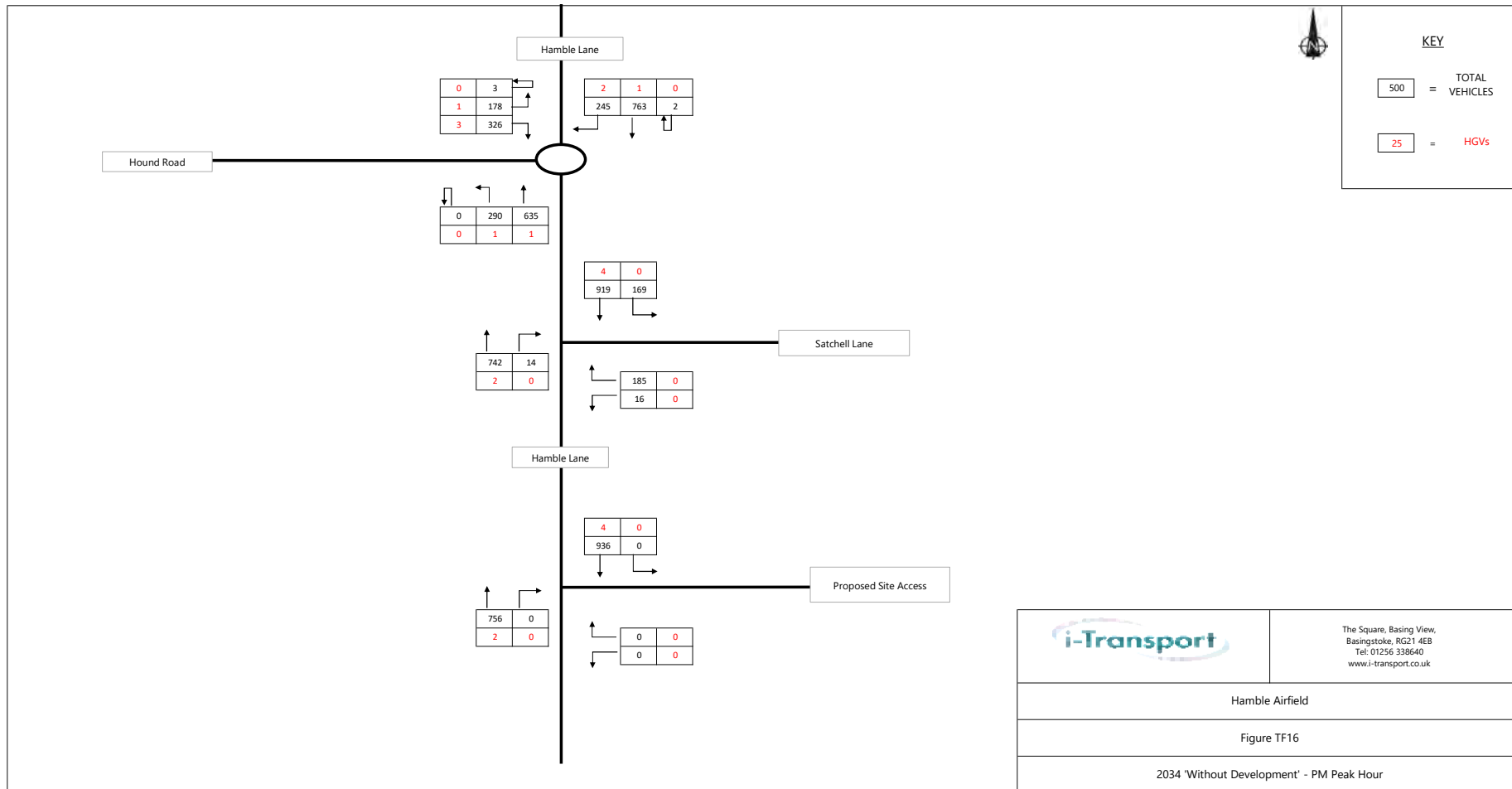


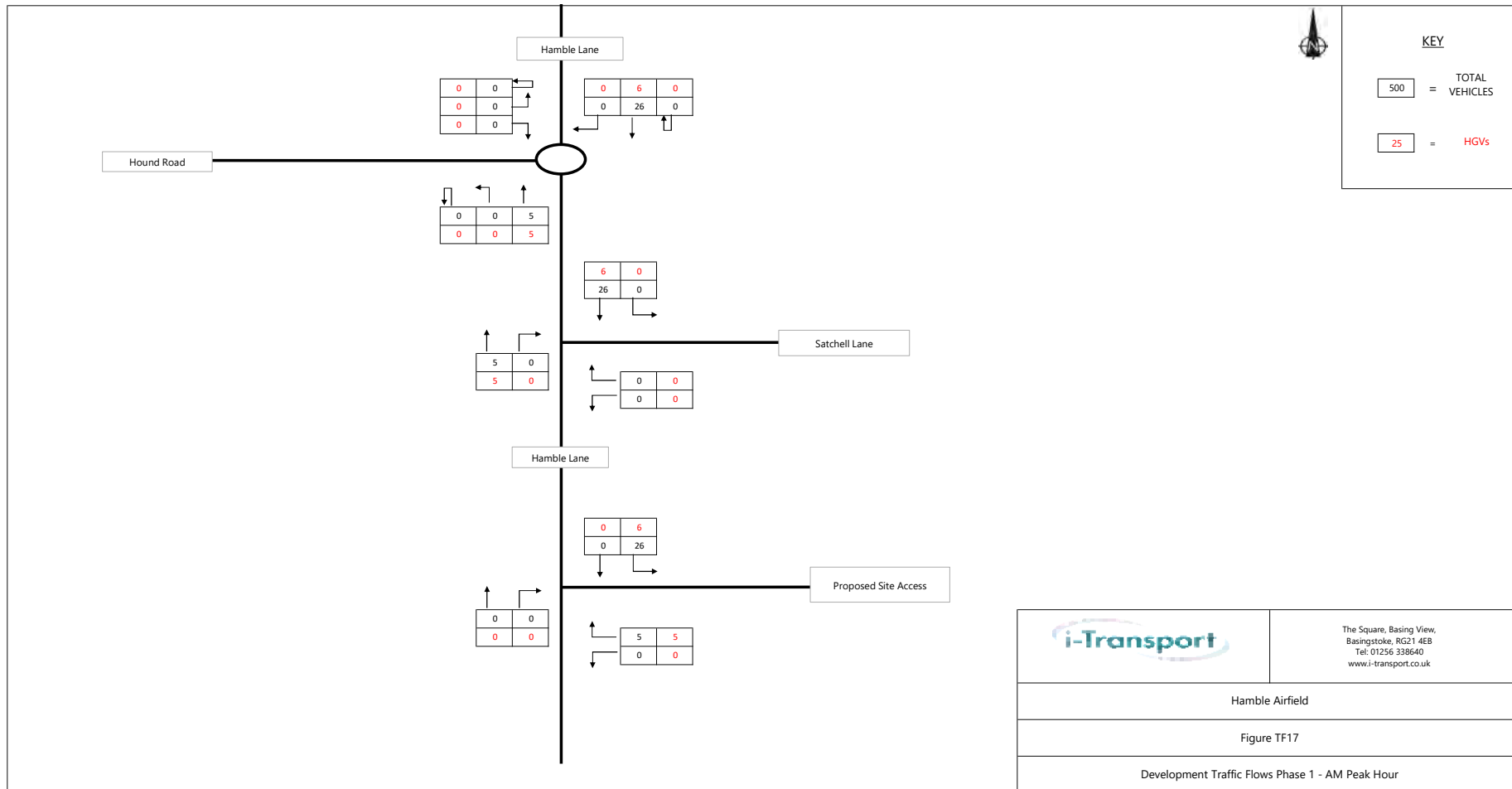


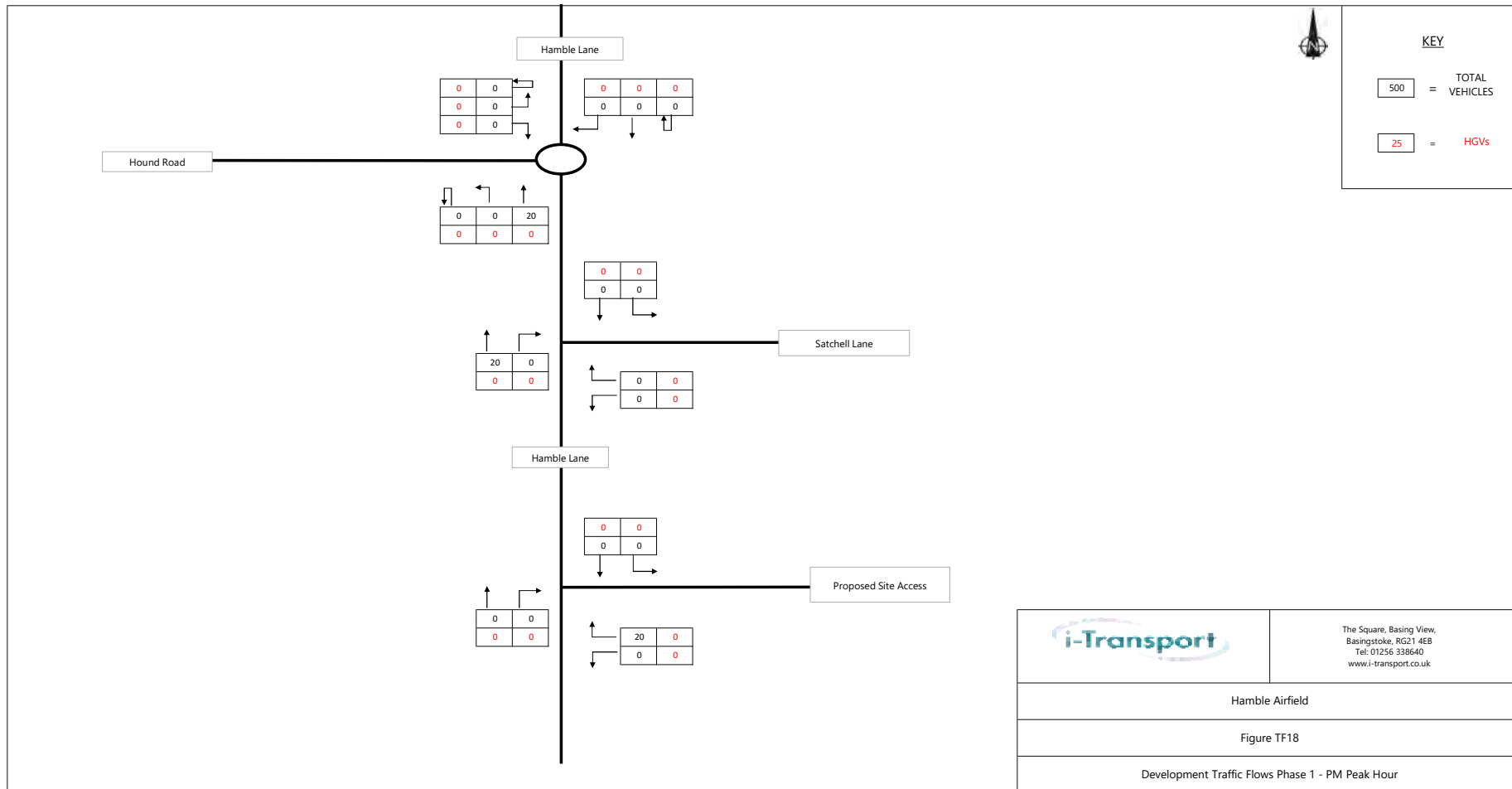












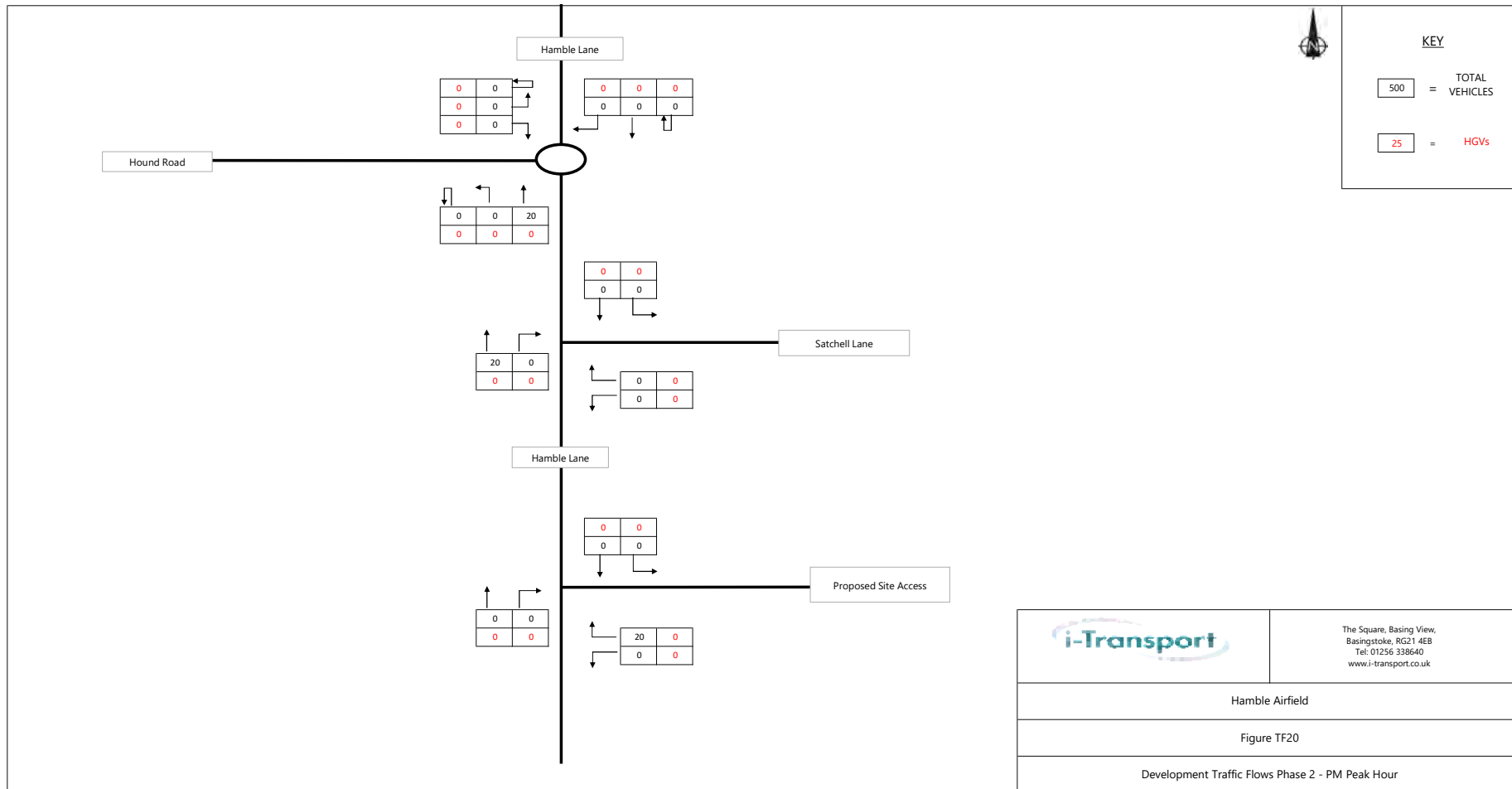
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Hamble Airfield

Figure TF18

Development Traffic Flows Phase 1 - PM Peak Hour



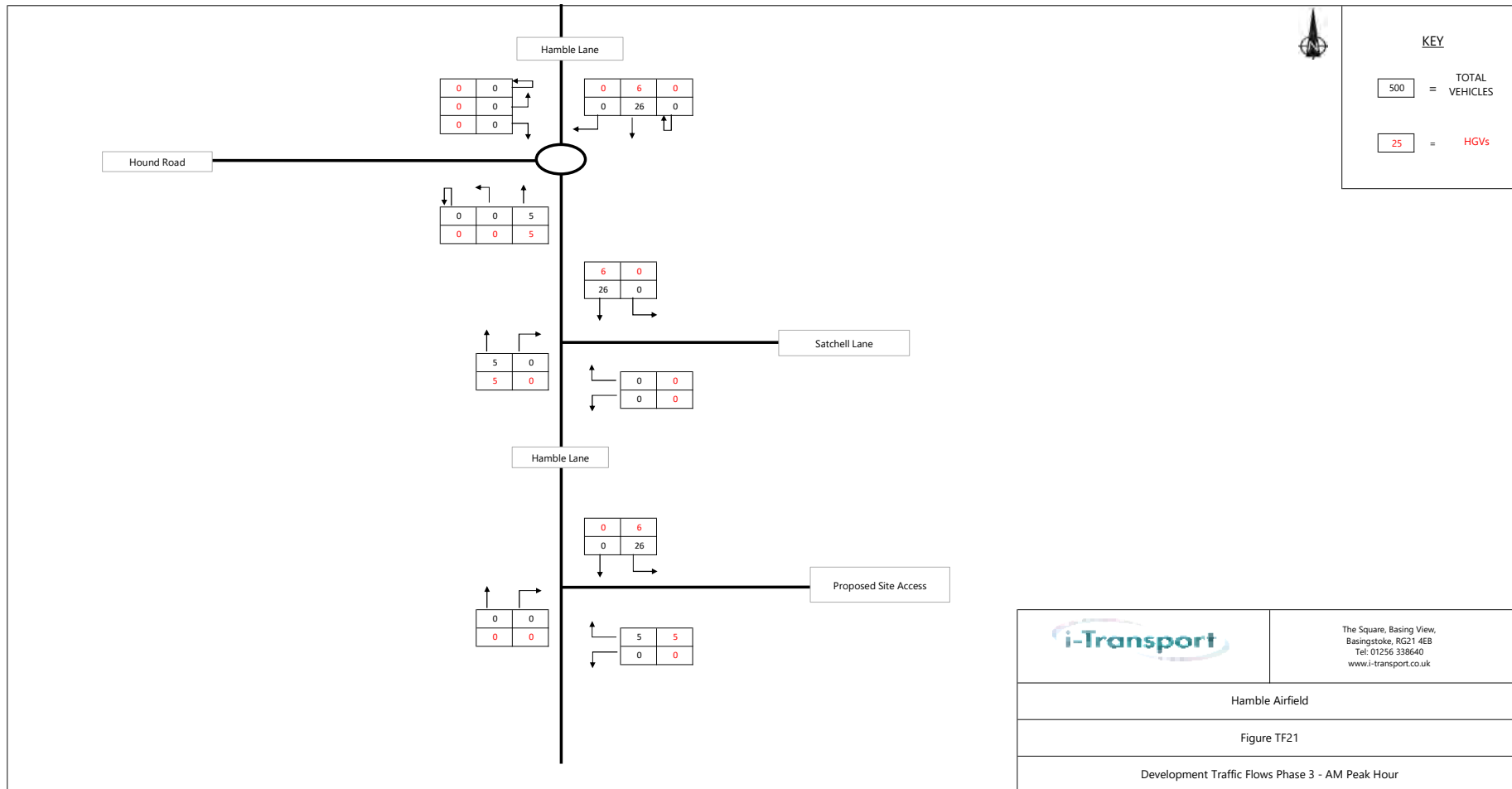


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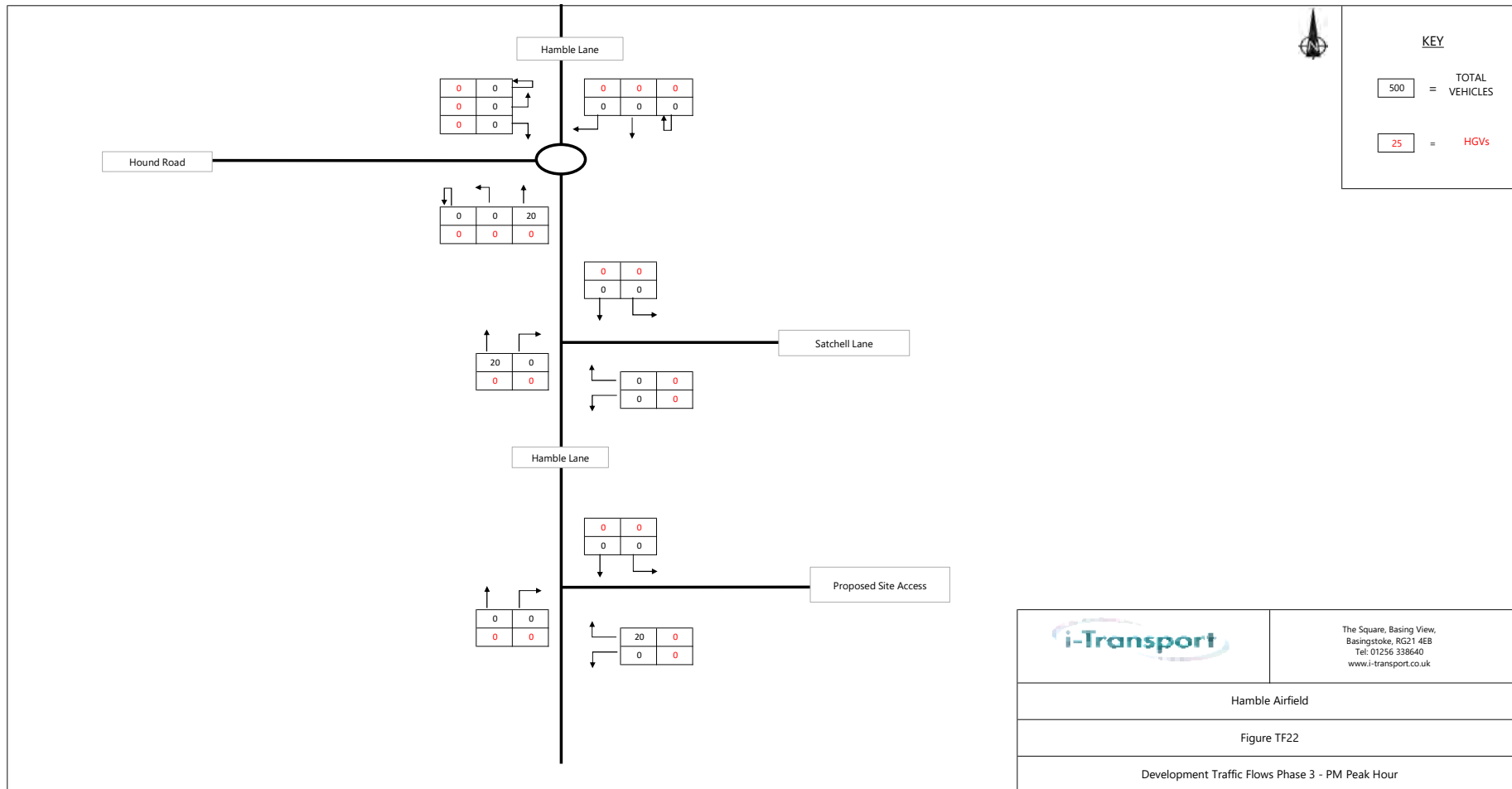
Hamble Airfield

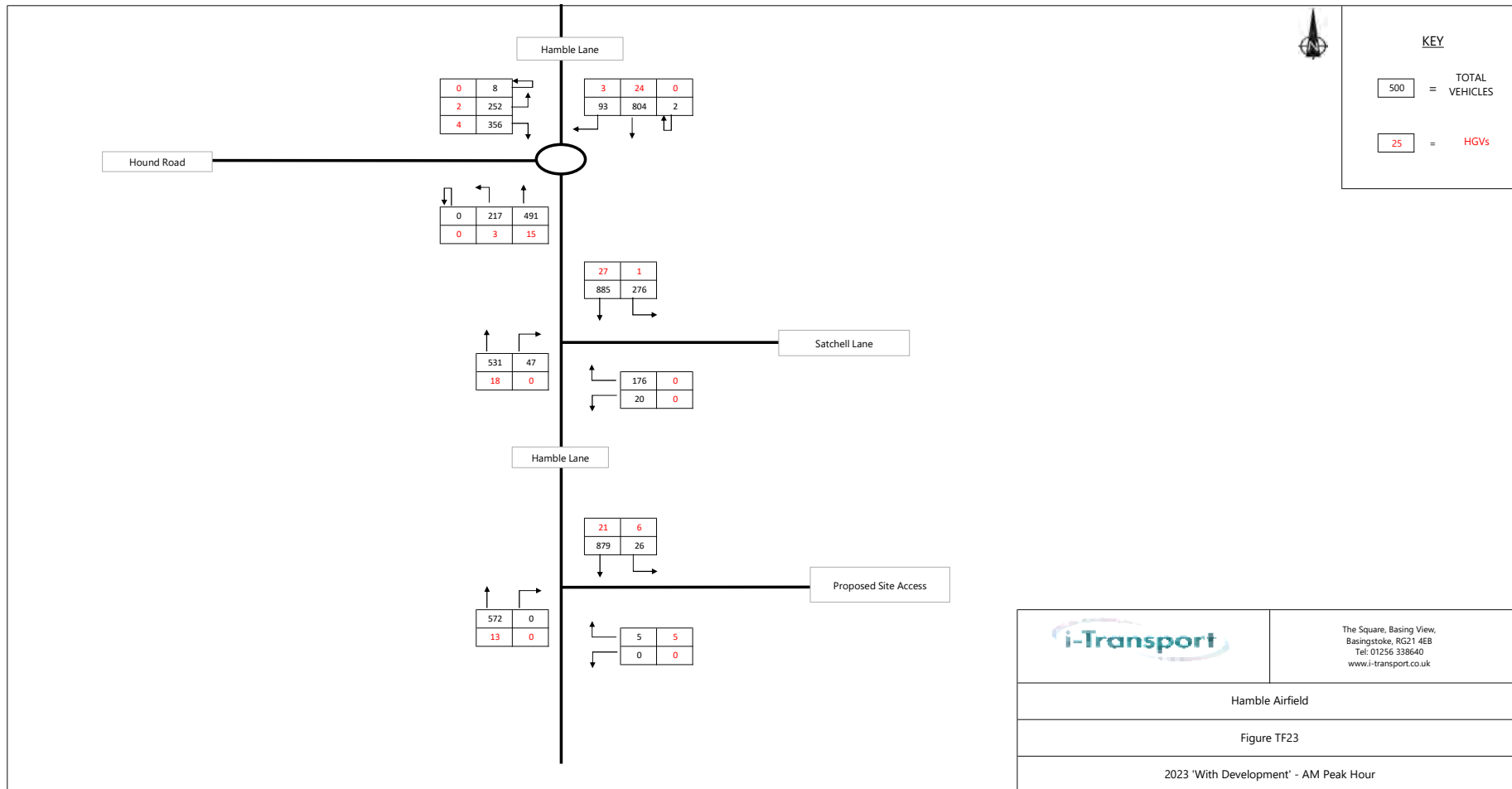
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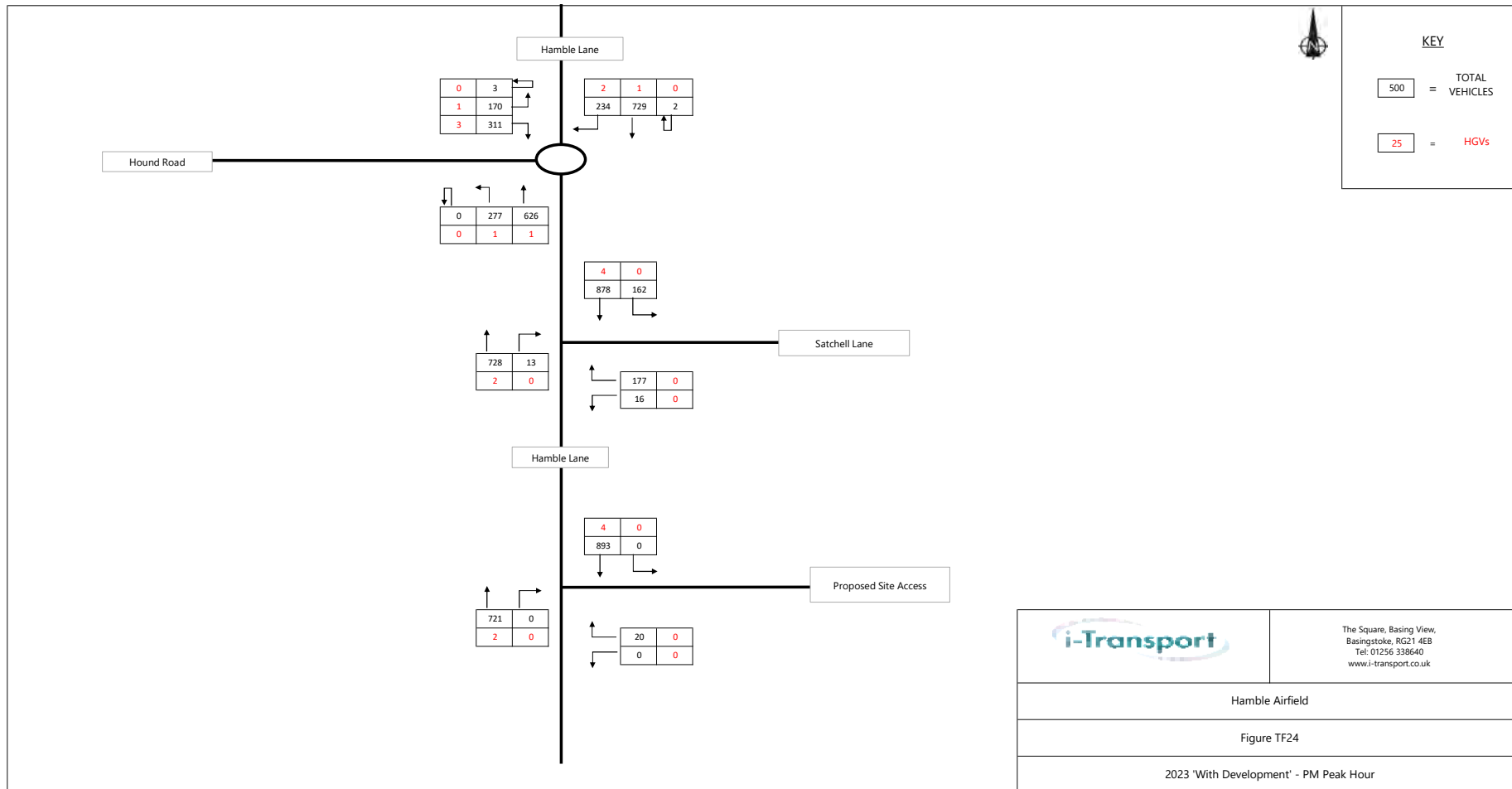
Development Traffic Flows Phase 2 - PM Peak Hour

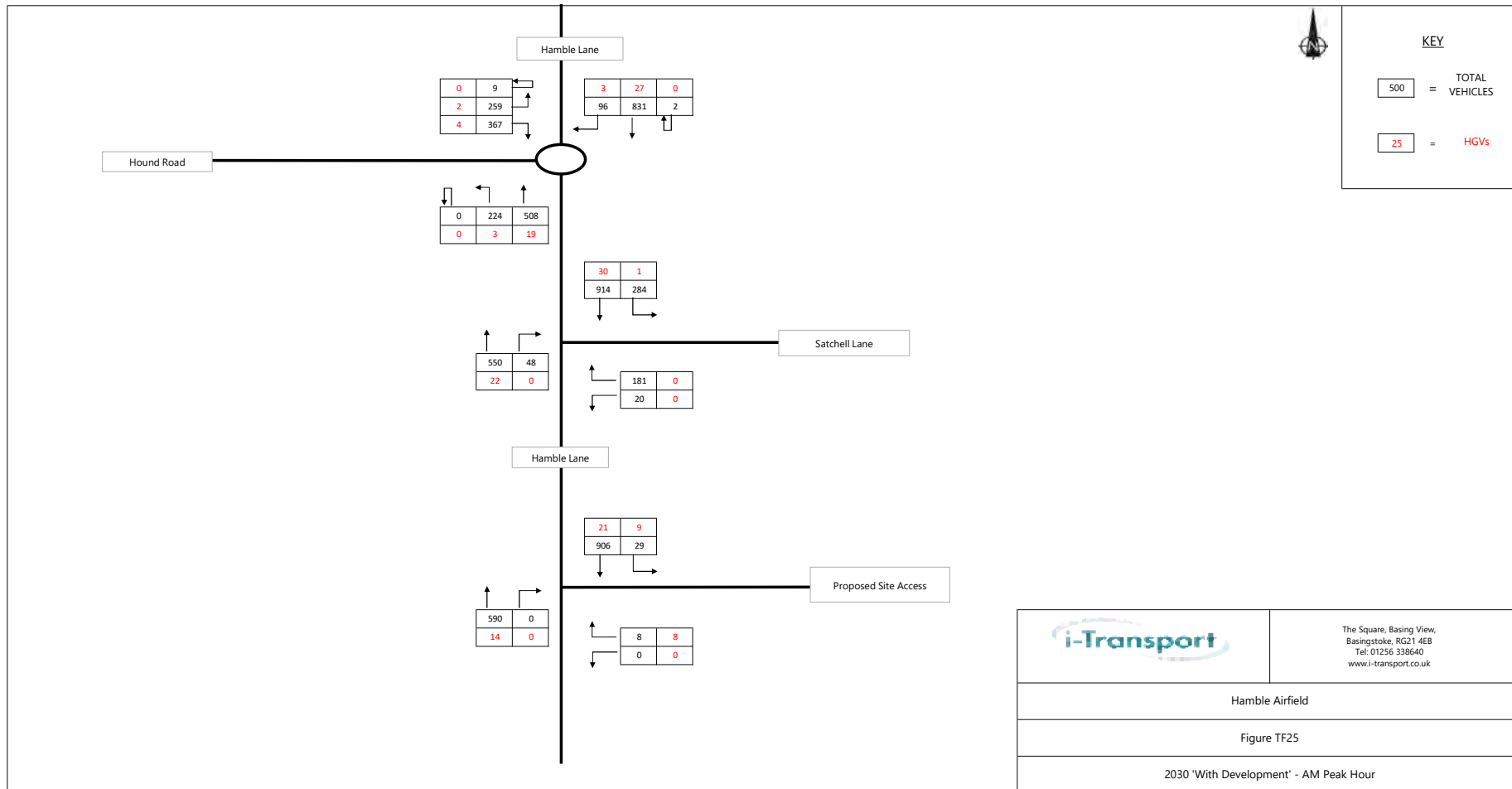










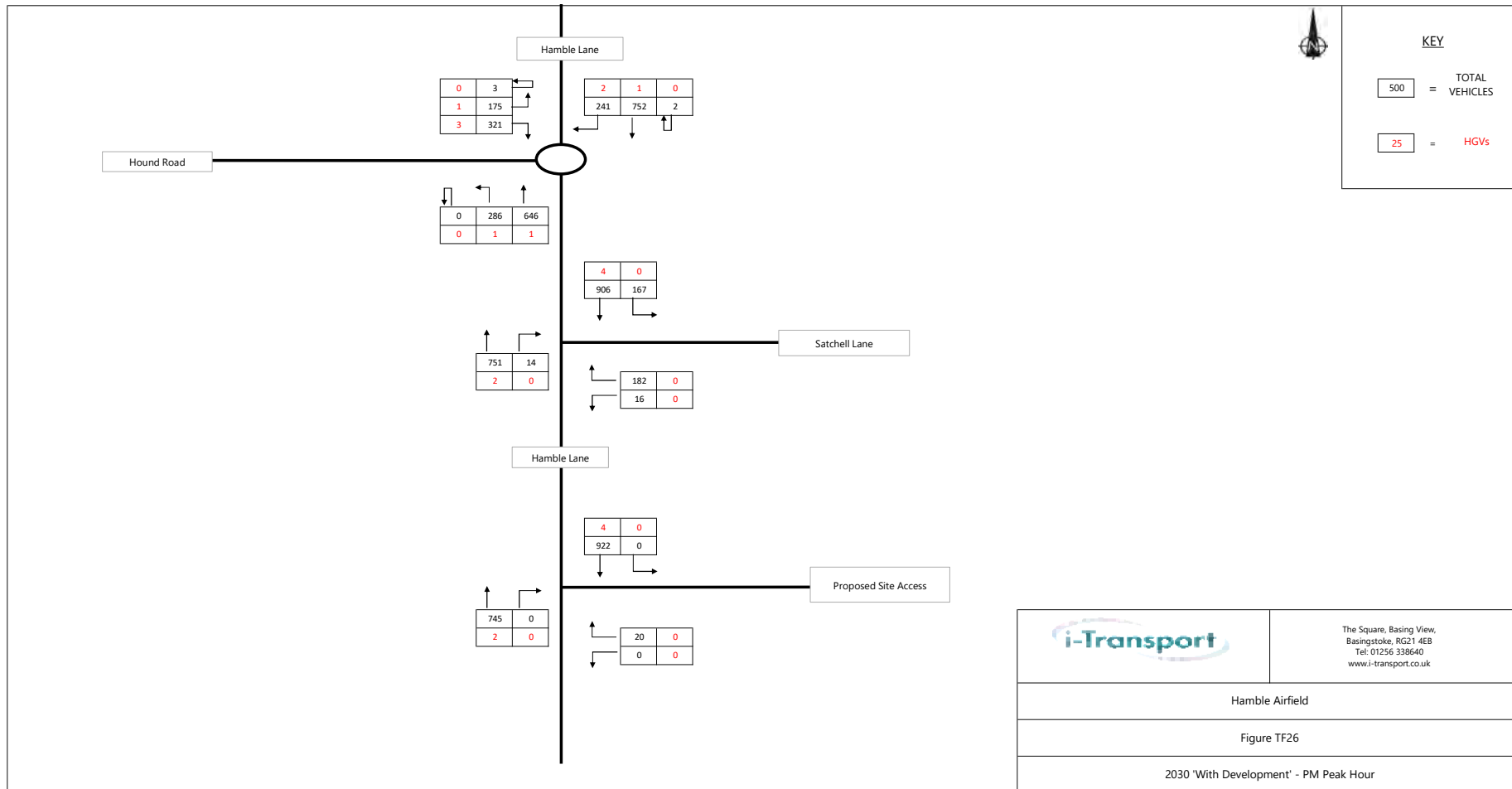


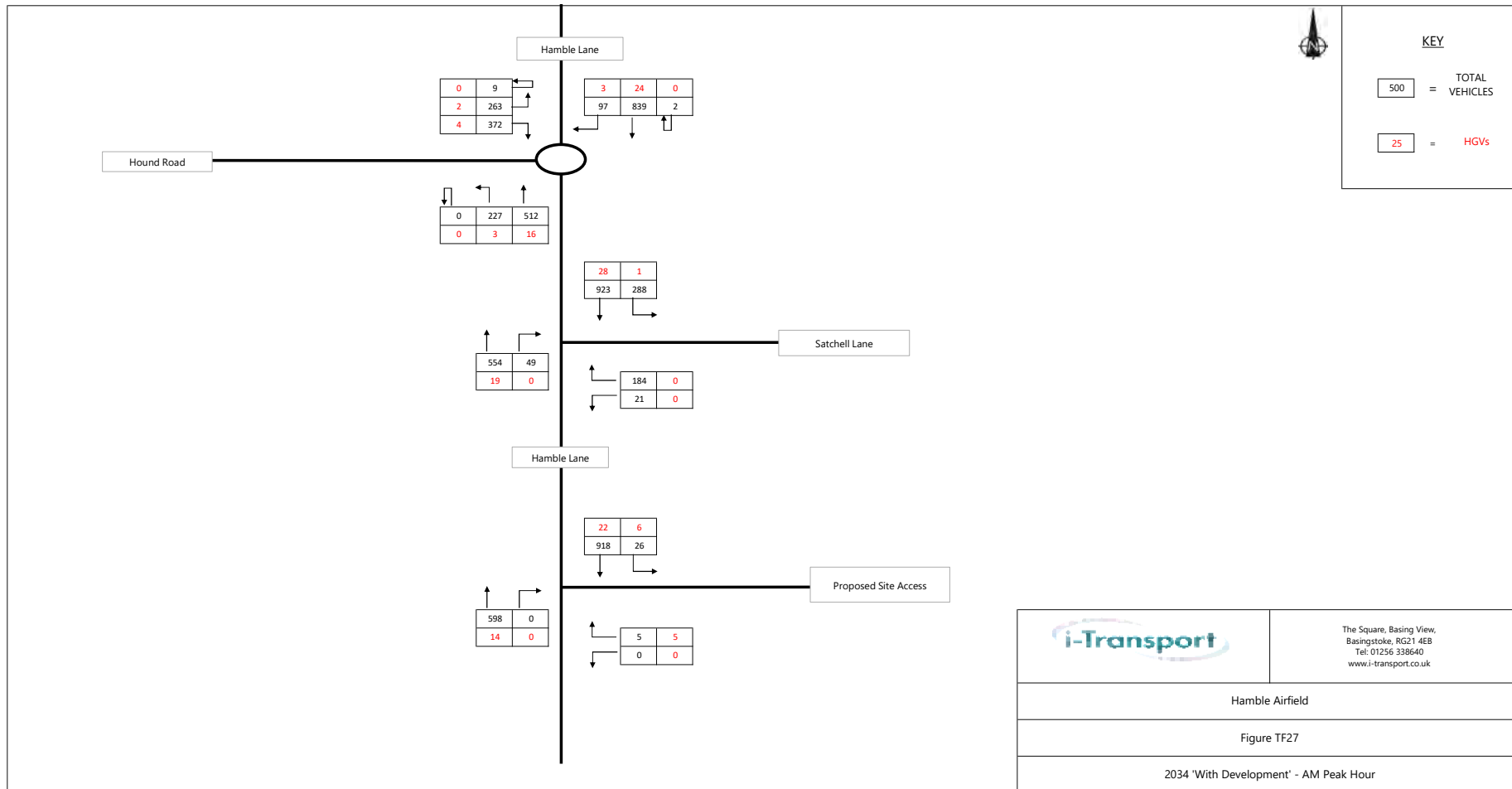
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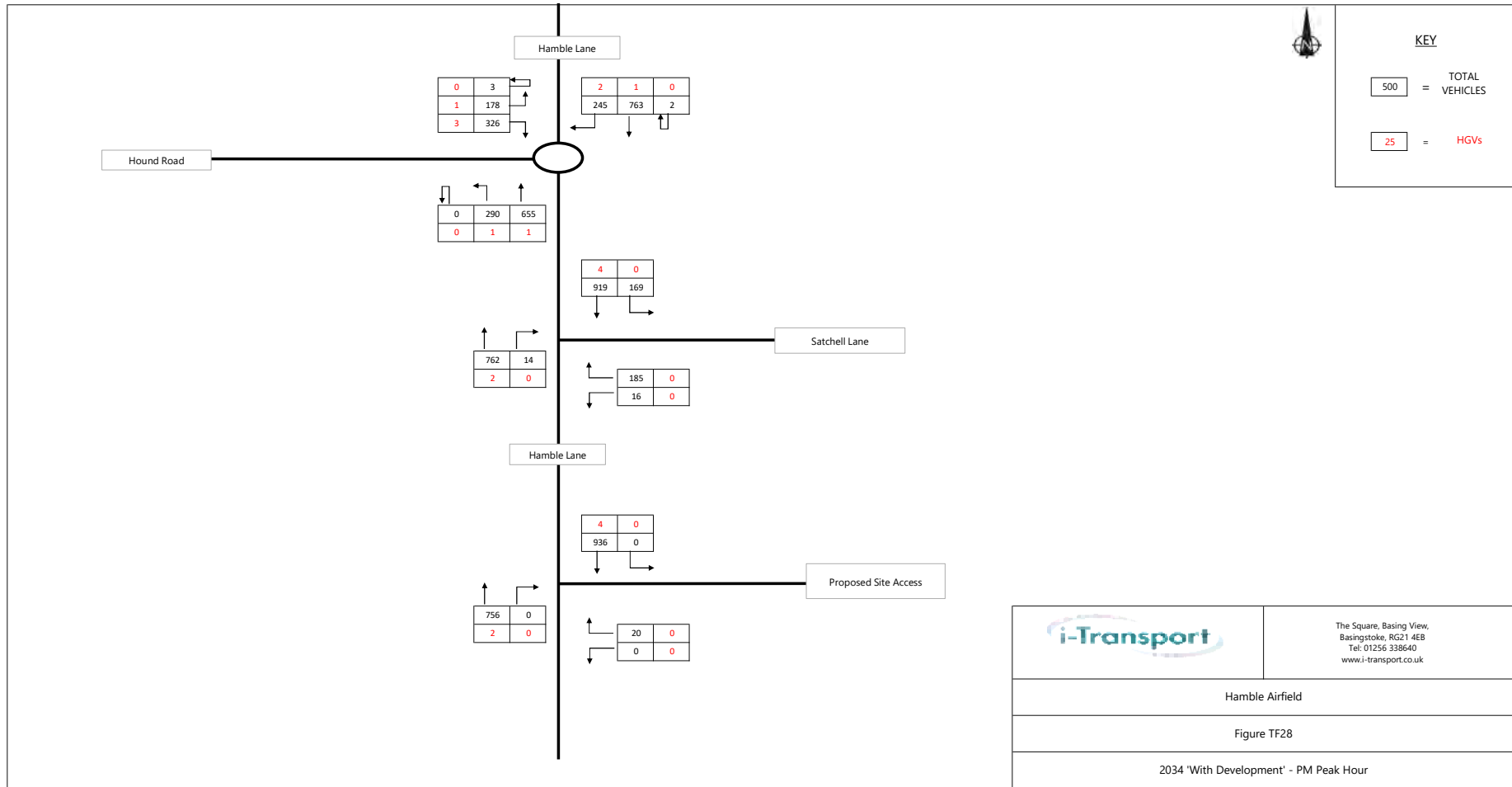
Hamble Airfield

Figure TF25

2030 'With Development' - AM Peak Hour



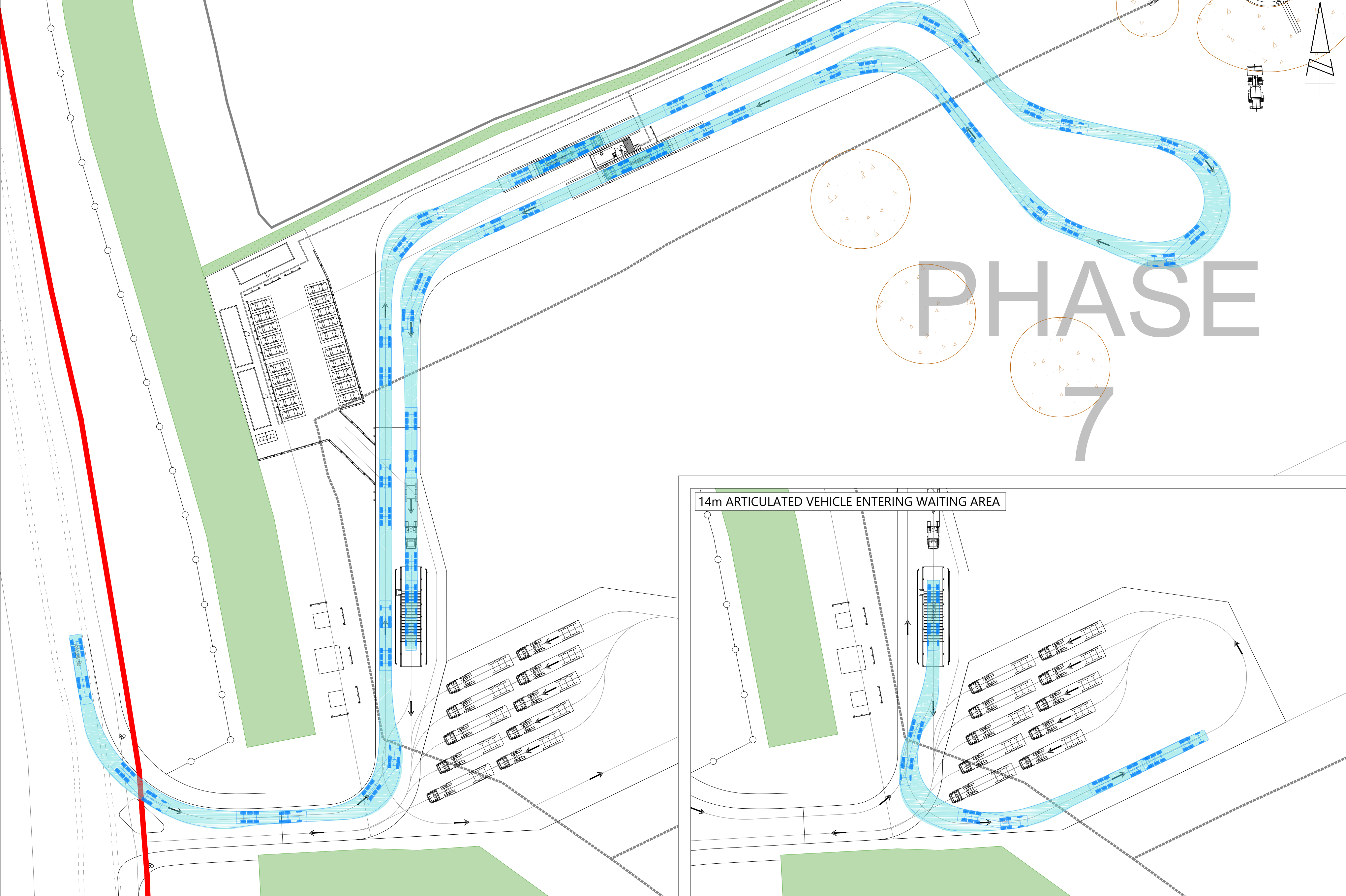




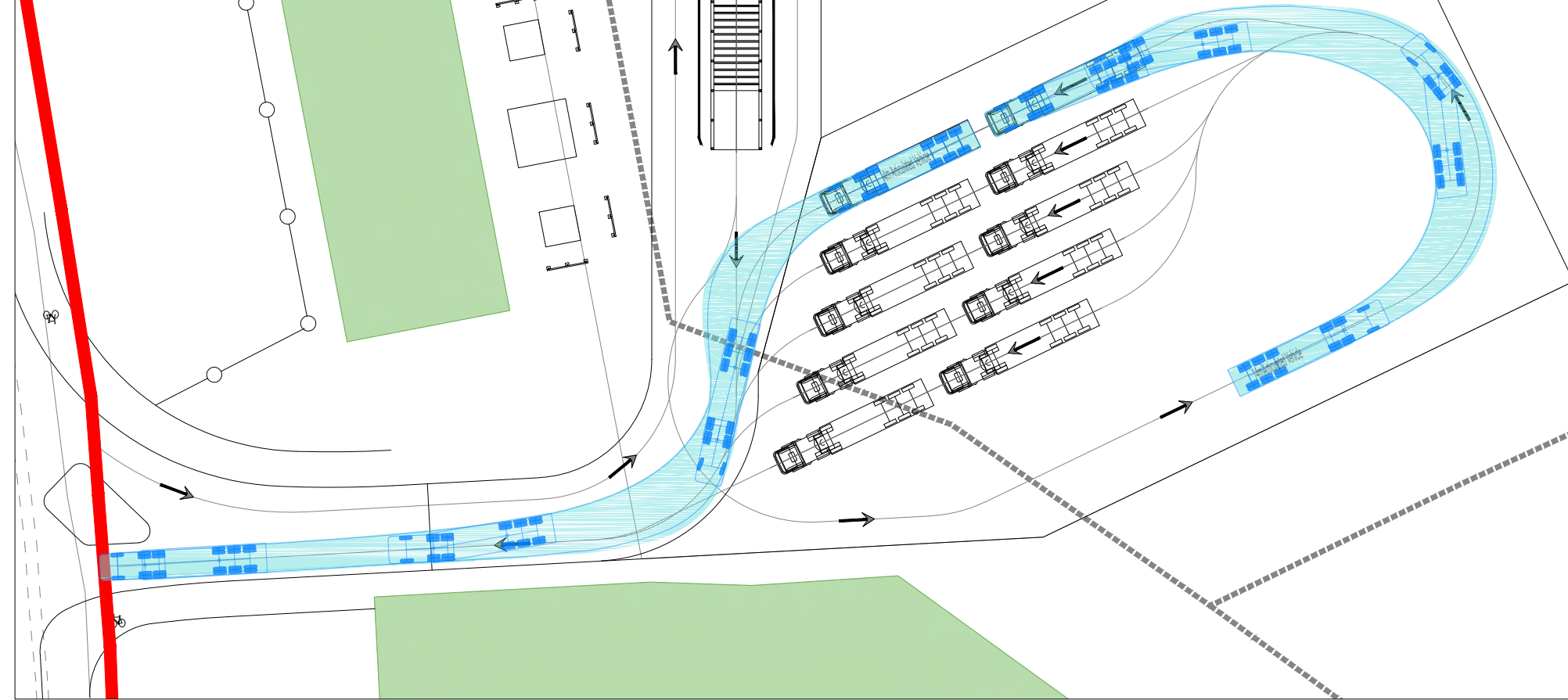
# DRAWINGS



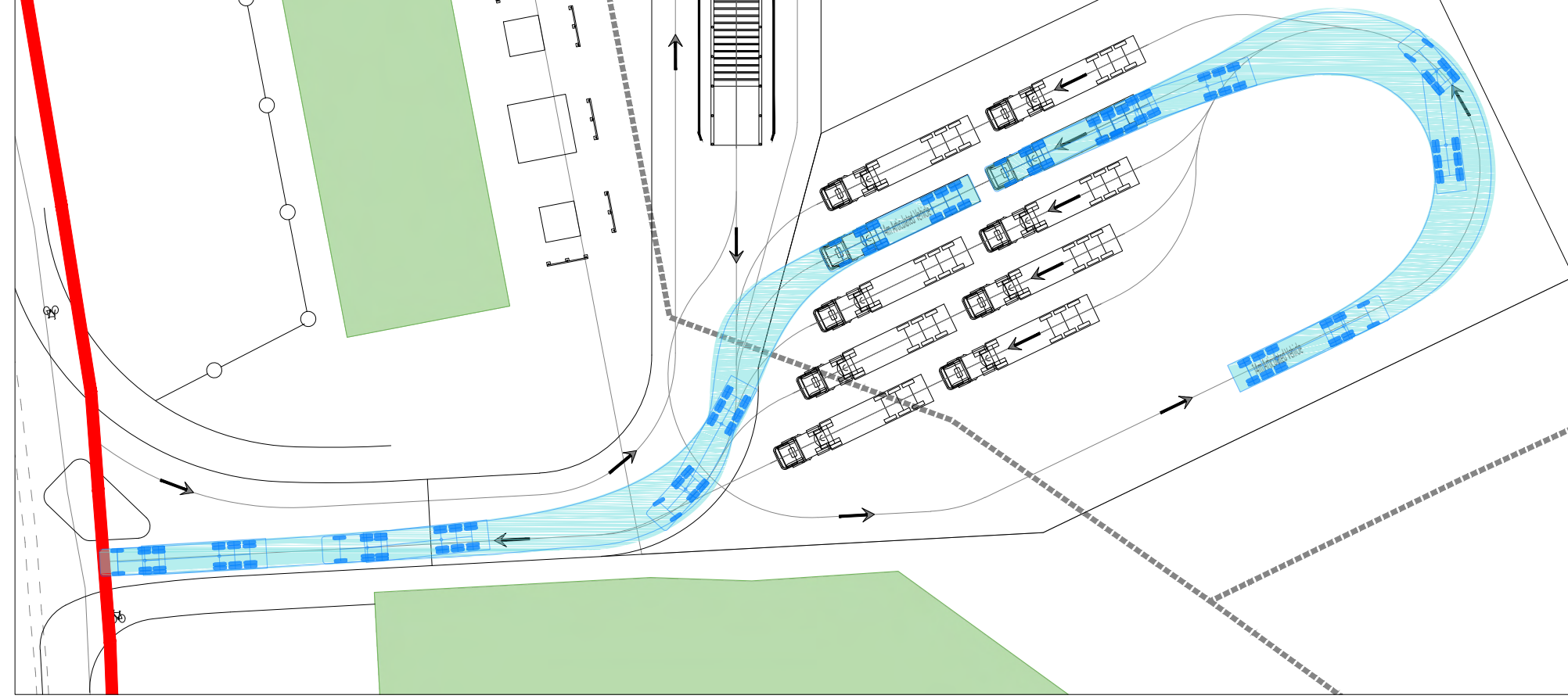
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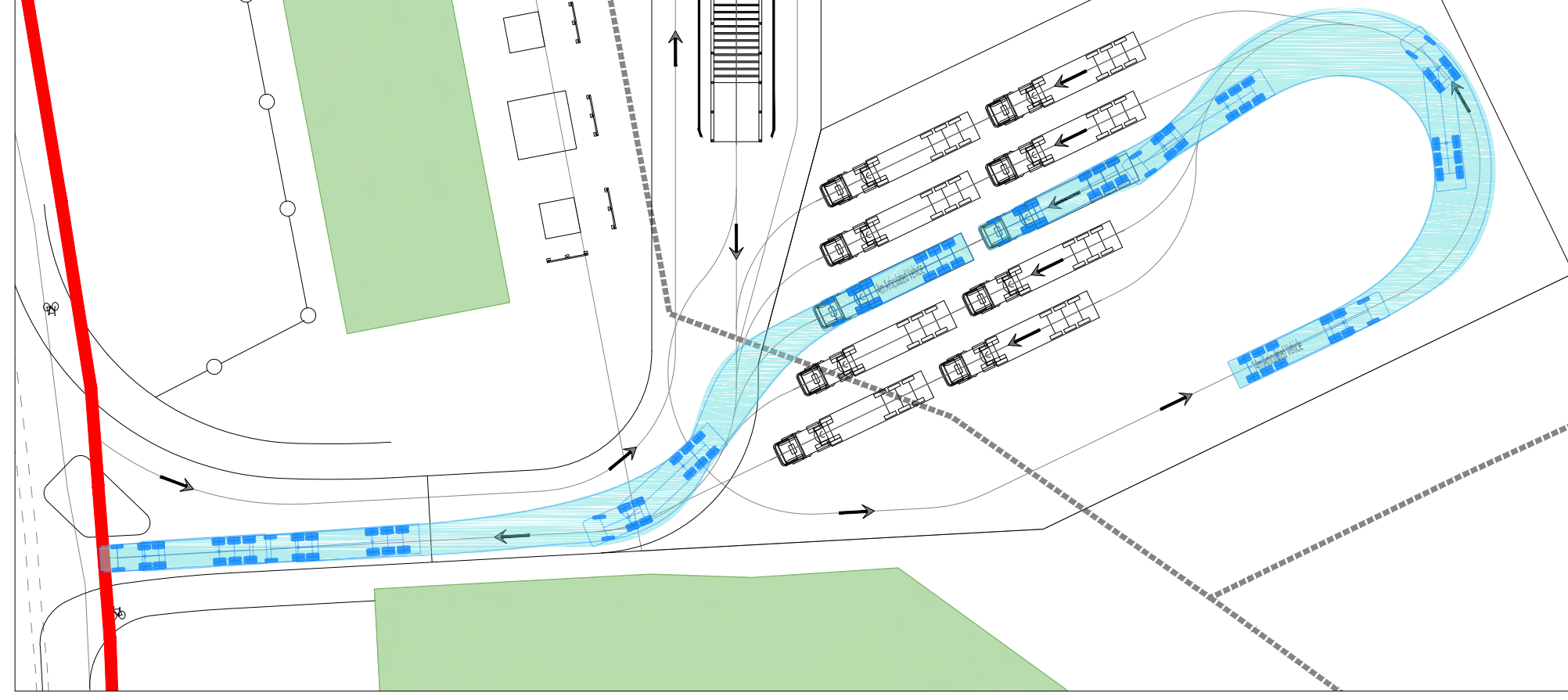
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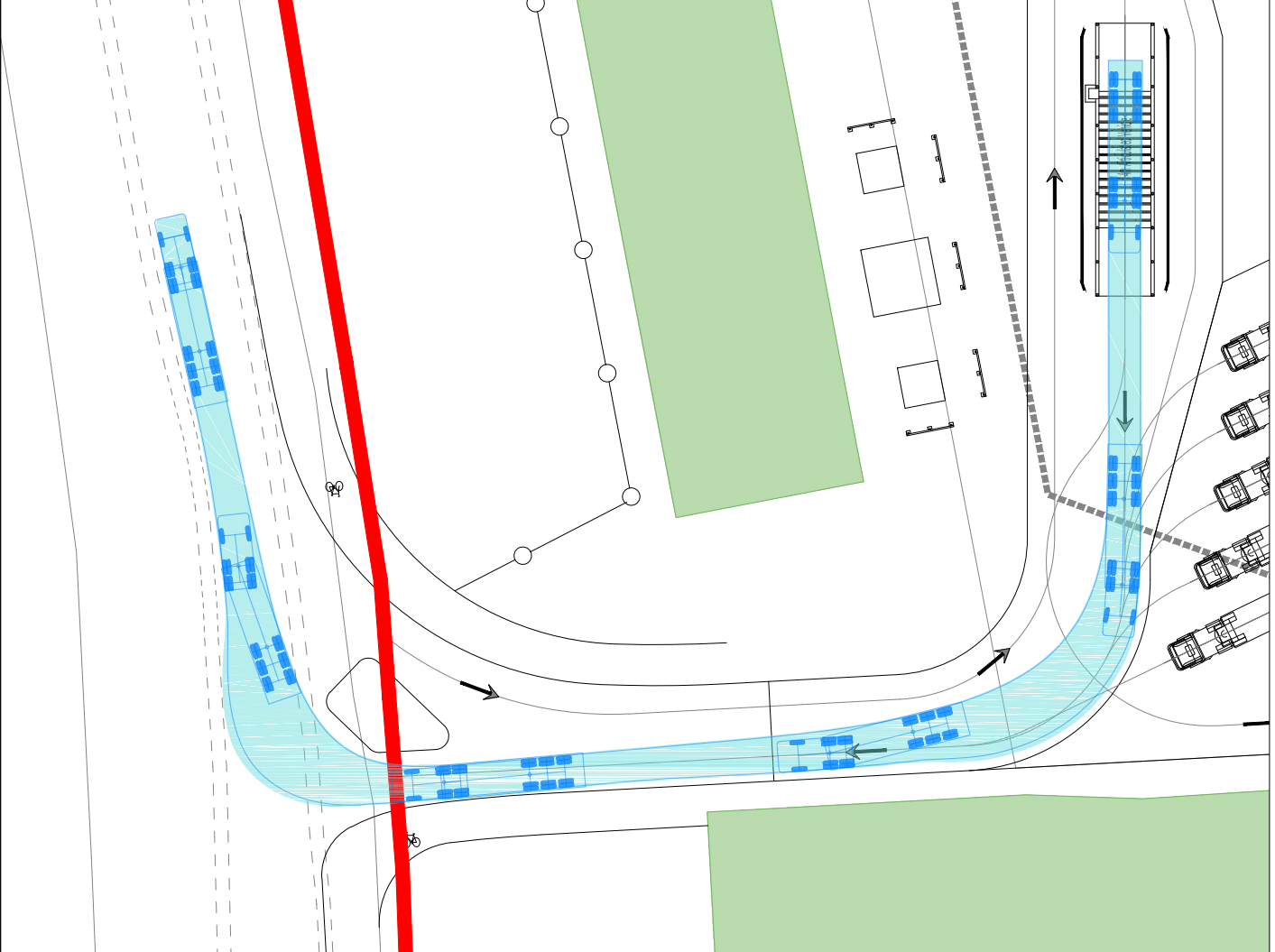
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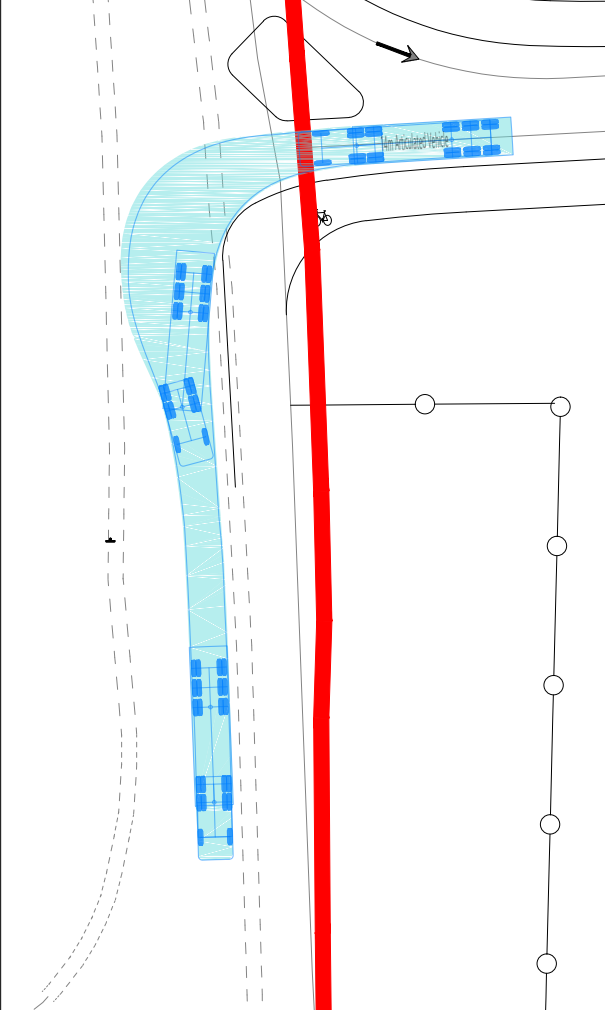
14m ARTICULATED VEHICLE ROUTING THROUGH WAITING AREA



14m ARTICULATED VEHICLE EXITING SITE



14m ARTICULATED VEHICLE EXITING SITE



14m ARTICULATED VEHICLE ROUTING THROUGH WAITING AREA



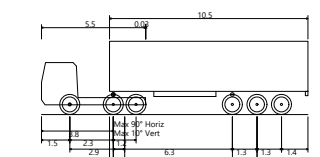
14m ARTICULATED VEHICLE ROUTING THROUGH WAITING AREA



# PHASE 7



SCALE BAR @ 1:500  
0 5 10 25 50



REV	DATE	BY	DESCRIPTION	CHK	APP	PROJEC
1						

TITLE: SWEPT PATH ANALYSIS - 14m ARTICULATED VEHICLE  
 CLIENT: CEMEX  
 PROJECT: HAMBLE AIRFIELD

STATUS: FOR INFORMATION

DRAWN	CHECKED	APPROVED
JD	IN	IN
PROJECT No:	SCALE @ A1:	DATE:
ITB13040	1:500	19.10.21
DRAWING No:	ITB13040-GA-001	

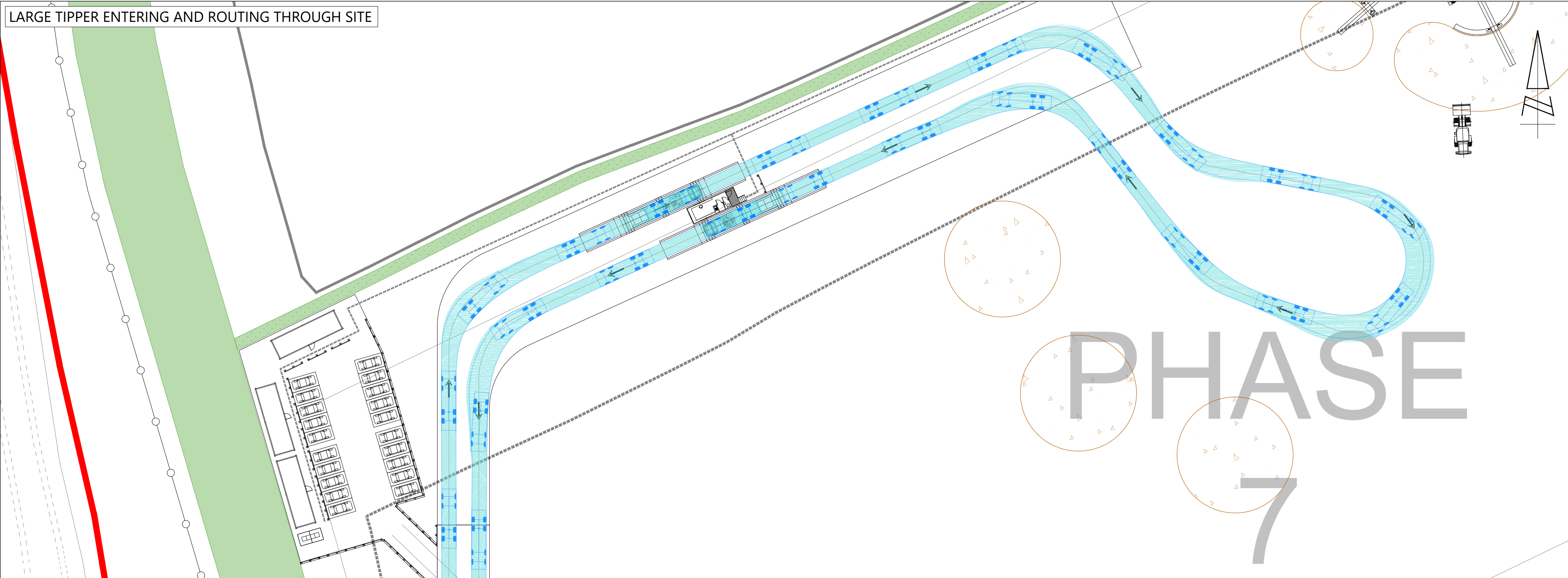
Project No: ITB13040-GA-001

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Basingstoke, Hampshire, RG21 4EB  
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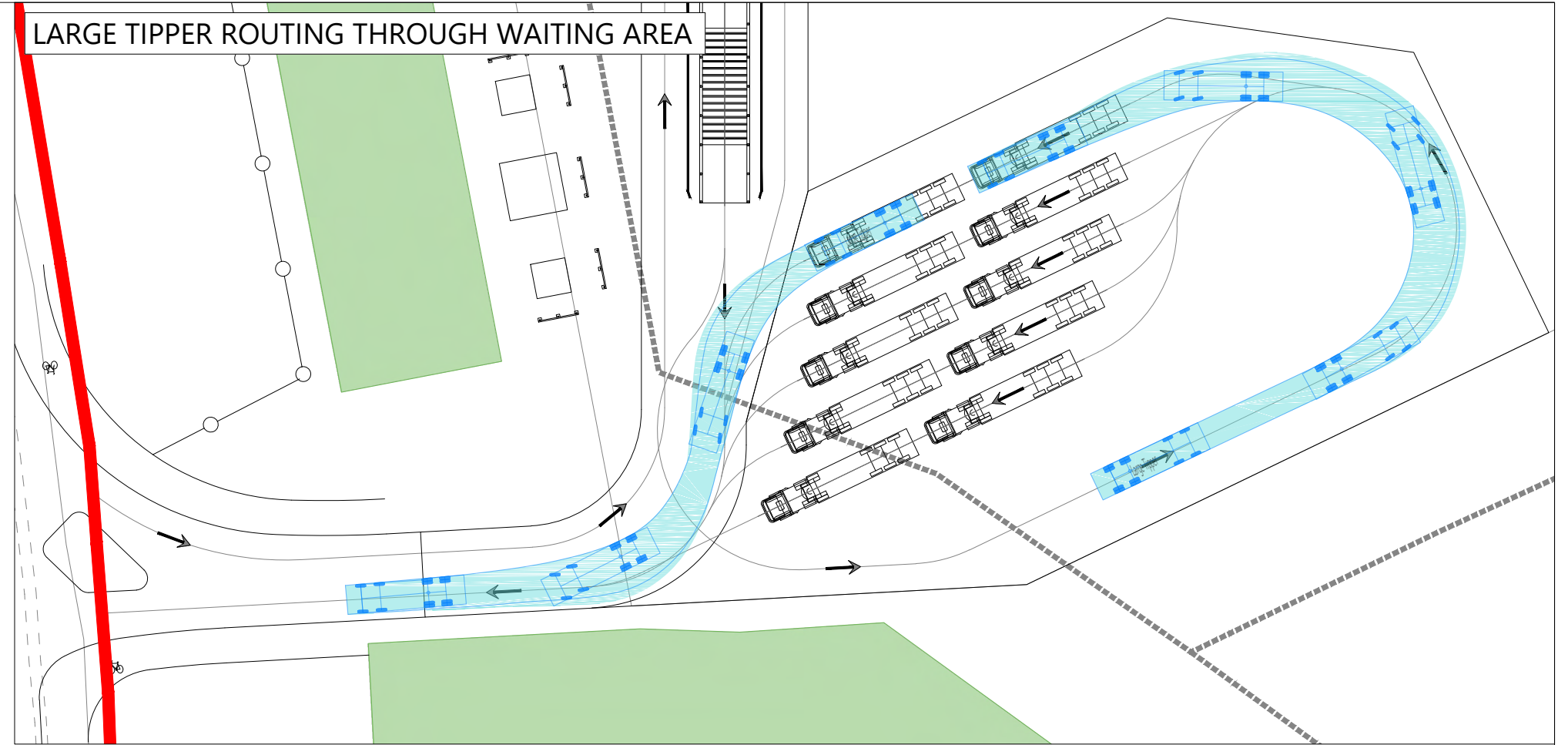
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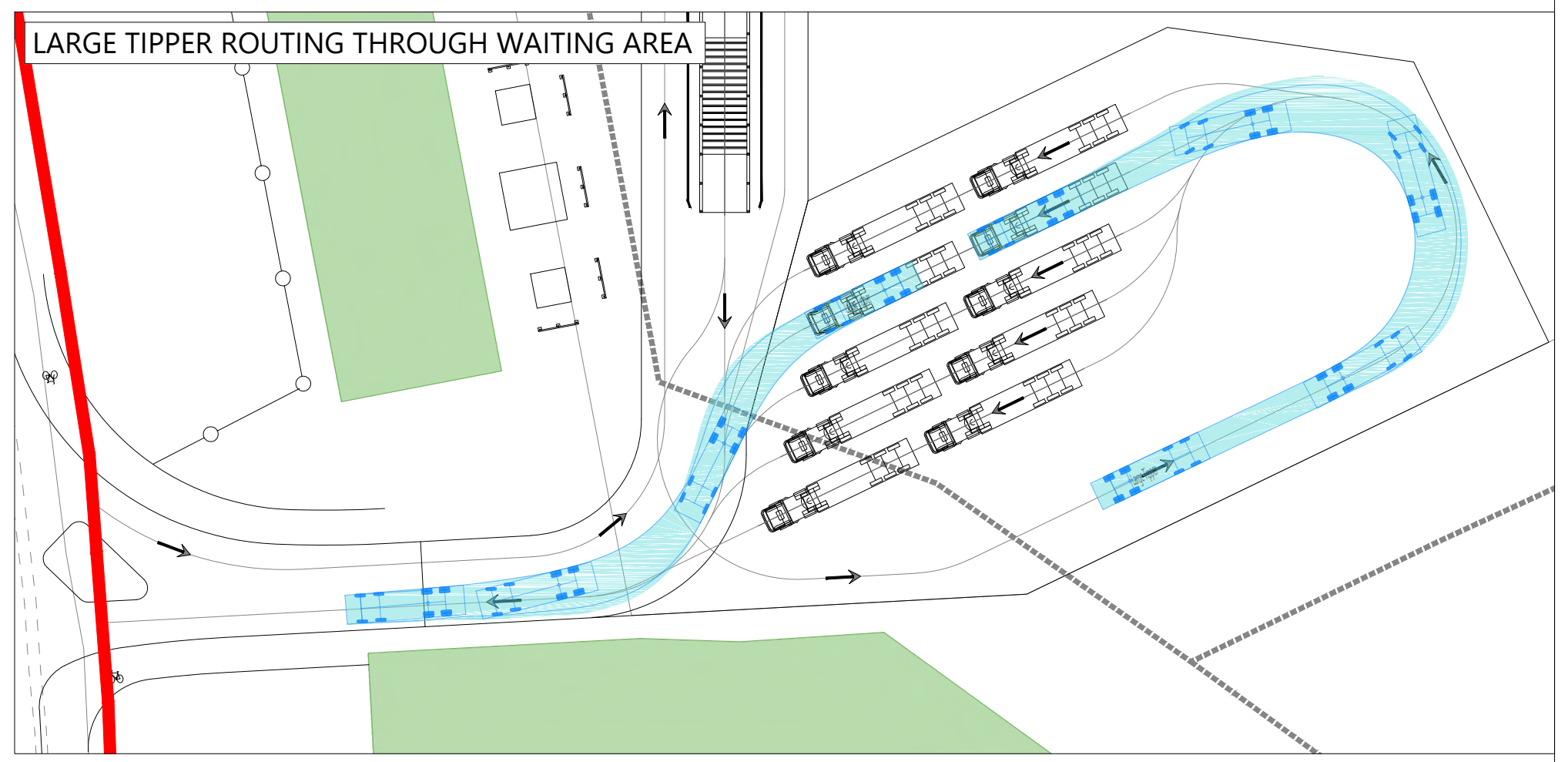
LARGE TIPPER ENTERING AND ROUTING THROUGH SITE



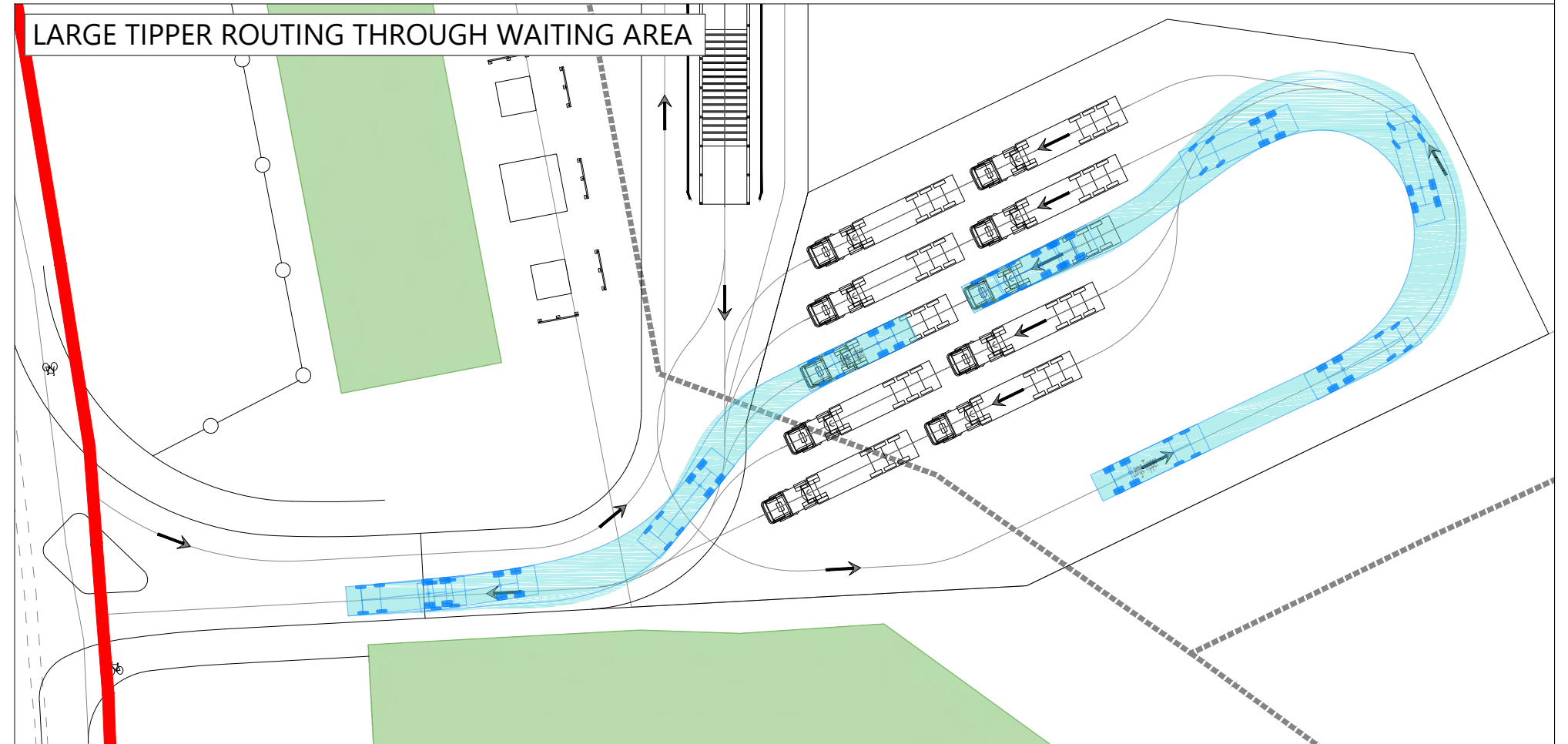
LARGE TIPPER ROUTING THROUGH WAITING AREA



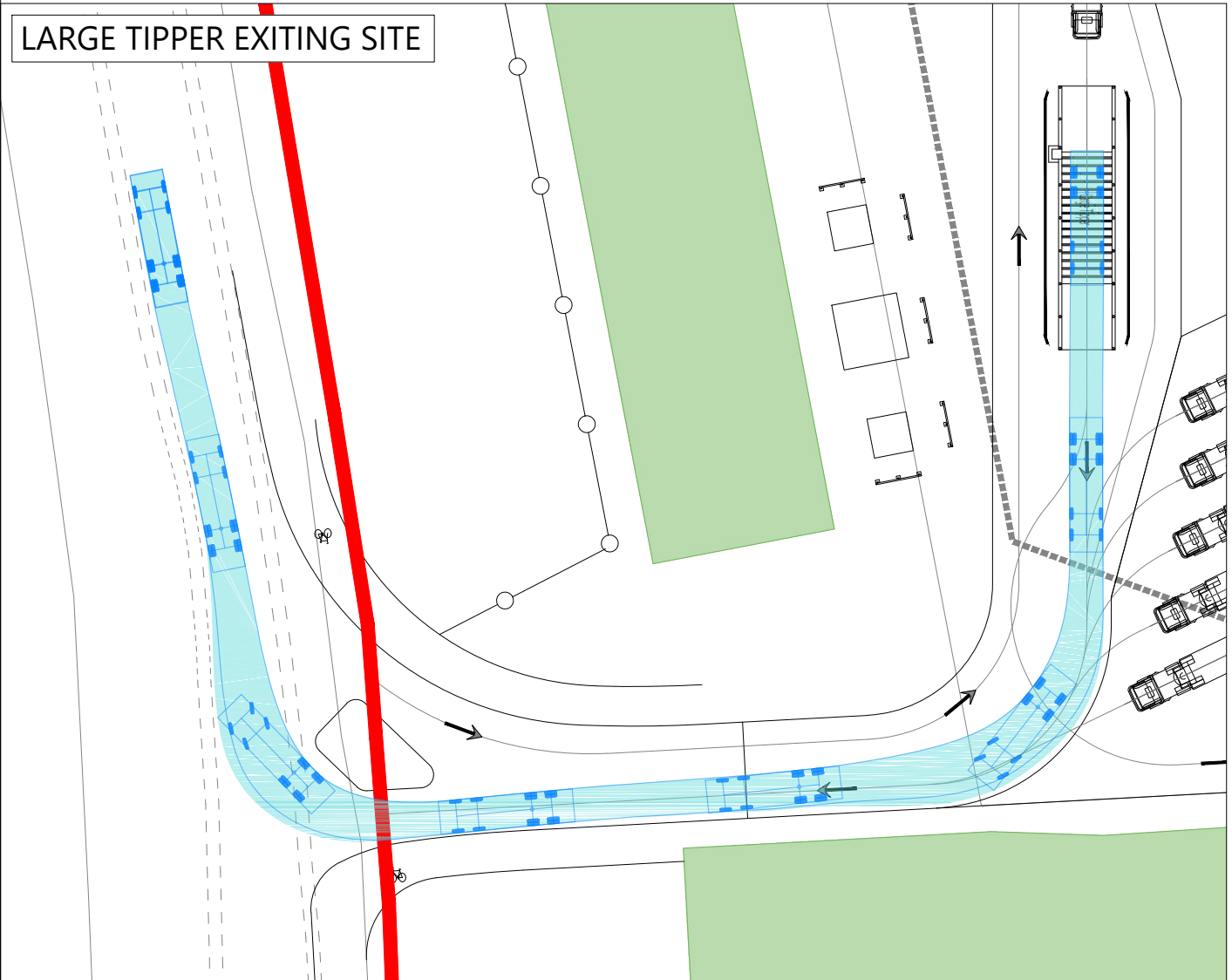
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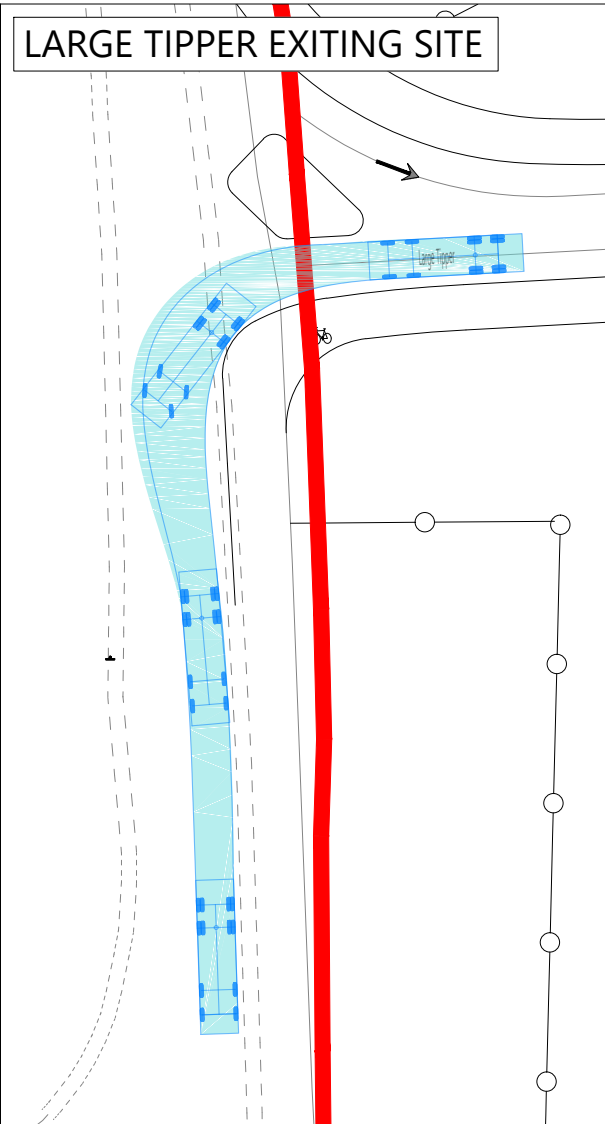
LARGE TIPPER ROUTING THROUGH WAITING AREA



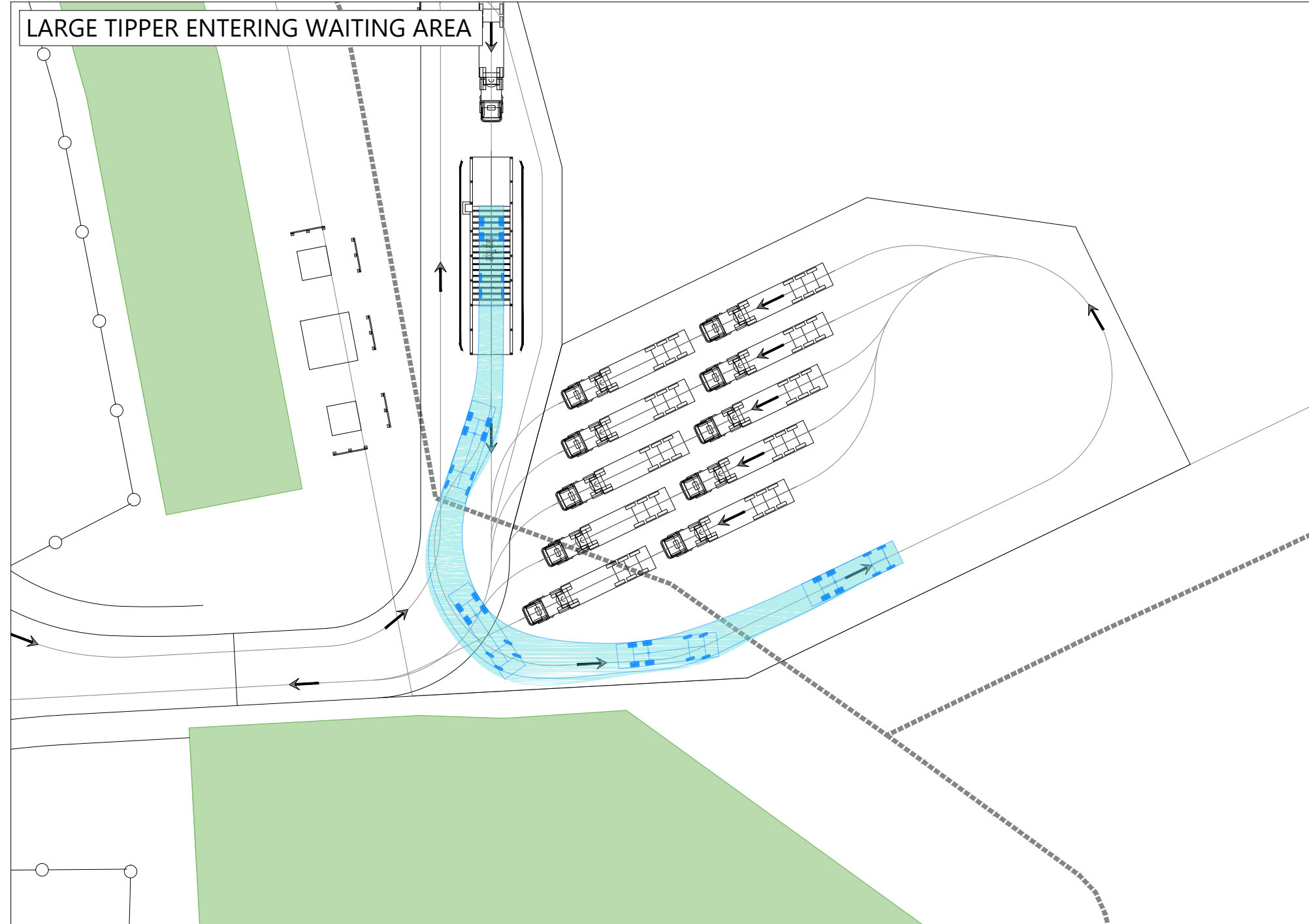
LARGE TIPPER EXITING SITE



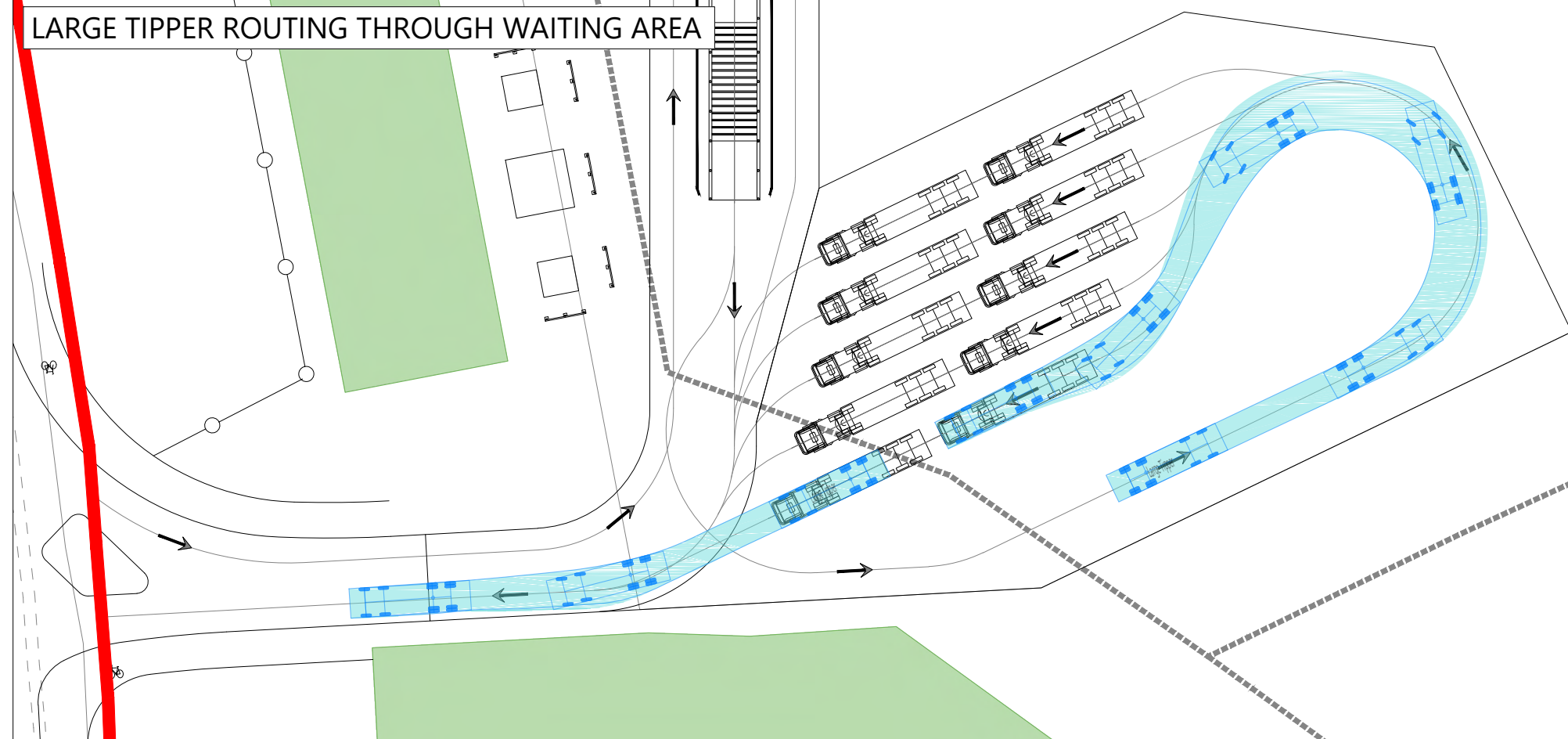
LARGE TIPPER EXITING SITE



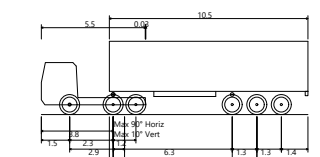
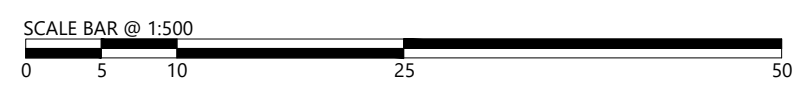
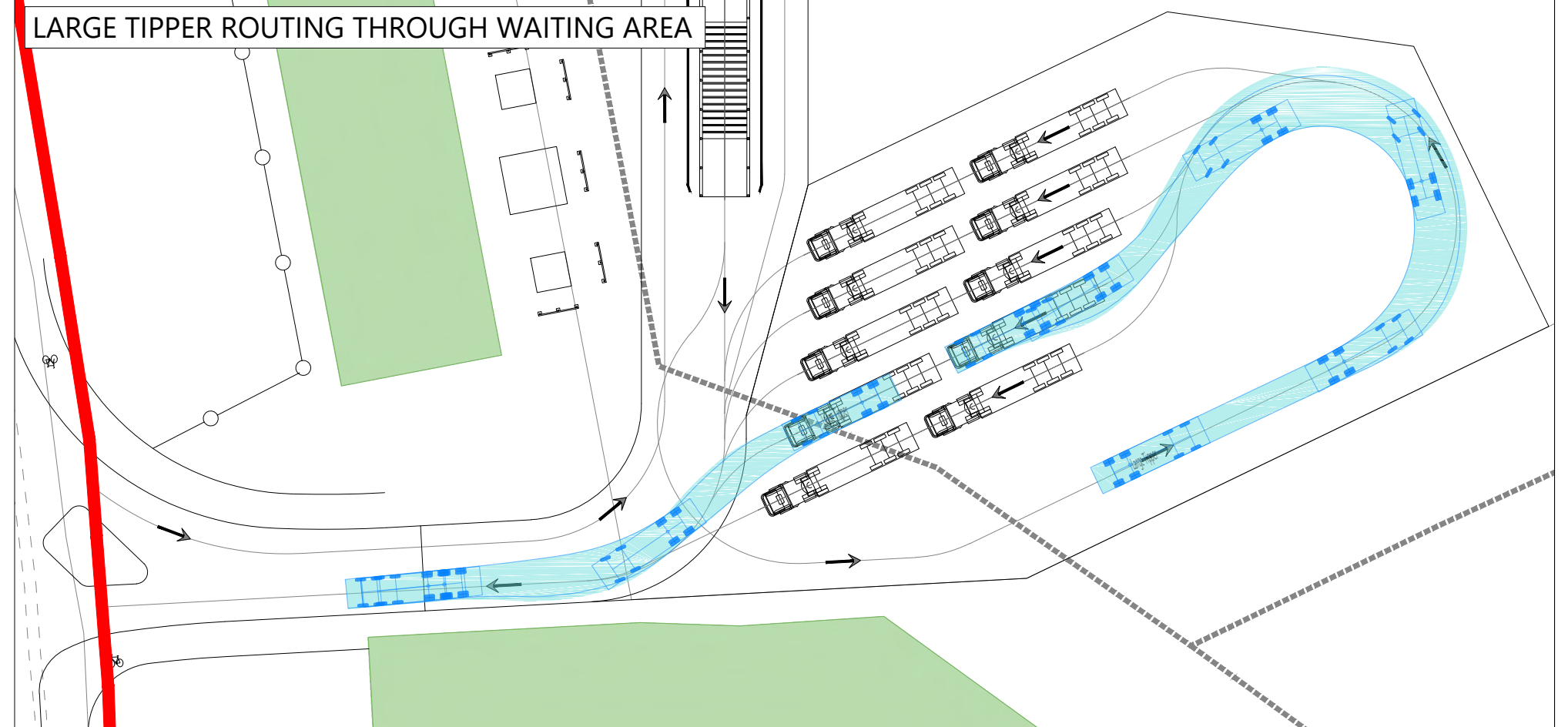
LARGE TIPPER ENTERING WAITING AREA



LARGE TIPPER ROUTING THROUGH WAITING AREA



LARGE TIPPER ROUTING THROUGH WAITING AREA



REV	DATE	BY	DESCRIPTION	CHK	APP	PROJECT

FOR INFORMATION

HAMBLE AIRFIELD

CEMEX

SWEPT PATH ANALYSIS - LARGE TIPPER

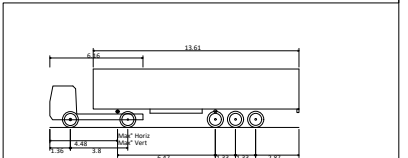
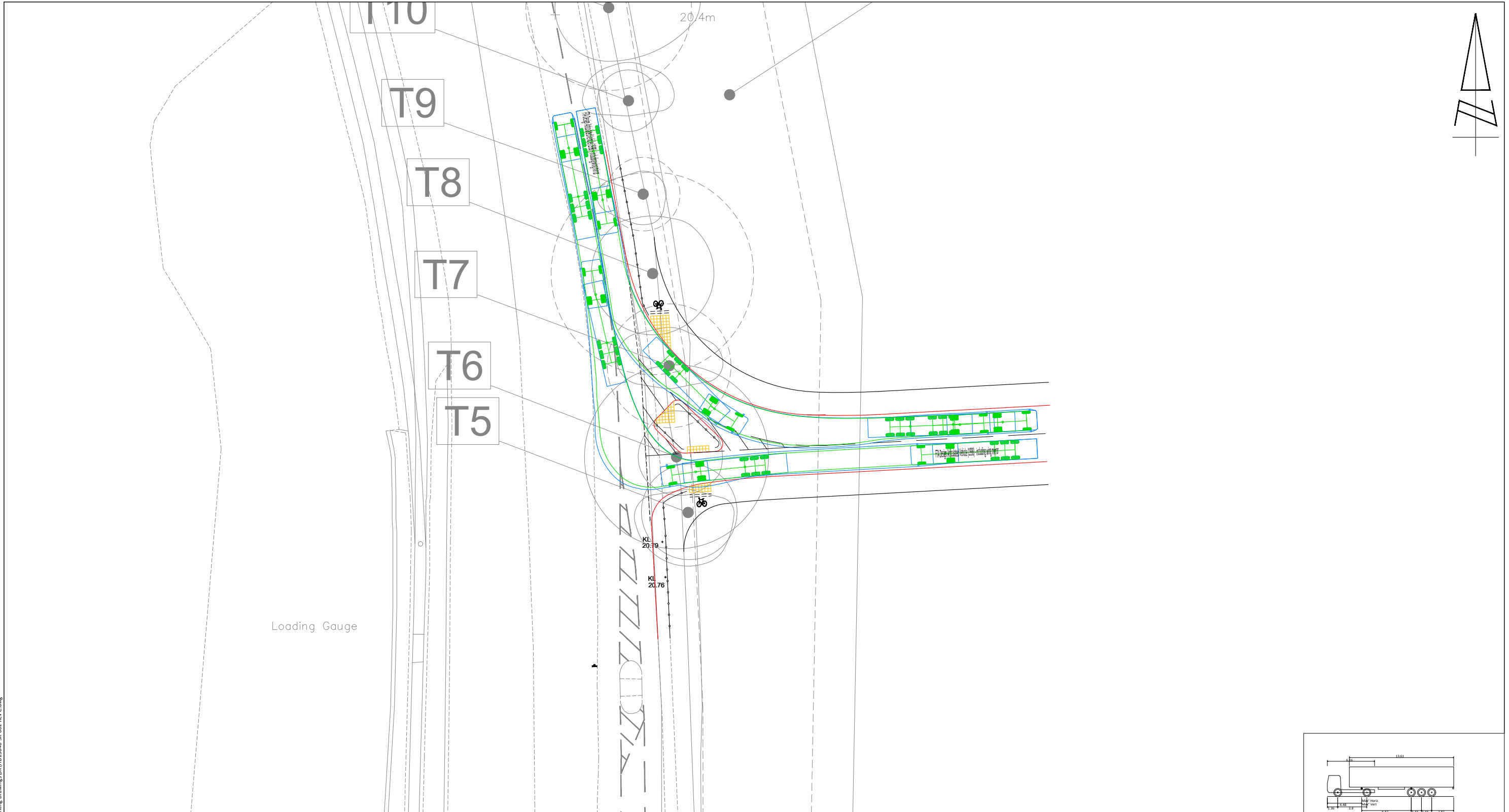
DRAWN: JD	CHECKED: IN	APPROVED: IN
PROJECT No: ITB13040	SCALE @ A1: 1:500	DATE: 19.10.21
DRAWING No: ITB13040-GA-002		REV: -

Project: ITB13040 - Hamble Airfield, Phase 7, Swept Path Analysis - Large Tipper, 19.10.21

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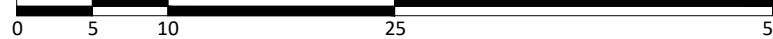


FTA Design Articulated Vehicle (1998) - including wing mirror  
 Overall Length 16.48m  
 Overall Width 2.55m  
 Overall Body Height 3.87m  
 Min Body Ground Clearance 0.51m  
 Max Track Width 2.47m  
 Lock to lock time 3.00s  
 Kerb to Kerb Turning Radius 6.55m

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SCALE BAR @ 1:500



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 Basingstoke, Hampshire, RG24 8AG  
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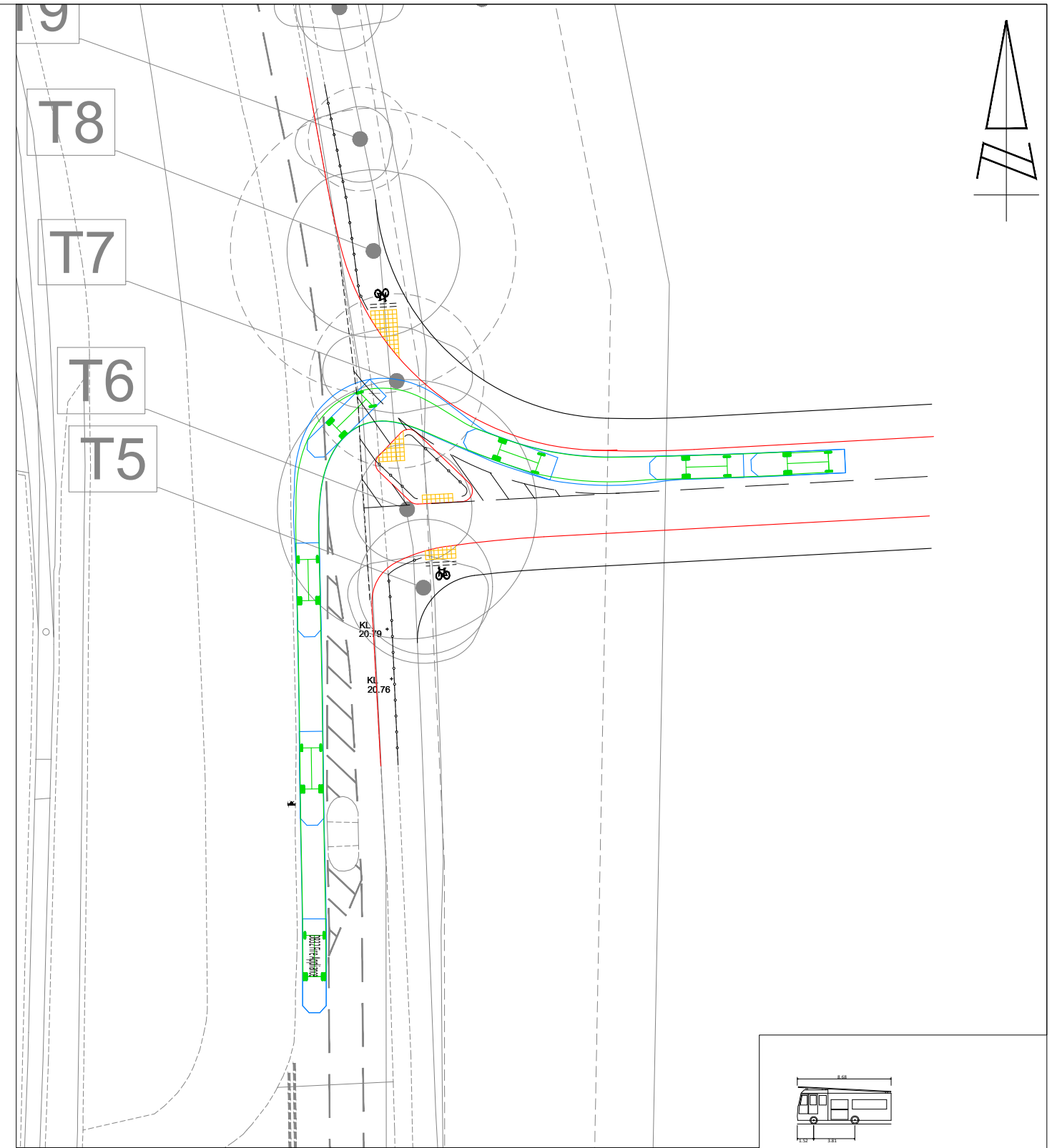
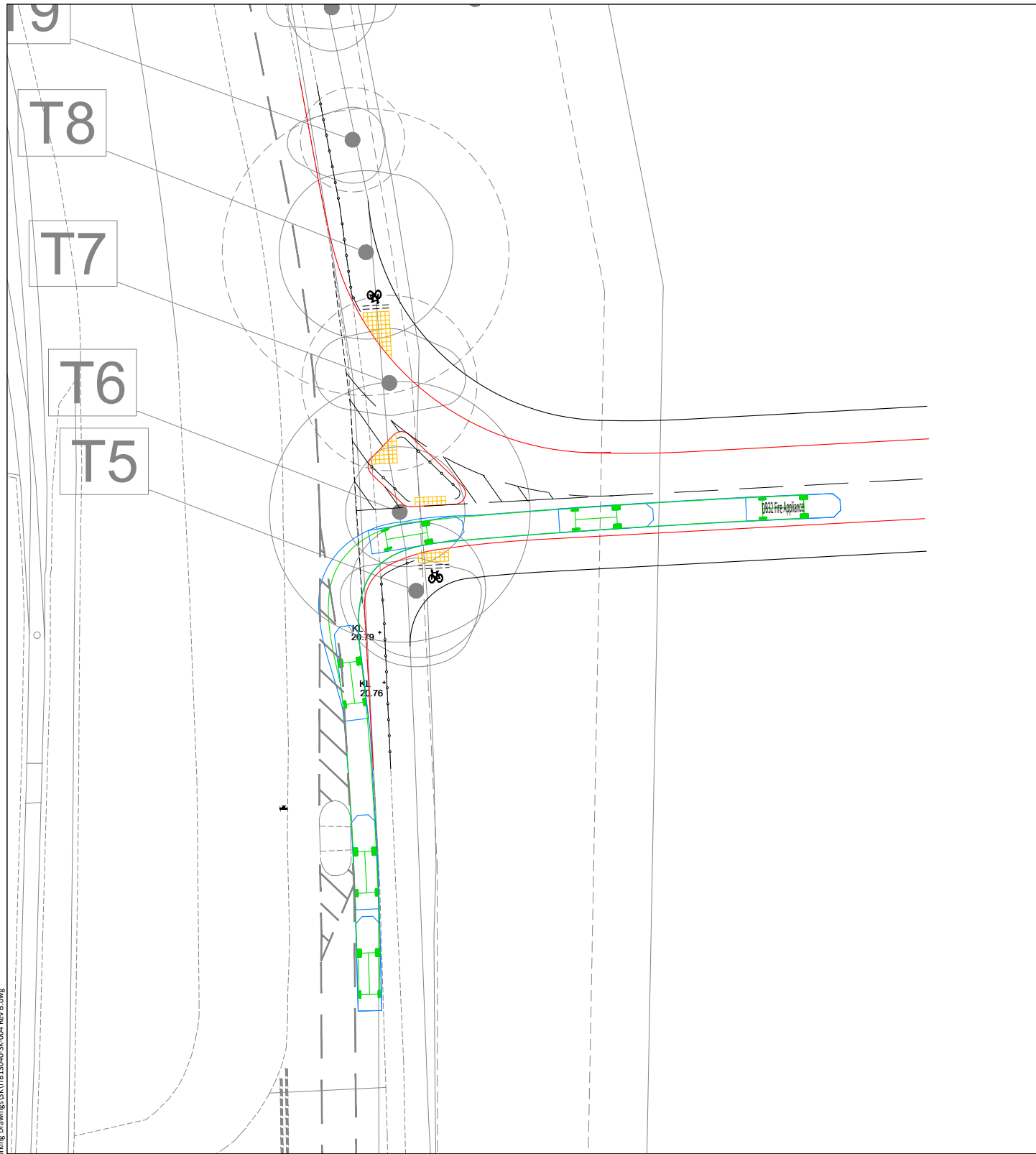
REV	DATE	BY	DESCRIPTION	CHK	APD
C	25.08.21	JD	SITE ACCESS UPDATED	IN	IN
B	16.07.18	JD	MINOR AMENDMENTS	IN	IN
A	16.05.18	JD	MINOR AMENDMENTS	IN	IN

STATUS: FOR INFORMATION

TITLE:	SWEPT PATH ANALYSIS	
PROJECT:	HAMBLE AIRFIELD	CLIENT: CEMEX

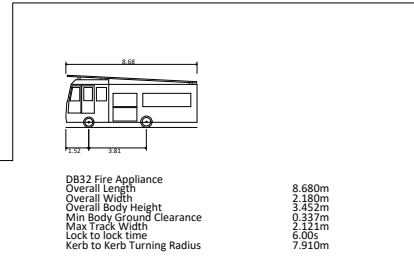
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FILE REF:	ITB13040	DRAWN:	JB	DATE:	26.05.17
DRAWING No:	ITB13040-SK-002			PROJECT No:	ITB13040
REV:	C				

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REV	DATE	BY	DESCRIPTION	CHK	APD
B	25.08.21	JD	SITE ACCESS UPDATED	IN	IN
A	16.07.18	JD	MINOR AMENDMENTS	IN	IN

STATUS: FOR INFORMATION

TITLE: <b>SWEPT PATH ANALYSIS - FIRE TENDER</b>
PROJECT: <b>HAMBLE AIRFIELD</b>
CLIENT: <b>CEMEX</b>

SCALE @ A3: <b>1:500</b>	CHECKED: <b>IN</b>	APPROVED: <b>IN</b>
FILE REF: <b>ITB13040</b>	DRAWN: <b>JD</b>	DATE: <b>16.05.18</b>
DRAWING No: <b>ITB13040-SK-004</b>		
PROJECT No: <b>ITB13040</b>	REV: <b>B</b>	

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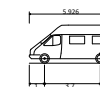


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SCALE BAR @ 1:500



Medium Panel  
Overall Length 5.926m  
Overall Width 1.993m  
Overall Body Height 2.578m  
Min Body Ground Clearance 0.299m  
Track Width 1.765m  
Lock to lock time 4.00s  
Kerb to Kerb Turning Radius 6.000m



Large Car (2006)  
Overall Length 5.075m  
Overall Width 1.872m  
Overall Body Height 1.525m  
Min Body Ground Clearance 0.310m  
Max Track Width 1.831m  
Lock to lock time 4.00s  
Kerb to Kerb Turning Radius 5.900m



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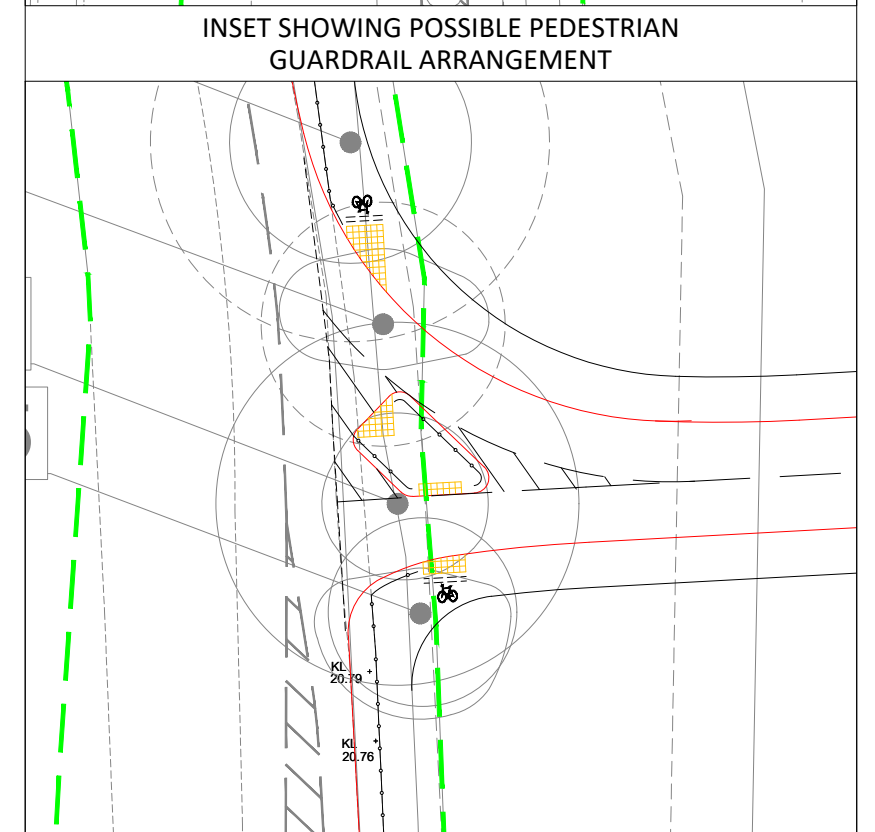
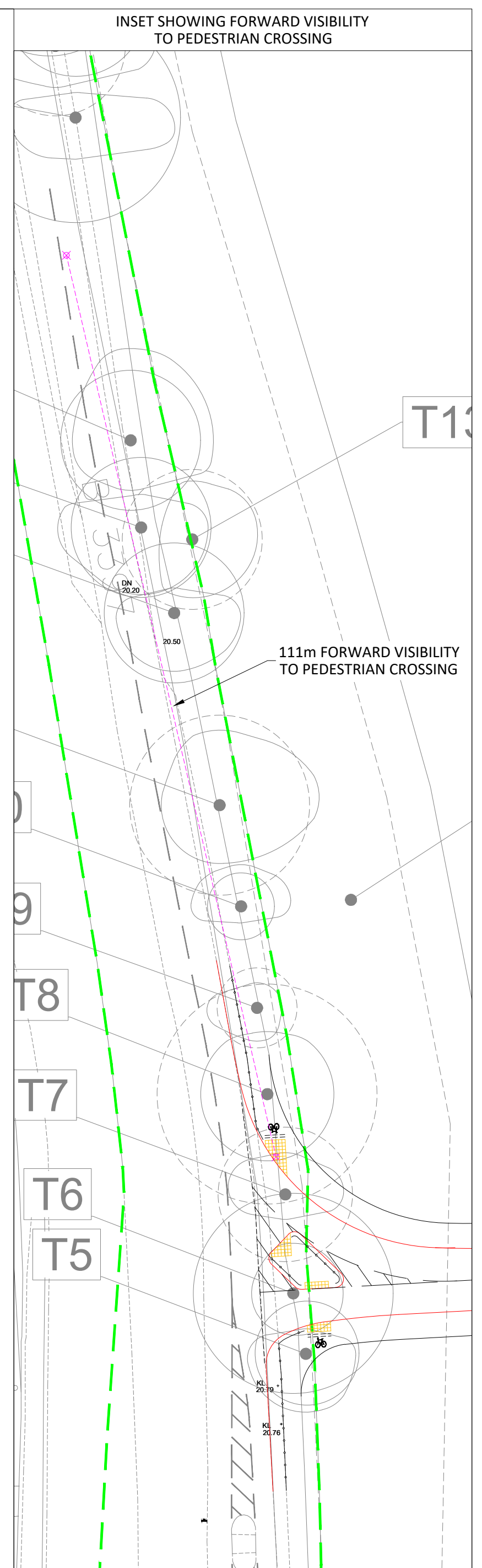
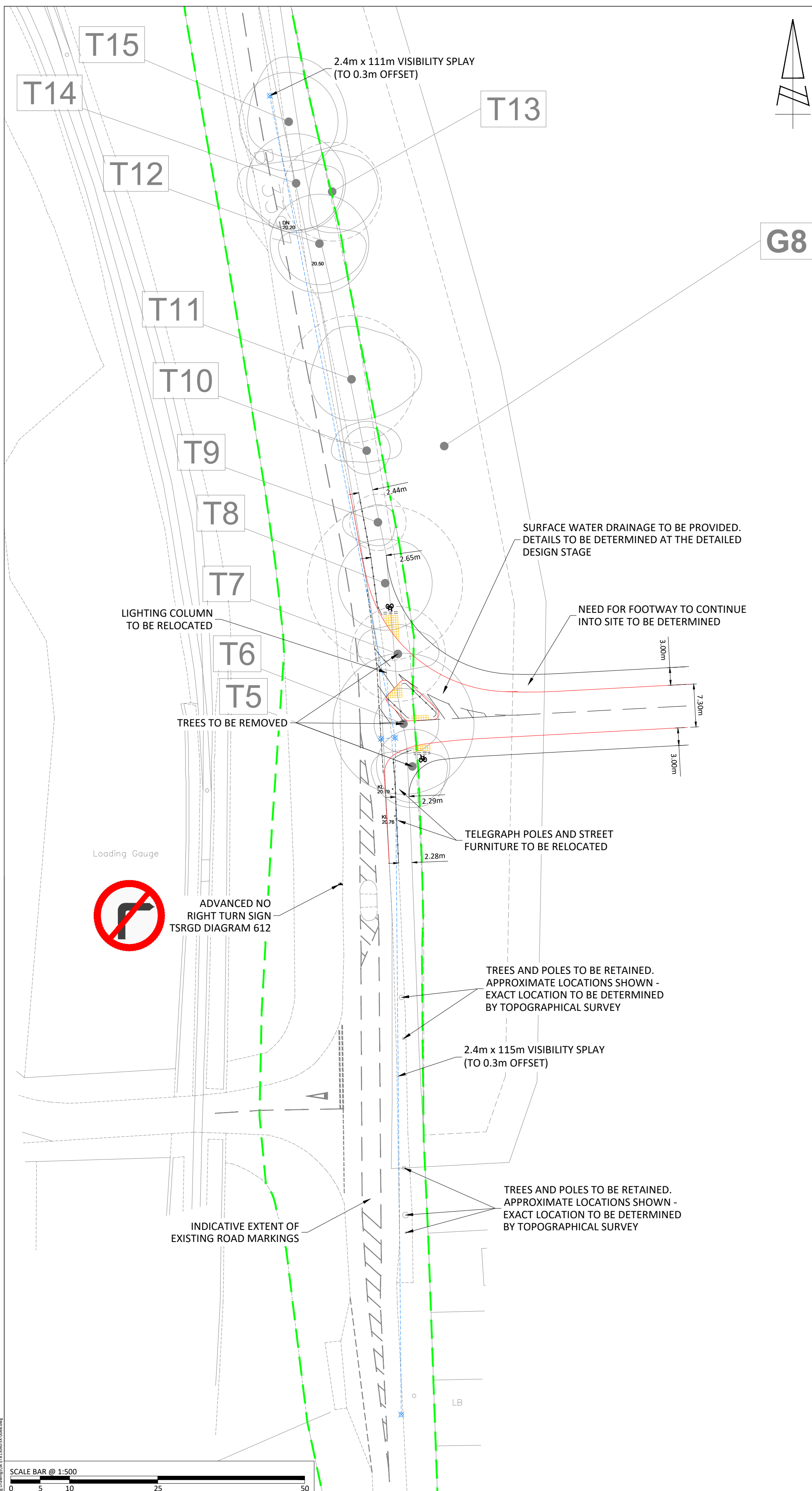
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B	25.08.21	JD	SITE ACCESS UPDATED	IN	IN
A	16.07.18	JD	MINOR AMENDMENTS	IN	IN

STATUS: FOR INFORMATION

TITLE: SWEEP PATH ANALYSIS - PANEL VAN	
PROJECT: HAMBLE AIRFIELD	CLIENT: CEMEX

SCALE @ A3: 1:500	CHECKED: IN	APPROVED: IN
FILE REF: ITB13040	DRAWN: JD	DATE: 16.05.18
DRAWING No: ITB13040-SK-005		
PROJECT No: ITB13040	REV: B	





SCALE BAR @ 1:500  
0 5 10 25 50

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CLIENT: CEMEX

TITLE: PROPOSED SITE ACCESS

PROJECT: HAMBLE AIRFIELD

B	30.11.21	SH	VISIBILITY SPLAYS AMENDED	IN	IN
A	24.09.21	JD	VISIBILITY SPLAYS AMENDED	IN	IN
STATUS: FOR INFORMATION					
SCALE @ A2: 1:500		CHECKED: IN	APPROVED: IN		
FILE REF: ITB13040		DRAWN: JB	DATE: 10.08.21		
DRAWING No:		ITB13040-SK-006			
PROJECT No:		ITB13040			REV: B

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