

### **AQUIND Limited**

### **AQUIND INTERCONNECTOR**

Environmental Statement – Volume 3 – Appendix 22.2 Framework Construction Traffic Management Plan - Low Resolution Part 2

The Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulation 5(2)(a)

The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017

Document Ref: 6.3.22.2

PINS Ref.: EN020022



### **AQUIND Limited**

### **AQUIND INTERCONNECTOR**

Environmental Statement – Volume 3 – Appendix 22.2 – Framework Construction Traffic Management Plan - Low Resolution Part 2

PINS REF.: EN020022 DOCUMENT: 6.3.22.2

**DATE: 14 NOVEMBER 2019** 

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### **DOCUMENT**

Document	6.3.22.1 Environmental Statement – Volume 3 – Appendix 22.2 Framework Construction Traffic Management Plan Low Resolution Part 2
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Document Owner	WSP UK Limited
Prepared By	M. Battle and S. Grant
Date	31 October 2019
Approved By	C. Williams
Date	14 November 2019

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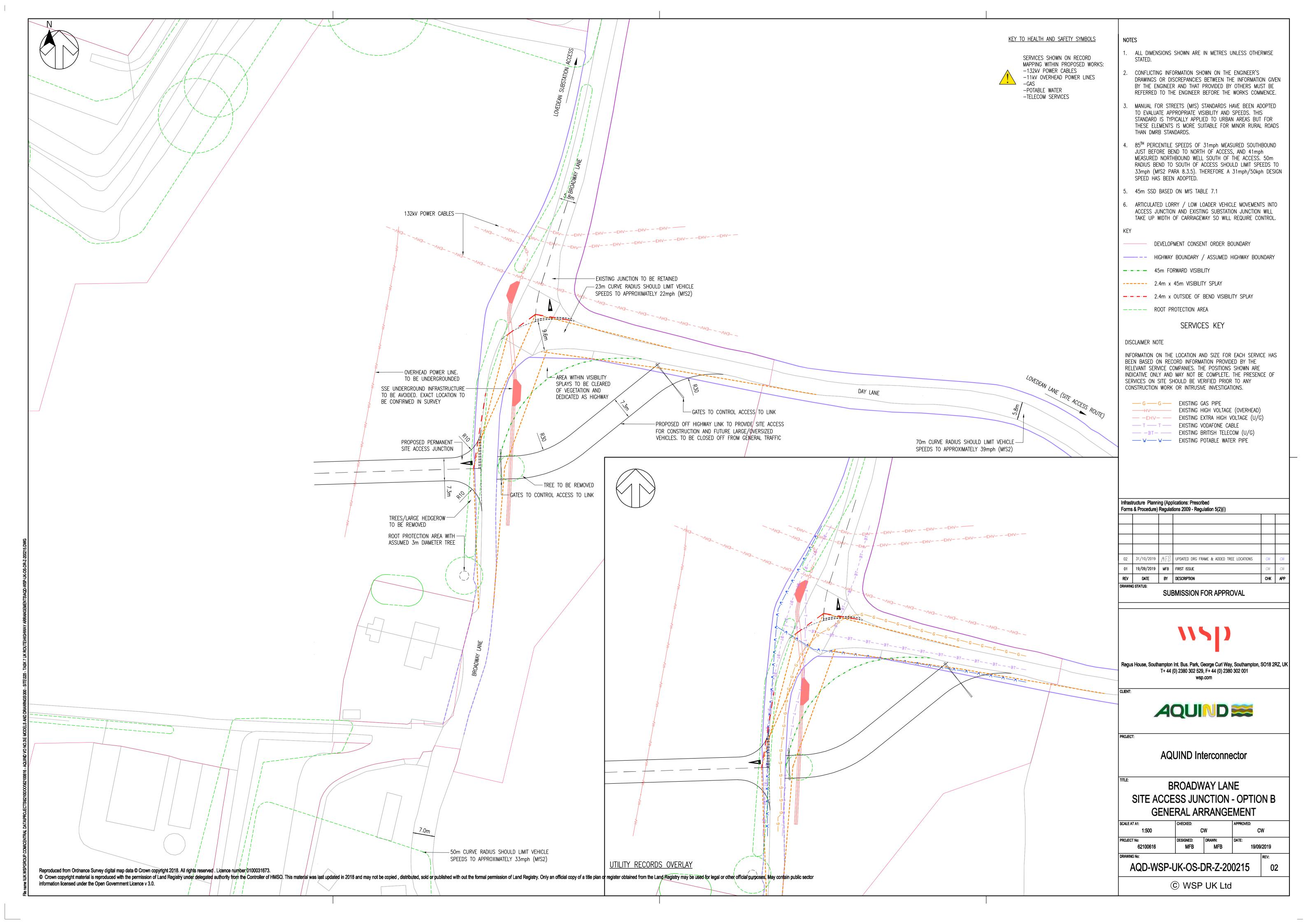
Document Ref.: Environmental Statement Appendix 22.2 Framework Construction Traffic Management Plan

November 2019

**AQUIND Limited** 



## Appendix 2 –Converter StationAccess Drawing





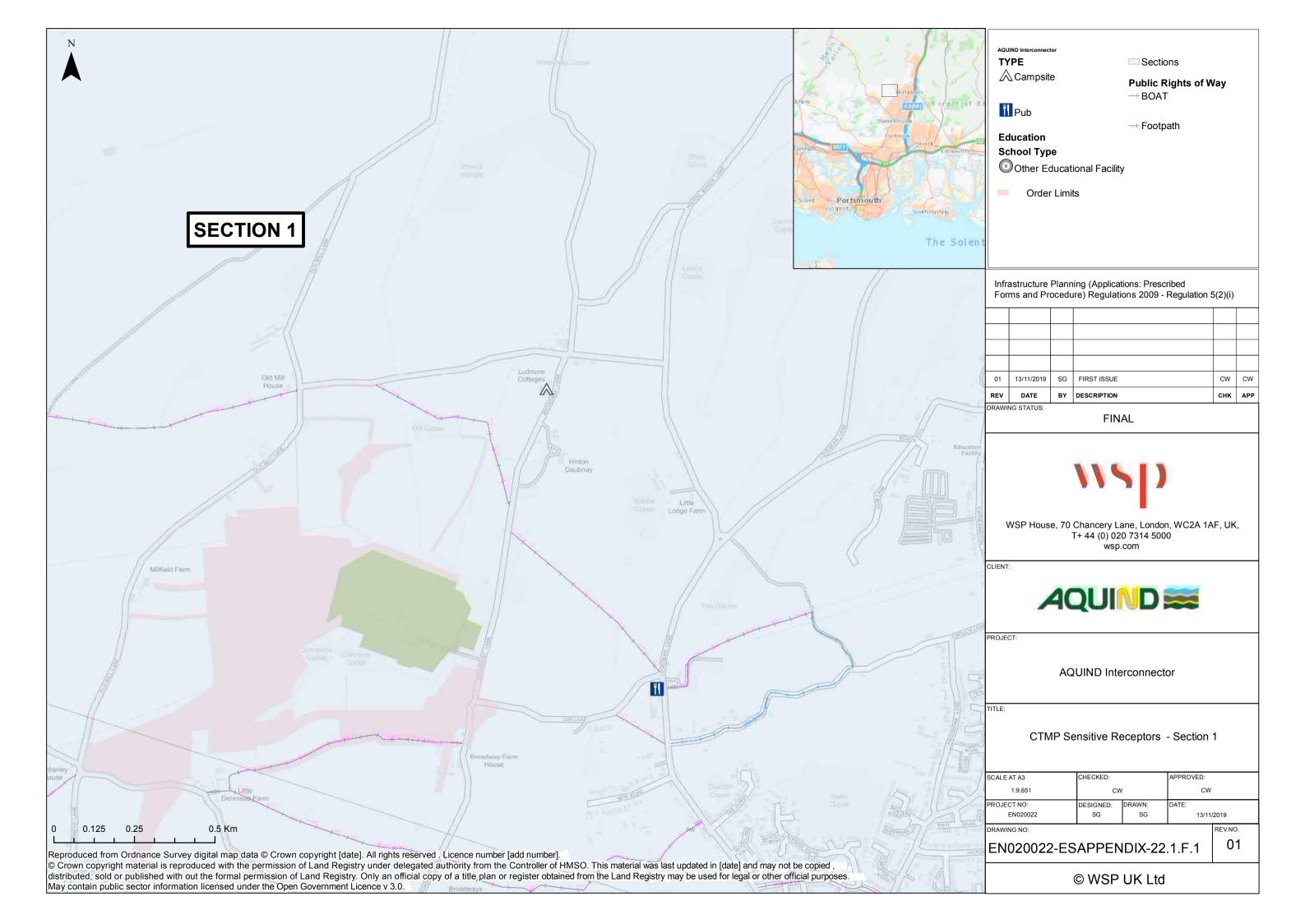
## Appendix 3 – Construction Programme

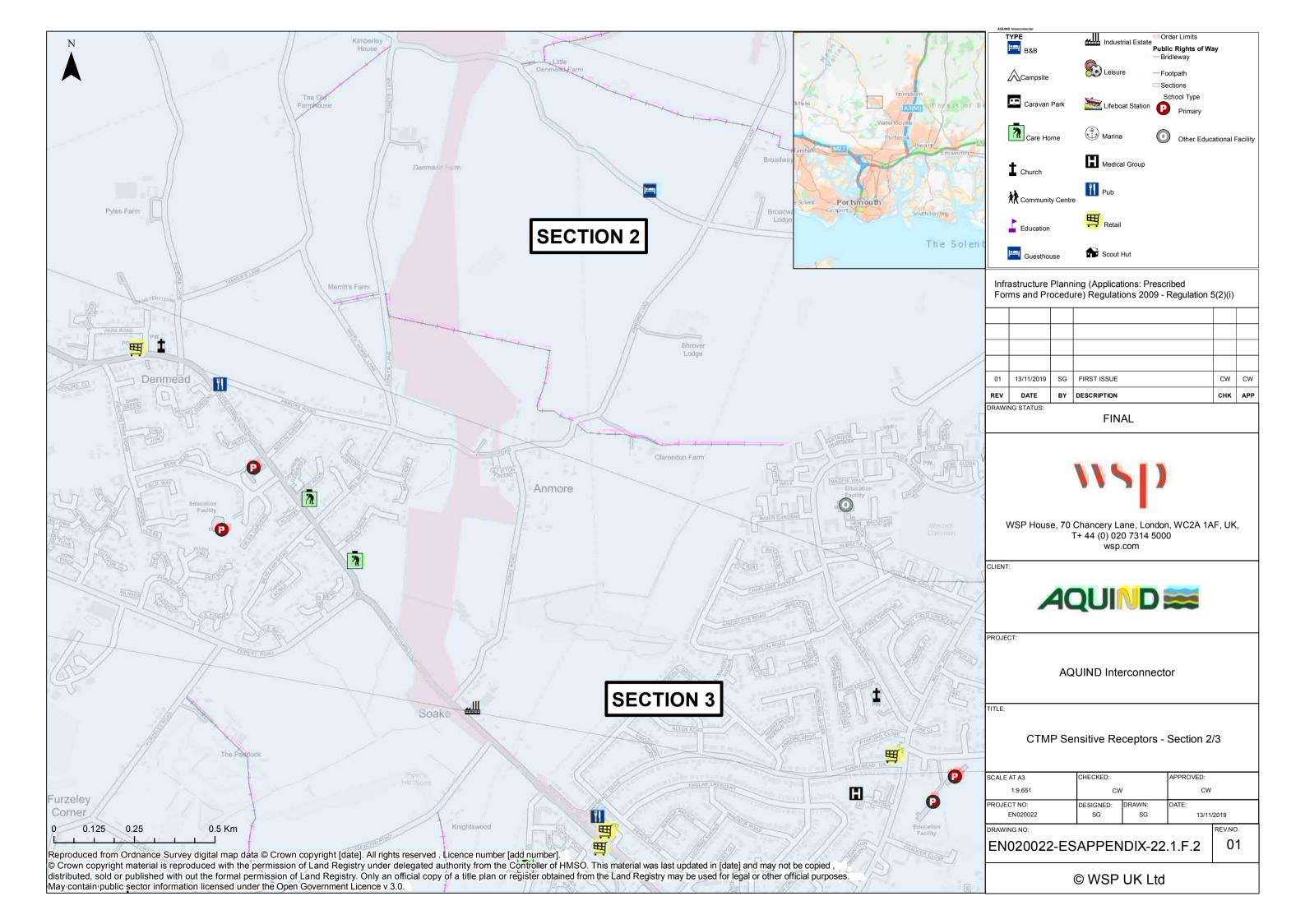
			20	21	2022			2023			2024					
Key Task	Related Activities	Indicative Duration (Weeks)	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Landfall Installation	All activities															
	Preparation, drilling and duct installation	44														
	Transition Joint Bay															
	ORS															
Onshore Cable Installation (UK)	All activities															
	Route construction															
	Cable pulling															
	Jointing and terminating															

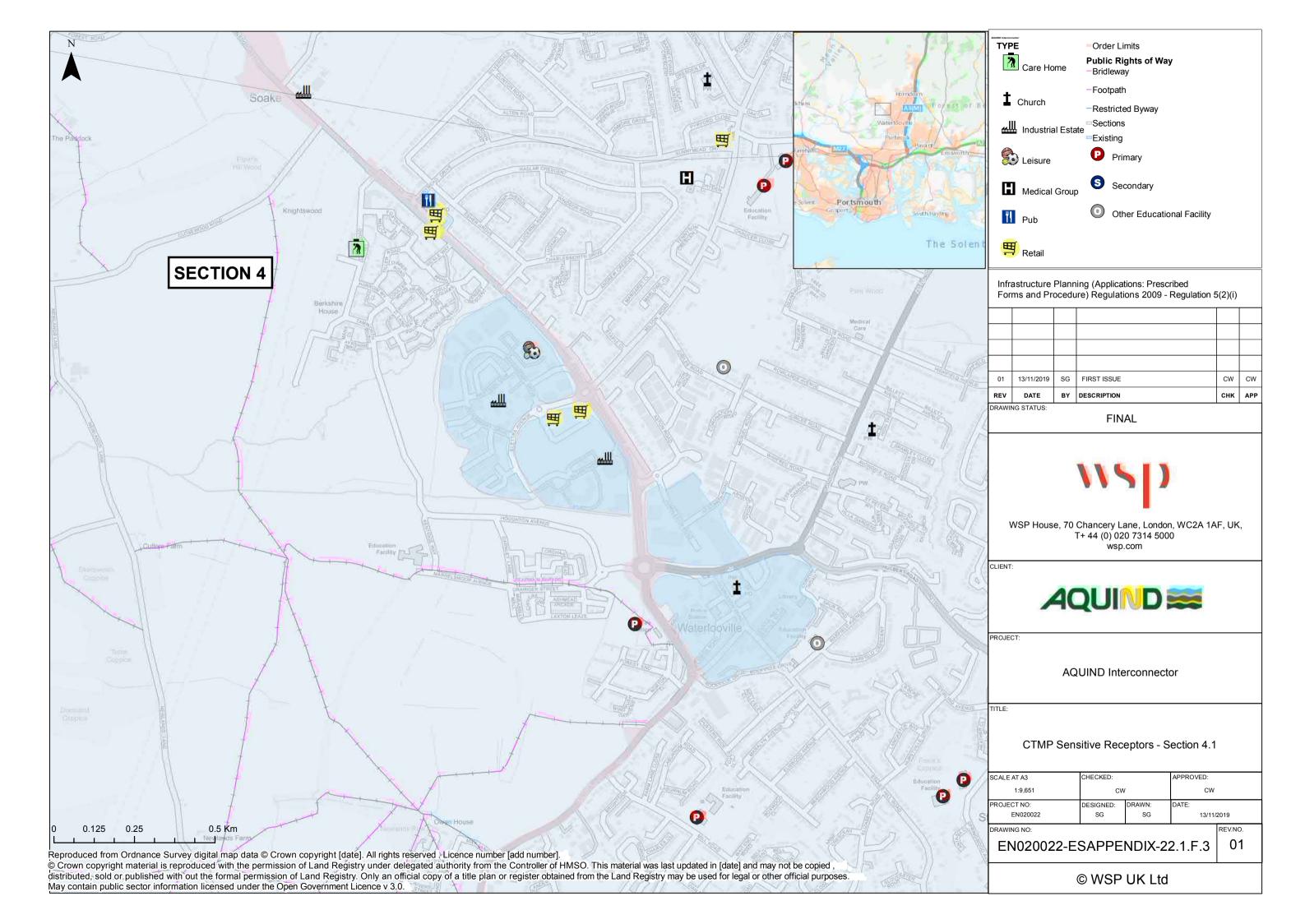
			20	21		20	22			20	23			20	24	
Key Task	Related Activities	Indicative Duration (Weeks)	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Converter Station Construction	All activities, including reinstatement															
	Enabling /Diversion Works															
	Main Civils Construction works															
	Mechanical and Electrical Work															

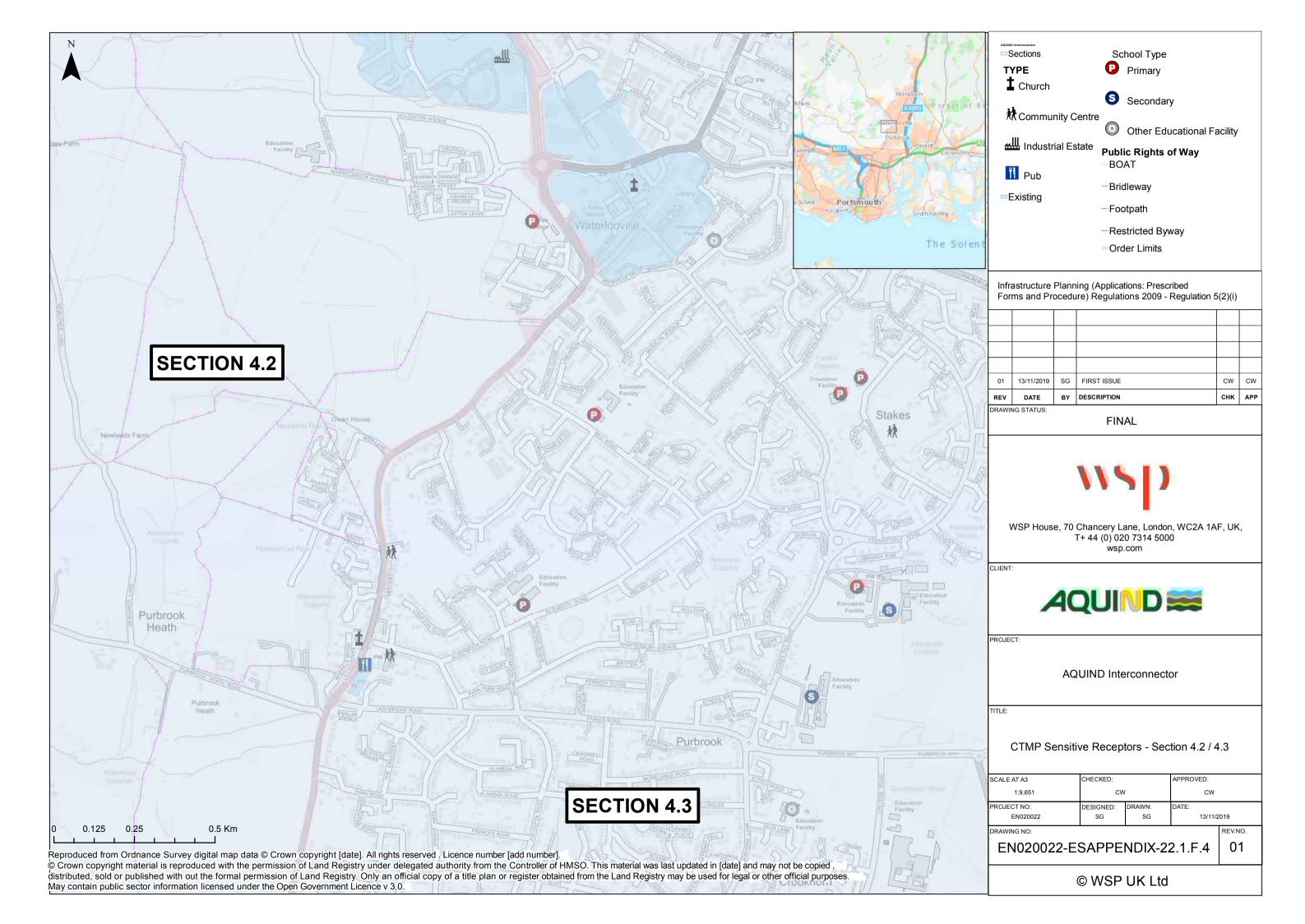


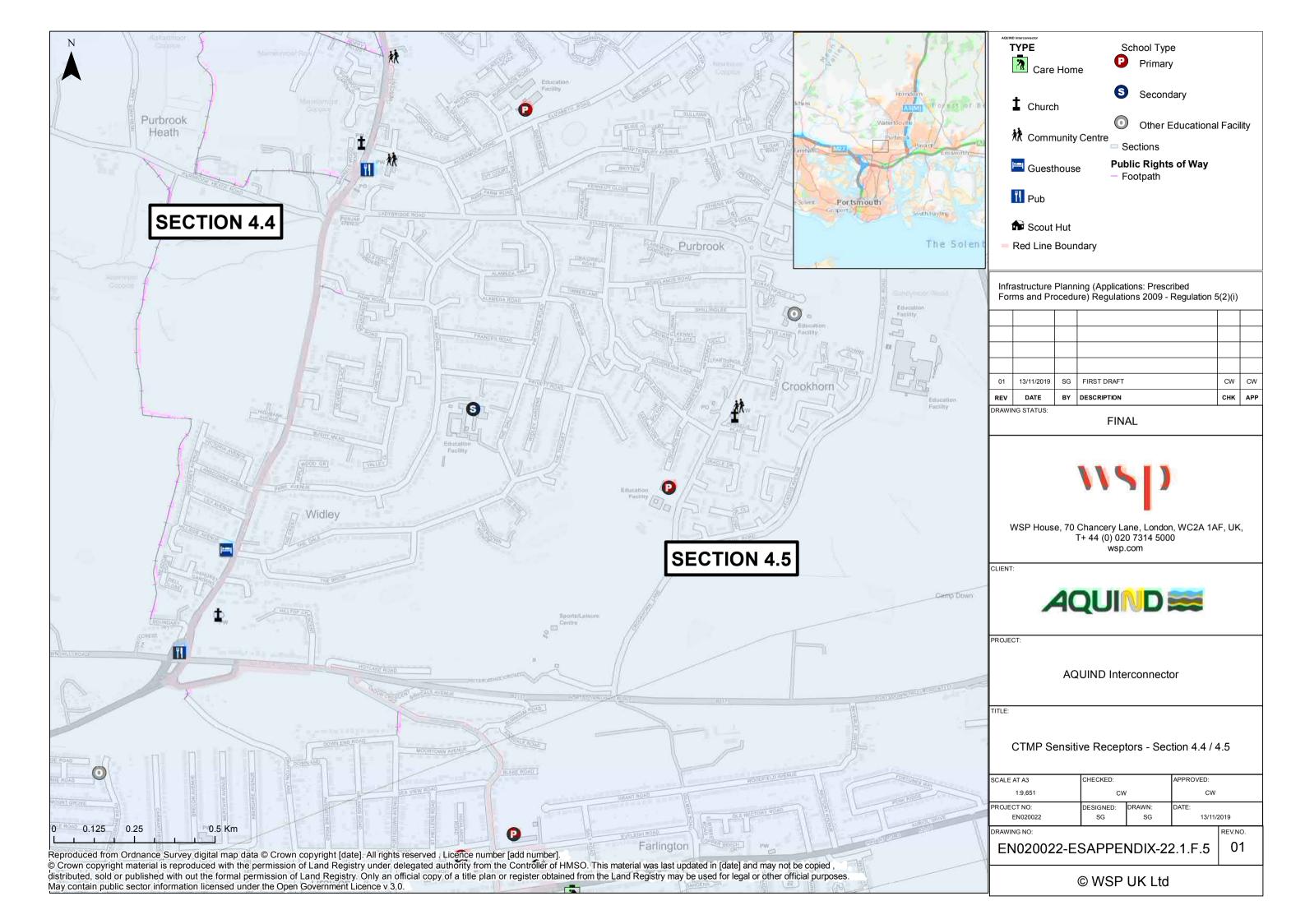
# Appendix 4 – Sensitive Receptors and Temporary Access Locations

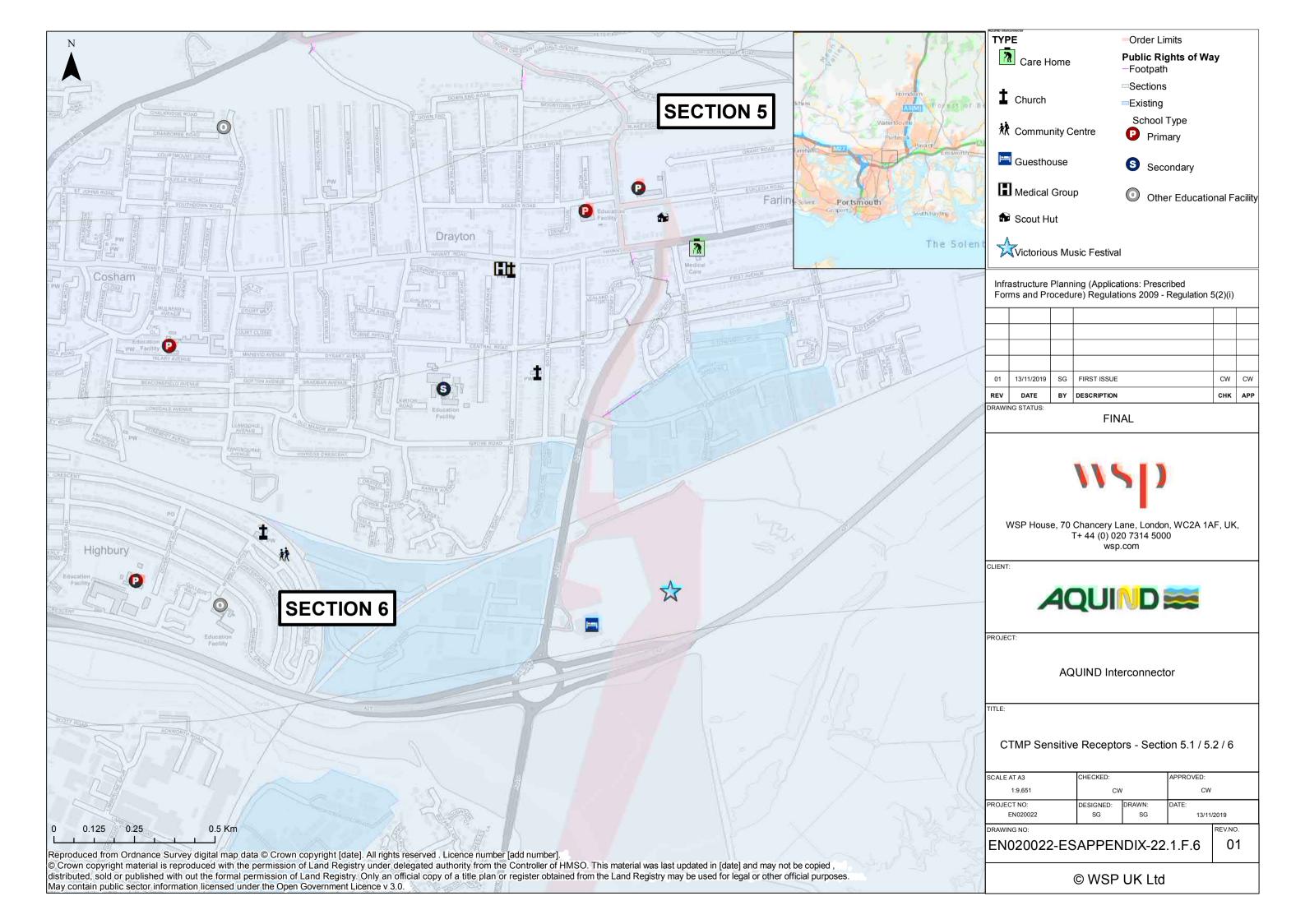


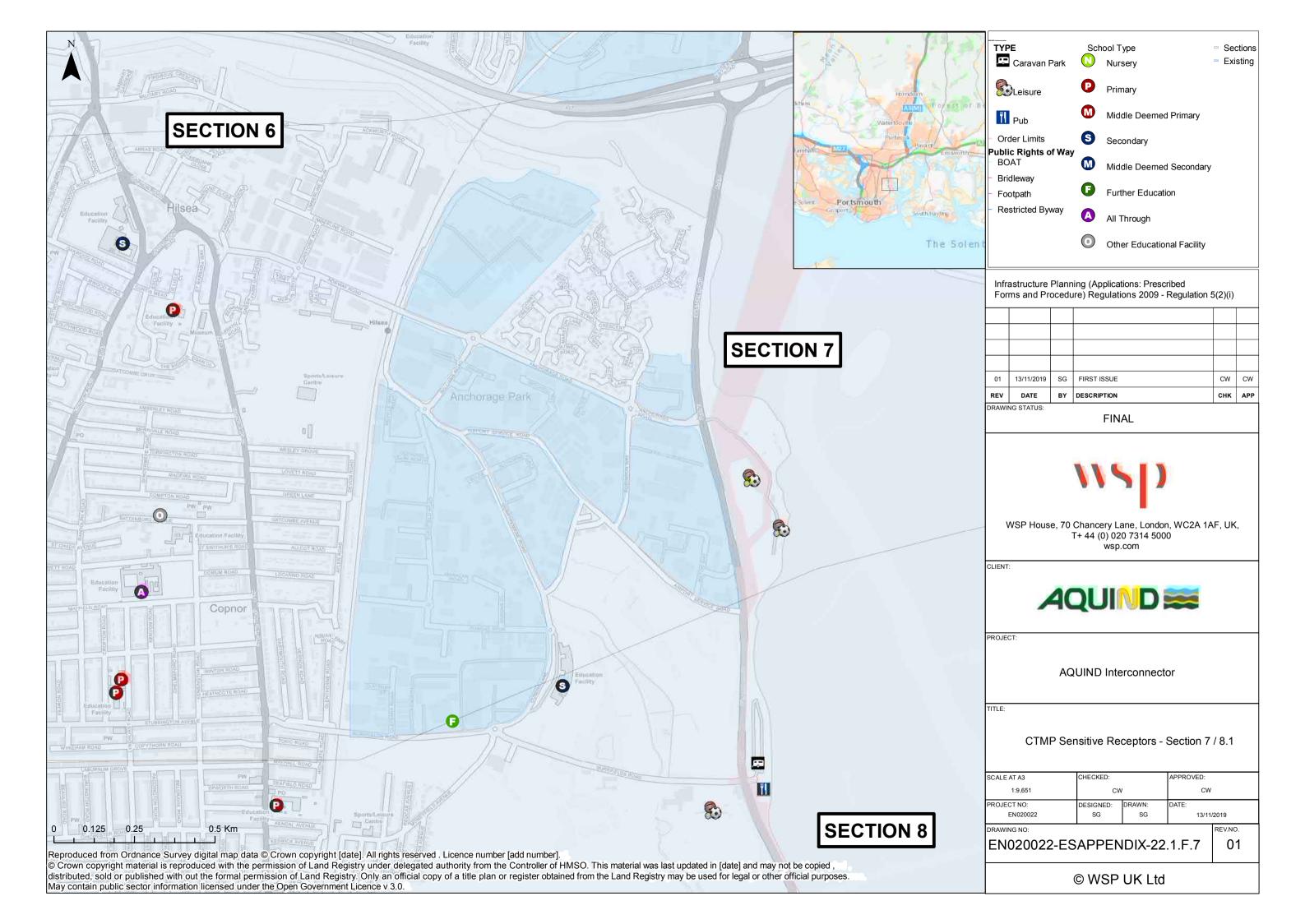


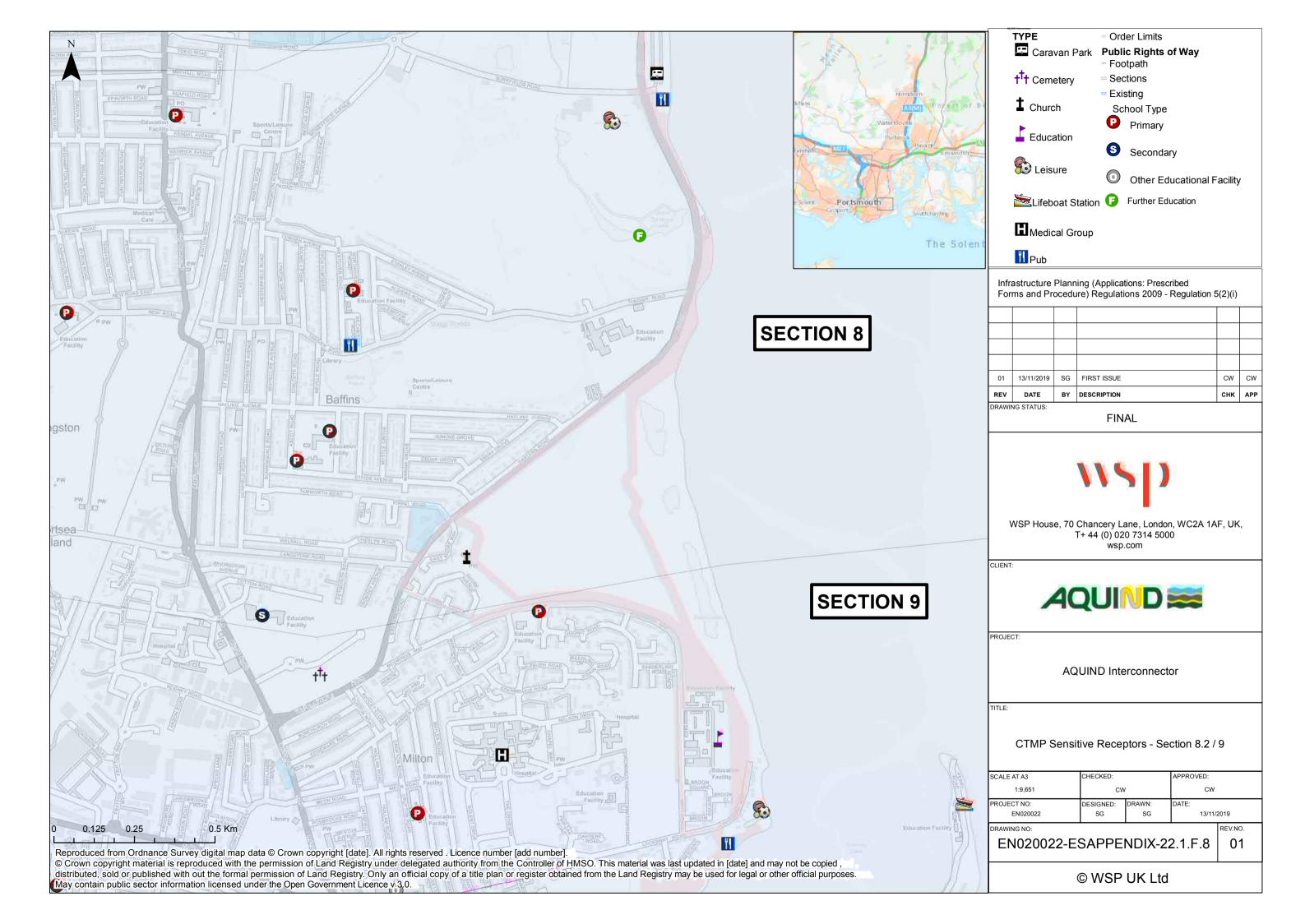


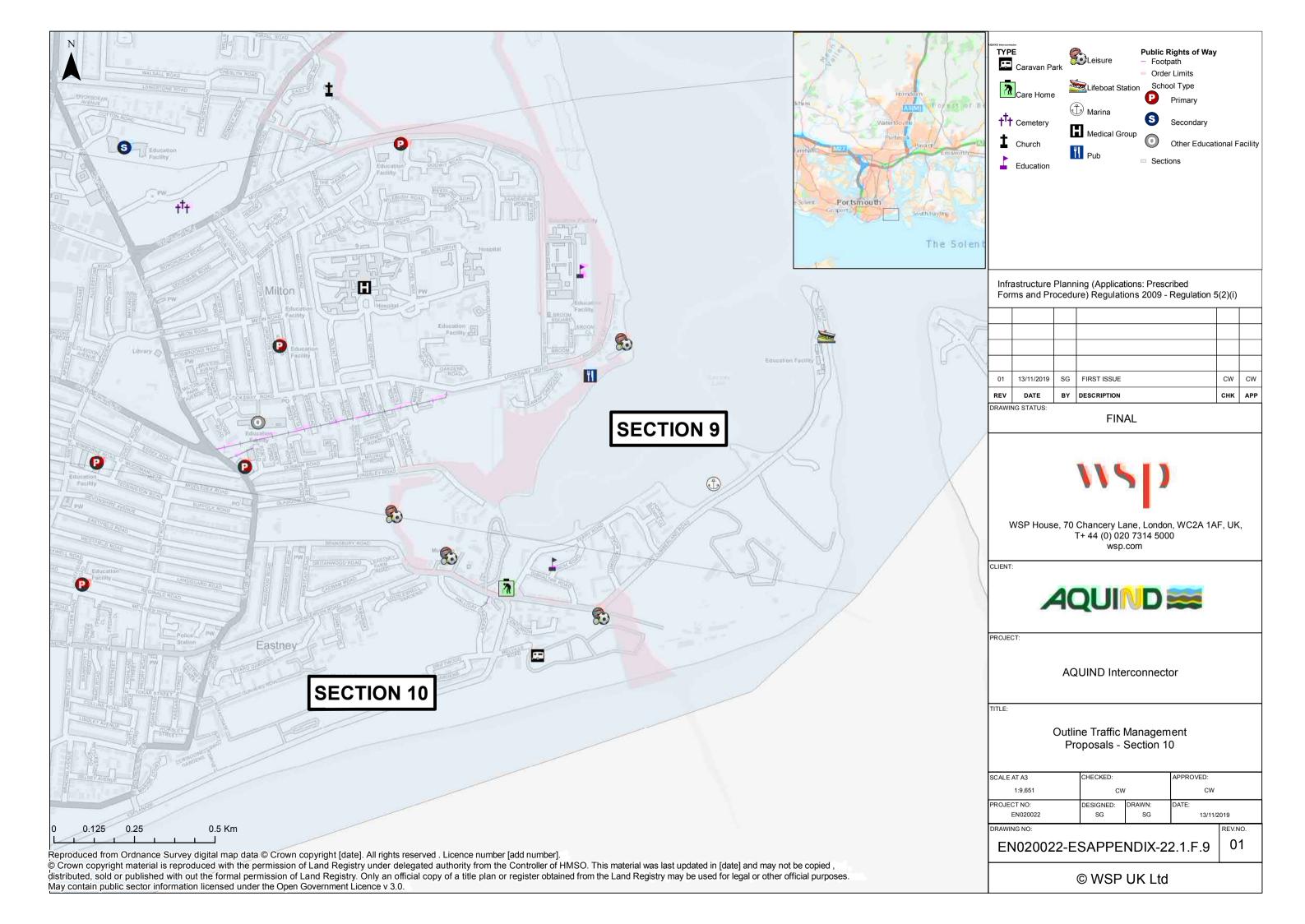














## Appendix 5 – Abnormal Indivisible Load Study

### COLLETT

### **EXPERTS IN MOTION**



Route Access Survey 333100

A3(M) J2 to AQUIND Lovedean

WSP September 2019







### Contents

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### **Report Details**

Report for

Stewart Urquhart WSP Three White Rose Office Park Millshaw Park Lane Leeds LS11 0DL

### **Attendees of Survey**

Steven Mangham

Time / Date of Survey: 2nd July 2019

General weather conditions: Mixed

Issued by

Steven Mangham

### Approved by

Steven Mangham

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### **Document Revisions**

No	Date	Details
1	04/11/2019	Updated to client comments
2	08/11/2019	Updated to client comments

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### **Company Profile**

Collett & Sons Ltd established in Halifax over 45 years ago specialise in the multimodal logistics throughout the UK, Europe and Worldwide.

Our Company owns a modern fleet of over 60 vehicles and over 100 trailers, operating from 3 depots located in Halifax, Goole and Grangemouth.

The depots situated in Google and Grangemouth offer strategically located sites suitable to provide central hubs for distribution throughout the UK. Each facility is complete with up to 110 tonnes lifting capacity in order to be able to handle all various abnormal load types. As logistical partners, the company is able to offer the complete transport solution from point of manufacture through to job site.

Collett & Sons Limited operate an in-house consultancy that deals with transport feasibility, route and site access surveys, Swept Path Analysis, Traffic Management Plans, Test Drives and Environment Statements.

In addition to consulting services, Collett & Sons Limited delivers the following services;

Marine
Port Operation
Heavy Lift Storage
Heavy Transport
Project Management
Freight Forwarding
Heavy Lift
General Haulage
Warehousing
Test Station (DVSA-authorised)
SHEQ Training











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### 1. Executive Summary

- **1.1.** This report comprises of a study of the road route as detailed here in for the road transport of a transformer to the proposed AQUIND Lovedean site, Lovedean, Hampshire.
- **1.2.** One route has been assessed from the A3(M) Junction 2 to the Day Lane/Broadway Lane junction, Lovedean.
- **1.3.** Due to the height of the proposed transformer and subsequent vehicle configuration, a suitable high load route is required from Port to start of the route detailed in this report body.

### Third party land

**1.4.** Third party land is required that the Day Lane/Broadway Lane junction if Option 2 is selected as the preferred method of navigating that junction.

### Road widening

**1.5.** Road widening within highways owned land is required at the A3/Lovedean Lane junction on the nearside footpath. Area to be made suitable to withstand axle loadings.

### Modifications to street furniture

**1.6.** Modifications to street furniture will be required along the route at a number of locations. The locations where street furniture removal is required are: B2149/A3 Junction, A3/Lovedean Lane Junction, Right bend on Lovedean Lane, Lovedean Lane/Day Lane Junction and Day Lane/Broadway Lane Junction.

### Vertical Alignment and Height Clearances

- 1.7. Due to the length and nature of the route there are a high number of overhead utility lines. The heights of these lines have not been assessed as part of this survey and further investigation is required with the utility companies, once the final load dimensions are determined, to establish their cable heights and any remedial measures that may be required.
- **1.8.** There are no overhead structures on the routes.
- **1.9.** On Day Lane, there is an incline gradient which will require the loaded vehicle to be towed. Towing vehicles will be required for deliveries.

### Structural Assessment

- **1.10.** Consultation with the relevant authorities has not been undertaken as part of this assessment due to the high G.V.W of the loaded configuration.
- **1.11.** For loads of this nature, it is usually expected/recommended that full structural surveys are undertaken of any structures on the route. Once the exact load dimensions are established, consultation with the relevant authorities is required to determine the structural suitability of the route.
- **1.12.** It should be noted that this route has been used for delivery of transformers to the Lovedean facility although that does not necessarily mean that this route is suitable for loads of this nature.

### Other areas of note

- **1.13.** Tree pruning will be required at numerous locations to ensure that a clear envelope is present for the vehicle.
- **1.14.** As part of the delivery convoy, tree surgeons and utility companies will be required to accompany the loads to make any necessary amendments.

### Unloading on site to Bund/Plinth

1.15. Once the loaded vehicle arrives at the proposed site, the load will require unloading to the bund/plinth.



- **1.16.** It is recommended that the proposed site is designed to allow the loaded girder set to navigate alongside the plinth, where the transformer can then be unloaded from the Girder set and then moved into position using the Jack and Skate method.
- **1.17.** If this site cannot be designed to achieve the above, transhipment on site to a SPMT vehicle will be required to move then transformer to the plinth for Jacking and Skating.



### 2. Introduction

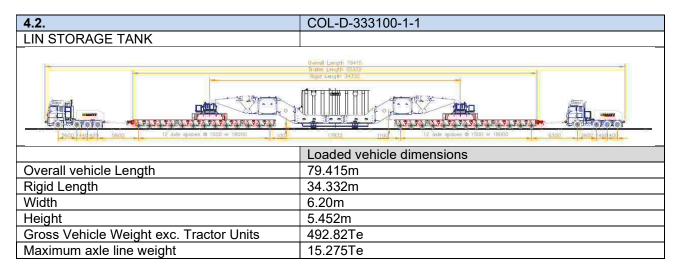
- 2.1 Collett & Sons Ltd. were commissioned by WSP to undertake an abnormal loads route access study to assess the transportation of a transformer components to the proposed AQUIND Lovedean Facility at Lovedean, Hampshire.
- 2.2 The road routes as detailed herein are for the road transport of the transformer component identified in Section 4.
- **2.3** The purpose of this report is to detail access from Junction 2 of the A3(M).

### 3. Candidate Abnormal Loads

**3.1.** WSP have requested that the assessment on which this report is compiled be based on the following Cargo Details: Length 10200mm, depth 4100mm, height 5100mm.

### 4. Abnormal Indivisible Load Profiles

**4.1.** The abnormal load components are assessed based on weight, length, width and height and loaded to the most appropriate vehicle the weights and dimensions of these are detailed below. The loading diagrams are detailed in Appendix 1.



### 5. Responses from Statutory Consultees (Structures Suitability)

### Summary of Structural Issues

- **5.1.** Consultation with the relevant authorities has not been undertaken as part of this assessment due to the high G.V.W of the loaded configuration.
- **5.2.** For loads of this nature, it is usually expected/recommended that full structural surveys are undertaken of any structures on the route. Once the exact load dimensions are established, consultation with the relevant authorities is required to determine the structural suitability of the route.
- **5.3.** It should be noted that this route has been used for delivery of transformers to the Lovedean facility although that does not necessarily mean that this route is suitable for loads of this nature.



### 6. Route Assessment Overview

- **6.1.** This section of the report illustrates the route assessed for the delivery of the storage tank components from Ellesmere Port to Air Liquide Facility at Coleshill.
- **6.2.** For the purpose of this report, one route to the site was surveyed. All the routes surveyed in this report have been identified by Collett Consulting.

### 6.3.

### **Route A**

Start Location	M3 Junction 2	Distance of Pouts	Km	Miles
Via:	B2149/A3/Lovedean Ln	Distance of Route	4.1	2.5

- Exit M3 Northbound at Junction 2
- At roundabout, turn left onto B2149
- At roundabout, continue straight on B2149
- Turn left onto A3
- Turn right onto Lovedean Lane
- Turn left onto Day Lane
- At junction with Broadway Lane, continue onto new access road.

### 6.4. Map Overview



### 6.5. Amendment Categorisation

For the purposes of this report, the route amendments have been identified into 3 categories.

Major Amendments – Third Party Land, Road Widening Minor Amendments – Modifications to Street Furniture, Pruning, Contraflow Manoeuvre, Manual Steering No Amendments - Location is suitable as assessed during this survey

The categories have been colour coded for each report item as per the below key.

KEY			
	Major Amendments	Minor Amendments	No Amendments



### 6.6. Map extract of survey locations





ITEM NUMBER 6.6.1 LOCATION A3(M) JUNCTION 2/B2149 ROUNDABOUT

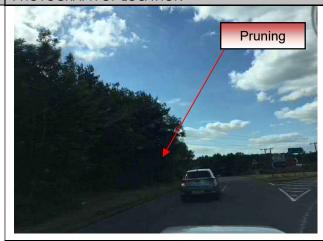
DIRECTION Take 1st Exit at the roundabout

GRID REFERENCE SU 70411 12347

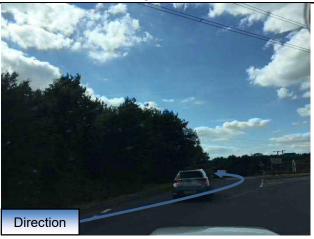
### MODIFICATION AND DESCRIPTION

Swept path analysis indicates that pruning of vegetation on the nearside will need to be made in order for the vehicle to pass through this section of the route.

### PHOTOGRAPH OF LOCATION



View of exiting the roundabout



Vehicle Direction



Aerial Vie	w of	Location
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FURTHER INVESTIGATION UNDERTAKEN?	YES	TYPE	Swept Path Analysis
RELATED DOCUMENT NUMBERS		CC	DL-D-333100-10-2



ITEM NUMBER	6.6.2	LOC	ATION	B2	2149 ROUNDABOUT
DIRECTION	Take 1st Exit at the round	labout			
GRID REFERENCE	SU 70065 12480				
MODIFICATION ANI	D DESCRIPTION		РНОТО	GRAPH OF LO	CATION
	dicates that the vehicle wil			Entry	to roundabout  Direction
				ven	icle Direction
	Δaria	al View	of Locate	ion	
ELIDTHED INVESTIG		ai view			N1 / A
	ATION UNDERTAKEN?		NO	TYPE	N/A
RELATED DOCUMEN	NI NUMBER2				N/A



ITEM NUMBER	6.6.3	LOCATION	B2149/A3 JUNCTION
DIRECTION	Turn left at this junction		
GRID REFERENCE	SU 69831 12559		
MODIFICATION AN	D DESCRIPTION	РНОТО	OGRAPH OF LOCATION
street furniture are	s indicates that modification required at this location. The raffic lights and bollards to	he	
	tion needs to be cleared to noval of traffic lights and bands required.	rriers	
Loaded vehicle will reservation on the	contraflow the central A3.		Direction  Approaching Crossroads
			Traffic lights, bollards, lamppost and railings to be removed
			View of entry splitter island  Traffic lights, bollards and railings to be removed
	Il View of Location		View of spliter island
	ATION UNDERTAKEN?	YES	TYPE Swept Path Analysis
RELATED DOCUME	NT NUMBERS		COL-D-333100-10-3



		,					
ITEM NUMBER	6.6.4	LOC	ATION	SPLITTER ISLAND ON A3			
DIRECTION	Continue straight at this l	ocatio	n				
GRID REFERENCE	SU 69566 12079						
MODIFICATION ANI	D DESCRIPTION		РНОТО	GRAPH OF LOCATION			
vegetation will be r Tree on nearside to	dicates that pruning of equried at this location.  be pruned to provide a cle	ear					
envelope.							
				View of splitter island			
				Pruning of tree required			
Ve	ehicle Direction			View of splitter island			
		al View	of Locat				
FURTHER INVESTIG	ATION UNDERTAKEN?		NO	TYPE N/A			
RELATED DOCUME			<del>                                     </del>	N/A			
				14/11			



ITEM NUMBER	6.6.5	LOCATION	A3/LOVEDEAN LANE JUNCTION
DIRECTION	Turn right at this junction		
GRID REFERENCE	SU 69483 11884		

### MODIFICATION AND DESCRIPTION

Swept path analysis indicates that road widening is required on the nearside of the A3 to allow axles to run on the footpath area. Area to be made suitable to withstand axle loadings.

Swept path analysis indicates that modifications to street furniture are required on the nearside at this location.

Road signs to be removed in order for the trailer to oversail the grass patch.

### PHOTOGRAPH OF LOCATION



Reverse view of junction



View of approaching junction



FURTHER INVESTIGATION UNDERTAKEN?		TYPE	Swept Path Analysis	
RELATED DOCUMENT NUMBERS	COL-D-333100-10-4			



ITEM NUMBER	6.6.6	LOCATION	RIGHT BEND ON LOVEDEAN LANE
DIRECTION	Continue straight at this location		
GRID REFERENCE	SU 68900 12105		

### MODIFICATION AND DESCRIPTION

Swept path analysis indicates that modifications to street furniture will be required at this location.

Bollards on the splitter island to be removed to allow trailer oversail.

### PHOTOGRAPH OF LOCATION



Approaching right bend



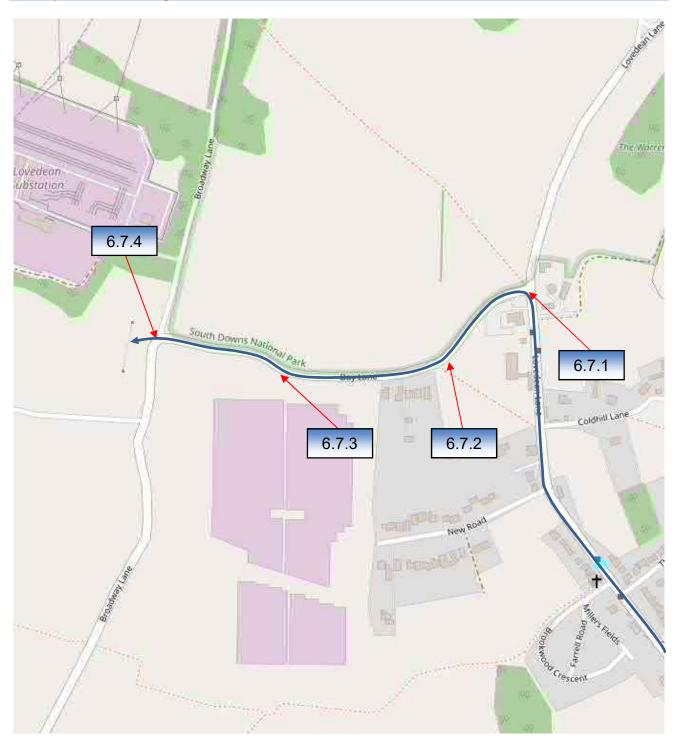
Reverse view of vehicle direction



	Aerial View of Location				
FURTHER INVESTIGATION UNDERTAKEN?			TYPE	Swept Path Analysis	
	RELATED DOCUMENT NUMBERS	COL-D-333100-10-5			



### 6.7. Map extract of survey locations





ITEM NUMBER	6.7.1	LOCATION	LOVEDEAN LANE/DAY LANE JUNCTION
DIRECTION	Turn left at this junction		
GRID REFERENCE	SU 68375 13325		

### MODIFICATION AND DESCRIPTION

Swept path analysis indicates that modifications to street furniture on the nearside will be needed at this location,

Road sign to be removed to allow the vehicle to oversail land on the nearside of the bend.

Trailer to be raised to oversail area.

### \*\*NOTE\*\*

From this junction to the junction with Broadway Lane, there is an incline in the road levels.

It is anticipated that a towing vehicle(s) will be required on this stretch of road.

### PHOTOGRAPH OF LOCATION



**Vehicle Direction** 



Reverse view of junction



Aerial View	/ ot	Location
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FURTHER INVESTIGATION UNDERTAKEN?	YES	TYPE	Swept Path Analysis	
RELATED DOCUMENT NUMBERS	COL-D-333100-10-6			



6.7.2 LOCATION ITEM NUMBER RIGHT BEND ON DAY LANE **DIRECTION** Continue straight at this location SU 68227 13211 GRID REFERENCE MODIFICATION AND DESCRIPTION PHOTOGRAPH OF LOCATION Visual inspection indicates that pruning will be required on both sides of the road. View of approaching right bend Pruning of trees required Direction Pruning of trees before right bend Vehicle Direction Aerial View of Location FURTHER INVESTIGATION UNDERTAKEN? NO TYPE N/A **RELATED DOCUMENT NUMBERS** N/A



6.7.3 LOCATION ITEM NUMBER S-BEND ON DAY LANE **DIRECTION** Continue straight at this location SU 67975 13207 GRID REFERENCE MODIFICATION AND DESCRIPTION PHOTOGRAPH OF LOCATION Visual inspection indicates that pruning will be required on both sides of the road at this location. View of approaching S-Bend Pruning required Direction Vehicle Direction View of S-Bend Aerial View of Location FURTHER INVESTIGATION UNDERTAKEN? NO TYPE N/A **RELATED DOCUMENT NUMBERS** N/A



ITEM NUMBER	6.7.4	LOCATION	DAY LANE/PROPOSED ACCESS TRACK JUNCTION
DIRECTION	Continue straight at this location		
GRID REFERENCE	SU 67788 13245		

#### MODIFICATION AND DESCRIPTION

#### OPTION 1 - COL-D-333100-10-7

Swept path analysis indicates that hedgerow on the nearside to be removed and cleared to allow the girder set to navigate onto the road. New access as per drawing required and modifications undertaken to accommodate this.

#### OPTION 2 - COL-D-333100-10-8

Swept path analysis indicates that new track to be constructed through third party land on the nearside.

Hedgerow to be removed to allow new track to be constructed.

New access as per drawing required and modifications undertaken to accommodate this.

#### **GENERAL**

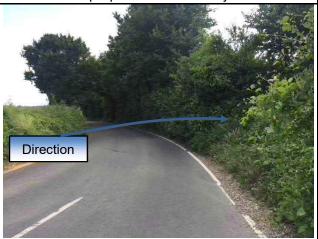
Both these options are considered to be more cost effective and less disruptive than creating a transhipment area in land on the nearside at the Solar frame.

Both these options allow for the load to be transported to the final destination without the need to tranship to a SPMT vehicle or similar.

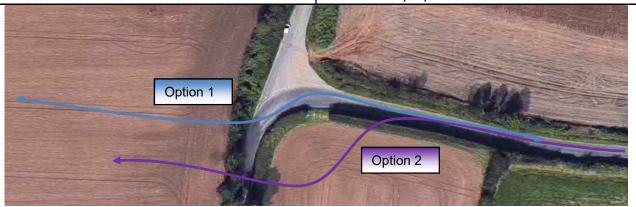
#### PHOTOGRAPH OF LOCATION



View of proposed access track junction



View of proposed access track enterance



Aerial View of Location			
FURTHER INVESTIGATION UNDERTAKEN?	YES	TYPE	SWEPT PATH ANALYSIS
RELATED DOCUMENT NUMBERS	COL-D-333100-10-7/8		



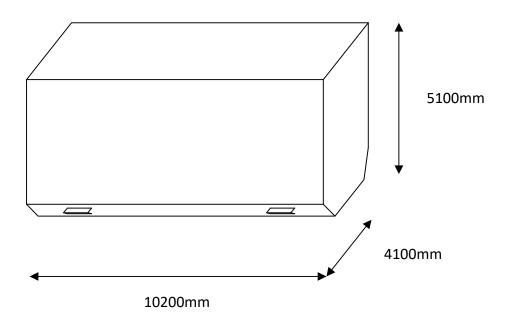
#### 7. Important Notes

- **7.1.** The recommendations in this report are made from a purely transport orientated view, and do not consider any political issues in terms of land ownership, or any other precincts raised that may otherwise be restrictive.
- **7.2.** The information contained in this report is privileged and confidential and is for the exclusive use of the client nominated herein.
- **7.3.** A Police escort or pilot car will be required in order to assist with traffic control for the entire route surveyed.
- **7.4.** Permits will be required for the movement of all loads. These permits are at the discretion of the Highways Agency (H.A). Therefore, approval of these permits by the H.A is a major consideration before any movements can be undertaken.
- **7.5.** It is recommended to have adequate warning signs implemented to warn other road users at critical points.
- **7.6.** All hedges, shrubs, bushes, trees and overhanging branches along the nominated routes must be trimmed to allow a suitable minimum envelope.
- **7.7.** All street furniture, signage etc. along the nominated route must be removed to allow a suitable minimum envelope on the road. Other specific street furniture has been nominated in this report to facilitate oversailed and swept areas.
- **7.8.** Overhead utility cables have not been measured as part of this survey and correspondence with the utility companies regarding cable heights and possible remedial solutions should be undertaken prior to any delivery.
- **7.9.** It should be noted that all assessments and inspections have been done so with the intention of producing information to highlight anticipated problems. This includes highlighting of potential land take requirements, possible street furniture implications, and highway alignment issues.
- 7.10. Land take is usually referred to when land is required from private land owners; road widening is usually referred to when land is required within highways boundaries. However the details of the nominated land take and road widening contained in this report are highlighting the expected areas of concern, and can only be confirmed by swept path analysis. The boundaries between private land and highways property are assumed by using obvious demarcation such as fence lines/hedges etc. It should be noted that actual boundaries between highways and private land are not substantiated in this report and can only be authenticated by carrying out land searches.
- **7.11.** All inspections and assessments are made for the road movement of loaded trailer equipment carrying specific storage tank components. These dimensions are based on the turning circles and specification of Collett & Sons trailer equipment.
- **7.12.** All route inspections and assessments, and subsequent conclusions and recommendations are deemed accurate by Collett & Sons Limited at the date that this report is created. We cannot be held responsible for the development of future road schemes or alterations to the routes surveyed that may leave this report inaccurate.
- **7.13.** This report is based solely on a preliminary visual inspection. Nothing in this report shall be construed in any way as committing Collett & Sons Limited to being able to deliver to site using this route before further structural analysis has been undertaken, and any accommodation/remedial works undertaken which are to Collett & Sons satisfaction.



# APPENDIX 1 TRANSFORMER DRAWING

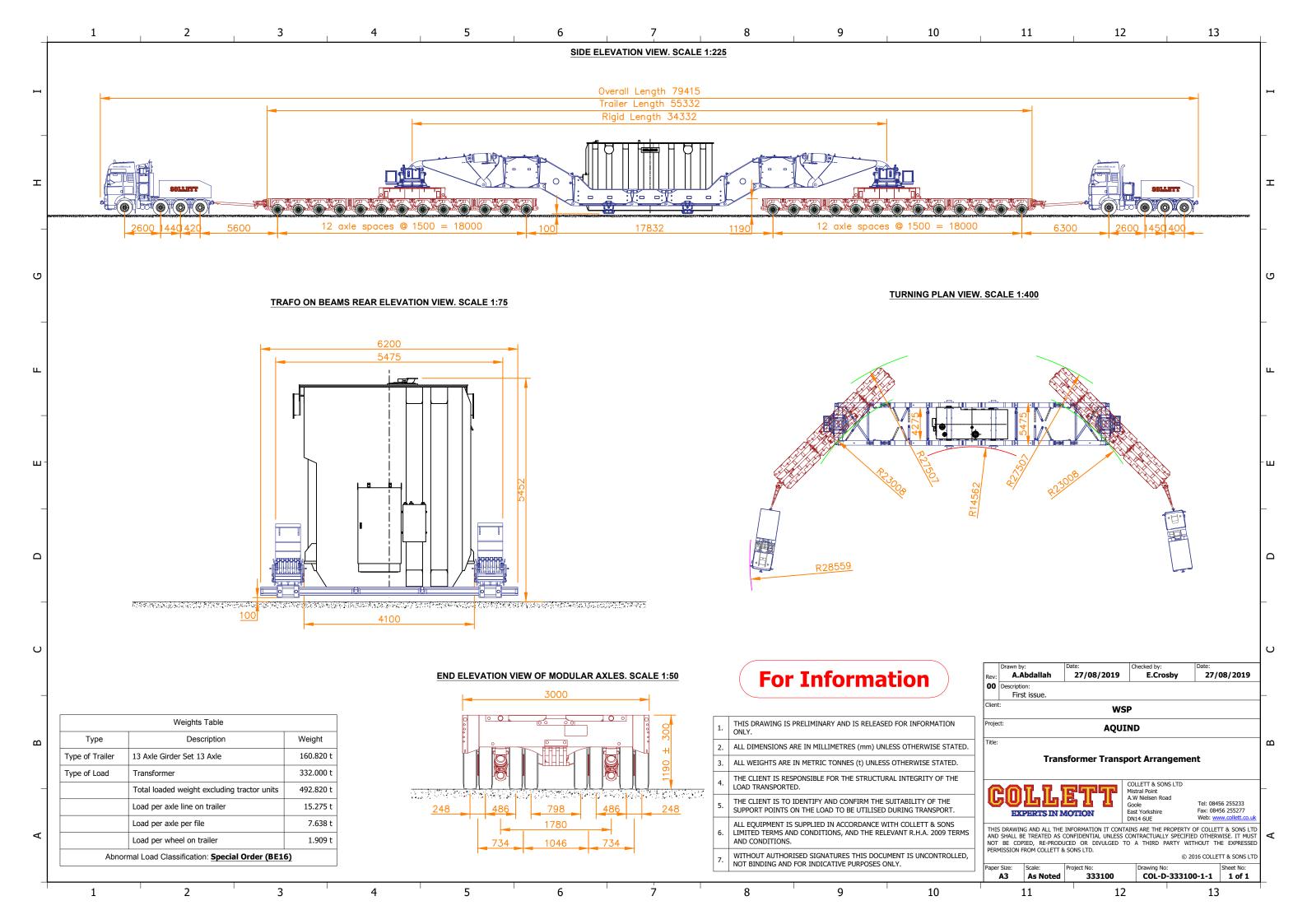
#### **Estimated Transformer Dimensions**



Shipping mass 332000 Kg

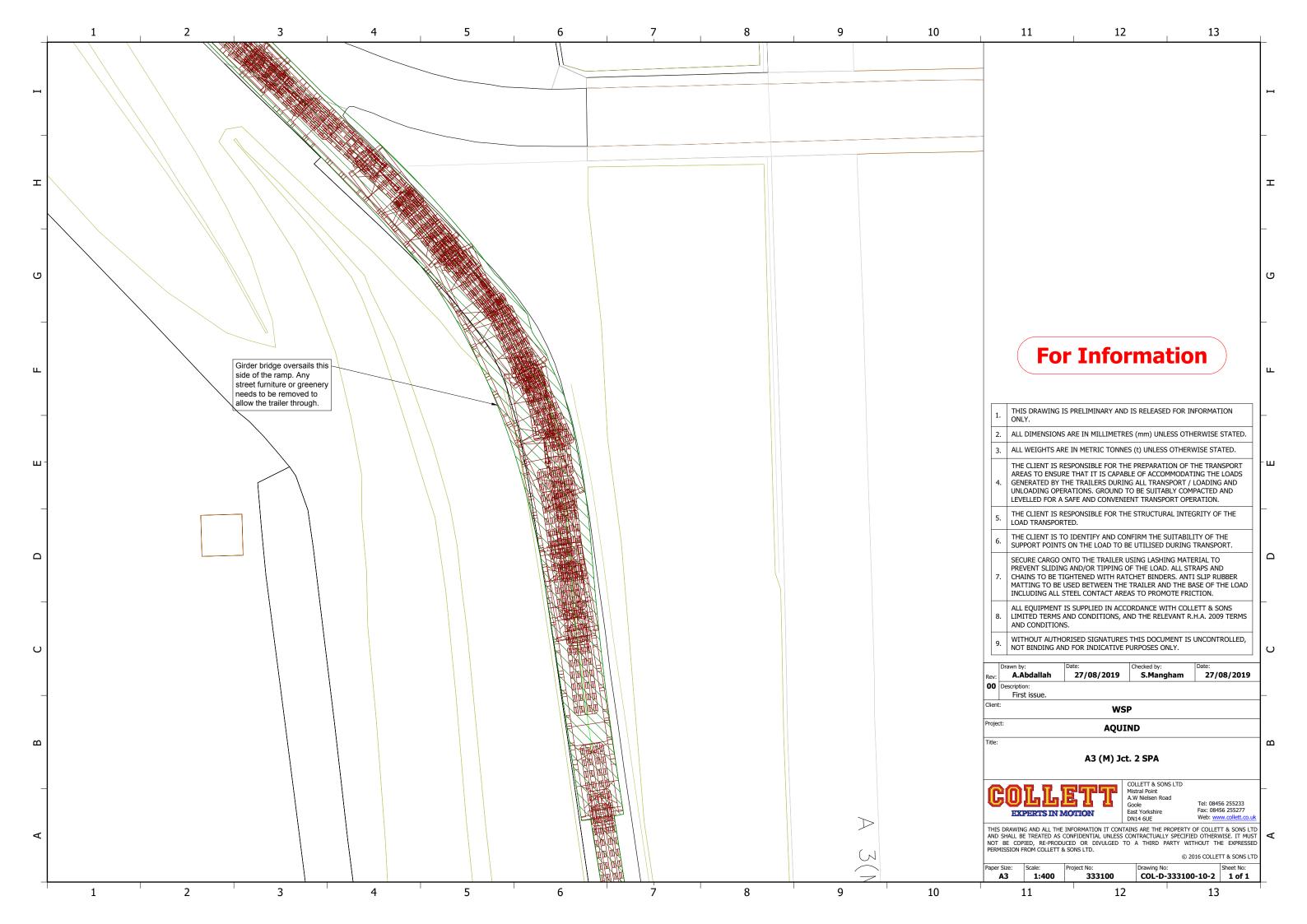


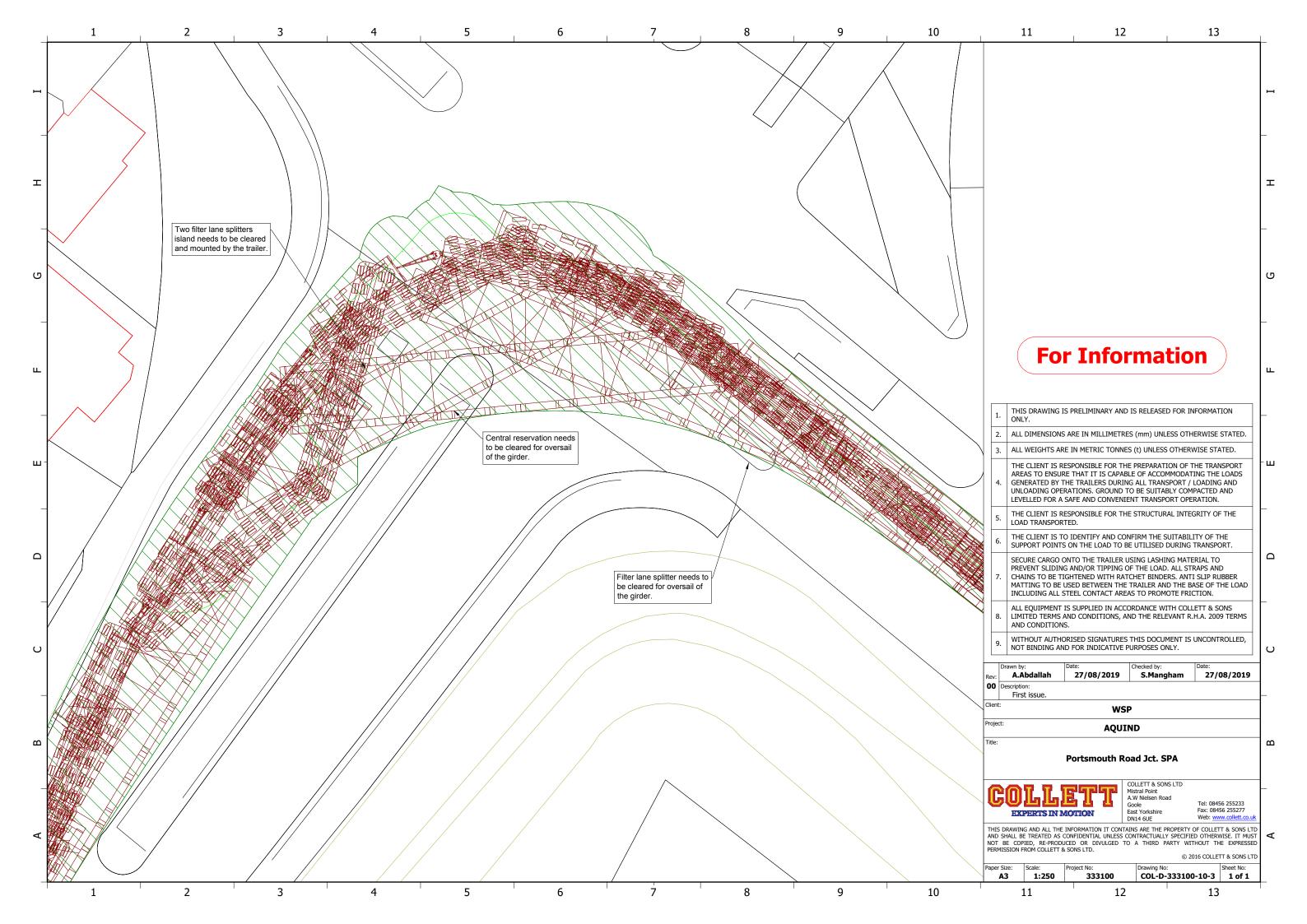
## APPENDIX 2 LOADED CONFIGURATION DRAWING

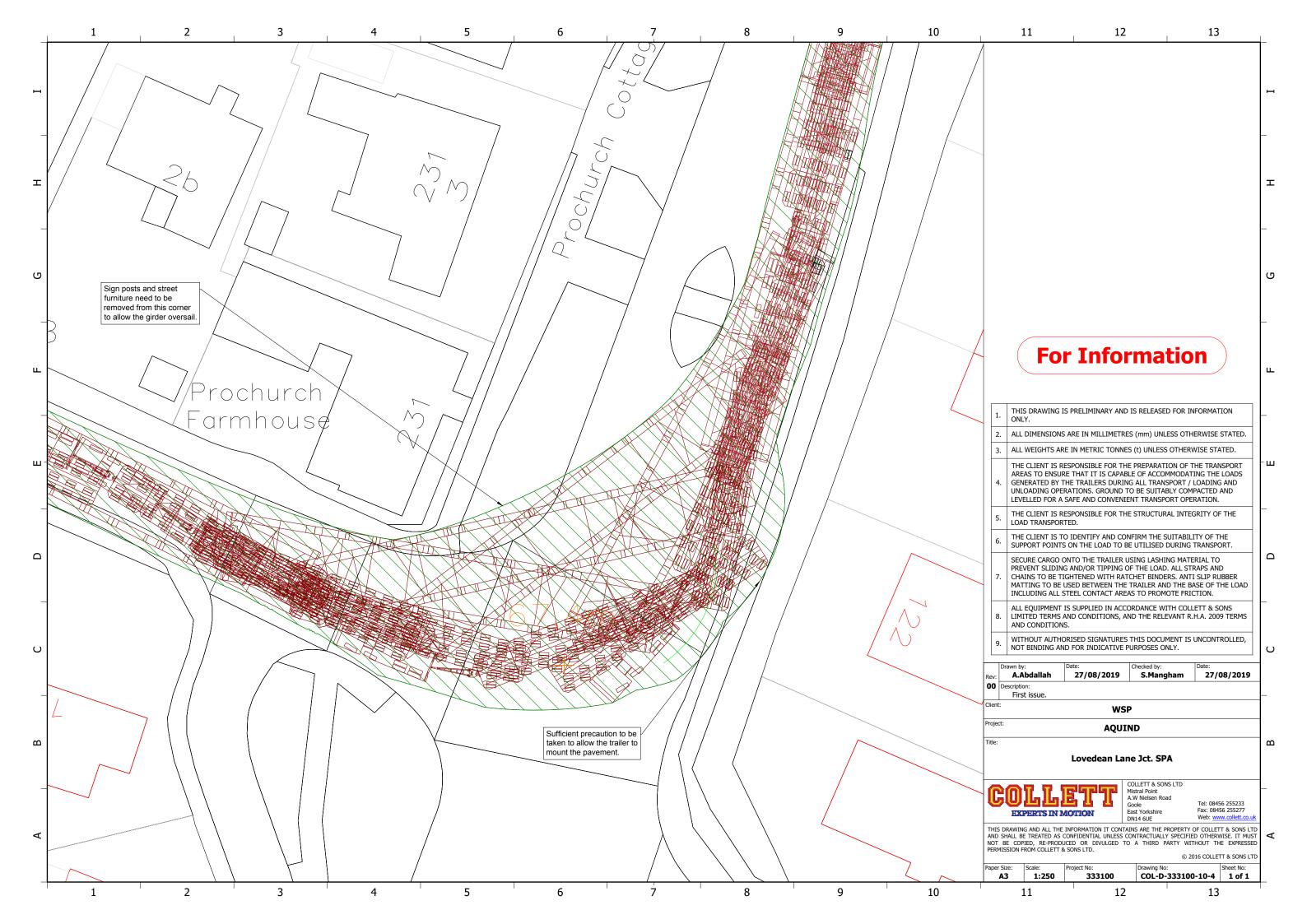


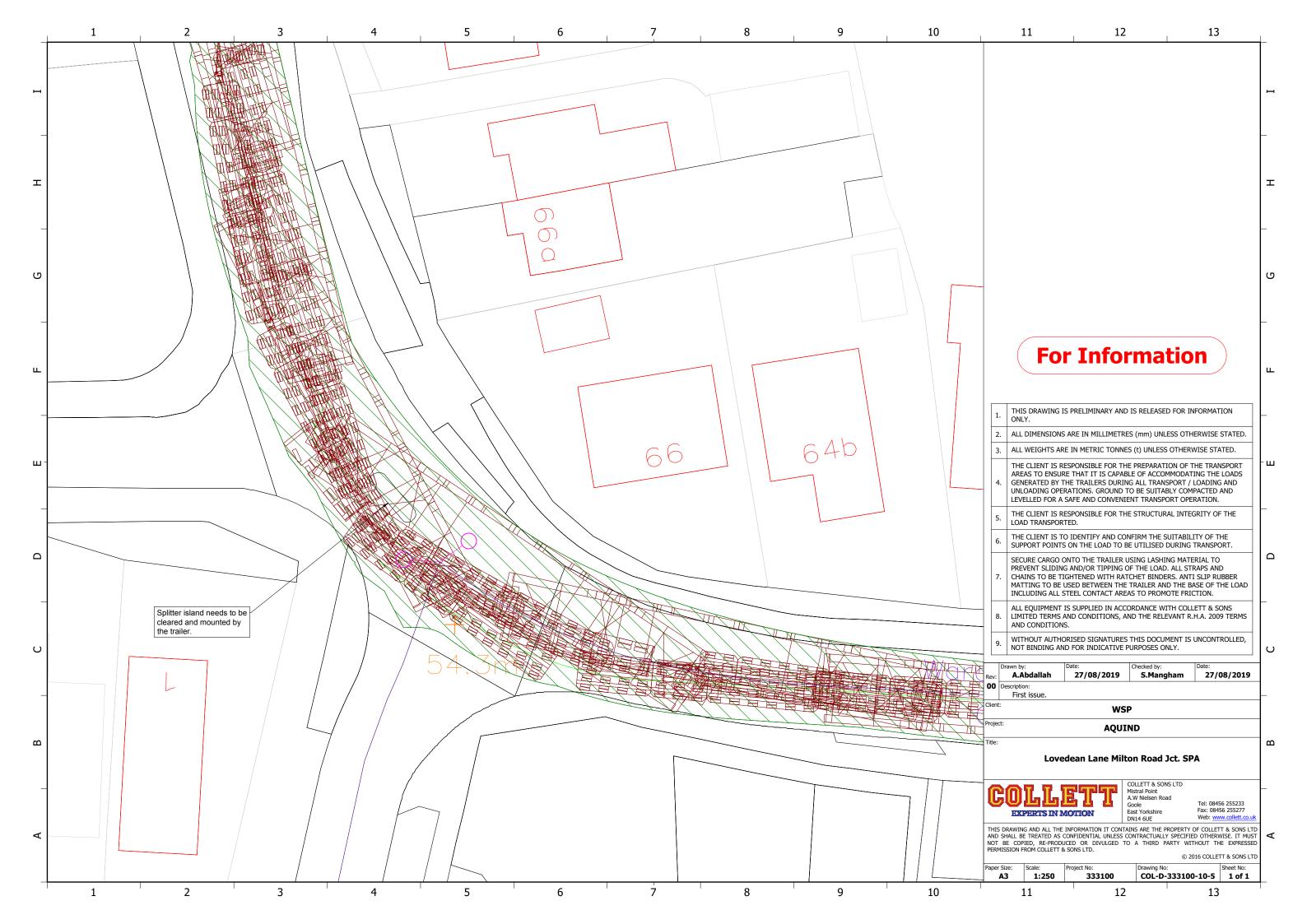


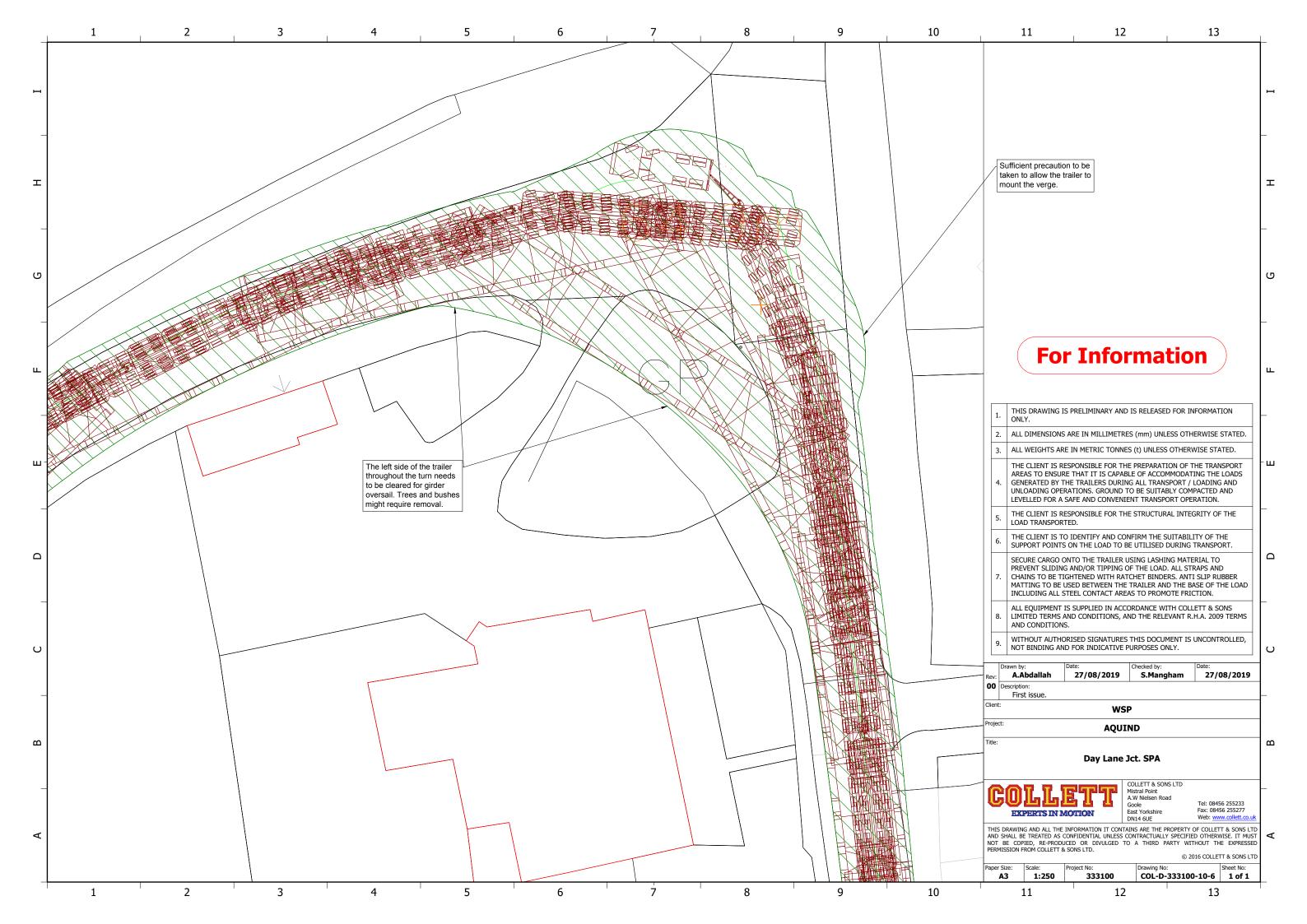
## APPENDIX 3 SWEPT PATH ANALYSIS DRAWINGS

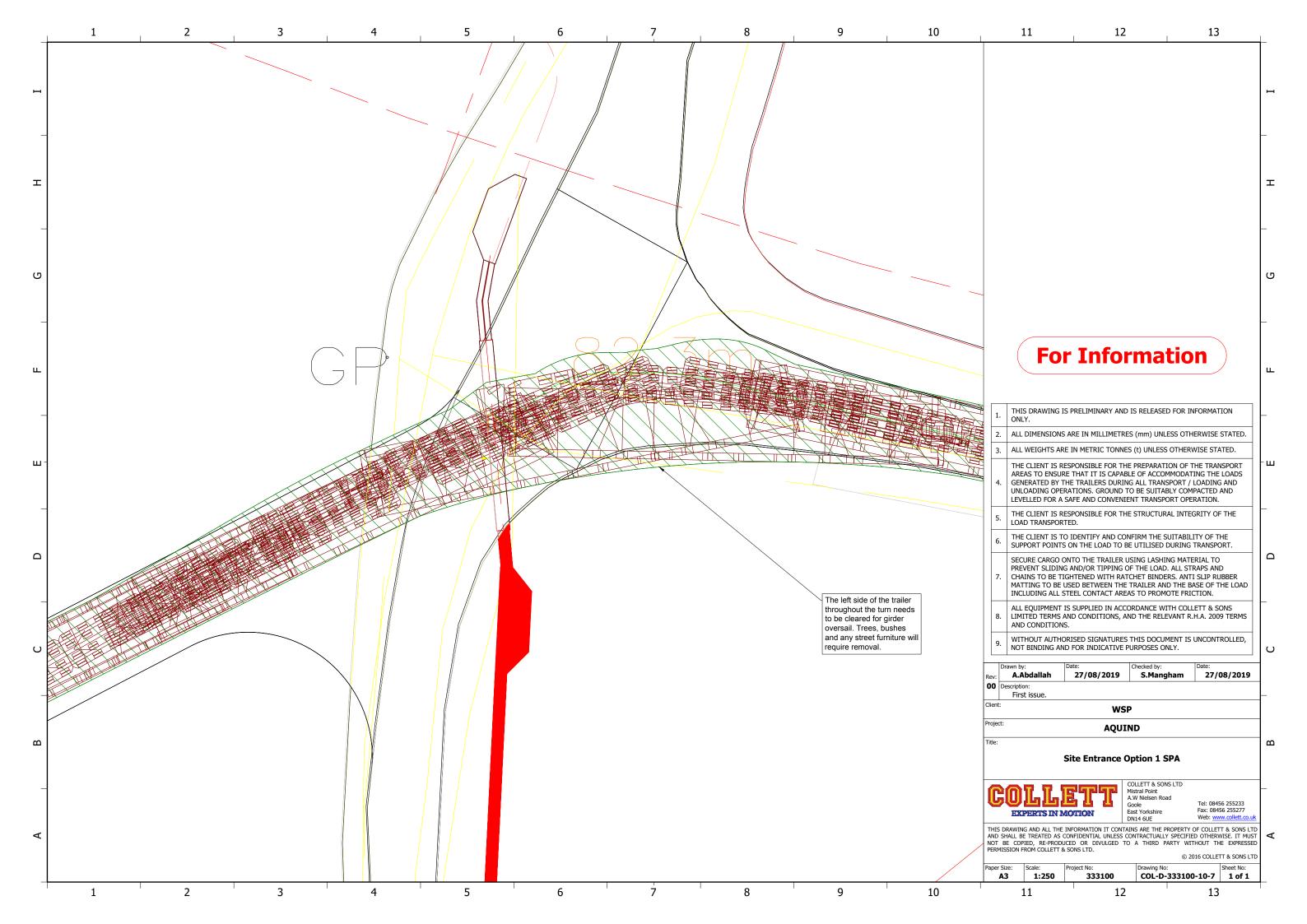


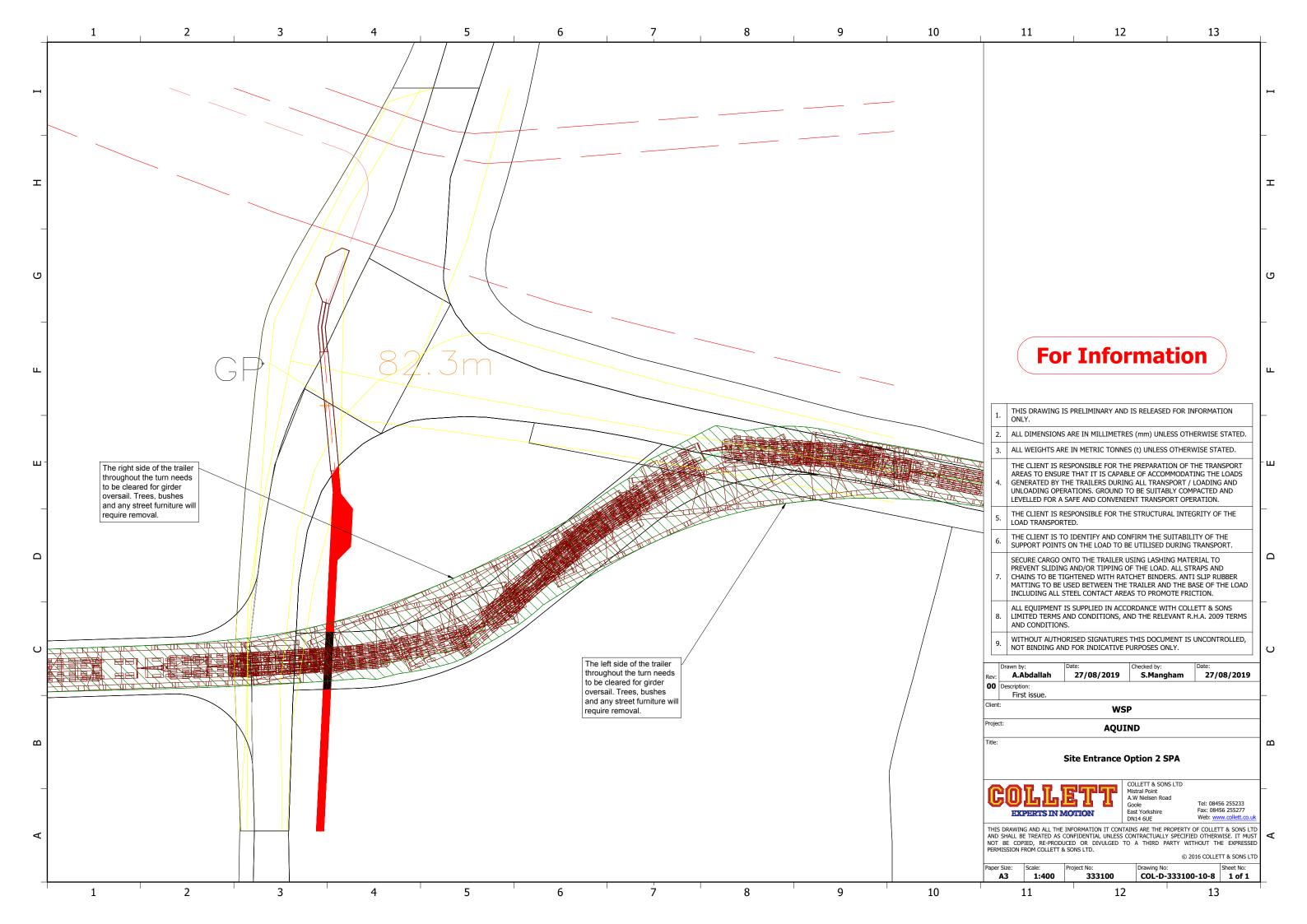






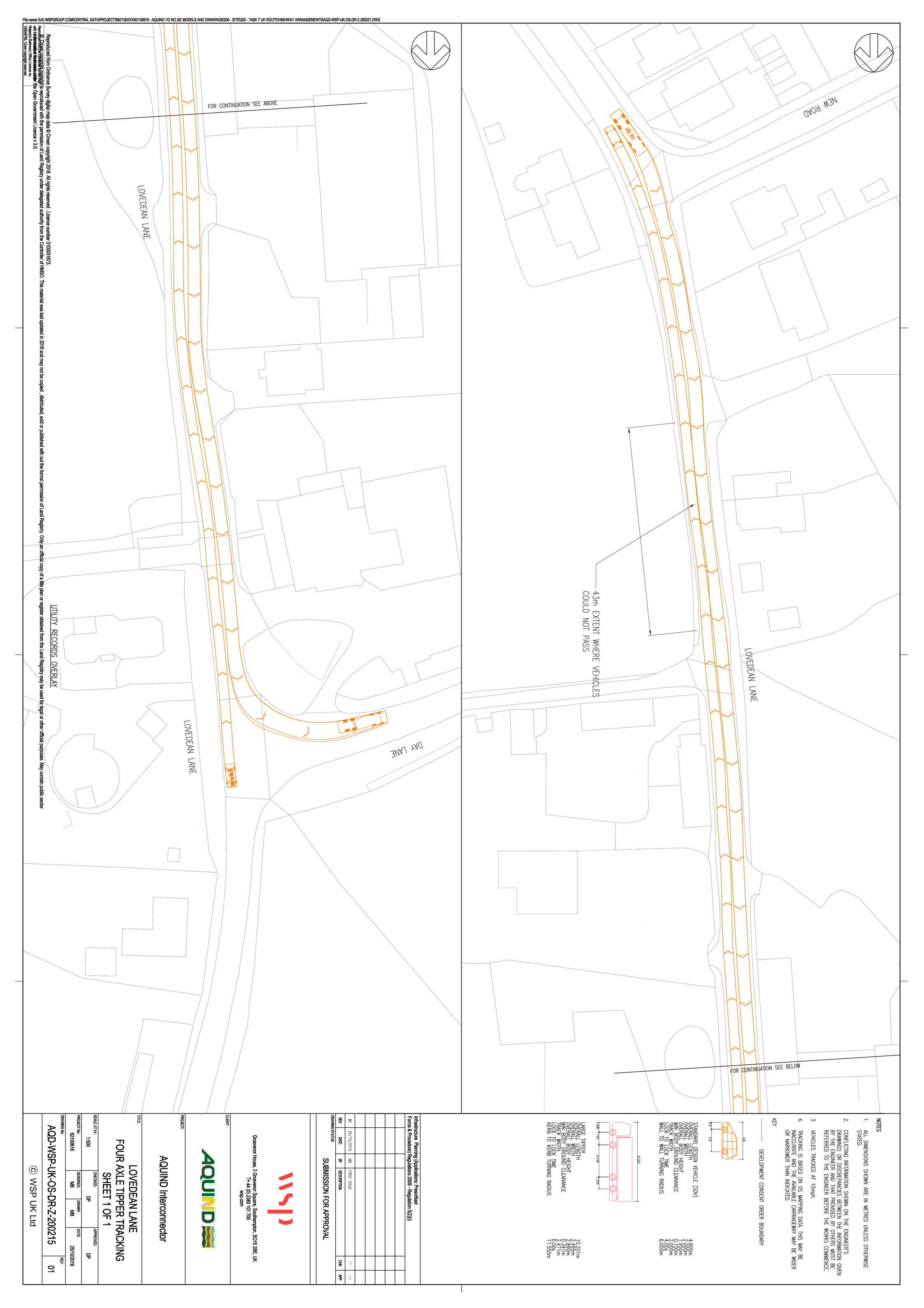


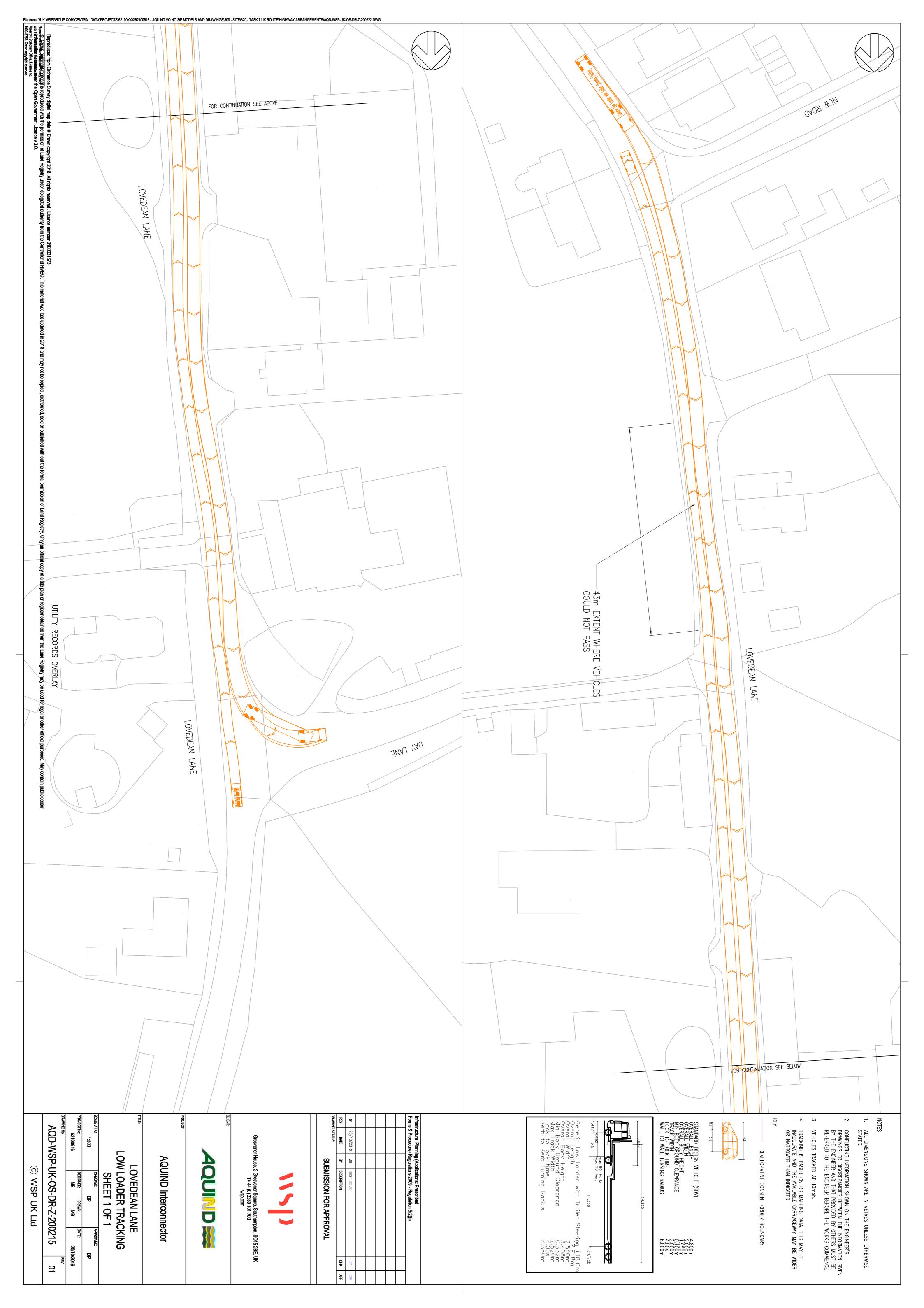


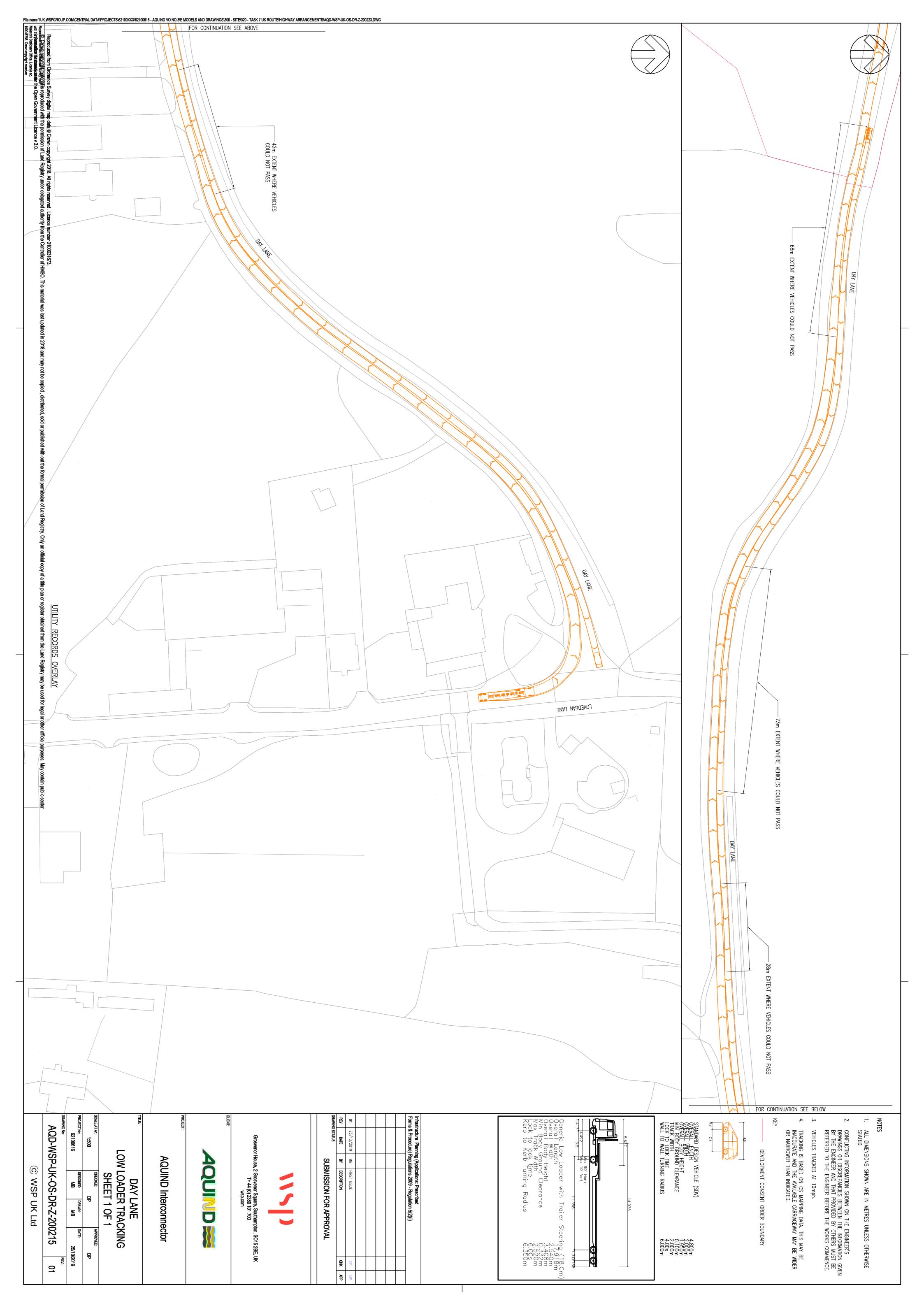




# Appendix 6 – Swept Path Analysis









# Appendix 7 – Framework Construction Worker Travel Plan



#### **AQUIND Limited**

#### **AQUIND INTERCONNECTOR**

#### Construction Worker Travel Plan

The Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulation 5(2)(a)

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#### **AQUIND Limited**

#### **AQUIND INTERCONNECTOR**

#### Construction Worker Travel Plan

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#### 1. INTRODUCTION

#### 1.1. INTRODUCTION

- 1.1.1..1.1 This Framework Construction Worker Travel Plan (CWTP) has been prepared by WSP on behalf of AQUIND Limited in support of Development Consent Order (DCO) to construct and operate an electricity interconnector between France and UK, known as AQUIND Interconnector.
- 1.1.1..1.2 The Framework CWTP relates to construction stage of the Onshore components of the Proposed Development and specifically the following:
  - The Onshore Cable consisting of two HVDC Circuits between Landfall in Eastney and Lovedean Converter Station;
  - A Converter Station and associated electrical and telecommunications infrastructure in Lovedean; and
  - HVAC Cables, and associated infrastructure connecting the Converter Station to the Great Britain electrical transmission network, the National Grid, at Lovedean Substation.
- 1.1.1.3 The Framework CWTP applies to the construction workforce for each of the Onshore components of the Proposed Development, nothing that the Converter Station will form the main compound for all construction works. This means that all construction workers will start and end their working day at the Converter Station.
- 1.1.1..1.4 The Framework CWTP details the tasks involved in developing initiatives for the Travel Plan, including management and co-ordination, which are set in the context of clear objectives to increase use of sustainable travel options and reduce single-occupancy car trips to and from the Proposed Development.

#### 1.2. BENEFITS OF A WORKPLACE TRAVEL PLAN

- 1.2.1..1.1 This CWTP is a requirement of the planning application process, to support the aims of sustainable development and to help mitigate the transport demands and potential traffic impacts of the construction of the converter station.
- 1.2.1..1.2 Travel Plans establish a number of key benefits that extend to employees and the broader local area. These key benefits include:
  - Improved quality of life for employees through adopting healthier lifestyles e.g. replacing short car journeys with walking and cycling;
  - Improved local air quality- through reduced traffic congestion in the local community, as a result of the use of alternative modes of the private car for many local journeys;



- Less vehicle congestion on local roads as a result of fewer cars attempting to depart and access the construction site; and
- Cost savings for car sharers -by sharing journeys with colleagues, employees can benefit from sharing the financial and time cost of making these journeys.
- 1.2.1..1.3 By identifying an appropriate package of measures and ensuring a consistent approach and ensuring a consistent approach to delivering a WTP, a number of stakeholders will experience the benefits.

#### 1.3. TRAVEL PLAN DOCUMENT STRUCTURE

- 1.3.1..1.1 This Travel Plan is set out in a further seven chapters:
  - Chapter 2 outlines the site access opportunities including current walking, cycling and public transport links, and the development proposals;
  - Chapter 3 sets out the Travel Plan vision and objectives;
  - Chapter 4 sets out the Travel Plan management strategy;
  - Chapter 5 outlines the Travel Plan measures;
  - Chapter 6 details the Travel Plan implementation action plan;
  - Chapter 7 presents targets and monitoring; and
  - Chapter 8 concludes the Travel Plan.



# 2. DEVELOPMENT PROPOSALS AND ACCESSIBILITY

#### 2.1. INTRODUCTION

2.1.1..1.1 This chapter outlines the development proposals and reviews the existing transport conditions near the proposed construction site. Details of the existing walking and cycling networks, and public transport services are presented, along with a brief description of the local highway network.

#### 2.2. SITE LOCATION

2.2.1..1.1 The proposed site location for the construction of the Interconnector Electricity Converter is located within agricultural land on the edge of the village of Lovedean, Hampshire. Lovedean is located approximately 13.5km to the north of Portsmouth city centre.

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Figure 2.1 - Site location

2.2.1..1.2 The Converter Station area spans a number of small fields divided by hedgerows.



2.2.1..1.3 Individual farm properties are situated to the north, west and south of the Converter Station Area, connected by rural lanes. The existing Lovedean substation, associated pylons and overhead lines are dominant elements in the landscape of the proposed location and immediate surrounding area. It is located approximately 180m – 200m from the South Downs National Park boundary at its closest point, to the north and west.

#### 2.3. PROPOSED DEVELOPMENT

- 2.3.1..1.1 The Applicant is proposing to construct and operate an electricity interconnector between France and the UK known as AQUIND Interconnector ('the Project').
- 2.3.1..1.2 The Project comprises a new marine and onshore High Voltage Direct Current ('HVDC') power cable transmission link between Normandy in France and Eastney, Hampshire, converter stations in both England and France and infrastructure necessary to facilitate the import and export of electricity between the high voltage alternating current ("HVAC") electricity transmission networks both countries.
- 2.3.1..1.3 The Onshore Components of the Proposed Development comprise the Converter Station, the Onshore Cable Corridor and the Landfall.
- 2.3.1..1.4 The UK Converter Station is proposed to be located adjacent to the existing National Grid Electricity Transmission ('NGET') substation, north-west of the village of Lovedean within the administrative boundary of Winchester City Council ('WCC').
- 2.3.1..1.5 The proposed Onshore Cable Route will travel through the administrative boundaries of WCC, Havant Borough Council ('HBC') and PCC, reaching the proposed Landfall location at Eastney, a district in the south-east of Portsmouth.
- 2.3.1..1.6 The Converter Station will act as the main construction compound for all Onshore components during the construction stage, meaning all construction workers will start and end their day at this location. Car parking for 150-200 vehicles will be provided at the Converter Station during the construction period.

#### 2.4. PROPOSED CONSTRUCTION ACCESS TO THE CONVERTER STATION SITE

- 2.4.1..1.1 The proposed access to the Converter Station for Construction and Operational Stages will be taken from Broadway Lane.
- 2.4.1..1.2 The proposed access junction will implement a gated highway link between Day Lane, east of the existing bend, and at Broadway Lane, south of the existing bend. This will provide a managed facility for vehicles entering the site during the construction period with vehicle movements across Broadway Lane able to be marshalled. This link also provides for abnormal load movements and would be retained as a permanent feature (unadopted) to allow future access with such vehicles should it be required. General verge / vegetation clearance will be required on all sides of Broadway Lane to ensure that adequate visibility splay requirements are met, with all required land falling within the proposed Order Limit.



- 2.4.1..1.3 Construction worker trips by car to and from the Converter Station will all be required to us the follow permitted route:
  - A3(M) Junction 2 B2149 Dell Piece West A3 Portsmouth Road Lovedean Lane – Day Lane – Broadway Lane.
- 2.4.1..1.4 These routes are described briefly in the following paragraphs.

#### **A3(M)**

2.4.1..1.5 The A3(M) is a dual carriageway subject to national speed limit which routes to the east of the study area, it merges with the A27 at Havant and continues onto Guildford and London. Converter Station traffic will exit the A3(M) at Junction 2 (Horndean).

#### **B2149 DELL PIECE WEST**

2.4.1..1.6 Dell Piece West is a section of road between A3 (M) Junction 2 and Lakesmere Road. The route is subject to national speed limit and has narrow footway provision on its northern carriageway. After passing the Morrisons roundabout the speed limit reduces to 40 mph and a wide shared use footway/cycleway is provided on the northern carriageway.

#### A3 PORTSMOUTH ROAD

- 2.4.1..1.7 A3 Portsmouth Road routes for approximately 2.6km from A3 London Road to the junction with B2149 Dell Piece West. The road is subject to a 30mph speed limit and has footway provision on both sides of the carriageway. Residential properties are located on both sides of the carriageway but are separated from traffic by wide footways / shared-use paths.
- 2.4.1..1.8 There are bus stops located on either side of the road however only 4 bus stops are located along the construction traffic section of the road. Two bus stops are located on either side of the road approximately 100m from the junction with B2149 Dell Piece West and two bus stops are located either side of the road outside the junction with Keydell Avenue.

#### **LOVEDEAN LANE**

2.4.1..1.9 Lovedean Lane routes from A3 (Cowplain) to Downhouse Road for approximately 4.3km, providing access mainly to residential properties. Footways are provided up until the route leaves Lovedean and Coldhill Lane. The speed limit along this route is 30mph until Lovedean Lane passes Day Lane, here the speed limit is extended to 60mph. No bus stops are located along this route.

#### **DAY LANE**

2.4.1..1.10 Day Lane is a rural lane with a length of approximately 630 metres and connects Lovedean Lane to Broadway Lane. The lane is subject to a 60mph speed limit and has no footway provision or bus stops.



#### 2.5. PUBLIC TRANSPORT

#### **BUS**

- 2.5.1..1.1 The nearest bus stops that serves services that fir with the proposed working hours or 07:00 to 19:00 is on A3 Portsmouth Road (at the junction with Lovedean Lane), which is a 33-minute walk from the Converter Station. This serves the Number 8 service to Clanfield, Waterlooville, Cosham Portsmouth City Centre and Southsea. In addition, bus services can be accessed from Eagle Avenue in Wecock Farm approximately 2.6km from the site location. This stop is served by First Bus route Number 7 and Stagecoach bus route Number 8, although neither provide a suitable arrival times to be used at the start of the day. At a typical walking speed of 4.8km/h, the stop will comprise of a 30-minute journey by foot from the site, via Day Lane, Lovedean Lane and Day Lane.
- 2.5.1..1.2 A summary of all bus routes accessible from the Converter station are shown in Table 1 below.

Table 1 - Local Bus Services

Service No.	Route	Start / Finish Times	Nearest bus stop from Converter Station
7 / 7C	City Centre – Cosham – Waterlooville – Wecock Farm	Bus arrival time at start of day : 06:39 Bus departure times at end of day: 19:44	Eagle Avenue, 30- minute walk
8	Clarence Pier – City Centre – Cosham – Waterlooville - Clanfield	Bus arrival time at start of day: 05:56, 06:30 Bus departure times at end of day: 20:05	A3 Portsmouth Road, 33-minute walk
37	Havant – Waterlooville – Cowplain – Clanfield - Petersfield	Bus arrival time at start of day : 06:07 Bus departure times at end of day: 19:58	A3 Portsmouth Road, 33-minute walk
39	Havant – Purbrook – Waterlooville – Wecock Farm	Bus arrival time at start of day : 06:37 Bus departure times at end of day: 19:11	Eagle Avenue, 30- minute walk



#### **RAIL**

- 2.5.1..1.3 Bedhampton Railway station is located approximately 10.4km south-east from the construction site but has no direct bus route from the station to the site or a cycle route.
- 2.5.1..1.4 Havant Railway station is also located approximately 12.3km south-east from the construction site. This could be accessed using bus service 37, which starts and ends at Havant bus station which is a six minute walk from the railway station. A summary of destinations that can be reached from Havant railway station are shown in Table 2.

Table 2 - Destination available from Havant Railway Station

Destination	Frequency	Travel Time
Portsmouth	5-6 per hour	12-18 minutes
Southampton	3-4 per hour	41-59 minutes
Chichester	3-4 per hour	11-21 minutes
Brighton	3-4 per hour	60-81 minutes
Guildford	4 per hour	46-56 minutes
London Waterloo	4 per hour	85-120 minutes

#### 2.6. CYCLE ACCESS

- 2.6.1..1.1 The closest Sustrans route in proximity to the site is National Cycle Network (NCN) Route 222, which is approximately 24km long and provides a connection between Portsmouth and Petersfield. The route is located approximately 2.8km to the southeast of the construction site on A3 Portsmouth Road, connecting into Petersfield in the north and Waterlooville and Portsmouth tot the south.
- 2.6.1..1.2 In addition to the NCN 222, other roads around the Converter Station are suitable for cycling, including Lovedean lane, Milton Road, Day Lane and Broadway Lane.



# 3. TRAVEL PLAN VISION AND OBJECTIVES

#### 3.1. TRAVEL PLAN VISION

3.1.1..1.1 The overarching vision for the development and implementation of the CWTP is outlined below:

"The proposed construction of the Proposed Development will accommodate employees and visitor journeys through a variety of integrated and sustainable transport options, with people able to access travel information on demand to make informed travel choices."

3.1.1..1.2 This vision will assist in guiding the development, implementation and evolution of this CWTP helping to ensure visitor journeys can be undertaken through a variety of integrated and sustainable travel options and thereby minimising the volume of single-occupancy car trips to and from the site. As a result, this will reduce traffic impacts on the surrounding highway network, reduce traffic congestion, improve air quality and enhance the operational road safety of the surrounding highway network.

#### 3.2. TRAVEL PLAN OBJECTIVES

- 3.2.1..1.1 In pursuit of the vison set out above, the CWTP will be guided by specific objectives as outlined below:
  - To manage the volume of single-occupancy car travel and the impact on local roads and communities:
  - To ensure the site is accessible by sustainable transport options; and
  - To facilitate informed travel choices, by ensuring both employees and visitors have access to real-time on demands travel information.
- 3.2.1..1.2 These objectives will help define and shape the package of measures to be introduced, collectively helping to achieve the vision statement.



#### 4. TRAVEL PLAN MANAGEMENT

- 4.1.1..1.1 A Travel Plan Co-ordinator (TPC) will be identified who is responsible for implementing and promoting the CWTP.
- 4.1.1..1.2 The role will initially mean planning for all agreed deliverables to be established, integrated and available for use by employees and visitors as intended. More generally the role of TPC will encompass:
  - Maintaining day-to-day responsibility for delivering the plan, including the agreed programme of measures;
  - Acting as the main point of contact for queries relating to visitor and employee travel and liaising with transport service providers as required;
  - Monitoring the plan to determine progress against the objectives, and preparing a concise annual monitoring report summarising modal outcomes for employee and visitor travel; and
  - Working in partnership with AQUIND and other local employers to explore areawide travel planning opportunities
- 4.1.1..1.3 The TPC will be a part-time position and will be appointed by AQUIND prior to occupation of the construction site.



#### 5. TRAVEL PLAN MEASURES

#### 5.1. INTRODUCTION

- 5.1.1..1.1 This CWTP has been developed to provide a range of measures to facilitate and encourage sustainable travel at the development.
- 5.1.1..1.2 Promoting car sharing, public transport and cycling will play a vital role in achieving a desirable outcome. Whilst many employees and visitors are likely to access the site using their own private vehicles, there remains opportunities to support car sharing.
- 5.1.1..1.3 The section presents travel planning measures proposed for the site, in four specific areas, and concludes by summarising how each element directly support the CWTP objectives. The four areas are summarised in Figure 5-1, and presented in further detail throughout this section.

Figure 5-1- Travel planning approach





#### 5.2. TRAVEL INFORMATION AND ADVICE

#### TRAVEL INFORMATION NOTICE BOARD

- 5.2.1.1.1 A travel information board will be created for the site that draws together multi-modal travel information into a single place for employees and visitors to view. The notice board will be placed in an area visible to employees, and will be regularly updated by the TPC. The notice board will include bus service and rail connections, car sharing opportunities and parking information.
- 5.2.1.1.2 This will represent a primary means of promoting sustainable travel options to all site users at an early stage. The notice board will also promote information relating to new travel initiatives that may be introduced, transport service improvements and timetable where appropriate.

#### **PROMOTION EVENTS**

5.2.1.1.3 The promotion of sustainable travel throughout the year will be undertaken through involvement in national activities such as 'Ride to Work Week' and car sharing awareness events. These events will be advertised on the travel information notice board to actively encourage uptake. The coordination of these events will be facilitated by the TPC.

#### 5.3. MANAGING CAR BASED TRAVEL

#### **CAR SHARING**

5.3.1.1.1 Promoting and managing shared car journeys can be facilitated through advertising opportunities to partake in the car share scheme on the travel information board and promoted to staff by the TPC. A car-sharing mobile app could also be developed to assist within this initiative.

#### PROMTOTING ACTIVE TRAVEL

5.3.1.1.2 Information on local walking and cycling routes will be promoted to staff via the travel information notice board. Secure cycle parking facilities will also be provided at the Converter Station compound.

#### CYCLE TO WORK SCHEME

5.3.1.1.3 Cycle to work schemes are a popular initiative for employees to source a bicycle and cycling equipment as a tax-free benefit. Cyclescheme is one such provider in the UK. The scheme is based on a tax-efficient salary-sacrifice arrangement and allows employees to be loaned bikes and accessories through their employer, with costs typically over 12-18 months, before purchasing the bike for a small sum at the end of the hire period. The scheme allows employees to spend up to £1,000 on bikes and equipment, tax-free, potentially saving a significant proportion of the overall value. The TPC will notify employee of cycle to work schemes available to them.



#### 5.4. PROMOTING PUBLIC TRANSPORT

- 5.4.1..1.1 Timetabling information for local bus and rail services will be included on the travel information notice board, and will be regularly updated by the TPC.
- 5.4.1..1.2 Given the distance from the nearest train station to the construction site, it is anticipated that rail will not be a chosen mode of travel. A potential mitigation measure that could be considered is the provision a shuttle bus from the Havant Railway station to the site to promote a genuine modal shift towards rail.

#### 5.5. SUMMARY

- 5.5.1..1.1 This chapter has highlighted a variety of travel planning measures to be introduced at the proposed development to encourage the use of sustainable transport options by employees and visitors. Some measures focus on raising awareness and providing travel information and advice so individuals can make informed choices on how to access the site and not otherwise assume car-based travel is the only viable option.
- 5.5.1..1.2 Other measures are designed to then actively encourage individuals to use these modes, ensuring the CWTP remains proactive in achieving its stated objectives over time. This includes investing in supporting infrastructure and services and rewarding sustainable travel patterns.
- 5.5.1..1.3 The TPC will provide a focal point for overseeing delivery and responding to changing travel demands over time with either revised or additional measures where benefits become apparent, and where investment can be focussed to achieve the most benefit.



#### 6. IMPLEMENTATION ACTION PLAN

6.1.1..1.1 The site management will ultimately be responsible for implementing the measures set out within this Travel Plan. The measures will be implemented by the appointed TPC, who will assume day-to-day responsibility.

**Table. 6-1. Implementation Action Plans** 

Travel Plan Measures	Delivery Trigger / Time	Delivery Responsibility
Appointment of TPC	Prior to initial occupation	Site Management
Full Travel Survey Undertaken	6 months post occupation	TPC
Travel Information Notice Board	From occupation, and to be regularly up- dated through-out occupancy	TPC
Promotional events	One month after occupation, and at regular intervals through-out occupancy	TPC
Promotion of car sharing	From occupation, and at regular intervals through-out occupancy	TPC
Provision of timetabling information	From occupation, to be updated when appropriate	TPC
'Cycle2work' scheme	From Occupation	Employer



#### 7. TARGETS AND MONITORING

#### 7.1. TRAVEL PLAN TARGET

- 7.1.1..1.1 The measures presented by this CWTP will ensure both employees and visitors are made aware of different travel options to access the construction site, and that sustainable travel options are actively promoted. The success of the measures set out in this CWTP will be assessed through a series of specific, measurable, achievable, realistic and time-bound (SMART) targets.
- 7.1.1..1.2 When considering the targets set out for the proposed development, and the subsequent monitoring of these targets, it is important to note the temporary nature of the construction site. As the proposed construction of the convertor will only be short term, it is not feasible to implement the type of long-term targets that would be typically included in a workplace travel plan. Therefore, all included targets are intended for short-term implementation and monitoring.
- 7.1.1..1.3 Due to the nature of the specialist construction skills workers required for the project, it is determined that these workers will travel from further afield than typical construction workers. Therefore, it has been determined the use of Census Data relating to the method of travel to work will not be a representative example of workers modal share. To provide a robust and representative method of determining initial travel modal shares it is assumed that all workers will drive to the site with a private car occupancy rate of 1.0
- 7.1.1..1.4 Therefore, due to the limited public transport opportunities close to the site and the distance travelled by the workers, the most appropriate measures for reducing trip generation are promotion of car sharing and provision of a shuttle bus service to / from Havant railway station. As such, the following framework targets are considered appropriate for the Proposed Development:
  - 5% of construction workers participating; and
  - 5% of construction workers traveling to the site by train and shuttle bus.
- 7.1.1..1.5 These targets, can be adjusted dependent on the results from the Full Travel Survey undertaken 6 months post occupation of the construction site.

#### 7.2. MONITORING

7.2.1..1.1 The CWTP target, and construction workers modal travel splits will be monitored by the TPC through the undertaking of travel surveys at 6 months, 1 year and 2 years into the construction stage. This will enable monitoring/ potential adjustments to be made to the CWTP to reduce single occupancy vehicle travel to/from the site.



#### 8. CONCLUSION

#### 8.1. SUMMARY

- 8.1.1..1.1 This Framework CWTP has been prepared by WSP on behalf of AQUIND Limited in support of DCO to construct and operate an electricity interconnector between France and UK, known as AQUIND Interconnector. The Framework CWTP relates to construction stage of the Onshore components of the Proposed Development and specifically the following:
  - The Onshore Cable consisting of two HVDC Circuits between Landfall in Eastney and Lovedean Converter Station;
  - A Converter Station and associated electrical and telecommunications infrastructure in Lovedean; and
  - HVAC Cables, and associated infrastructure connecting the Converter Station to the Great Britain electrical transmission network, the National Grid, at Lovedean Substation.
- 8.1.1..1.2 The Framework CWTP applies to the construction workforce for each of the Onshore components of the Proposed Development, nothing that the Converter Station will form the main compound for all construction works. This means that all construction workers will start and end their working day at the Converter Station.
- 8.1.1..1.3 The CWTP will be an iterative document, managed and implemented by a Travel Plan Co-ordinator (TPC), to provide relevant information relating to initiatives and measures aimed to reduce single occupancy car trips generated by the construction site.
- 8.1.1..1.4 Due to the nature of the specialist construction skills workers required for the project, it is determined that these workers will travel from further afield than typical construction workers. Therefore, due to the limited public transport opportunities close to the site and the distance travelled by the workers, the most appropriate measures for reducing trip generation are promotion of car sharing and provision of a shuttle bus service to / from Havant railway station.

#### 8.2. CONCLUSION

- 8.2.1..1.1 The CWTP has considered the sustainable transport initiatives and measures that can be implemented to promote a reduction in single occupancy car use to the proposed Converter Station during the construction stage. Having regard to the nature of the proposals, and the specialist workers required for construction, a target of a 5% shift towards car sharing and 5% shift towards train travel has been proposed for the site. The WTP will be actively managed and monitored by a TPC.
- 8.2.1..1.2 It is therefore concluded that the WTP provides a sustainable access strategy for the proposed development.



