

KIRDFORD PARISH COUNCIL
c/o 8 Saville Gardens, Billingshurst, West Sussex, RH14 9RR.
Clerk: Mrs. I. Marshall, BA(Hons), FILCM.
Tel: 01403 783477 E-mail: kirdfordpc@gmail.com

Our ref: IM

27th November, 2013

Mrs. J. Moseley,
Chief Planning Officer,
West Sussex County Council,
County Hall,
West Street,
Chichester,
West Sussex,
PO19 1RQ.



Dear Mrs. Moseley,
re: Planning Application No: WSCC/083/13/KD

Proposal: The installation of a well and associated infrastructure, including access road and soil bunds, for the drilling of a vertical borehole and contingent horizontal borehole from the same well for the exploration, testing and evaluation of hydrocarbons for a temporary period of three years.

Location: Land south of Boxal Bridge, Northup Field, Wisborough Green, West Sussex, RH14 0DD.

The Parish Council encloses herewith a copy of an independent review of Traffic Data and Highways Measures prepared by Temple. Whilst it does not support all the concerns of residents, you will note in the conclusions it recommends the application is refused on the grounds of highways safety.

The Parish Council is extremely concerned by the report's analysis of the site access design which clearly does not provide for safe ingress and egress to the site given the current 60 mph speed limit on Kirdford Road. It is requested this matter is resolved before the application is determined.

The Council would further point out that the review is based on the estimated increase in traffic movements, as advised by the applicant Celtique Energie who has no experience of such development, as indeed is your own and that of West Sussex Highways limited to just one similar development in Balcombe. This lack of knowledge guides us to request that you err on the side of caution in dealing with these matters. Should you have details of the actual traffic movements recorded, at the recently aborted development in Balcombe, the Parish Council would appreciate a copy for reference.

It is also requested that as the Local Planning Authority you note the reference to the uncertainty in regard to the structural load capacity of Boxal Bridge, and ask that you have this clarified before determining the application. Please note, Temple were not instructed to address a sequential test to the alternative access routes, as suggested by Wisborough Green Parish Council, however we still consider this a material consideration, in any review undertaken by yourselves in consultation with West Sussex Highways.

Lastly, the Council would again express our concern over the lack of robustness of the information included in the applicants Environmental Statement submission, especially, but not solely in respect of Highway Safety. This makes determining such an application extremely difficult for a Local Planning Authority and may, in the view of this Council, unnecessarily expose it to legal challenge at some future date.

Yours sincerely,

I Marshall

I. Marshall (Mrs.) BA(Hons), FILCM,
Clerk to the Council.

c.c. Mr. A. Howick, Team Manager, West Sussex Highways
Wisborough Green Parish Council

Enc.



REPORT for

Kirdford Parish Council

**T2083 - Celtique Energie Traffic Data
Review, Kirdford Road, Wisborough
Green, West Sussex**

Initial Review of Traffic Data and Highway Measures

Status: Final

20 November 2013

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Kirdford Parish Council

T2083 - Celtique Energie Traffic Data Review, Kirdford Road, Wisborough Green, West Sussex

Initial Review of Traffic Data and Highway Measures

Document Version Control

Version	Date	Author	Approver
Draft	18/11/2013	Eric C Woodgate	Patrick Duffy
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1. INTRODUCTION

Kirdford Parish Council via Temple Group Ltd has requested a review of Celtique Energie Weald Limited (CEWL) traffic data, this review comprises:

- Review Site 2 Kirdford Road traffic count data supplied in spread sheet form (25th February – 3rd March 2013);
- Review of Kirdford Road (150m west of Skiff Lane) traffic count data supplied in spread sheet form (26th September – 3rd October 2013);
- Review construction traffic compared with existing traffic flow graph data;
- Review heavy construction vehicles graphed data;
- Review of Chapter 10 of the Environmental Impact Assessment, and Appendix 10.1 – 10.7; and
- Production of a short report setting out the review of the above and the implications for local highway flows, capacity and design and to provide recommendation on how Kirdford PC can make use of this information.

The conclusions reached are those, which can reasonably be determined from the sources of information referred to in the report and from our knowledge of current professional practice and standards. Any limitations resulting from the data have been identified where possible but both these and our conclusions may require amendment should additional information become available. The report is only intended for use in the stated context and should not be used otherwise.



2. BACKGROUND

The development being proposed by CEWL is the exploration of hydrocarbons at Northup Field, south of Boxal Bridge, Kirdford Road, Wisborough Green for duration of approximately 26 weeks.

The proposed development would comprise four separate phases: construction; mobilisation and drilling; testing; and retention/restoration. It is understood that depending on the geology found and results, a lateral borehole may also be drilled to explore and appraise the horizontal rock structures. The results from the testing phase would determine whether the site is retained (and subject to a new application for production), or restored.

It is proposed that the site would use an existing farm access from Kirdford Road. Situated at Grid Reference TQ 03516 26779 which is in close proximity to a SNCI and an Ancient Woodland.

It is assumed that development traffic would exit right onto Kirdford Road, crossing over a historic narrow road bridge (known as Boxal Bridge) and necessitating travel through the village of Wisborough Green before continuing onto the A272 to the south.

It is understood that the site's operational hours would be 08:00 – 17:00 between Monday and Friday, 08:00 – 13:00 on Saturdays, with no working on Sundays, Public or Bank Holidays.



3. REVIEW OF DATA

3.1. Capacity and Flow

Kirdford Road is a National Speed Limit Road (60 mph), and generally appears to be c6.0m wide except where it narrows at Boxal Bridge. This narrowing appears to be less than 6.0ms and this is evident as no central white line is placed over the bridge.

Whilst Kirdford Road is primarily rural especially near the proposed site entrance, it is our opinion that due to certain characteristic of the road i.e. actual speed, as opposed to national speed limit especially near the proposed entrance, then it is felt that criteria within The Design Manual Roads and Bridges TA 79/99 'Traffic Capacity of Urban Roads' should be consulted. This document gives an indication of flow capacities for different road categories (Urban All Purpose (UAP)).

Based upon Table 1 of TA 79/99 Kirdford Road would meet most of the criteria for a UAP2 (6.1m) road type; Good standard single/dual carriageway with frontage access and more than two side roads per km. Based upon Table 2 of TA 79/99, a UAP2 carriageway road with grade junctions and the two-way capacity of the road, it is assumed that the actual and development peak (daily) traffic flows are as shown in table 3.1 below.

3.2. Review of Information Provided Before the 27th September 2013 Technical Note Publication

It was assumed that the Peak Hourly Flow for the development would be based on the maximum number of vehicles using the site. Currently CEWL has estimated that 35 vehicles in number will ingress and egress the site during working hours. The information supplied and upon which this review is based does not include information on the Peak Hour Flows which would be from the development; however, it was our opinion that by using the DfT Design Manual for Roads and Bridges (DMRB) Volume 13 Section 1 Chapter 9 Part 4, this could be estimated. By using the conversion factors within this document, known as the E-factor and M-factors this can be used to convert the maximum 35 vehicle per 12 hours into a flow rate for 16 hours and then to calculate the 24hours rate. It is our assumption that the Peak Hour Flow for the development is as follows:

- The (E-Factor) is 1.15 and the (M-Factor for around March) is approximately 1.016 this would equate to make the total 24 hour Average Daily Trips (ADT) as follows:
 - $ADT = 35 \text{ vehicles} * 1.15 * 1.106 = 44.52 \text{ 2-way trips per day.}$
- Using above information and the following methodology for calculating the Average Hourly Trips (AHT) and Peak Hour Flow (PHF) can be used:
 - $AHT = [(ADT/24) = 1.86 \text{ AHT}].$ Then $PHF = [AHT*2.63 \text{ (traffic conversion factor – main urban)}]$ to arrive at an average AM and PM two way Peak Hour Flow (PHF) = 4.88 trips.
- The PHF of 4.88 trips (say 5) equates to 1 trip (two way) every 12 minutes during the standard AM and PM network peak hours.

The above PHF can then be incorporated in the table below to determine whether the capacity of Kirdford Road would be significantly affected.

It was assumed that Kirdford Road has a 60/40 split flow and this has been used in the table below:



Table 3.1 – Flow Capacity

	One Way c (60%)		One Way c (40%)		Total Flow	
Flow Capacity (UAP2)	612		408		1020	
	No	%	No	%	No	%
	Kirdford Road					
Peak Flow with Dev	79	12.91	53	12.99	132	12.94
Without Dev	76	12.42	51	12.50	127	12.45
Development flow	3	0.49	2	0.49	5	0.49

From the above information, it was assumed that the net % increase in traffic for Kirdford Road flows is approximately 0.49%. It can be seen that the peak flows with development lie well within the environmental capacity of this road. However, the difference between existing flows and proposed flows is 3.94%.

CEWL data (25th February – 3rd March 2013 - please see attached spread sheet) had been assessed. The increase of Light Good Vehicles and Heavy Good Vehicles from its current average of 183 (average 24 hour 2-way flow) to 205 vehicles i.e. circa 22 vehicles or a 10.75% increase, along with predicted increase of traffic of a total 35 vehicles per day maximum is likely to temporarily increase traffic to 2.45% for a 26 week duration.

3.3. Review of Information Provided Before the 19th November 2013 Technical Note Publication

Currently CEWL has estimated that 35 vehicles in number will ingress and egress the site during working hours.

Chapter 10 of the Environmental Impact Assessment (EIA) indicates that the maximum expected number of daily two-way HGV movements are expected to be 22 HGVs with the corresponding maximum daily two-way Light Vehicle (LGV) movements at 13. During the peak hours, two-way HGV movements are not expected to exceed 3 with two-way LGV movements not exceeding 13 (see **Figure 3.1** for the extracted from Table 10.5 of the EIA below).



Figure 3.1 Extract from Environmental Statement Chapter 10

Table 10.5: Likely Significant Effects of Phase 1

Phase 1: Construction of access road and well site	Time Period	Two-way Traffic Volumes		
		Total	LV (<1.5te)	HV (>1.5te)
Forecast traffic associated with Phase 1 of the Proposed Development	AM Peak (08:00-09:00)	9	7	2
	PM Peak (17:00-18:00)	2	0	2
	24-hour (AAWT) ¹	35	13	22
Percentage change in vehicle movements on A272	AM Peak (08:00-09:00)	1.53%	1.32%	3.40%
	PM Peak (17:00-18:00)	0.32%	0.00%	3.21%
	24-hour (AAWT) ¹	0.49%	0.20%	3.10%
Percentage change in vehicle movements on Kirdford Road	AM Peak (08:00-09:00)	7.99%	7.13%	13.89%
	PM Peak (17:00-18:00)	1.65%	0.00%	12.20%
	24-hour (AAWT) ¹	2.51%	1.07%	12.05%

During the previous review, it was considered that Kirdford Road had the characteristic of a UAP2 road, this view remains unchanged.

Analysis of recently supplied traffic data would indicate that Kirdford Road has a tidal peak hour flows depending on the direction of travel at the time. For simplicity, the AM and PM peak hour results have been averaged and then multiplied by two to determine the average 2-way AM and PM flows.

Review of the recent traffic data would indicate that Kirdford Road has a 60/40 split flow AM Peak Flow and 50/50 split flow during the PM Peak Flow, this has been used in the table below.

Table 3.2 – Flow Capacity

	One Way c 60% AM c(50%) PM		One Way c 40% AM c(50%) PM		Total Flow	
	No	%	No	%	No	%
Flow Capacity (UAP2)	612 (510)		408 (510)		1020	
AM Peak Flow	Kirdford Road					
Peak Flow with Dev	85	13.89	59	14.46	142	13.92
Without Dev	80	13.07	53	12.99	133	13.04
Development flow	5	0.82	4	0.98	9	0.88
PM Peak Flow						
Peak Flow with Dev	53	10.39	51	10.00	104	10.20
Without Dev	52	10.20	50	9.80	102	10.00
Development flow	1	0.20	1	0.20	2	0.20

From the above information, it was assumed that the net % increase in traffic for Kirdford Road flows is approximately 0.88% in the AM Peak Hour and 0.20% in the PM Peak Hour. It can be seen that the peak flows with development lie well within the environmental capacity of this road. However, the difference between existing flows and proposed flows are 6.77% in the AM Peak Hour and 1.96% in the PM Peak Hour.



The 26th September – 3rd October 2013 traffic data had been assessed. The increase of Light Good Vehicles and Heavy Good Vehicles from its current average of 168 (average 24 hour 2-way flow) to 190 vehicles i.e. circa 22 vehicles or a 11.59% increase, along with predicted increase of traffic of a total 35 vehicles per day maximum is likely to temporarily increase traffic to 2.23% for a 26 week duration.

3.4. Comparison between the Various Survey Data

A local highways authority would normally classify a percentage change over 5% as significant, and may then seek offsite highways improvements. However, the predicted level of change may be considered to be de-minimis by the highways authority if considered over a 24 hour period.

Overall the above tables show that it is unlikely there will be a significant level of total traffic generation from the development during a 24 hour period i.e. somewhere between 2.23% and 2.51% and that any increase in traffic is unlikely to have a bearing on the effectiveness of nearby junctions to accommodate the additional trips. It is unlikely that there would be substantial impacts upon the wider area, although this will need to be confirmed by West Sussex County Council. Locally during the AM Peak Hour the total traffic generated is greater than 5% (approximately 7%) with a significant increase of 24 hour movement of LGVs/HGVs approximately 12%. This level of increase could be considered by West Sussex County Council as significant; thereby requiring the developer to provide localised improvements to cater for the increase of LGV/HGV traffic flows, however, this will need to be confirmed by West Sussex County Council.

It should be noted that generally de-minimis transport impacts would not be a reason for refusal of planning permission.

3.5. Traffic Speed and Site Access

proposed site (Grid Reference TQ 03516 26779) between Monday 25th February 2013 to Sunday 3rd March 2013, and one, 150m west of the Skiff Lane junction with Kirdford Road between Thursday 26th September to Wednesday 3rd October 2013.

It is agreed that the section of Kirdford Road under consideration is a National Speed Limit Road (60 mph). It is further agreed that the February/ March results from the survey indicate that the 85th percentile was c41 mph and the mean speed was c36 mph and that the September/ October results for the survey indicated that the 85th percentile was c46 mph and the mean speed was c40 mph.

It is our opinion that further speed surveys are required. The reasons why are as follows:

- That one survey was undertaken in a location where the road is narrow over a narrow bridge, and on a rise and on a series of bends. This geometry would naturally cause vehicles to travel at reduced speeds;
- It has been shown in the second most recent speed survey that greater speeds are possible in advance of the above survey location; but this has been provided at the eastern approach to the site only, and no information is provided from the western approach; and
- No assessment of approach speeds for sight stopping distance or forward visibility envelopes approaching the entrance, especially as this is a National Speed Limit Road (60 mph). The sight stopping distance for a 60 mph road according to The Design Manual Roads and Bridges TD 42/95 'Geometric Design of Major/ Minor Priority Junctions' is 215 metres.



Whilst the survey results indicate that 85th percentile were c41 mph with a mean speed was c36 mph (say 40mph), and c46 mph (say 50mph) with mean speed was c40 mph, respectively, this would generally meet the requirement for a relaxation of standards, to that of a sight stopping distance of 120 metres or 160 metres. It is our opinion that a sight stopping distance of either 120 metres for 40 mph or 160 metres for 50 mph in this location is not possible due to the geometry and road layout.

Significant works would be required to be undertaken (such as removing hedgerows and tree lines) and/or by the approval of temporary traffic orders being placed to reduce the current speed limit to 30 mph having first been agreed by the highways authority, to bring the Sight Stopping Distance down to an accessible distance of 90 metres.

As can be seen from the following table, the visibility splays have varying degrees of (X Distance) space requirements (this being the distance into the site along the centreline of the site access road) and any reduction from what is required on the existing posted speed limit will have to be agreed by the Highways Authority.

However, we believe that for this site it would be inappropriate to use the Manual for Streets requirements as opposed to the Design Manual for Roads & Bridges requirements, if the access remains in its intended position.

Table 3.3 – Speed Limits and Associated Design Standards

Speed Limit	X Distance (into the site)*	Desirable Minimum Stopping Sight Distance Y Distance (along the road edge)	Design Standard
30 mph	2.4m	43m	Manual for Streets
30 mph	2.4m/4.5m/9m	90m	Design Manual for Roads & Bridges
40 mph	2.4m/4.5m/9m	120m	Design Manual for Roads & Bridges
50 mph	2.4m/4.5m/9m	160m	Design Manual for Roads & Bridges
60 mph	2.4m/4.5m/9m	215m	Design Manual for Roads & Bridges

*X Distance in bold is generally considered the preferred distance, however, local circumstances may require adjustment accordingly, by agreement with the local highways authority.

The site access traffic has to join the Kirdford Road when there are gaps in the major road traffic streams. It is therefore essential that drivers leaving the site have adequate visibility in each direction to see the oncoming Kirdford Road traffic in sufficient time to permit them to make their manoeuvres safely. This also applies to those driving along Kirdford Road with traffic turning right into the site entrance.

As stated above, it is our opinion that the current arrangement is not possible even at 40 or 50 mph without substantial works being carried out and as such any removal of hedgerows, trees and possible ecology habitat will have to be thoroughly assessed prior to any works being carried out.

As well as having adverse safety implications, poor visibility reduces the capacity of turning movements. Visibility should however, not be excessive as this can provide a distraction away from nearer opposing traffic and potential increase speeds especially on bends.

It would appear that the route for site traffic would be along Kirdford Road, crossing over a historic narrow road bridge (known as Boxal Bridge) and travelling through the village of Wisborough Green before continuing onto the A272 to the south.



However, it is not known whether Boxal Bridge has been assessed for any increased or frequency of load or whether the aforementioned route could possibly be used for the delivery of large construction or hydrocarbon extraction plant, without the possibility of damage to the road surface, the bridge or the tree canopy belonging to the ancient woodland. As such further information or studies will be required.

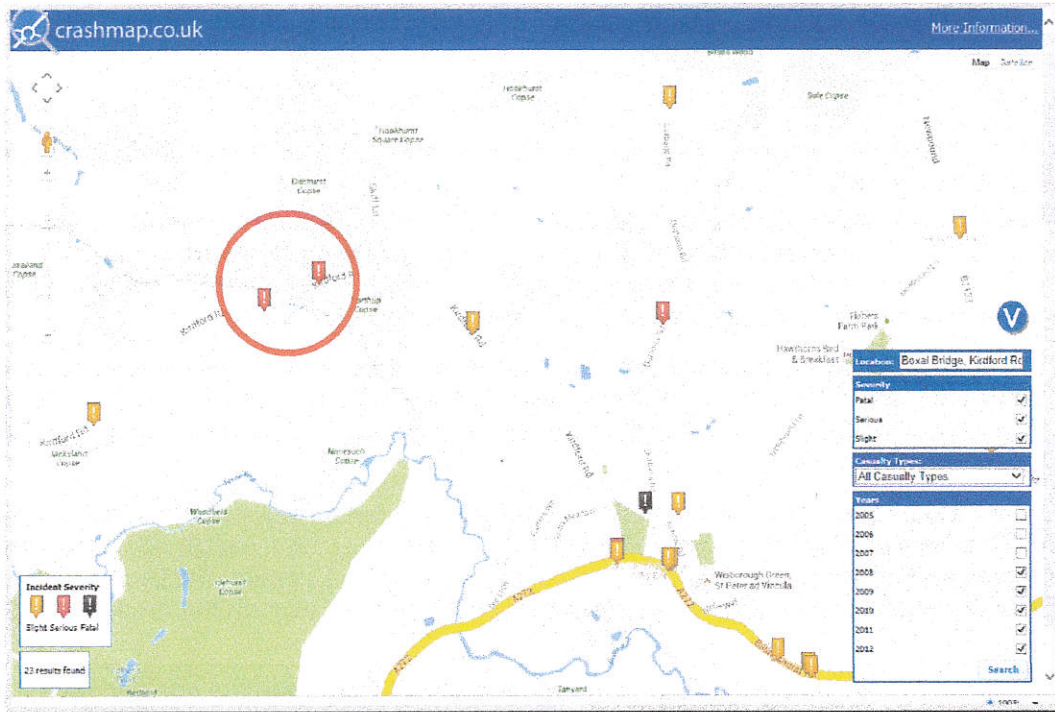
3.6. Road Safety

According to the freely available “Crashmap” database, there have been six collisions resulting in personal injury or death and were reported to the police along Kirdford Road between the proposed site entrance and Durbans Road Junction during the period 2005 – 2012 (inclusive). Two of these collisions were classified as “Slight”, three were classified as “Serious” and one was classified as “Fatal” by the police.

No further collisions have been recorded along Kirdford Road (directly fronting the site) during the aforementioned period.

Normal industry practice requires a 5 years period to be assessed for the purposes of a Transport Assessment, and as such, the occurrence of collisions is not currently at a level, which in our opinion would require mitigation due to the proposed development. Please see the extract from the “Crashmap” database below.

Figure 3.2 – ‘Crashmap’ Database



Period from 2008 to 2012 (inclusive).

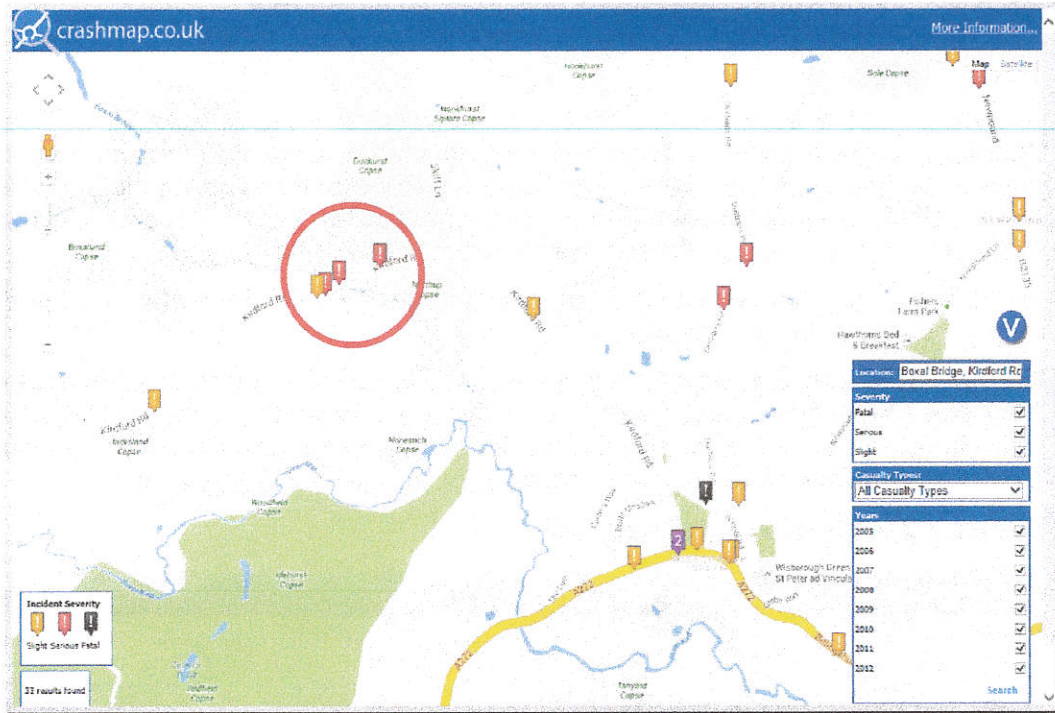
However, if the period is extended beyond the normal 5 year assessment period, to 2005, (please see below) a different scenario occurs, where the section of road immediately adjacent to the site has had a number of slight and serious collisions.

This is significant, as there appears to be a cluster in comparison to the remainder of Kirdford Road. This would indicate that this location may be problematic in road safety terms, especially for any increase of turning movements coming out of the proposed



entrance on to a road that has reduced visibility, even with an actual typical speed currently between 40 mph and 50 mph.

Figure 3.3 - Freely Available 'Crashmap' Database



Period from 2005 to 2012 (inclusive).

The Road Safety Audit Report dated 25th July 2013 states in paragraph 2.2.1 that a potential problem is possible, "There is some concern that large vehicles may arrive to enter the access at the same time as another is exiting. A large vehicle stopping unexpectedly mid-turn could result in rear end shunt type collisions".

It is our opinion that the latter point could potentially be worse, if this problem occurred whilst other road users are travelling at speed along Kirdford Road. Especially due to the location of the site entrance and the forward visibility required for a safe stopping distance before a collision occurred.

Whilst the proposed developer of the site has carried out further traffic/ speed surveys (150m West of Skiff Lane), which have demonstrated that the average 85th percentile is approximately 46mph, or in other words a Sight Stopping Distance (SSD) of 160 metres. This sits outside of the limit of the eastern visibility splay shown on the drawing 3582 P18 C.

The speed data gathered during February and March 2013 from the site entrance, demonstrated that the 85th percentile was approximately 40 mph or in other words 120 metres; however, it is our opinion that neither 120 metres nor 160 metres SSD are possible due to the horizontal and vertical geometry and road layout, including the presents of trees, and vegetation.

It is also our opinion that the visibility splays shown in drawing (3582 P18 C) have been incorrectly shown; as the consultant has shown, the terminal point at the wrong side of the carriageway, and this is not in accordance to the criteria laid out in TD 42/95 'Geometric



Design of Major/ Minor Priority Junctions'. This in itself would mean that the actual visibility splay envelopes to allow for a suitable SSD are far shorter than currently drawn.

It should be noted that the latest speed data, shows that there are a significant number of vehicles travelling in a westerly direction, that travel in excess of the 85th percentiles but within the National Speed Limit, and this would require a sight stopping distance of 215 metres. There are also some recorded speeds, which have recorded during the day with a maximum speed close to 70 mph.

Currently, there is no additional speed or traffic data from the western approaches to be assessed, however, it is our assumption that based on what has been review to date, and this is expected to provide similar results to eastern approaches.

Consideration should be given to the extended history of more personal injury collisions occurring along this stretch of road, than at any other point. That this road is currently posted at a National Speed Limit with many vehicles recorded travelling at speeds approaching the National Speed Limit. That the potential of conflict occurring between the movements of large vehicles ingressing and egressing this site and opposing oncoming traffic due to inadequate Site Stopping Distances will be increased, especially considering that the proposed site entrance will increase daily movements significantly in comparison to what is happening at the moment.

It is our opinion that the current proposal for the site entrance is poorly placed, and in road safety terms and on the grounds of highway safety this application should be refused.



4. CONCLUSION AND RECOMMENDATIONS

The current level of traffic generation for the proposed development is expected to be low (see above). The de-minimis transport impacts would not be a reason for refusal of planning permission.

If the design of the access in the information currently reviewed is expected to remain unchanged; then it is our opinion that the proposed access, with the increase of traffic however slight is expected to ingress and egress the site during peak times, will be dangerous, unless suitable mitigation measures are put in place. It is our opinion that the SSD are inadequate, and that proposals for mitigations to improve the situation, which are provided, are inadequate.

The route from the A272 through Wisborough Green, along Kirdford Road and over Boxal Bridge will have to be proven to be suitable; this will require the following information:

- Further speed surveys are carried out up to 215 metres either side of the site entrance;
- The swept paths and movement of large construction and hydrocarbon extract plant;
- The loading and frequency of loading on to the Boxal Bridge;
- The assessment of noise and vibration along the route;
- The possible removal or damage of hedgerows and the effect on ecology, and
- The possible damage to tree roots or removal of limbs/ trees, including the effect on ecology.

It is our opinion that apart from the above, that a Pre and Post Construction condition survey are undertaken on all approach roads, bridges, trees, and hedgerows with any subsequent damage repaired and/or replaced.

It is our opinion that a detailed route management plan should be provided at the earliest opportunity in discussion with the parish council and the highways authority, especially concerning timings of deliveries and that this is needed during the planning application period, instead of a pre-commencement condition.

It is our opinion that if this development were granted planning permission, that any proposed route management plan is monitored and fully enforced. Any significant failure would result in suspension of all operations until further agreed measures are put in place to prevent any occurrences happening again.

It is our opinion that due to the concerns stated above regarding road safety, the design of the entrance is inadequate, and that further studies are required, including the possibility of relocating the entrance to another point along Kirdford Road. Further Road Safety Audits (RSA) would be warranted, with any actions or recommendations carried out and meeting the approval of the highways authority.

It is our opinion that the developer would be required to undertake forward visibility studies, which should be carried out in both approaches to the site, including the haul route, taking into account the horizontal and vertical topography, the gradient of the road, hedgerows, signage, telegraph poles, and structures. Once this is carried out, this again is reviewed by an independent road safety auditor, and that any recommendations and mitigation



measures are designed in advance of any planning permission being granted, and that this is carried out as a pre-commencement condition.

It is our opinion that Kirdford Road is not at a level that an additional 35 vehicles per day (during a 12-hour period) would be detrimental to capacity and traffic flows.

It is however, necessary for appropriate measures to be put in place to reduce the possibility of injury collisions near the site access, due to poor forward visibilities and sight stopping distances. Without such measures, the current location of the site access is in our opinion unsafe.

Therefore, it is our overall opinion that it is highly likely that the development will result in a material increase or material change in the character of the traffic safety in the vicinity of the site, and this is a material transport or highway consideration in the determination of the planning application.

It is our recommendation that this application should be refused on ground of highways safety.



APPENDIX 1

Traffic Data Analysis Spread Sheet

Thu 26 Time	September Total	2013 RunTot	Westbound Bicycle	Motor Cycle	Car / Van	Car / Van (T)	R2/ Bus	R3/ Bus	R4	A3	A4	A5	A6	A6 [2]	A7 [2]	Vmin	Mean	Vmax	>PSL 60	>PSL% 60	Vpp 85
0800	47	117	0	0	38	1	7	1	0	0	0	0	0	0	0	30.8	40.7	49.5	0	0	45.6
0900	53	173	0	0	47	0	6	0	0	0	0	0	0	0	0	24.8	39.3	53.9	0	0	44.7
1200	80	596	1	0	73	3	3	0	0	0	0	0	0	0	0	12.8	38.8	56	0	0	45.9
07-19	541	760	1	2	543	20	67	2	2	1	0	0	0	0	0	12.8	39.3	56	0	0	44.7
09-00	740	760	1	2	630	22	78	2	2	1	1	0	0	0	0	12.9	39.4	57	0	0	43
Fri 27 Time	September Total	2013 RunTot	Westbound Bicycle	Motor Cycle	Car / Van	Car / Van (T)	R2/ Bus	R3/ Bus	R4	A3	A4	A5	A6	A6 [2]	A7 [2]	Vmin	Mean	Vmax	>PSL 60	>PSL% 60	Vpp 85
0800	51	879	3	0	43	3	5	0	0	0	0	0	0	0	0	18.3	36.9	54.3	0	0	43.4
0900	61	940	0	0	50	4	7	0	0	0	0	0	0	0	0	24.7	37.2	48.3	0	0	43.6
1600	81	1371	1	0	63	10	6	0	0	1	0	0	0	0	0	21.5	37.6	51.1	0	0	42.7
1700	85	1456	0	0	72	5	7	0	0	1	0	0	0	0	0	22.5	39.5	61.8	1	1.2	44.7
07-19	751	1030	2	2	392	19	72	2	1	1	2	0	0	0	0	16.3	37.8	61.8	2	0.3	44.3
09-00	870	1030	2	2	607	20	82	2	1	1	2	0	0	0	0	16.3	37.8	61.8	2	0.3	44.3
Mon 30 Time	September Total	2013 RunTot	Westbound Bicycle	Motor Cycle	Car / Van	Car / Van (T)	R2/ Bus	R3/ Bus	R4	A3	A4	A5	A6	A6 [2]	A7 [2]	Vmin	Mean	Vmax	>PSL 60	>PSL% 60	Vpp 85
0700	44	2877	0	0	39	1	4	0	0	0	0	0	0	0	0	21	41.6	57.6	0	0	45.9
0800	56	2980	1	0	47	0	6	0	0	0	0	0	0	0	0	26.2	42.9	62.9	0	0	45.8
1600	76	3355	0	0	61	2	9	0	0	0	1	0	0	0	0	22.3	39.9	50.5	0	0	45
1700	80	3433	0	0	75	2	3	0	0	0	0	0	0	0	0	16.9	38.9	61.2	1	1.3	43.2
07-19	654	3577	4	4	585	13	70	3	0	0	0	0	0	0	0	13.4	39.3	62.6	3	0.5	45.2
09-00	763	3577	4	4	653	13	79	3	0	0	0	0	0	0	0	13.4	39.3	62.6	3	0.4	45.2
Tue 01 Time	October Total	2013 RunTot	Westbound Bicycle	Motor Cycle	Car / Van	Car / Van (T)	R2/ Bus	R3/ Bus	R4	A3	A4	A5	A6	A6 [2]	A7 [2]	Vmin	Mean	Vmax	>PSL 60	>PSL% 60	Vpp 85
0700	39	3640	0	0	36	1	2	0	0	0	0	0	0	0	0	20.9	39.9	51.9	0	0	45.4
0800	45	3685	0	0	38	0	7	0	0	0	0	0	0	0	0	31.2	40.3	56.9	0	0	46.8
1600	66	4096	0	0	58	0	7	1	0	0	0	0	0	0	0	21.1	40.8	56.8	0	0	46.1
1700	74	4170	0	0	66	3	5	0	0	0	0	0	0	0	0	34.1	40.2	56.1	0	0	42.5
07-19	625	4316	0	7	512	9	66	3	1	1	0	0	0	0	0	13.3	40.4	62.6	3	0.9	46.9
09-00	739	4316	0	7	617	9	74	4	1	1	0	0	0	0	0	13.3	40.4	62.6	3	0.4	46.9
Wed 02 Time	October Total	2013 RunTot	Westbound Bicycle	Motor Cycle	Car / Van	Car / Van (T)	R2/ Bus	R3/ Bus	R4	A3	A4	A5	A6	A6 [2]	A7 [2]	Vmin	Mean	Vmax	>PSL 60	>PSL% 60	Vpp 85
0700	40	4382	0	0	30	0	9	0	1	0	0	0	0	0	0	21.1	37.9	54.7	0	0	42.5
0800	48	4472	1	1	42	4	1	0	0	0	0	0	0	0	0	38.2	38.5	54	0	0	43.6
1600	74	4852	1	1	63	3	4	0	0	0	2	0	0	0	0	16.2	39.7	66.3	1	1.4	44.7
1700	82	4934	0	0	71	1	10	0	0	0	0	0	0	0	0	28.8	41.7	66.6	3	3.7	46.5
07-19	655	5084	7	8	560	12	63	4	1	0	0	0	0	0	0	13.6	39.4	66.6	4	0.6	44.7
09-00	778	5084	7	8	672	13	71	4	1	0	0	0	0	0	0	13.6	39.4	66.6	4	0.5	45
Total	Total	RunTot	Westbound Bicycle	Motor Cycle	Car / Van	Car / Van (T)	R2/ Bus	R3/ Bus	R4	A3	A4	A5	A6	A6 [2]	A7 [2]	Vmin	Mean	Vmax	>PSL 60	>PSL% 60	Vpp 85
--	5094	5094	50	35	4380	140	438	16	8	5	7	14	1	0	0	6.3	39.5	67.3	16	0.3	45.4

Mon - Fri	3910	100%	25	25	3300	127	385	15	5	3	5	10	1	0	0						
Av AM Peak Flow	53		0	0	45	2	5	0	0	0	0	0	0	0	0	38.84					44.46
Av PM Peak Flow	50		1	0	42	0	6	1	0	0	0	0	0	0	0	39.46					44.86
Av 12H,7-19	665		5	4	517	25	68	3	1	1	2	0	0	0	0	39.26					44.92
Av 24H,0-24	782		5	5	662	25	77	3	1	1	2	0	0	0	0	39.48					45.08
	100%		1%	1%	85%	3%	10%	0%	0%	0%	0%	0%	0%	0%	0%						

Proposed (Max)	35																				
New Total (12H) 2 way	1362						LGV/HGV (approx)	22													
% Difference	2.57%						New Total (12H) 2 way	172													
New Total (24H) 2 way	1571						% Difference	12.61%													
% Difference	2.23%						New Total (24H) 2 way	180													
							% Difference	11.99%													
AM Peak Flow	Av	Total	Split (W)	% (W)	Split (E)	% (E)															
	66	133	53	40%	80	60%															
PM Peak Flow	51	102	50	49%	52	51%															
12H,7-19	-	1327	665	50%	661	50%															
24H,0-24	-	1936	782	51%	754	49%															

Thu 26 Time	September Total	2013 RunTot	Eastbound Bicycle	Motor Cycle	Car / Van	Car / Van (T)	R2/ Bus	R3/ Bus	R4	A3	A4	A5	A6	A6 [2]	A7 [2]	Vmin	Mean	Vmax	>PSL 60	>PSL% 60	Vpp 85
0800	86	175	0	0	75	0	0	0	0	0	0	0	0	0	0	36.9	40.8	53.8	0	0	45.4
0900	59	234	0	1	47	0	10	1	0	0	0	0	0	0	0	11.7	38.9	49.8	0	0	45.4
1200	69	836	0	0	62	3	4	0	0	0	0	0	0	0	0	20.3	39.4	52	0	0	46.1
07-19	642	746	0	2	545	17	72	2	0	1	0	0	0	0	0	9.2	39.3	58	0	0	45.2
09-00	746	746	0	2	627	19	80	4	0	1	0	0	0	0	0	9.2	39.2	61.5	1	0.1	45.2
Fri 27 Time	September Total	2013 RunTot	Eastbound Bicycle	Motor Cycle	Car / Van	Car / Van (T)	R2/ Bus	R3/ Bus	R4	A3	A4	A5	A6	A6 [2]	A7 [2]	Vmin	Mean	Vmax	>PSL 60	>PSL% 60	Vpp 85
0800	84	918	0	0	70	5	0	0	0	0	0	0	0	0	0	15	40.4	53.7	0	0	45.9
0900	66	982	0	1	58	2	3	2	0	0	0	0	0	0	0	26.1	38.1	53.8	0	0	42.5
1600	62	1381	0	1	52	2	7	0	0	0	0	0	0	0	0	14.2	38.7	50.1	0	0	45.2
1700	50	1431	0	1	44	3	2	0	0	0	0	0	0	0	0	26.9	40.2	52.7	0	0	47
07-19	781	1358	0	2	699	33	89	3	1	1	0	0	0	0	0	6.3	39.4	65.9	3	0.4	45.2
09-00	861	1358	0	2	802	33	75	3	1	1	2	0	0	0	0	6.3	39.4	65.9	3	0.4	45.2
Mon 30 Time	September Total	2013 RunTot	Eastbound Bicycle	Motor Cycle	Car / Van	Car / Van (T)	R2/ Bus	R3/ Bus	R4	A3	A4	A5	A6								

16227		LOXWOOD & WISBOROUGH GREEN				Site No: 16227002		Location		Site 2, Kirdford Road, Wisborough Green			
Mon 25-Feb-13 to Sun 03-Mar-13		Channel: Eastbound											
TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	MOTOR-CYCLES%	CARS	CARS %	LGV	LGV %	HGV	HGV %	BUS	BUS %		
Mon 25-Feb-13													
08:00	68	1	1.5	58	85.3	6	8.8	3	4.4	0	0.0		
16:00	50	1	2.0	37	74.0	9	18.0	2	4.0	1	2.0		
12H,7-19	538	9	1.7	439	81.6	80	14.9	8	1.5	2	0.4		
24H,0-24	616	11	1.8	504	81.8	90	14.6	9	1.5	2	0.3		
Tue 26-Feb-13													
08:00	77	1	1.3	66	85.7	9	11.7	1	1.3	0	0.0		
16:00	44	0	0.0	32	72.7	11	25.0	0	0.0	1	2.3		
12H,7-19	575	4	0.7	469	81.6	93	16.2	8	1.4	1	0.2		
24H,0-24	652	6	0.9	536	82.2	101	15.5	8	1.2	1	0.2		
Wed 27-Feb-13													
08:00	70	0	0.0	62	88.6	7	10.0	1	1.4	0	0.0		
16:00	56	0	0.0	47	83.9	9	16.1	0	0.0	0	0.0		
12H,7-19	558	5	0.9	456	81.7	88	15.8	9	1.6	0	0.0		
24H,0-24	634	7	1.1	522	82.3	96	15.1	9	1.4	0	0.0		
Thu 28-Feb-13													
08:00	79	0	0.0	67	84.8	11	13.9	1	1.3	0	0.0		
16:00	54	2	3.7	44	81.5	7	13.0	0	0.0	1	1.9		
12H,7-19	610	13	2.1	501	82.1	79	13.0	16	2.6	1	0.2		
24H,0-24	704	15	2.1	580	82.4	91	12.9	17	2.4	1	0.1		
Fri 01-Mar-13													
08:00	67	2	3.0	55	82.1	8	11.9	2	3.0	0	0.0		
16:00	61	0	0.0	53	86.9	7	11.5	1	1.6	0	0.0		
12H,7-19	584	5	0.9	480	82.2	85	14.6	13	2.2	1	0.2		
24H,0-24	681	6	0.9	560	82.2	99	14.5	15	2.2	1	0.2		
Av AM Peak Flow (0800-0900)	72	1		62		8		2		0			
Av PM Peak Flow (1600-1700)	53	1		43		9		1		1			
Av 12H,7-19	573	7	1.25	469	81.84	85	14.86	11	1.87	1	0.17		
Av 24H,0-24	657	9	1.36	540	82.20	95	14.54	12	1.74	1	0.15		

16227		LOXWOOD & WISBOROUGH GREEN				Site No: 16227002		Location		Site 2, Kirdford Road, Wisborough Green			
Mon 25-Feb-13 to Sun 03-Mar-13		Channel: Westbound											
TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	MOTOR-CYCLES%	CARS	CARS %	LGV	LGV %	HGV	HGV %	BUS	BUS %		
Mon 25-Feb-13													
09:00	51	0	0.0	46	90.2	4	7.8	1	2.0	0	0.0		
17:00	74	0	0.0	67	90.5	5	6.8	2	2.7	0	0.0		
12H,7-19	581	3	0.5	520	89.5	33	5.7	25	4.3	0	0.0		
24H,0-24	669	5	0.6	596	89.1	41	6.1	27	4.0	0	0.0		
Tue 26-Feb-13													
09:00	45	0	0.0	39	86.7	4	8.9	2	4.4	0	0.0		
17:00	79	0	0.0	75	94.9	1	1.3	3	3.8	0	0.0		
12H,7-19	626	3	0.5	564	90.1	29	4.6	30	4.8	0	0.0		
24H,0-24	735	3	0.4	666	90.6	36	4.9	30	4.1	0	0.0		
Wed 27-Feb-13													
09:00	49	0	0.0	41	83.7	6	12.2	2	4.1	0	0.0		
17:00	67	0	0.0	62	92.5	5	7.5	0	0.0	0	0.0		
12H,7-19	614	3	0.5	546	88.9	43	7.0	22	3.6	0	0.0		
24H,0-24	709	5	0.7	632	89.1	49	6.9	23	3.2	0	0.0		
Thu 28-Feb-13													
09:00	46	0	0.0	45	97.8	1	2.2	0	0.0	0	0.0		
17:00	86	0	0.0	79	91.9	5	5.8	2	2.3	0	0.0		
12H,7-19	651	3	0.8	564	86.6	48	7.4	34	5.2	0	0.0		
24H,0-24	771	5	0.7	670	86.9	56	7.3	40	5.2	0	0.0		
Fri 01-Mar-13													
09:00	52	0	0.0	49	94.2	2	3.9	1	1.9	0	0.0		
17:00	90	0	0.0	78	86.7	6	6.7	6	6.7	0	0.0		
12H,7-19	712	4	0.6	644	90.5	33	4.6	30	4.2	1	0.1		
24H,0-24	811	5	0.6	735	90.6	39	4.8	31	3.8	1	0.1		
Av AM Peak Flow (0900-1000)	49	0		44		3		1		0			
Av PM Peak Flow (1700-1800)	79	0		72		4		3		0			
Av 12H,7-19	637	4	0.56	568	89.12	37	5.86	28	4.42	0.20	0.028		
Av 24H,0-24	739	5	0.63	660	89.27	44	6.00	30	4.07	0.20	0.024		

Proposed (Max)	35
New Total (12H) 2 way	1245
% Difference	2.81%
New Total (24H) 2 way	1431
% Difference	2.45%

LGV/HGV (approx)	22
New Total (12H) 2 way	184
% Difference	11.93%
New Total (24H) 2 way	205
% Difference	10.75%



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