

Mr. Duncan Evans
Surrey County Council
County Planning Department
County Hall Penrhyn Road
Kingston upon Thames
Surrey
KT1 2DY

Our ref: ZG-307
Your ref: 2018/0152
Date: 29th November 2019

Dear Mr. Evans,

TOWN AND COUNTRY PLANNING ACT 1990 - COUNTY MATTER APPLICATION

SITE: Horse Hill Well Site, Horse Hill, Hookwood, Horley, Surrey RH6 0HN.

PROPOSAL: Retention and extension of an existing well site, HH-1 and HH-2 wells, and vehicular access to allow: the drilling of four new hydrocarbon wells and one water reinjection well; the construction of a process and storage area and tanker loading facility; new boundary fencing; well maintenance workovers and sidetrack drilling; and ancillary development enabling the production of hydrocarbons from six wells, for a period of 25 years.

APPLICANT: Horse Hill Developments Limited

PLANNING APPLICATION NO. RE18/02667/CON

CONDITION NO.8: TRAFFIC & TRANSPORT MANAGEMENT PLAN

I refer to the above-named development proposal which was consented by Surrey County Council on the 27th September 2019. Consistent with the permission I enclose the following detail to enable the discharge of Condition No.8: Traffic and Transport Management Plan;


Appendix A: Discharge of Planning Conditions Application Form: completed, signed and dated;

Appendix B: Discharge of Planning Conditions Report: Application for Approval of Details Reserved by Condition - Condition No.8: Traffic & Transport Management Plan

A fee of £116 will follow and I will await confirmation of an application number once the validation process has been completed.

I trust this submission is satisfactory but if you have any queries please do not hesitate to contact me.

Yours sincerely,


Nigel Moore B. A (Hons), B. Pl, MRTPI
Environmental Impact Assessment Project Manager

Appendix A: Discharge of Planning Conditions Application Form: completed, signed and dated.

Application for approval of details reserved by condition.

Town and Country Planning Act 1990

Planning (Listed Buildings and Conservation Areas) Act 1990

You can complete and submit this form electronically via the Planning Portal by visiting www.planningportal.gov.uk/apply

Publication of applications on planning authority websites

Please note that the information provided on this application form and in supporting documents may be published on the Authority's website. If you require any further clarification, please contact the Authority's planning department.

Please complete using block capitals and black ink.

It is important that you read the accompanying guidance notes as incorrect completion will delay the processing of your application.

1. Applicant Name and Address

Title:		First name:	
Last name:			
Company (optional):	HORSE HILL DEVELOPMENTS LIMITED		
Unit:		House number:	
		House suffix:	
House name:	SUIT 3B PRINCES HOUSE		
Address 1:	38 JERMYN STREET		
Address 2:			
Address 3:			
Town:	LONDON		
County:			
Country:			
Postcode:	SW1Y 6DN		

2. Agent Name and Address

Title:	MR	First name:	NIGEL
Last name:	MOORE		
Company (optional):	ZETLAND GROUP		
Unit:		House number:	
		House suffix:	
House name:			
Address 1:	THE INNOVATION CENTRE		
Address 2:	VIENNA COURT		
Address 3:	KIRKLEATHAM BUSINESS PARK		
Town:	REDCAR		
County:			
Country:			
Postcode:	TS10 5SH		

3. Site Address Details

Please provide the full postal address of the application site.

Unit:		House number:		House suffix:	
House name:					
Address 1:	HORSE HILL WELL SITE				
Address 2:	HORSE HILL				
Address 3:	HOOKWOOD				
Town:	HORLEY				
County:	SURREY				
Postcode (optional):	RH6 0RB				
Description of location or a grid reference. (must be completed if postcode is not known):					
Easting:	525316	Northing:	143598		
Description: AGRICULTURAL LAND SUPPORTING HORSE HILL WELL SITE AND ACCESS TRACK					

4. Pre-application Advice

Has assistance or prior advice been sought from the local authority about this application? ☒ Yes ☐ No

If Yes, please complete the following information about the advice you were given. (This will help the authority to deal with this application more efficiently).

Please tick if the full contact details are not known, and then complete as much as possible: ☐

Officer name:

DUNCAN EVANS

Reference:

N/A

Date (DD/MM/YYYY):

OCT 2019

(must be pre-application submission)

Details of pre-application advice received?

CONFIRMATION OF APPLICATION SUBMISSION PROCEDURE, INFORMAL SCOPE AND CONTENT.

5. Description Of Your Proposal

Please provide a description of the approved development as shown on the decision letter, including the application reference number and date of decision in the sections below:

RETENTION AND EXTENSION OF AN EXISTING WELL SITE, HH-1 AND HH-2 WELLS, AND VEHICULAR ACCESS TO ALLOW: THE DRILLING OF FOUR NEW HYDROCARBON WELLS AND ONE WATER REINJECTION WELL; THE CONSTRUCTION OF A PROCESS AND STORAGE AREA AND TANKER LOADING FACILITY; NEW BOUNDARY FENCING; WELL MAINTENANCE WORKOVERS AND SIDETRACK DRILLING; AND ANCILLARY DEVELOPMENT ENABLING THE PRODUCTION OF HYDROCARBONS FROM SIX WELLS, FOR A PERIOD OF 25 YEARS

Reference number: RE18/02667/CON Date of decision: 27 SEPT 2019 (Date must be pre-application submission) (DD/MM/YYYY)

Please state the condition number(s) to which this application relates:

1.	CONDITION 08 - TRAFFIC MANAGEMENT PLAN	6.	
2.		7.	
3.		8.	
4.		9.	
5.		10.	

Has the development already started?

☐ Yes ☒ No

If Yes, please state when the development started (DD/MM/YYYY):

(date must be pre-application submission)

Has the development been completed?

☐ Yes ☒ No

If Yes, please state when the development was completed (DD/MM/YYYY):

(date must be pre-application submission)

6. Discharge Of Condition

Please provide a full description and/or list of the materials/details that are being submitted for approval:

DISCHARGE OF PLANNING CONDITIONS REPORT: APPLICATION FOR APPROVAL OF DETAILS RESERVED BY CONDITION - CONDITION NO.8: TRAFFIC & TRANSPORT MANAGEMENT PLAN

7. Part Discharge Of Condition(s)

Are you seeking to discharge only part of a condition?

☐ Yes ☒ No

If Yes, please indicate which part of the condition your application relates to:

--

8. Planning Application Requirements - Checklist

Please read the following checklist to make sure you have sent all the information in support of your proposal. Failure to submit all information required will result in your application being deemed invalid. It will not be considered valid until all information required by the Local Planning Authority (LPA) has been submitted.

The original and 3 copies* of a completed and dated application form: ☒

The original and 3 copies* of other plans and drawings or information necessary to describe the subject of the application: ☒

The correct fee: ☒

*National legislation specifies that the applicant must provide the original plus three copies of the form and supporting documents (a total of four copies), unless the application is submitted electronically or, the LPA indicate that a smaller number of copies is required. LPAs may also accept supporting documents in electronic format by post (for example, on a CD, DVD or USB memory stick).

You can check your LPA's website for information or contact their planning department to discuss these options.

9. Declaration

I/we hereby apply for planning permission/consent as described in this form and the accompanying plans/drawings and additional information. I/we confirm that, to the best of my/our knowledge, any facts stated are true and accurate and any opinions given are the genuine opinions of the person(s) giving them.

Signed - Applicant:

Or signed - Agent:

NIGEL MOORE - ZETLAND GROUP

Date (DD/MM/YYYY):

29/11/2019

(date cannot be pre-application)

10. Applicant Contact Details

Telephone numbers

Country code: National number: Extension number:

Country code: Mobile number (optional):

Country code: Fax number (optional):

Email address (optional):

11. Agent Contact Details

Telephone numbers

Country code: National number: Extension number:

Country code: Mobile number (optional):

Country code: Fax number (optional):

Email address (optional):

12. Site Visit

Can the site be seen from a public road, public footpath, bridleway or other public land? ☐ Yes ☒ No

If the planning authority needs to make an appointment to carry out a site visit, whom should they contact? (Please select only one)

☒ Agent ☐ Applicant ☐ Other (if different from the agent/applicant's details)

If Other has been selected, please provide:

Contact name:

Telephone number:

Email address:

Appendix B: Discharge of Planning Conditions Report: Application for Approval of Details Reserved by Condition - Condition No.8: Traffic & Transport Management Plan.



HORSE HILL PRODUCTION APPLICATION FOR APPROVAL OF DETAILS RESERVED BY CONDITION

CONDITION NO.8: TRAFFIC & TRANSPORT MANAGEMENT PLAN

CONSENTED DEVELOPMENT	RETENTION AND EXTENSION OF AN EXISTING WELL SITE, HH1 AND HH2 WELLS, AND VEHICULAR ACCESS TO ALLOW: THE DRILLING OF FOUR NEW HYDROCARBON WELLS AND ONE WATER REINJECTION WELL; THE CONSTRUCTION OF A PROCESS AND STORAGE AREA AND TANKER LOADING FACILITY; NEW BOUNDARY FENCING; WELL MAINTENANCE WORKOVERS AND SIDETRACK DRILLING; AND ANCILLARY DEVELOPMENT ENABLING THE PRODUCTION OF HYDROCARBONS FROM SIX WELLS, FOR A PERIOD OF 25 YEARS
LOCATION:	HORSE HILL WELL SITE, HORSE HILL, HOOKWOOD, HORLEY, SURREY RH6 0RB
SURREY COUNTY COUNCIL REF:	2018/0152
APPLICATION NO:	RE18/02667/CON
DOC REF:	ZG307-HH-DISCON08
DATE:	26 th November 2019

APPROVAL LIST

ACTION	NAME	TITLE
REVIEWED BY		Project Manager
REVIEWED BY		Managing Director

REVISION RECORD

VERSION	DATE	DESCRIPTION
DISCON08 REVIEW VERSION	20 th November 2019	Draft for Review
DISCON08 UKOG REVIEW	26 th November 2019	Submission Version
DISCON08	26 th November 2019	Issue Version

This document has been prepared for and on behalf of Horse Hill Developments Ltd by Zetland Group Limited.

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- Appendix B: Temporary Signing Strategy

1. INTRODUCTION

1.1 Background

Zetland Group has been commissioned to prepare a Traffic and Transport Management Plan ("TTMP") to help discharge planning condition 8 of planning permission RE18/02667/CON for the production of hydrocarbons at the existing Horse Hill site near Horley in Surrey ("Site"). Condition No.8 is reproduced below in full with a reconciliation to where the condition criteria are addressed within the TTMP:

RE18/02667/CON CONDITION NO.8: TRANSPORT MANAGEMENT PLAN	TTMP RESPONSE
<i>"Prior to the commencement of the development hereby permitted a revised and updated Transport and Traffic Management Plan shall be submitted to and approved in writing by the County Planning Authority, to include details of:</i>	TTMP when read as a whole.
<i>a) Evidence to demonstrate that large HGV movements will no longer be required to swing out into the opposite carriageway to access the site and care to be taken in connection to vulnerable road users on Horse Hill, and that this arrangement will be managed and maintained for the duration of works. To include details on how the improved gate management protocol is being introduced, to manage the arrival of HGVs over each Phase of works;</i>	<ul style="list-style-type: none"> • 5.2: Swept Path Analysis & Site Access Modifications
<i>b) Programme of works for each phase, to include the identified peak HGV vehicle movements;</i>	<ul style="list-style-type: none"> • 4.1: Programme of Works for Each Phase – Schedule & Projected Traffic Movement
<i>c) Measures for traffic management by phase at the access on Horse Hill and at the Horse Hill/A217 junction, taking into account the number and size of the HGVs (see part A);</i>	<ul style="list-style-type: none"> • 6.1:A217/Horse Hill Junction Traffic Management • 6.2: Route Enforcement • 6.5: Temporary Signing Strategy • 6.7: Times & Enforcement • 6.11: Abnormal Loads
<i>d) Provision of boundary hoarding behind any visibility zones, subject to any amendments that may be required to the access in preventing swing out movements;</i>	<ul style="list-style-type: none"> • 5.3: Visibility Splays • 6.10: Hoardings Adjacent to Highways
<i>e) HGV deliveries and hours of operation;</i>	<ul style="list-style-type: none"> • 4.3: Projected Vehicle Movements – HGV
<i>f) Inclusion of vehicle routing to reflect those previously agreed, this information should also include any layby/waiting locations for vehicles on route to the site;</i>	<ul style="list-style-type: none"> • 5.1: Description of Route – Heavy Commercial Vehicles • 6.8: Protestors & HGV Holding Areas
<i>g) Measures to prevent the deposit of materials on the highway;</i>	<ul style="list-style-type: none"> • 6.6: Vehicle Arrival/Departure Scheduling
<i>h) Before, during and after construction condition surveys of the highway between the site and the A217 and a commitment to fund the repair of any damage caused by the development (timings of these surveys can be agreed with SCC, but must reflect the 25 years of operation now being sought);</i>	<ul style="list-style-type: none"> • 6.3: Route Condition Monitoring
<i>i) In the event that protesters delay HGVs accessing the site, contingency measures to prevent vehicles queuing back from Horse Hill onto the A217 and to maintain access for local residents and businesses.</i>	<ul style="list-style-type: none"> • 6.8: Protesters & HGV Holding Areas
<i>For avoidance of doubt this should be a standalone and separate document that can be easily referenced and updated as required. Only the approved details shall be implemented during the duration of the development."</i>	TTMP when read as a whole.

The local planning authority for the site is Reigate & Banstead Borough Council ("RBBC"), whilst the local highway authority and mineral planning authority is Surrey County Council ("SCC").

2. SITE LOCATION, EXISTING USE & ACCESS ARRANGEMENTS

2.1 Site Location

The Site is a worked farm that has been developed to accommodate an operational well site covering 2.08 hectares with an associated access track and ancillary development. The Site is situated in a rural location and is bound by agricultural fields and woodland to the north, east, south and west and is located approximately 3.1km to the west of Horley town centre.

2.2 Existing Use of the Application Site

Planning permission was granted by SCC in January 2012 (SCC ref: 2010/2089) for the following development at Horse Hill, representing the 3-year exploration stage of the scheme:

“Construction of an exploratory well site to include plant, buildings and equipment; the use of the well site for the drilling of one exploratory borehole and the subsequent short-term testing for hydrocarbons; the erection of security fencing; construction of a new access onto Horse Hill and an associated access track with passing bays, all on some 1.16ha, for a temporary period of up to 3 years, with restoration to agriculture and woodland.”

Works to construct the wellsite commenced in February 2014 with Horse Hill-1 (“HH-1”) being drilled in October 2014. Oil was discovered in the Portland Sandstone and the deeper Kimmeridge Limestone enabling flow testing to begin in 2016.

In 2017, the Applicant obtained further authorisation under permission reference RE16/02556/CON dated 1st November 2017 to extend testing for a period of 3 years and to drill and test an appraisal well (“HH-2”) and sidetrack well (“HH-1z”):

“The retention of the existing exploratory well site and vehicular access onto Horse Hill; the appraisal and further flow testing of the existing borehole (Horse Hill-1) for hydrocarbons, including the drilling of a (deviated) sidetrack well and flow testing for hydrocarbons; installation of a second well cellar and drilling a second (deviated) borehole (Horse Hill-2) and flow testing for hydrocarbons; erection of security fencing on an extended site area; modifications to the internal access track; installation of plant, cabins and equipment, all on some 2.08ha, for a temporary period of three years, with restoration to agriculture and woodland.”

This application was supported by a Transport Statement (SCP, 2016)¹, and then a Transport Statement Addendum (SCP, 2017)² in order to provide further details requested by SCC Highways. In order to discharge one of the planning conditions for the retention of exploratory well, a Transport Management Plan was submitted and approved in March 2018 (SCC ref: 2017/0204). This planning permission was implemented in June 2018.

2.3 Existing Access Arrangements

Vehicular access to the site is currently provided by a private track which connects with the Horse Hill road at a priority T-junction via an area of dense woodland. As part of the development the access is to be retained and will continue to provide access to/from the site.

3. LOCAL HIGHWAY

3.1 Local Highway Network

Horse Hill is a two-way single carriageway, which measures approximately 5.5m in width and is subject to a 40mph speed limit, with no existing street lighting. Horse Hill becomes Ironsbottom and connects with Collendean Lane at a priority T-junction approximately 800m north of the Site access point. Approximately 1.1km to the south-east of the Site, Horse Hill connects with Reigate Road (A217) via a priority T-junction with single lane dualling.

Horse Hill is rural in nature and has no footway provision, with hedgerows, fields or walls present along most parts. The road has already been used by Heavy Goods Vehicles (“HGVs”) associated with various stages of hydrocarbon exploration and appraisal since the construction of the Site in 2014. The width of Horse Hill is sufficient to accommodate the passing of two HGVs.

Within the vicinity of the Site, Reigate Road (A217) is a two-way single carriageway which measures approximately 7.8m in width and is subject to a 50mph speed limit. There is a kerbed right-turn lane at the junction with Horse Hill, facilitating right-turn movements both to and from Horse Hill. The A217 provides access to Reigate approximately 7.5km to the north of the Site. Approximately 3.6km north of Reigate, the A217 links with the M25 via a grade-

¹ SCP Transport Planning & Infrastructure Design Report: Transport Statement – Horse Hill (October 2016) (Doc Ref: LS/16286/TS/2).

² SCP Transport Planning & Infrastructure Design Report: Transport Statement Addendum – Horse Hill (April 2017) (Doc Ref: LS/16286/TSA/5).

separated roundabout. Approximately 2.4km to the south-east of the Site, the A217 links with London Road (A23) via a signalised roundabout. London Road forms part of the A23 that connects with Airport Way via a roundabout adjacent to Gatwick Airport to provide direct access to the M23.

The M25 is a trunk road which measures approximately 188km in length and encircles virtually all of Greater London and is managed by Highways England (HE). The M23 is also a trunk road which measures approximately 25.6km in length and runs between Horley in Surrey and Crawley in West Sussex.

It is considered that the classified roads (major roads intended to provide large-scale transport links within or between areas) within the wider highway network including the M23/M25, are adequate to accommodate the number of additional traffic movements that the development is projected to generate during the construction, operational and restoration phases of the development.

3.2 Access by Sustainable Modes

There are bus stops on both the eastern and western sides of Horse Hill, situated an approximately 300m walk to the north of the Site access point, although it is understood that there are no existing services available from these stops. Due to the nature of the Site operation and Site accessibility, access to the Site by private vehicles would be expected to be the predominant mode of transport for staff, as they would be bringing materials or specialist equipment. Accordingly, it is considered that there are no practical alternative access options at Horse Hill other than vehicle-based travel solutions. However, car share and shuttle bus will be promoted and used where reasonable and practical.

4. VEHICLE TYPES & PROGRAMME OF WORKS

4.1 Programme of Works for Each Phase – Schedule & Projected Traffic Movement

The development is comprised of five phases Table 1, below identifies the estimated timescales for each phase of the development, although operations within phases and the phases themselves may not be carried out consecutively. The timings of the phases will be dependent on factors such as the availability of drilling and workover rigs, weather conditions and restrictions arising from planning conditions such as the bird nesting season.

TABLE 1: PROGRAMME OF WORKS TIMESCALES			
ACTIVITY	WORK STAGE	ESTIMATED DURATION	HOURS OF OPERATION
Phase 1	Well site modifications & new construction works	3 Months	<ul style="list-style-type: none"> Mon – Fri: 08:00-18:30 Saturday: 09:00-13:00 Sun/Bank Hols: None
Phase 2	Workover – mobilisation and demobilisation	2 Weeks	<ul style="list-style-type: none"> Mon – Fri: 08:00-18:30 Saturday: 09:00-13:00 Sun/Bank Hols: None
	Workover operation of HH-1/1z and HH-2	1 Month	24hours, 7 days a week
	Drilling rig – mobilisation and demobilisation	2 Weeks	<ul style="list-style-type: none"> Mon – Fri: 08:00-18:30 Saturday: 09:00-13:00 Sun/Bank Hols: None
	Drilling – 4 production wells HH-3 to HH-6 and 1 water reinjection well	15 Months	24hours, 7 days a week
Phase 3	Installation of production equipment	4 Months	<ul style="list-style-type: none"> Mon – Fri: 08:00-18:30 Saturday: 09:00-13:00 Sun/Bank Hols: None
	Production of oil	20 Years	24hours, 7 days a week
	Maintenance workovers (if necessary)	1 Month	24hours, 7 days a week
	Sidetrack drilling (if necessary)	3 Months	24hours, 7 days a week
Phase 4	Plugging, abandonment & decommissioning	5 Months	<ul style="list-style-type: none"> Mon – Fri: 08:00-18:30 Saturday: 09:00-13:00 Sun/Bank Hols: None
Phase 5	Site restoration & aftercare	2 Months	<ul style="list-style-type: none"> Mon – Fri: 08:00-18:30 Saturday: 09:00-13:00 Sun/Bank Hols: None

4.2 Vehicle Types – HGV

Part of the site preparation and construction process will require the movement of material and components to and from the site compound using HGVs. The largest and most onerous vehicle required at the site during all phases of construction is a standard articulated HGV, including deliveries of parts/main components. Based on specification and knowledge of the site the most onerous standard HGV would be an articulated flatbed HGV, which typically measures approximately 16.5m in length, as per the vehicle profile shown in Figure 1.

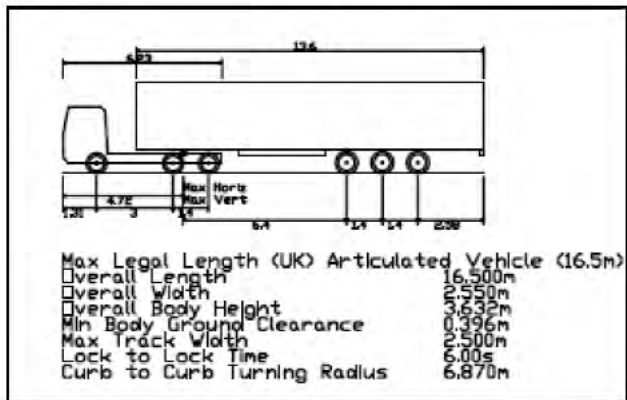


Figure 1: UK Articulated Vehicle Dimensions

4.3 Projected Vehicle Movements – HGV

It is acknowledged that different terminology can be used for vehicle trips/journeys/movements. For the avoidance of doubt and consistency with the transport work supporting previous applications at the Site, particularly the TSA (SCP, 2017), within this report '2-way movements' refer to a vehicle that both arrives and then departs the Site (no vehicles associated with the development would remain on the Site, so all vehicles would arrive and then depart, none would arrive but not depart).

The main envisaged traffic impact associated with the development would be during part of Phase 3 production, where up to 16 daily two-way HGV movements are expected (16 HGV arrivals and 16 HGV departures), albeit over a limited time period (4 months), with lower HGV traffic generation during all other phases and sub-phases. Traffic movements expected within Phase 1, 2, 4 and 5 are similar, with a maximum of 10 daily two-way HGV movements expected (10 HGV arrivals and 10 HGV departures). The proposed numbers of HGVs generated by each phase of development are consistent with those imposed by condition No.10 and are indicated below in Table 2.

TABLE 2: EXPECTED NUMBER OF HGV TRIPS GENERATED BY THE DEVELOPMENT				
ACTIVITY	WORK STAGE	ESTIMATED DURATION	MAXIMUM DAILY HGV 2-WAY MOVEMENTS	
			IN	OUT
Phase 1	Well site modifications & new construction works	3 Months	10	10
Phase 2	Well management & drilling	17 Months	10	10
Phase 3	Installation of production equipment	4 Months	16	16
	Production	4 Months	16	16
		24 Months	12	12
		48 Months	8	8
		60 Months	4	4
		104 Months	2	2
	Workover	1 Month	10	10
	Sidetrack Drilling	3 Months	10	10
Phase 4	Decommissioning	5 Months	10	10
Phase 5	Restoration & aftercare	2 Months	10	10

All HGV movements will be scheduled and timetabled in order to cause minimal impact on the local highway network, with no HGV movements occurring on a Sunday or bank holiday. Although the site is expected to operate on a 24-hour basis during short-term drilling (i.e. workover) operations and during the production of oil, outside of these periods, materials delivered to and collected from the site would take place between the following hours consistent with condition No.6:

- 08:00 and 18:30 hours (Monday-Friday) and,
- 09:00 and 13:00 hours on a Saturday.

4.4 Projected Traffic Generation – Staff

It is expected that the maximum number of staff on-site will vary across the different phases. An allowance for 3-6 security staff has been made in the event that they are all required with the following additional staff during each respective phase:

- Phase 1: Well Site Modifications & New Construction Works ≈ 12 construction staff;
- Phase 2: Well Management & Drilling ≈ 20 staff (working back-to-back 12-hour shifts);
- Phase 3: Production & Well Management ≈ 12 staff during the mobilisation of production equipment only with an unmanned Site during the production phase (except for routine maintenance, assumed to be 1 visit per day);
- Phase 4: Plugging, Abandonment & Decommissioning ≈ 12 staff; and
- Phase 5: Site Restoration & Aftercare ≈ 12 staff.

Staff trips will be made by cars, vans/small Light Goods Vehicles (LGV's), motorcycles or minibuses. As a worst-case scenario, it has been assumed that all of the staff will use their own private vehicle to travel to the Site and so the Site could be expected to generate a maximum of approximately 26 daily 2-way vehicle movements associated with staff (20+6 staff, with 26 staff arrivals and 26 staff departures per day), which would occur during phase 2, with lower levels of staff movements during other phases. Maximum traffic generation associated with staff is expected to be low, particularly given the following reasons:

- On-site accommodation is to be provided during some phases for key staff that are on-call, therefore some staff may not be required to commute to the Site every day.
- Staff vehicle movements are to be spread across the day, with the Site being operational across a 24-hour period during some phases.
- Car sharing amongst staff is to be promoted at the Site and will be a realistic travel mode for those staff who are employed by the same service company/sub-contractor.

4.5 Projected Vehicle Movements – Miscellaneous Deliveries

There will be a small number of miscellaneous deliveries associated with the project. These unscheduled movements are likely to be infrequent and distributed across the period of the project. These movements will typically take place in LGVs and would not adversely affect the operation of the surrounding highway network.

4.6 Projected Traffic Movements – Summary

The traffic generation of the Site primarily consists of HGV movements and those associated with staff commuting, as summarised below in Table 3:

TABLE 3: EXPECTED NUMBER OF TOTAL VEHICULAR TRIPS GENERATED BY THE DEVELOPMENT				
ACTIVITY	WORK STAGE	ESTIMATED DURATION	MAXIMUM DAILY 2-WAY MOVEMENTS (HGVS & STAFF)	
			IN	OUT
Phase 1	Well site modifications & new construction works	3 Months	28	28
Phase 2	Well management & drilling	17 Months	36	36
Phase 3	Installation of production equipment	4 Months	21	21
	Production	4 Months	17	17
		24 Months	13	13
		48 Months	9	9
		60 Months	5	5
		104 Months	3	3
	Workover	1 Month	28	28
	Sidetrack Drilling	3 Months	28	28
Phase 4	Decommissioning	5 Months	28	28
Phase 5	Restoration & aftercare	2 Months	28	28

5. ROUTE DESCRIPTION, SWEPT PATH ANALYSIS & SITE ACCESS MODIFICATIONS

5.1 Description of Route – Heavy Goods Vehicles

The likely constraints relating to the routeing of the HGVs associated with the site have been considered. HGV access to the site will be via Horse Hill using the A217. Consistent with condition No.9, no HGV will be allowed to take the north direction from the site, meaning that HGVs travelling north will need to turn right out of the site onto Horse Hill and then onto the A217. The routes outlined below are to be used by all HGVs accessing/ departing the site during all stages of the project, depending on their origin/destination are outlined below:

- 1) M25 – A217 – Horse Hill; and
- 2) M23 – Airport Way – London Road – A217 – Horse Hill.

The egress routes from the site will be the same as above but in reverse. All relevant parties involved in making deliveries to the site will be instructed on these restrictions. These routes are to be strictly enforced and all sub-contractors and suppliers are to be monitored to ensure that they use the defined routes. The temporary signing strategy to be employed (see **Section 6.5**) will ensure that the access route is clearly defined for all drivers. All sub-contractors will be provided with a summary of the traffic management requirements as part of their terms of engagement.

It is not considered appropriate to enforce these as the routes for all traffic associated with the development (including cars and light commercial vehicles), therefore no restrictions on routeing would be placed on access by cars and light commercial vehicles.

5.2 Swept Path Analysis & Site Access Modifications

Swept path analysis of the Site access in-off Horse Hill for a large HGV has been undertaken and is attached as **Appendix A**. The analysis shows that the access can accommodate a 16.5m articulated vehicle turning into the site without requiring both sides of the carriageway to do so (referred to as “swing out” within criterion (a) of condition No.8). To facilitate access and help reduce the risk of swing out in the future the following mitigations will be engaged:

- **Management of bollards:** bollards are installed at the back of the highway spanning the bell-mouth preventing the access from being blocked. The Operator has obtained feedback from hauliers and HGV drivers who record that the bollards give the impression that the access is constrained. In response, drivers align their approaching HGV's to navigate the perceived constraint by virtue of an exaggerated and unnecessary swing out manoeuvre. To mitigate this unwelcome effect, the bollards will be retained (in the interests of site safety) but will now be actively managed to prevent swing out during periods of known HGV movement;
- **Notification and training:** all hauliers and drivers will be notified of the access modifications as part of a new stay-in-lane policy and that policy adherence will be monitored by Site staff;
- **Access Management:** all vehicular flows in and out of the site are currently monitored and managed by dedicated Site staff. They will be informed of the new “stay-in-lane” policy and the requirement to record and report any policy breach to the Site Operator. In addition, Site staff will be trained to achieve qualified banksman status and will then manage the HGV flows during periods of construction and rig mobilisation/demobilisation when trip generation is predicted to temporarily increase.

It is also acknowledged that the A217 junction can accommodate a 16.5m articulated vehicle, as tested within the letter dated 31st March 2011 from D M Mason Engineering Consultants Ltd (DMM, 2011).

5.3 Visibility Splays

The visibility splay requirements for the Horse Hill Site access junction were defined and agreed as part of the previous exploration stage, with the supporting TSA (SCP, 2017) identifying that splays of 2.4m x 160m would be required, based on the results of the ATC speed survey in January 2017 and the highway design guidance within the ‘*Design Manual for Roads and Bridges*’ (DMRB). It is understood that the access junction has been constructed in accordance with this agreed requirement, with no proposed changes as part of the production stage.

6. PROPOSED TRAFFIC MANAGEMENT STRATEGY

The Traffic management strategy for the project is one of minimising the interface between the public and Site traffic, and reducing the number of deliveries where practicable, including the stages of deliveries such that the volume of traffic is kept as even as possible, avoiding peaks, and controlling vehicular movement on the project.

This Site has already been the host of construction, hydrocarbon exploration drilling, appraisal drilling and well testing operational activities since 2014. The Applicant would retain the same traffic management techniques previously approved, adopt a reduced traffic and transport programme (given the well site and access track are already in place) and implement the same considerate transport practices that aim to minimise the scope for any adverse highway impacts. Accordingly, there is no evidence to indicate that the traffic and transport effects for production would be more severe than those found to be acceptable in the past.

6.1 A217/Horse Hill Junction Traffic Management

The proposed development is expected to generate low traffic flows (a maximum of 16 two-way HGV movements per day over a period of 4 months). The swept path analysis has demonstrated that HGVs can undertake all movements at the junction. It is also noted that the Site has previously been used as a well drilling and testing Site, with some protesters for the previous operation situated adjacent to the junction. To maintain the safe free-flow of traffic at the junction in the event of protesters preventing/delaying the movement of HGVs associated with the Site, the off-site HGV holding areas discussed in **Section 6.8** are to be utilised, with vehicles waiting to be called forward to the junction and the well site. If more substantial traffic management measures are required, then the Site operator is to implement appropriate measures at the junction, such as a Police escort or signal traffic control to ensure that Site vehicles are not required to give-way at the junction and can proceed without delay. If these additional controls are required, they would be agreed and implemented in conjunction with Surrey Police and SCC.

6.2 Route Enforcement

All HGVs accessing and egressing the well site during all stages of the project are to travel via the southern section of Horse Hill consistent with condition No.9³. This route is to be strictly enforced and all sub-contractors and suppliers are to be monitored to ensure they use the defined route. The temporary signing strategy to be employed (**Section 6.5**) will ensure that the HGV access route is clearly defined to all drivers. All contractors and drivers will be provided with a summary of the traffic management requirements as part of their terms of engagement.

6.3 Route Condition Monitoring

It is proposed that the Applicant undertakes an assessment of the current condition of the highway on Horse Hill along the 1km section between the site access and the A217 junction. This section identifies the methodology which will be employed to conduct the survey at various stages, with the schedule of monitoring to be agreed with SCC Highways.

Prior to the commencement of the works, a dilapidation survey will be carried out, in conjunction with the local highway authority (SCC Highways). This will form the benchmark against which any damage associated with the proposed operation may be established.

These surveys will assess any damage to the highway caused by operational construction traffic. The proposed methodology would be as follows:

- Invite SCC Highways Area Engineer to attend survey;
- Establishment of chainages (using paint) at 100m intervals along the route;
- Video recording of the route; and
- Any structural defects within the carriageway noted.

³ Horse Hill Production Consent RE18/02667/CON, condition No.9: "All HGVs shall enter and exit the site to/from the south east via the Horse Hill/A217 junction".

The route condition will be monitored throughout the project with appropriate communications with drivers etc. to identify any issues. Upon completion of each dilapidation survey, a report and fully referenced photographic schedule recorded by defect and chainage will be submitted for the information of SCC Highways. Should the need for highway repair be identified, the developer would enter into an appropriate agreement with SCC Highways under the relevant terms of the Highways Act 1980.

6.4 Internal Parking Arrangements & Manoeuvring Facilities

Vehicular access to the site is currently provided by a private track which connects with Horse Hill at a priority T-junction via an area of dense woodland. As part of the development the access is to be retained and will continue to provide access to/from the site.

Adequate space is to be set aside within the site boundary to provide appropriate parking and manoeuvring facilities for all vehicles accessing the site (including both construction and staff vehicles). The internal site area is to be arranged in such a way that will reduce the number of reversing manoeuvres that are required and adequate driving visibility is to be provided at all times. Within the site, an area of hardstanding is to be set aside for vehicles to manoeuvre, enabling all vehicles to enter and exit the site in forward gear. The provision of an area of hardstanding within the site for vehicles to manoeuvre reduces the risk of mud being deposited onto the highway. An area of hardstanding is to be provided for parking within the site. A banksman will also be provided on-site. No vehicles associated with the site will be parked on the adjacent public highway at any time during the site's operation. Any contractor not adhering to the relevant parking guidance will be disciplined appropriately.

6.5 Temporary Signing Strategy

It is proposed to implement a temporary signing strategy to facilitate safe access to/from the site for vehicles associated with the operation and to ensure that all delivery vehicles use only designated routes. The proposed signing strategy would be subject to approval from SCC Highways, would be installed prior to the commencement of works at the site and maintained as necessary for the duration of the works.

The temporary signing is to be the same as the highway signing plan submitted to discharge conditions associated with the exploration and appraisal consents issued in 2012 and 2017. A copy of the approved highway signing plan is attached in **Appendix B**.

All signing will be in accordance with "*The Traffic Signs Regulations and General Directions*" (DfT, 2002). No temporary Traffic Regulation Orders (TROs) are required in support of this strategy. As shown in **Appendix B**, suitable signs are to be provided in the vicinity of the site in order to warn other road users of the likely presence of HGVs making turning movements in the vicinity of the development.

6.6 Vehicle Arrival/Departure Scheduling

In order to prevent congestion, all deliveries associated with the project will be pre-arranged with site management. During busy periods, deliveries to the site will be staged with drivers given specific time windows for arrival at the site.

In all cases traffic management provision (e.g. signing) should be sited, maintained and removed by qualified and competent personnel.

6.7 Times & Enforcement

In the interest of road safety and to reduce possible nuisance, delivery traffic will be subject to a timing restriction outside of which delivery vehicles will not be able to gain access into the site, or depart from the site. The proposed operational hours at the site are summarised in Table 1 consistent with condition No.6.

Where possible deliveries will be timed to avoid the morning and afternoon road network peak hours and any other predictable peak periods.

Deliveries are to be timed to maximise site efficiency and as such it is expected that deliveries will take place throughout the working day, rather than being condensed into the peak periods.

6.8 Protesters & HGV Holding Areas

In the event that protesters prevent/delay HGVs accessing the Site or other locations on the route to/from the Site (e.g. the A217/Horse Hill junction), particularly if it leads to the possibility of queuing back from the Horse Hill Site access to the A217, operational construction vehicles may be held in lorry parks within the local area until being called forward to the well site. Furthermore, if there is sufficient queuing on Horse Hill as a result of protesters in relation to the Site to affect the free-flow of traffic at the junction with the A217, then additional warning signs are to be erected at appropriate locations in order to warn of possible queues ahead.

6.9 Highway Cleaning Regime

Throughout all phases of the development the site operator will monitor the need for road cleaning and engage a sweeper supplier when necessary. To minimise debris and spillage onto the public highway any lorry loads of material removed from the site will be covered by sheeting/tarpaulin to prevent deposited onto the public highway. These measures will be strictly enforced during all phases of the operation.

6.10 Hoardings Adjacent to Highways

For the avoidance of doubt, there is no need to deploy boundary hoardings behind the splays that protect driver visibility at the junction of the site entrance and Horse Hill.

6.11 Abnormal Loads

Although at this stage not currently anticipated, any abnormal load movements on the highway would be undertaken in accordance with any applicable local highway authority guidelines, with appropriate notification made and in consultation with stakeholders.

6.12 Worksite Security

A transport load central control register (or a similar system) is to be implemented at the Site, which will ensure that site security is not compromised. The register will obtain details of all vehicles arriving/departing the Site, with information obtained including driver name, date, time, delivery details, contractor and contact name. Surrey Police will be provided with this transport load information on a regular basis.

6.13 Promoting Car Sharing

In order to minimise the number of trips to the Site, the applicant will actively promote the benefits of car sharing to all contractors at the Site.

7. REFERENCES

DfT (Department for Transport), 2002. The Traffic Signs Regulations and General Directions.

DfT, 2002. The Traffic Signs Regulations and General Directions.

DCLG (Department for Communities & Local Government), 2012. National Planning Policy Framework.

DMM (D M Engineering Consultants), 2011. Letter Titled '*Hydrocarbon Oil Exploration Site: Horse Hill, Horley*' (31/03/2011).

Fox (Owmbly) Ltd, 2013. Horse Hill Exploration Site, Hookwood, Horley Surrey. Planning Consent Ref: RE 10/2089. Submission of Approval of Details Reserved by Condition 11 (Construction Method & Programme).

HA (Highways Agency), 1995. TD41/95 Vehicular Access to All-Purpose Trunk Roads.

IEA (Institute of Environment Assessment), 1993. Guidelines for the Environmental Assessment of Road Traffic.

MHCLG (Ministry of Housing, Communities & Local Government), 2018. National Planning Policy Framework.

SCP, 2017. Horse Hill, Transport Statement Addendum (April 2017, Ref: SRE/16286/TSA/5).

SCP, 2016. Horse Hill, Transport Statement (October 2016, Ref: LS/16286/TS/2).

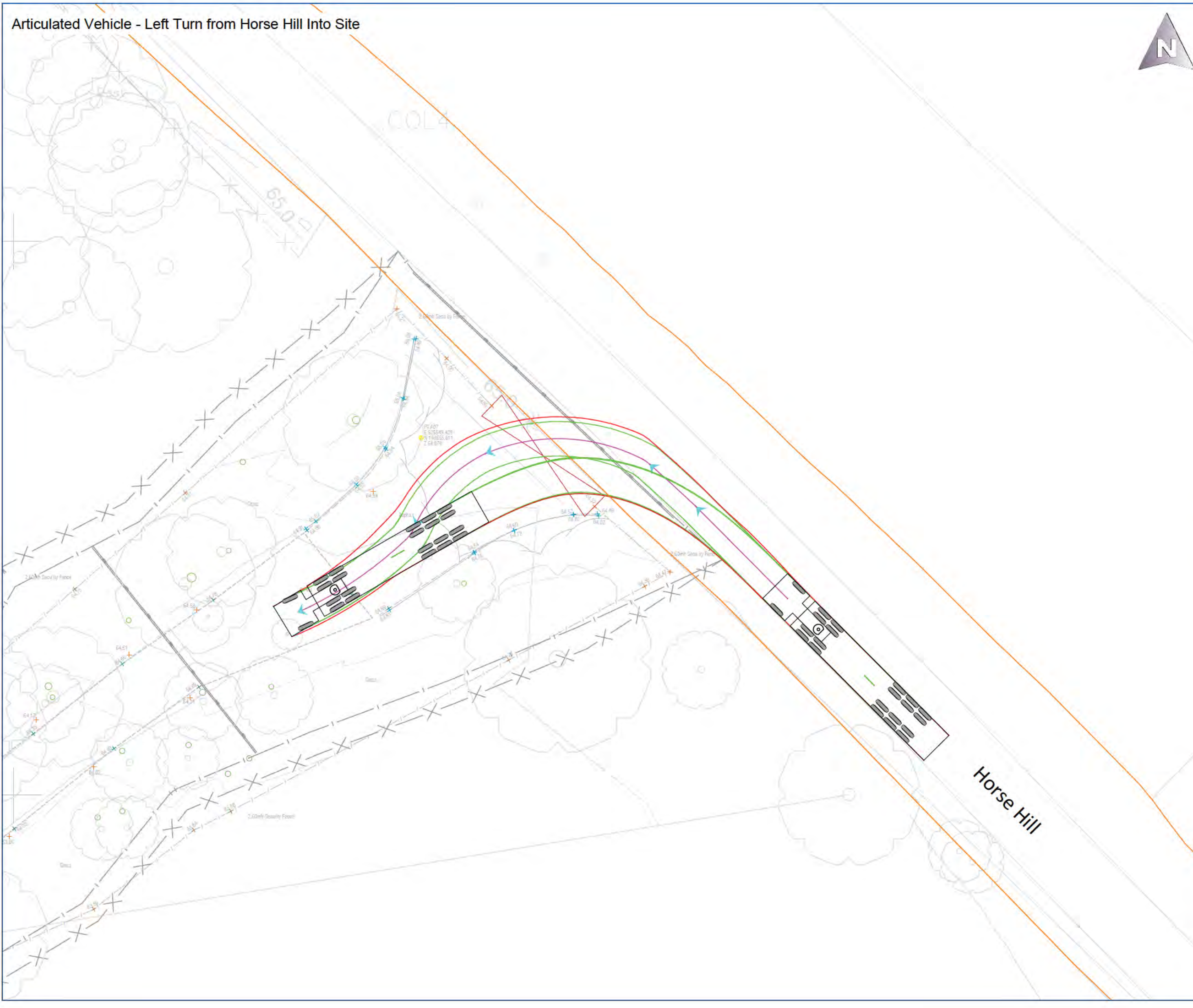
ZET (Zetland Group Ltd), 2017. Transport Management Plan (dated: 14/12/2017, Ref: HH-ZG122-DCA:01.1).

ZET, 2018. Transport Statement (dated: 30/11/2018, Ref: HHDL-HH-PS&ER-V1: APPENDIX G: TRANSPORT).

APPENDIX A: SWEEP PATH ANALYSIS

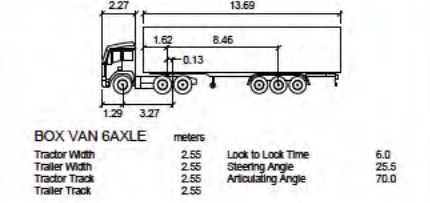
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Articulated Vehicle - Left Turn from Horse Hill Into Site



- Outer wheel tracks
- Vehicle swept path
- Vehicle centreline and direction

- Notes:-
1. Simulated speed - not more than 5 mph
 2. Actual vehicle dimensions and track may vary.



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 - ii. Reference should be made to the project's drawing register to ensure the latest drawing is being referred to.
 - iii. All dimensions are to be checked by the contractor prior to commencement of work. Any discrepancy shall be reported immediately to Local Transport Projects Ltd
 - iv. All work shall be carried out in accordance with local authority, statutory authority and health & safety requirements & regulations
 - v. Drawing based on a topographical survey.

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Rev.	Date	By	Chk	Description

Client
Horse Hill Developments Ltd

Project
Horse Hill Well Site,
Horse Hill,
Surrey

Title
Site Access Swept Path Analysis



traffic engineering and transport planning



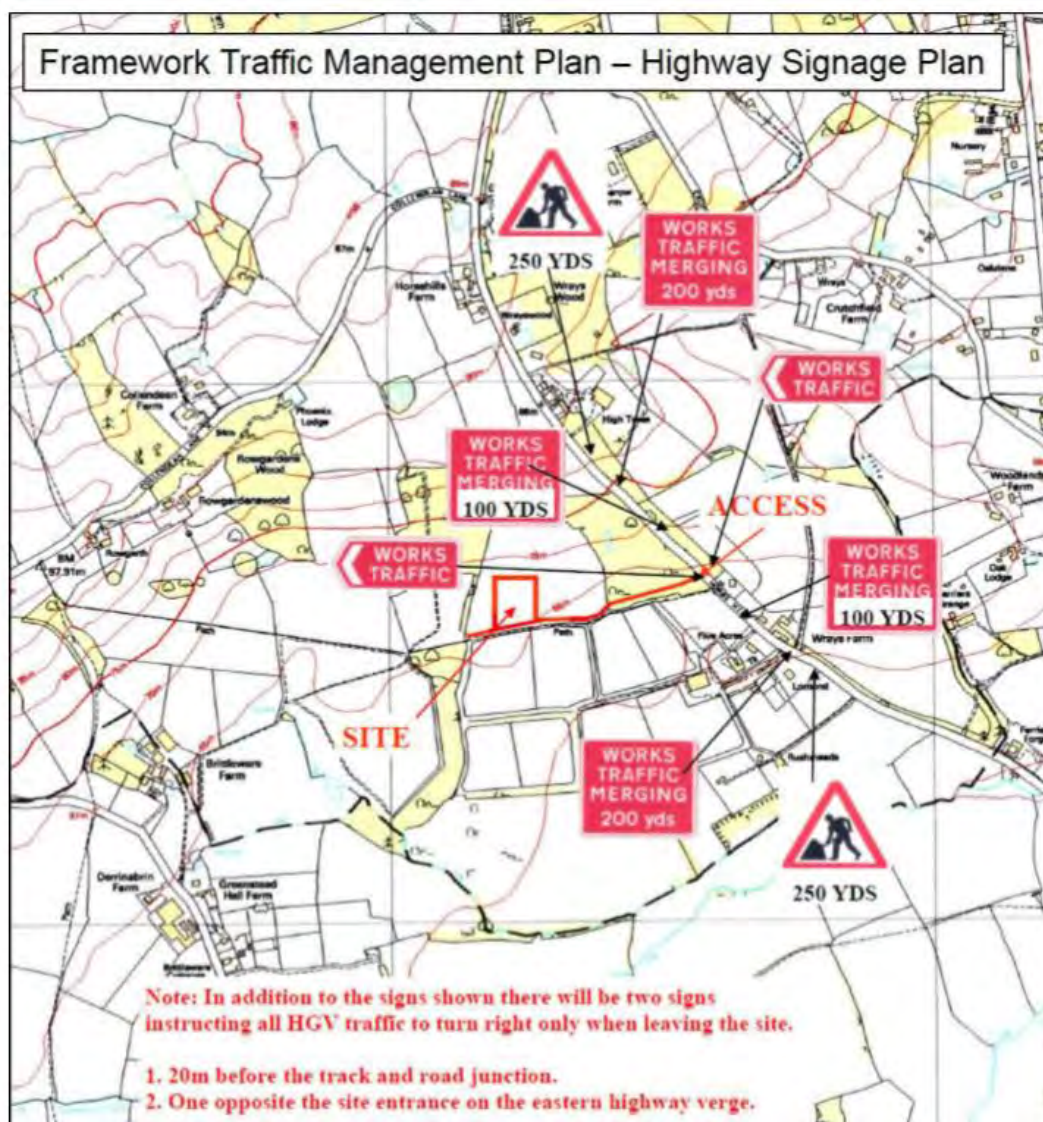
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APPENDIX B: TEMPORARY SIGNING STRATEGY



The signage strategy has been designed to facilitate safe access to/from the Site for vehicles associated with the proposed development and to ensure all delivery vehicles use only designated routes. The signage would be maintained as necessary for the duration of the works and will be erected in accordance with "The Traffic Signs Regulations and General Directions" (Department for Transport, 2002) (DfT). No temporary Traffic Regulation Orders are required in support of this strategy.

The strategy is to be the same as the Highway Signage Plan produced by Fox (Owmbly) Ltd in 2013 to discharge planning condition No.11: Construction Method & Programme, of the SCC planning consent for hydrocarbon exploration (SCC consent ref: RE/10/2089). This same plan was submitted by the Applicant to discharge planning condition No.1: Transport Management Plan, of the SCC planning consent for hydrocarbon appraisal (SCC consent: RE16/02556/CON).

Given that this plan has been deployed twice and found to acceptably control Site related traffic flows it is reasonable to assume that the outcome will be the same if deployed to control Site production traffic flows.

End of Plan Statement