

Traffic Review for Section 16 Planning Application of a proposed temporary logistics centre for a period of three years and filling of land and pond at Lots 267 (Part) and 268 (Part) in D.D. 84, Lots 481 S.A (Part) and 481 RP (Part) in D.D. 87, and adjoining Government Land, Ping Che, Ta Kwu Ling, New Territories

Responses to Comments from Transport Department (A/NE-TKL/759)

Annex A

Traffic Review for Section 16 Planning Application of a proposed temporary logistics centre for a period of three years and filling of land and pond at Lots 267 (Part) and 268 (Part) in D.D. 84, Lots 481 S.A (Part) and 481 RP (Part) in D.D. 87, and adjoining Government Land, Ping Che, Ta Kwu Ling, New Territories



TRAFFIC REVIEW REPORT

Reference: 31037-T01-02
Date: July 2024

Contents

1	Introduction	1
1.1	Background	1
1.2	Objectives	1
2	The Proposed Development	2
2.1	The Application Site	2
2.2	The Proposed Development	2
2.3	Existing Road Network	2
3	Traffic Operation Review	3
3.1	Overview of Business Operations and Traffic Flow	3
3.2	Operating Hours and Vehicle Types	3
3.3	Site Access and Vehicle Manoeuvrability	4
3.4	Traffic Control Measures	4
3.5	Loading and Unloading Operations	4
4	Summary and Conclusions	6
4.1	Summary	6

Figures

Appendix A Swept Path Analysis

1 Introduction

1.1 Background

The Applicant intends to seek Town Planning Board ("TPB") approval for a proposed temporary logistics centre for a period of three years and filling of land and pond at Lots 267 (Part) and 268 (Part) in D.D. 84, Lots 481 S.A (Part) and 481 RP (Part) in D.D. 87, and adjoining Government Land, Ping Che, Ta Kwu Ling, New Territories (hereafter "the proposed development", in order to facilitate the proposed relocation of the Applicant's existing logistics centre in Sheung Shui North.

In the Approved Hung Lung Hang Outline Zoning Plan (S/NE-HLH/11) and Approved Ping Che and Ta Kwu Ling Outline Zoning Plan (S/NE-TKL/14) (referred to as the "OZP"), the Applicant Site is zoned as "Agriculture". According to the Schedule of Uses outlined in the OZP, the intended use of a "logistics centre" does not fall under either Column 1 or Column 2 uses. Consequently, obtaining temporary planning permission from TPB is necessary for the proposed logistics centre, in accordance with TPB PG-No. 13G 'Application for Open Storage and Port Back-up Uses under Section 16 of the Town Planning Ordinance'.

AXON Consultancy Limited was commissioned to carry out a Traffic Review (TR) report in support of the Section 16 planning application to facilitate the proposal at the Application Site.

1.2 Objectives

The objectives of the traffic review study are as follows:

- to assess the operational traffic impacts associated with the temporary logistics centre; and
- to ensure that existing traffic operations adhere to relevant statutory requirements, guidelines, and standards; and
- to analyse the effectiveness of current traffic management measures implemented at the site.

2 The Proposed Development

2.1 The Application Site

The Application Site covers approximately 3,270m² and is bounded by Lots 267 (Part) and 268 (Part) in D.D. 84, Lots 481 S.A (Part) and 481 RP (Part) in D.D. 87, and adjoining Government Land in Ping Che, Ta Kwu Ling, New Territories. The site is proximate to a local store (樂奇園士多) and is accessed via a single-track road branching from Ping Che Road on the west. The site's location is depicted in **Figure 2.1**.

2.2 The Proposed Development

The Applicant plans to operate the site as a temporary logistics centre from 2024 to 2027. The development timeline is outlined in **Table 2.1**.

Table 2.1 Development Schedule

Design Parameter	Quantity of Proposed Development Parameter
Subject Site Area	About 3,270 m ²
Covered Area	About 1,400 m ²
Tentative Operation Year	2024 – 2027

2.3 Existing Road Network

The major road networks in the vicinity of the Application Site are listed as follows:

Ping Che Road, operates as a District Distributor and features a single two-lane carriageway running in the north-south direction. It serves as a crucial link between Sha Tau Kok Road and Lin Ma Hang Road.

Unnamed Access Road, serves as the primary access route for local communities in Hung Lung Hang, including Lei Uk and Lei Uk San Tsuen. This road extends east-west between Ping Che Road and Kong Nga Po Road. Vehicular access to the application site is detailed in **Figure 2.2**.

3 Traffic Operation Review

3.1 Overview of Business Operations and Traffic Flow

The proposed logistics centre is designed for low-intensity operations, focusing on infrequent, specialized shipments. This operational model inherently limits the number of vehicle trips to and from the site, as depicted in **Table 3.1**. The information pertains to the Applicant’s existing logistics centre in Sheung Shui North. Typically, the maximum traffic generation is projected to be 13 pcu per hour during AM peak hours and 15 pcu per hour during PM peak hours, with traffic attraction slightly reversing to 15 pcu in the morning and 13 pcu in the afternoon.

Table 3.1 Development Traffic Generation

Development	Generation		Attraction	
	AM Peak	PM Peak	AM Peak	PM Peak
Observed Trips (pcu/hr)				
Existing Site (Covered Area: about 2,136m ²)	13	15	15	13
Anticipated Trips (pcu/hr)				
Application Site* (Covered Area: about 1,400m ²)	13	15	15	13

*Note: * To provide a conservative estimate, the anticipated maximum traffic generated and attracted would be equivalent to the highest recorded traffic at the current site, even though the application site has a smaller area of coverage compared to the existing site.*

3.2 Operating Hours and Vehicle Types

The logistics centre will operate from 9:00 AM to 6:00 PM, Monday through Saturday, excluding public holidays. These hours have been chosen to align with local business operations and to minimise the impact on peak traffic periods in the surrounding areas. The primary types of vehicles expected at the site include Private cars by Staff, Light Goods Vehicles (LGV), and Heavy Goods Vehicles (HGV).

3.3 Site Access and Vehicle Manoeuvrability

In order to determine the optimal width for the access at the logistics centre, a swept path analysis was conducted for the vehicles anticipated to use this facility. This analysis led to the conclusion that a 9-meter-wide access point is necessary to ensure safe and efficient vehicle manoeuvres, thereby minimizing congestion and to minimize tailback onto public road. The results are documented in **Figures SP-01 to SP-05**.

3.4 Traffic Control Measures

To ensure that there is no queuing or backlog of vehicles at the site entrance, the following measures will be implemented:

- a. The site is designed with ample maneuverable space to facilitate the smooth entry and exit of vehicles.
- b. All vehicle entry and exit records will be managed internally, ensuring that vehicles can enter the site immediately upon arrival without waiting outside.
- c. Deliveries to the logistics centre are expected to be infrequent, averaging only a few trips per hour. Delivery schedules can be staggered to avoid traffic peaks and ensure a steady and manageable flow of vehicles.
- d. Dedicated personnel will be present on-site to monitor vehicle movements and provide real-time guidance to drivers, which helps maintain efficient traffic flow and prevents delays or backlogs.

These measures, along with the site's design as depicted in **Figure 2.2** will ensure that vehicles can move in and out without causing external queuing.

3.5 Loading and Unloading Operations

The design of the logistics centre incorporates three loading/unloading bays to meet the operational demands of the facility, given that there are no specific parking requirements for logistics centres outlined in the Hong Kong Planning Standards and Guidelines (HKPSG). The layout is planned to ensure efficient operations and to mitigate any potential traffic or operational congestion. The layout of the loading/unloading areas, along with the designated parking spaces, is depicted in **Figure 2.2**.

Figure 2.2 illustrates a pedestrian route that segregates from the vehicular routes and the quickest and most direct route to the covered area. These measures have been put in place to ensure the safety of pedestrians.

a. Loading/Unloading Provisions

One LGV L/UL bay, measuring 7 meters in length, and 3.5 meters in width.

Two HGV L/UL bays, each measuring 11 meters in length and 3.5 meters in width.

These bays are located on the western side of the site to enhance access and efficiency.

b. Parking Provisions

Three private car parking spaces, each measuring 5 meters in length and 2.5 meters in width.

Two visitor parking spaces, each measuring 5 meters in length and 2.5 meters in width.

These parking spaces are provided on the north-western side of the site, ensuring the parking needs of staff and visitors.

The manoeuvrability of vehicles at each bay has been analysed to ensure that there are no backlogs or excessive idling times. The detailed manoeuvrability for each bay is illustrated in **Figures SP-01 to SP-05**, showing that each space is well-suited to the vehicle sizes anticipated.

4 Summary and Conclusions

4.1 Summary

The applicant seeks planning permission to develop Lots 267 (Part) and 268 (Part) in D.D. 84, Lots 481 S.A (Part) and 481 RP (Part) in D.D. 87, and adjoining government land in Ping Che, Ta Kwu Ling, New Territories, into a temporary logistics centre. This development, slated to operate from 2024 to 2027, aims to facilitate the relocation of the applicant's existing logistics centre currently located in Sheung Shui North.

This Traffic Operation Review confirms that the planned logistics centre, strategically situated near key roadways, is designed for low-intensity operations that will generate two-way traffic of 28 pcu per hour during peak periods, thus ensuring minimal impact on local traffic.

Operational Highlights:

- **Operating Hours:** The centre will operate from 9:00 AM to 6:00 PM, Monday through Saturday, specifically timed to reduce disruptions to local traffic flow.
- **Vehicle Management:** The operation will predominantly all scheduled to operate outside peak traffic times to mitigate potential congestion.
- **Safety and Design:** The centre will feature a 9-meter-wide access point to ensure safe vehicle manoeuvres, three L/UL bays, and three private car parking spaces.
- **Pedestrians and Vehicles Segregation:** Pedestrian routes are clearly marked and separated from vehicular routes to minimize interactions between pedestrians and vehicles. Also, lighting systems are in place to ensure pedestrian areas are well-lit and monitored.

In conclusion, the logistics centre is designed to meet regulatory standards and optimize operational efficiency without substantially impacting local traffic.

Figures



Traffic Review for Section 16 Planning Application of a proposed temporary logistics centre for a period of three years and filling of land and pond at Lots 267 (Part) and 268 (Part) in D.D. 84, Lots 481 S.A (Part) and 481 RP (Part) in D.D. 87, and adjoining Government Land, Ping Che, Ta Kwu Ling, New Territories

SITE LOCATION

FIGURE 2.1

Scale : 1:20000 (A3)

Date : MAY 2024

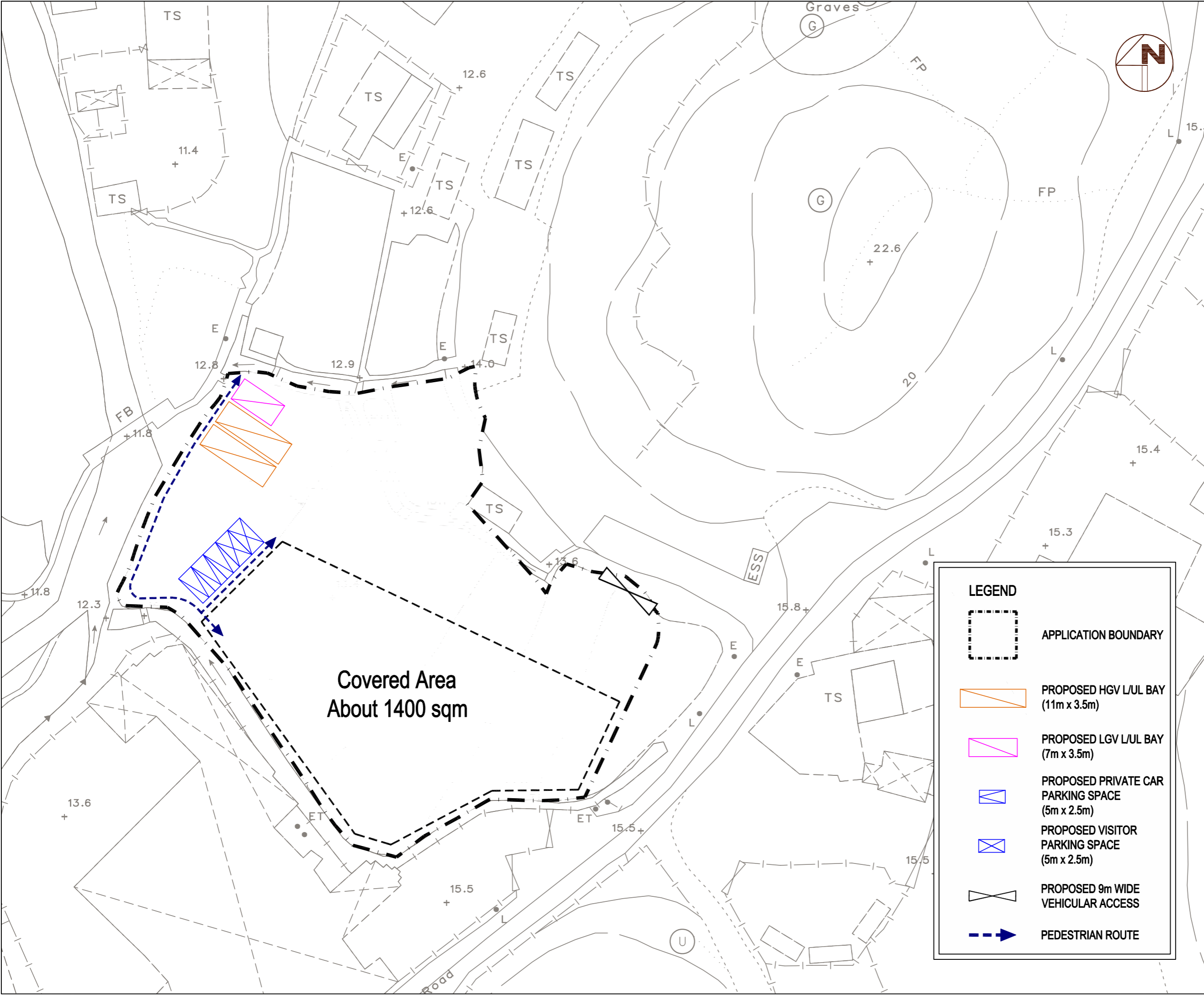
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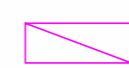


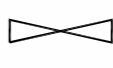

TRAFFIC MANAGEMENT MEASURES

FIGURE 2.2



**Covered Area
About 1400 sqm**

LEGEND

-  APPLICATION BOUNDARY
-  PROPOSED HGV L/UL BAY (11m x 3.5m)
-  PROPOSED LGV L/UL BAY (7m x 3.5m)
-  PROPOSED PRIVATE CAR PARKING SPACE (5m x 2.5m)
-  PROPOSED VISITOR PARKING SPACE (5m x 2.5m)
-  PROPOSED 9m WIDE VEHICULAR ACCESS
-  PEDESTRIAN ROUTE

Scale : 1:500 (A3)

Date : MAY 2024

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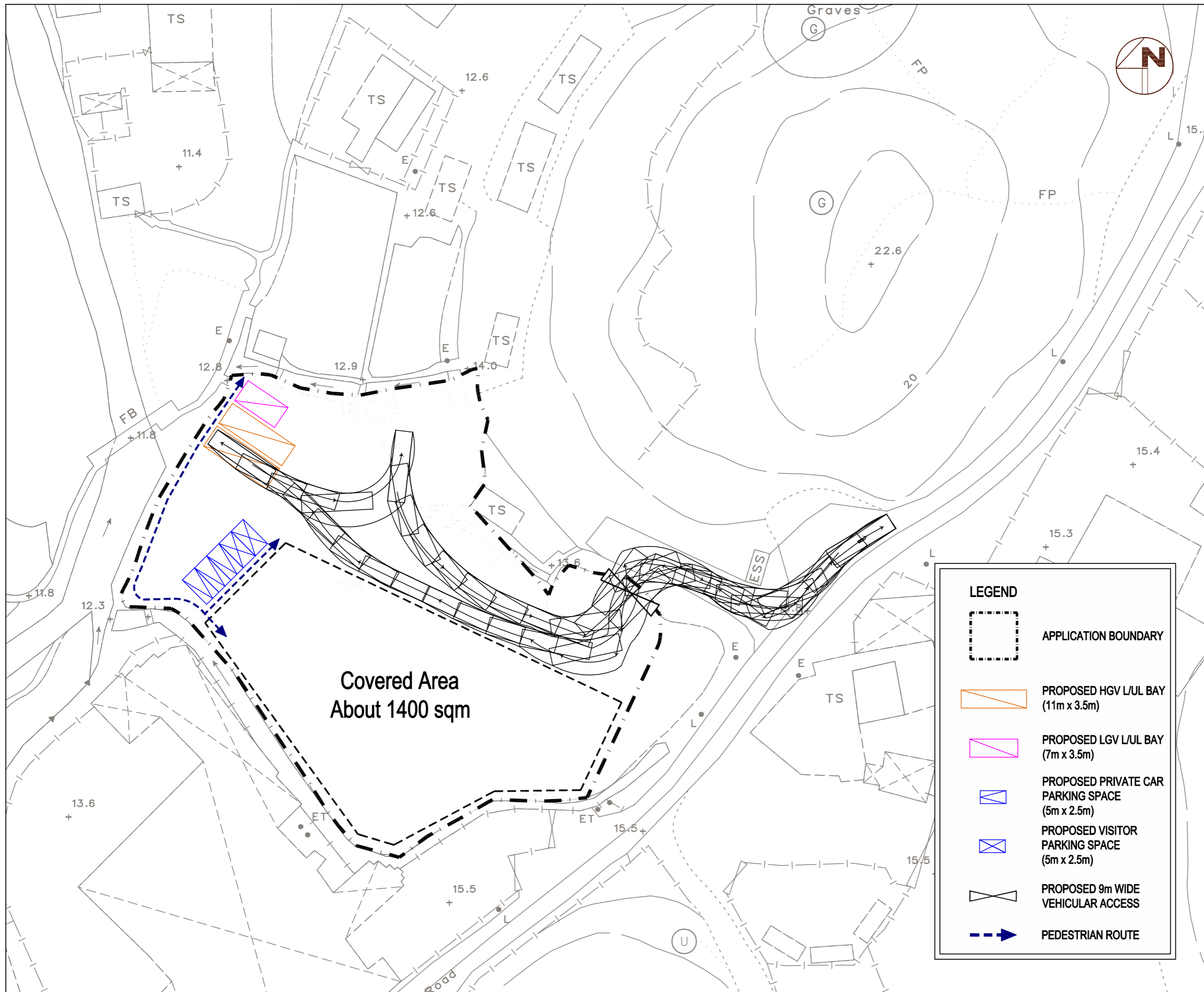
Appendix A

Swept Path Analysis

Traffic Review for Section 16 Planning Application of a proposed temporary logistics centre for a period of three years and filling of land and pond at Lots 267 (Part) and 268 (Part) in D.D. 84, Lots 481 S.A (Part) and 481 RP (Part) in D.D. 87, and adjoining Government Land, Ping Che, Ta Kwu Ling, New Territories



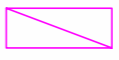


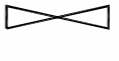

SWEPT PATH ANALYSIS FOR 11m HEAVY GOOD VEHICLE

FIGURE SP-01



**Covered Area
About 1400 sqm**

LEGEND

-  APPLICATION BOUNDARY
-  PROPOSED HGV L/UL BAY (11m x 3.5m)
-  PROPOSED LGV L/UL BAY (7m x 3.5m)
-  PROPOSED PRIVATE CAR PARKING SPACE (5m x 2.5m)
-  PROPOSED VISITOR PARKING SPACE (5m x 2.5m)
-  PROPOSED 9m WIDE VEHICULAR ACCESS
-  PEDESTRIAN ROUTE

Scale : 1:500 (A3)

Date : JUL 2024

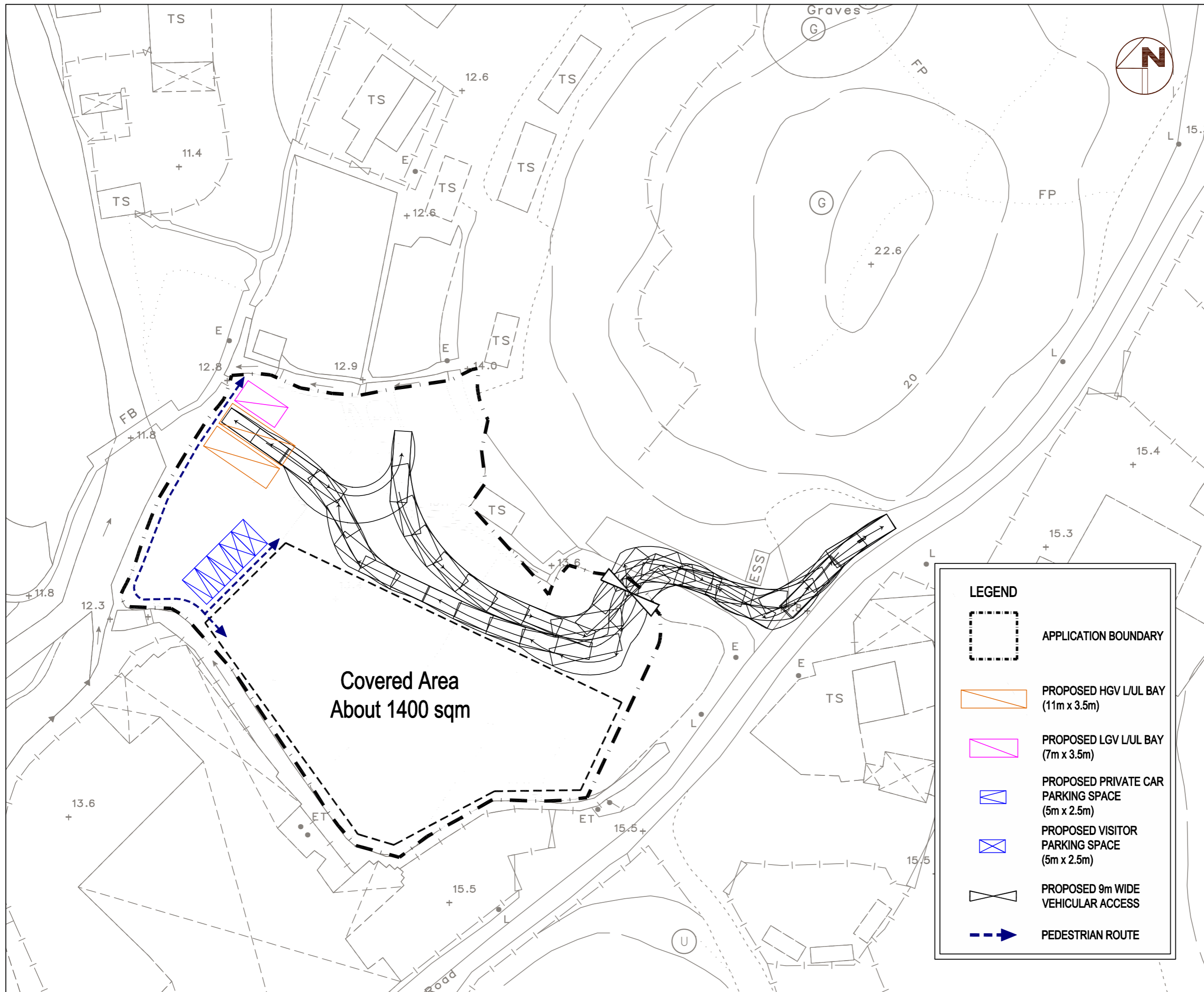
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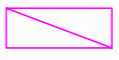


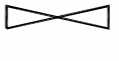

SWEPT PATH ANALYSIS FOR 11m HEAVY GOOD VEHICLE

FIGURE SP-02



**Covered Area
About 1400 sqm**

LEGEND

-  APPLICATION BOUNDARY
-  PROPOSED HGV L/UL BAY (11m x 3.5m)
-  PROPOSED LGV L/UL BAY (7m x 3.5m)
-  PROPOSED PRIVATE CAR PARKING SPACE (5m x 2.5m)
-  PROPOSED VISITOR PARKING SPACE (5m x 2.5m)
-  PROPOSED 9m WIDE VEHICULAR ACCESS
-  PEDESTRIAN ROUTE

Scale : 1:500 (A3)

Date : JUL 2024

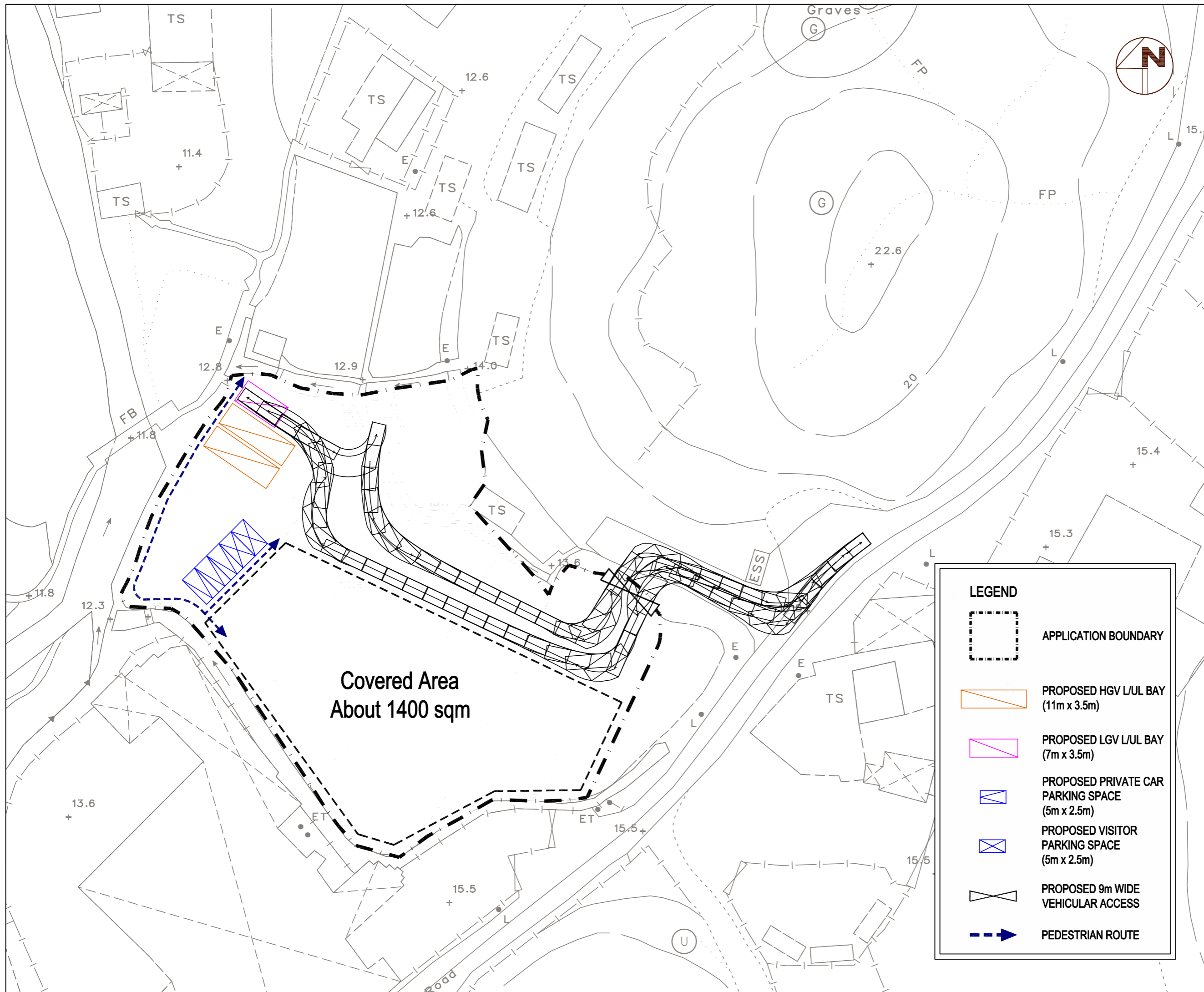
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SWEPT PATH ANALYSIS FOR 7m LIGHT GOOD VEHICLE

FIGURE SP-03



LEGEND	
	APPLICATION BOUNDARY
	PROPOSED HGV L/UL BAY (11m x 3.5m)
	PROPOSED LGV L/UL BAY (7m x 3.5m)
	PROPOSED PRIVATE CAR PARKING SPACE (5m x 2.5m)
	PROPOSED VISITOR PARKING SPACE (5m x 2.5m)
	PROPOSED 9m WIDE VEHICULAR ACCESS
	PEDESTRIAN ROUTE

Scale : 1:500 (A3)

Date : JUL 2024

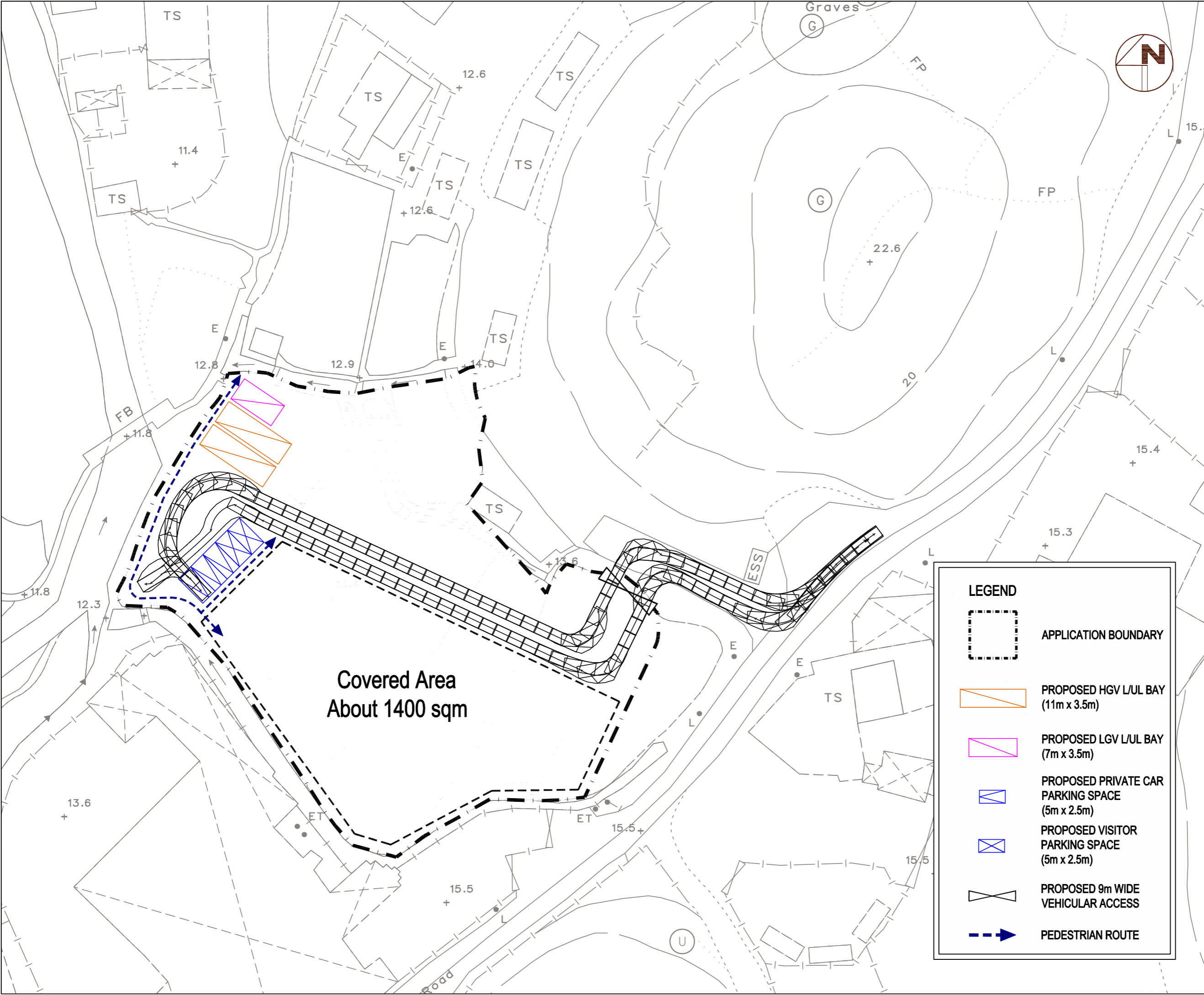
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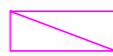


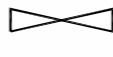

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SWEPT PATH ANALYSIS FOR 5m PRIVATE CAR

FIGURE SP-04



LEGEND

-  APPLICATION BOUNDARY
-  PROPOSED HGV L/UL BAY (11m x 3.5m)
-  PROPOSED LGV L/UL BAY (7m x 3.5m)
-  PROPOSED PRIVATE CAR PARKING SPACE (5m x 2.5m)
-  PROPOSED VISITOR PARKING SPACE (5m x 2.5m)
-  PROPOSED 9m WIDE VEHICULAR ACCESS
-  PEDESTRIAN ROUTE

Scale : 1:500 (A3)

Date : JUL 2024

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Traffic Review for Section 16 Planning Application of a proposed temporary logistics centre for a period of three years and filling of land and pond at Lots 267 (Part) and 268 (Part) in D.D. 84, Lots 481 S.A (Part) and 481 RP (Part) in D.D. 87, and adjoining Government Land, Ping Che, Ta Kwu Ling, New Territories

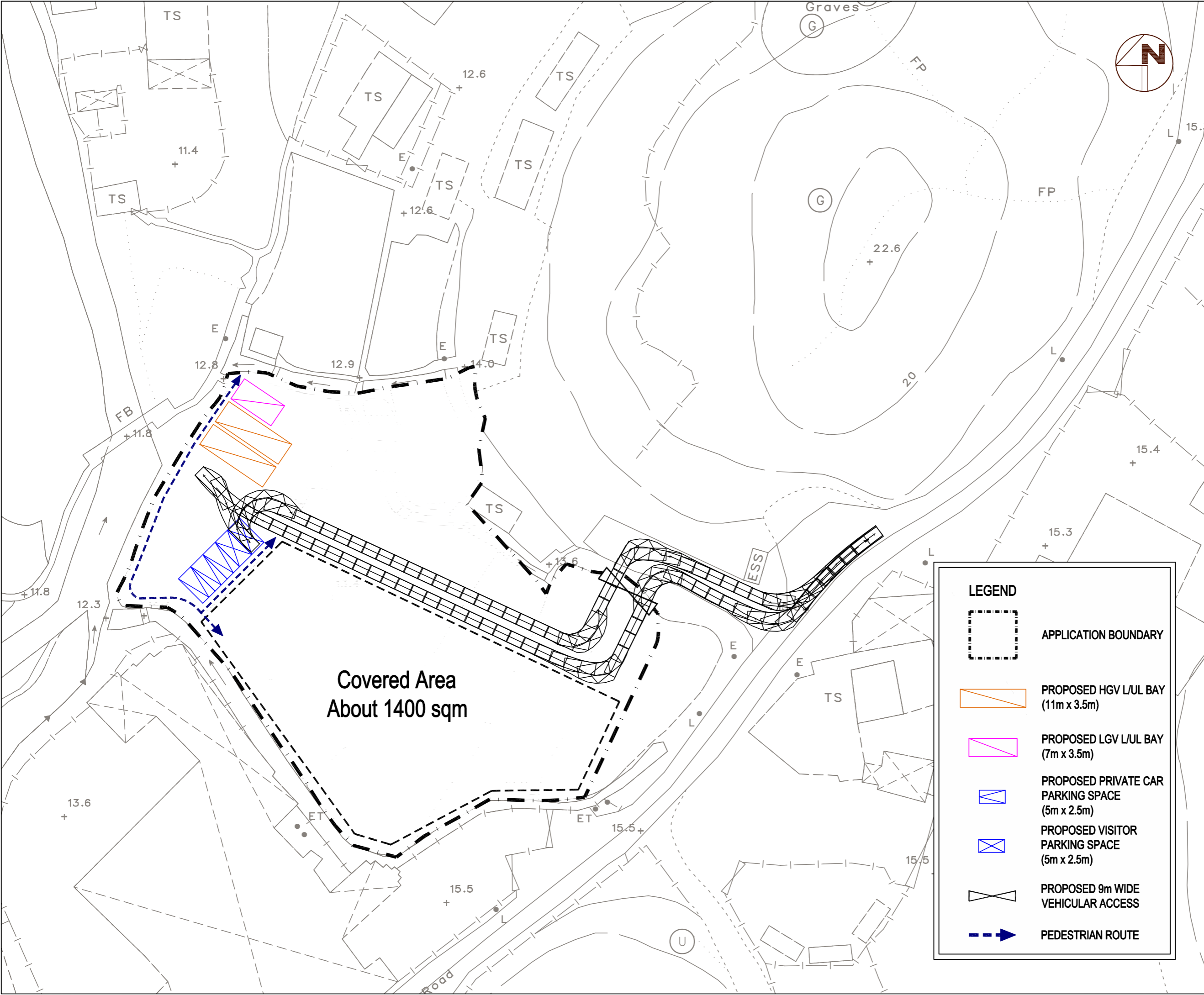
SWEPT PATH ANALYSIS FOR 5m PRIVATE CAR

FIGURE SP-05

Scale : 1:500 (A3)

Date : JUL 2024

Rev. :



LEGEND	
	APPLICATION BOUNDARY
	PROPOSED HGV L/UL BAY (11m x 3.5m)
	PROPOSED LGV L/UL BAY (7m x 3.5m)
	PROPOSED PRIVATE CAR PARKING SPACE (5m x 2.5m)
	PROPOSED VISITOR PARKING SPACE (5m x 2.5m)
	PROPOSED 9m WIDE VEHICULAR ACCESS
	PEDESTRIAN ROUTE

X:\PROJECTS\1037 \$16 FOR PROPOSED TEMPORARY LOGISTIC CENTRE AT PING CHE -1\DATA\ADMIN\REPORT DRAWING\FIG 2.2A -TRAFFIC MANAGEMENT MEASURES.DWG