# Road Safety Risk Assessment Panorama Road, 

 Swanage Dorset$18^{\text {th }}$ November 2014

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## 1 INTRODUCTION AND SCOPE OF REPORT

1.1 David A Graham Associates has been commissioned by Swanage Town Council to provide a Road Safety Risk Assessment Report for Panorama Road, Swanage BH19 2QT which is in the Town Council's ownership. The primary reason for the request is as a result of the proposed drilling for gas at California Farm which has been granted planning permission and as a result will lead to more frequent and heavy goods traffic than currently exists. This has led to local residents raising their concerns about the suitability of the road to accommodate such traffic which in turn has led Swanage Town Council to seek the advice of an independent Road Safety Engineering Consultancy to carry out a Road Safety Risk Assessment that comments on the suitability or otherwise of the road to accommodate the proposed increase in heavy goods vehicle (HGV) traffic. The basic considerations for the risk assessment as instructed by Swanage Town Council was as follows:-

- Suitability for use of the road by heavy goods vehicles and plant accessing California Quarry
- Pedestrian use including but not limited to access to the caravan park and Hoburne Caravan Site.
- Highlight any safety issues
- Recommend improvements such as signage, road markings and pedestrian access.
1.2 A further oral brief was given to the report team Author David Graham and his Associate Clive Ashby by Martin Ayres (Town Clerk) and Geoff Brookes (Operations Manager) at a meeting which took place at the Town Hall Swanage at 2.00pm on Thursday $25^{\text {th }}$ September 2014. This oral brief and the following email to D.A.G.A. from Martin Ayres introduced additional information for consideration by this report namely:-
- A Transport Assessment carried out by Richard DC Elliott BA (Hons), BSc (Hons), CEng, MIStructE, MICE of R Elliott Associates Limited on $30^{\text {th }}$ July 2013
- Numerous Planning Application documents which can be found on the following web link
http://countyplanning.dorsetforyou.com/ePlanningOPS/loadFullDetails.do?ap|l $\mathrm{d}=5117$
- An untitled and unscaled drawing of the proposed route along Panorama Road
- Notes of a meeting with the author of the Transport Assessment which also sets out some details about vehicle movements at different stages of the project
- The access agreement between Swanage Town Council and Sutte's Stone Quarries regarding the road
- Notes of a meeting with Sutile's Stone Quarries regarding the incident in which the articulated lorry slid doven the hill tast November.
- The Author vas also advised of CCTV video footage that will be sent to D.A.G.A. if considered to be of relevance*
* CCTV footage of vehicles and other road users negotiating the second bend on Panorama Road was attached to an email sent to the author on the $17^{\text {th }}$ November 2014 by Mr J. Daniels (a local resident). Having reviewed the footage the author is satisfied that the potential issues represented in this footage are already covered within the body of this report. The covering email sent by Mr Daniels also expresses his particular road safety concerns. For completeness, a copy of this email can be found at (Appendix G).
1.3 Planning Application reference: PLI1546113 (6/2013/0456) retates to proposals for Temporary planning permission for the construction of a wellsite, with associated portable cabins for the storage of equipment and for staff accommodation, the drilling of an exploratory borehole, undertaking of production tests and retaining the stite and wellhead valve assembly gear for evaluation of a conventional hydrocarbon reservoir.
1.4 This report has been prepared by David A Graham I Eng, FIHE, CMILT, MCIHT, MSoRSA, RegRSA (IHE) Managing Director, David A Graham Associates Limited (D.A.G.A.)
1.5 A site visit was made to Panorama Road by the Author and his associate Mr Ashby on Thursday $25^{\text {th }}$ September 2014. Photographs taken during this site visit can be found at (Appendix A).
1.6 Section 2 of the report provides an Executive Summary of the road safety and other issues identified within the body of the report; Section 3 describes the background and history of the proposals; Section 4 discusses existing site details of the road following a site visit by the report team on $25^{\text {th }}$ September 2014; Section 5 discusses the file note of the meeting of $25^{\text {th }}$ September 2013 regarding traftic management held at the Town Hall Swanage; Section 6 discusses the file note of the meeting of $20^{\text {th }}$ May 2014 held with Suttles at the Town Hall Swanage Section 7 comments on the highway safety implications of the planning consent as perceived from the online document records; Section 8 looks at the Personal Injury Collision records for Panorama Road; Section 9 discusses road safety improvements identified by the author and Section 10 describes the authors' career in Road Safety and Traffic Engineering.
1.7 Some reliance is placed on the information provided in the Transport Assessment and other documentation which relates to the Planning Application, as listed on the Dorset County Council website. Any observations on highway and traffic matters are made on the basis of a reasonable interpretation of the facts as they are presented.


## 2 EXEOUTME SUNMARY

2.1 Panorama Road between the first bend and the entrance to Califomia Quarry is not sutiable for two-way simultaneous HGV traffic in its existing layout.

22 If there is a likelihood of abnomal loads needing to access the site, particularty during set up and de commissioning then these will pose significant futher issues in their own right including the method by which they can negotiate the public highway en-route to Panorama Road. These factors will need to be established and put together in the form of sultable Travel Plan for such deliveries.
2.3 At the entrance to Califomia Quarry on the east side of Panorama Road visibility is restricted to the south on emerging from the quarry access road by hedging. As such, the hedge should be cut back and maintained on a regular basis.
2.4 Given the ambiguity of the current speed limit the notional 20 mph speed limit on Panorama Road should be formalised and accompanied by the appropriate road markings and upright traffic signs that comply with current regulations.
2.5 Parking on Panorama Road on the eastbound approach to the second bend adjacent to Plantation Close results in vehicles having to pass on the opposite side of the carriageway to negotiate the bend. As such, an appropriate length of waiting restrictions should be introduced on the north side of Panorama Road on the eastbound approach to the bend.
2.6 The inability of certain vehicles to gain traction in certain weather conditions on the steep gradient of Panorama Road after the second bend should now result in the Polished Stone Value (PSV) of the carriageway at this point to be established. If this is found to be inadequate then an appropriate length of High Friction Suffacing (HIFS) should be introduced.
2.7 Should it be necessary to close Panorama Road in the event of an abnormal load being required to access the site then such a closure would need to have a comprehensive publicity campaign.
2.8 Should an abnormal load be required to access the site then it would be necessary to enforce temporary parking restrictions on the agreed access route which will need to be timed appropriately following adequate advance notice to local schools, business and residential premises en-route.
2.9 Delivery Drivers should be made aware of a new compulsory 20 mph speed limit to be imposed along the whole of Panorama Road.
2.10 Following the incident on the $6^{\text {th }}$ November 2013 HGVs with automatic gearboxes should be restricted from deliveries to the site.
2.11 If other large (panticularly heavily laden) vehicles are going to have a problem negotiating the route up the gradient of Panorama Road in certain road and weather conditions then all haulage operations should be restricted to summer months when ice and rain is unlikely to be a problem for large HGVs negotiating the steep gradient of Panorama Road.
2.12 The route to and from California Quarry should include a number of traffic sign and road marking improvements (refer Chapter 9).
2.13 The need of some form of control of potentially opposing HGVs movements on the narrow section of Panorama Road between the second bend and the California Quarry entrance is essential (refer Chapter 9).
2.14 To prevent potential conflicts with school children and parents travelling to and from school or the swimming baths then all deliveries should be restricted outside of these time periods.
2.15 Given the undulating vertical profile of Panorama Road beiween the second bend and the entrance to California Quarry which includes a number of hill crests the ground clearance of low loaders should be checked against the vertical protile of Panorama Road before they are despatched to make deliveries.
2.16 To prevent pedestrians from walking in the carriageway after the first bend a new faotway should be constructed making use of either the nothern or southern verges of Panorama Road.
2.17 The integrity of the existing vehicle restraint system (VRS) on the northern side of Panorama Road beiween the two bends should be checked by an appropriately qualified engineer and if necessary improvements / replacements carried out.
2.18 All HGV deliveries to and from the site should be accompanied where appropriate by suitable number of banksmen.
3.1 Panorama Road, Swanage extends firsty southwards from ifs junction with Priests Road before extending eastwards and then sothwards again through wo right angle bends. It then continues up a $1: 10$ or steeper gradient towards the camping and caravan park on the west side and the woodland park on the east side. At the top of the hill on the east side there is an existing access to California Quary which is further accessed via a gravel track. The made up road continues a little further west around a bend before reaching a public footpath and a kurning area. On the first section of Panorama Road between Priests Road and the junction with Swanage Bay View Holiday Home Park the road is approximately 7.5 metres wide with a largely 2.00 metre footpath on its eastern side and a 2.00 metre with sections of 3.00 metre wide footpath on its western side.
3.2 This section is largely residential in nature with on street parking (some of which is partially on the footway suggesting a need to avoid passing large vehicles) and street lighting. it is notionally subject to a 20 mph speed limit given the road markings present at its junction with Priests Road. However, the legality of this speed limit is questionable given that Panorama Road is a private road and the markings provided are not accompanied by the appropriate upright traffic signs and do not comply with current regulations. After Bay View Holiday Home Park the footpath and the street lighting regime teminates on both sides of Panorama Road as it tums eastwards following the line of a hedge with a vehicle restraint system within it and a row of houses behind it known as Plantation Close before turning southwards up a steep hill.
3.3 This second bend effectively demarcates the residential area, with a caravan park on the west side and a woodland park and open countryside on the east side of the road as it rises towards Califomia Quarry entrance on the east side of the road at the top of the hill. If is worth noting that over the inclined section of the road from the second bend to the Quarry access the road narrows significantly to as litte as 3.2 metres with occasional passing bays provided. The vertical alignment of the hill also has a number of blind summiss where opposing trafic streams and / or NonMotorised Users (NMIU) could be partially masked from one another.

## EXISTING SITE DETAILS AND POTENTIAL ROAD SAFETY RISKS

4.1 A site visit was made to Panorama Road by the Author and his associate Mr Ashby on Thursday $25^{\text {th }}$ September 2014. Photographs taken during this site visit can be found at (Appendix A). The site visit made the following findings:-
4.2 The northern section of Panorama Road between Priests Road and Swanage Bay View Holiday Home Park was measured at 7.5 metres wide. There was on-street parking observed some of which included parking on the footway presumably to avoid potential for conflict with passing large vehicles. The width of the footway over this section of Panorama Road was measured on the east side to be generally 2 metres wide. The width of the footway on the west side of Panorama Road over this section varied between 1.6-3 metres, some of which was noted to be in a poor state of repair and consequently a potential trip hazard for pedestrians.
4.3 Visibility to the west along Priests Road at its junction with Panorama Road is restricted by stone walling (see pic 3 Appendix A).
4.4 Visibility for drivers turning right from Panorama Road at the first bend into the access road leading to Bay View Holiday Home Park is compromised severely by a high hedge (see pic 7 Appendix A).
4.5 The width of the carriageway of Panorama Road at the first bend adjacent to the access road leading to Bay View Holiday Home Park was measured at approximately 6.4 metres. This is not wide enough to accommodate two opposing HGVs and could lead to injudicious reversing, conflicts with other vehicles / passing pedestrians and head-on collisions.
4.6 Notwithstanding 4.5 above the carriageway width at the second bend where Panorama Road turns south up a steep hill is also of insufficient width to accommodate two opposing HGVs with the added hazard that an HGV travelling northwards down the hill could lose control when braking in the face of another HGV travelling east to south past Plantation Close. This would be of particular concern during inclement or freezing weather conditions.
4.7 There is no pedestrian footway between the first two bends on Panorama Road as it runs alongside Plantation Close. During the site visit a schoolchild and adult were observed to walk along this section of Panorama Road at the end of the school day which would appear to suggest that this route is used by some parents and school children (see pic right). If
 they were faced with oncoming or following HGV traffic they would have only limited defensible space available to them in the verge on the south side of Panorama Road which, particularly in inclement weather conditions is less than ideal.
4.8 It is understood that school childen use the caravan park swimming pool but the routes that they take to access this facility and times of the day are unknown to the repont team. This infomation should be detemined as there is the potential for school children to be in narrow patts of Panorama Road without the benem of a footway at the same time as passing HGVs which could lead to potentiat conticts.
4.9 There is a vehicle restrain system (VRS) on the outside of the second bend at the bottom of the hill which runs parallel to Plantation Close. It is unlikely to afford any significant protection to the properties at the bottom of the hill given the size and weight of any potentially errant vehicle and the momentum that such a vehicle, if out of control, could gain whilst travelling down the hill. It is also unlikely to completely restrain large vans, should they lose control, from somersaulting over the (VRS) due to the 90 degree approach down the steep gradient. A guide to the classification of various types of goods vehicles can be found at (Appendix C).
4.10 Notwithstanding 4.9 above there is a single issue that has been brought to the attention of the report team whereby an articulated HGV failed to negotiate the steep gradient of Panorama Road past the second bend and had to be recovered by a futher vehicle to tow it up the steep gradient to the quarry site. It is further understood that the automatic gearbox of the vehicle in question played a part in its failure to negotiate the steep gradient although it is likely that the condition of the road surface may also have had some bearing in this incident occurring.
4.11 Over the length of Panorama Road between the second bend and the California Quarry access there are four passing places on the steep gradient. It is questionable whether these would be sufficient to accommodate a large HGV wishing to allow another HGV to pass which could lead to injudicious reversing and potential conticts.
4.12 There are approximately 9 pedestrian access points onto the carriageway of Panorama Road between the second bend at the bottom of the steep gradient and the access to California Quarry, some of which are public rights of way. Some of these emanate from the caravan park and some from the open countryside. An increase in HGV traffic on Panorama Road could lead to potential conflicts with pedestrians emanating fram these accesses.
4.13 Notwithstanding 4.11 above the width of Panorama Road between the second bend at the bottom of the steep gradient and the access to California Quarry varies in width from 3.2 to 4.7 metres which is insufficient for two way traffic and could lead to injudicious reversing and potential conflicts with pedestrians (refer 4.12 above). The passing places as referred to in 4.11 above measure, approximately 6.1 to 6.5 metres in width.
4.14 The exact gradient of the section of Panorama Road between the second bend at the bottom of the steep gradient and the access to Califoria Quarry varies although it is likely to be at least $10 \%$ if nat greater on some sections which could be difficult for large heavily laden HGVs to negotiate.
4.15 It is not clear to the author whether any abnormal loads (> 40 Tonnes) will require use of the route, particularly during the setup and closing down of operations at California Quarry. If there is a likelihood of abnormal loads then these will pose significant further issues in their own right including the method by which they can negotiate the public highway en-route to Panorama Road.
4.16 At the California Quarry entrance visibility is restricted to the left on emerging from the Quarry access road by hedging.
4.17 Panorama Road from its junction with Priests Road appears to be notionally subject to a 20 mph speed limit given the road markings present at its junction with Priests Road. However, the legality of this speed limit is questionable given that Panorama Road is a private road and the markings provided are not accompanied by the appropriate upright traffic signs and do not comply with current regulations.
4.18 There appears to have already been an adverse effect on the integrity of the carriageway of Priests Road at its junction with Panorama Road (see pic right) probably due to large turning HGVs. This is likely only to get worse with the increase in HGV traffic and could lead to further deterioration of the carriageway and the creation of a hazard to passing vehicles particularly riders of two wheeled vehicles.
4.19 Parking on Panorama Road on the eastbound approach to second bend adjacent to Plantation Close results in vehicles having to pass on the opposite side of the carriageway to negotiate the bend (see pic right). This has the potential for head-on conflicts to occur with vehicles travelling north to west around the bend in the opposite
 direction.
4.20 During the site visit agricultural vehicles were observed travelling down Panorama Road between the entrance to California Quarry and the second bend adjacent to Plantation Close (see pic right). These could pose a further hazard if a large HGV is travelling in the opposite direction and could also lead to further conflicts with passing pedestrians.

4.21 The Polished Stone Value (PSV) of the carriageway of Panorama Road between the entrance to California Quarry and the second bend adjacent to Plantation Close is unknown. Whilst it may be adequate it is significant that the HGV referred to in 4.10 above was unable to get traction on the carriageway at this point where the slip resistance of the carriageway could have been a factor, particularly in inclement or freezing weather conditions.
4.22 Within the hedgerow on the eastern side of the carriageway of Panorama Road north of the entrance to Califormia Quary a Comish-type stone hedge was observed on a long downhill gradient section. In the event of an errant HGV losing control this would leave litite possibility for escape from the narrow carriageway at this point and could exacerbate potential conflicis, particularly in freezing and inclement weather conditions.

5 COMMENT ON THE FILE NOTE OF THE MEETING ON 25/09/13 RE: TRAFFIC MANAGEMENT
5.1 On the $25^{\text {th }}$ September 2013 a meeting took place at Swanage Town Council to discuss traffic routing, traffic management and timing in respect of a planning application to drill an exploratory borehole at California Quarries, Swanage. The meeting was attended by the following parties:-

Dr M Ayres, Town Clerk, Swanage Town Council Ms A Patrick, Councillor, Swanage Town Council Mr W Trite, Councillor, Swanage Town Council Mr R Elliott, R Elliott Associates Ltd
5.2 A copy of the minutes of this meeting was forwarded to me and can be found at (Appendix D). Having now had the opportunity to review these minutes I would make the following observations:-
5.3 It is not clear to the author what the implications would be of additional traffic movements if the site were to become permanent. Whilst it is understood that the planning permission is for exploratory investigations to determine the presence of oil should these be successful then the extraction of the oil would have significant highway implications.
5.4 Fully laden HGVs could struggle to negotiate the steep gradient of Panorama Road, particularly in inclement or freezing weather conditions.
5.5 During the start-up and closing of exploratory works Rig movements may be required on abnormal load HGVs. In this instance it would be necessary to implement a road closure during traffic movements along Panorama Road which would effectively restrict access to residents, pedestrians, cyclists and dog walkers etc.
5.6 Notwithstanding 5.5 above during any operation involving an abnormal load enroute to and from Panorama Road there would be the potential for conflicts to occur along the agreed access route if not properly managed.
5.7 The file note states the 20 mph speed limit on Panorama Road is advisory and that this will be included on driver advice cards but if it were on a public highway it would be mandatory.

## 6 COMIMENT ON THE FILE NOTE OF THE MEETING ON 20/05/14 RE: SUTTLES

6.1 On Tuesday $20^{\text {th }}$ May 2014 a meeting took place at Swanage Town Council to discuss Suttles current delivery operations along Panorama Road and to discuss the incident that took place on $6^{\text {th }}$ November 2013 involving a fully laden HGV carrying Indian Sandstone that became stuck and could not negotiate the steep gradient of Panorama Road to the California Quarry site. The meeting was attended by the following parties:-

Martin Ayres, Town Clerk
Geoff Brookes, Operations Manager
Niki Clark, Management Support Officer
Chris Suttle, Chairman, Suttle Group
Nick Crocker, Quarry Manager, California Farm Quarry
Simon Clabburn, Director of Quarrying, Suitles (which includes Company Health \& Safety Policy and Risk Assessment)
6.2 A copy of the minutes of this meeting was forwarded to the author and can be found at (Appendix E). Having now had the opportunity to review these minutes I would make the following observations:-
6.3 Following the incident on the $6^{\text {th }}$ November 2013 HGVs with automatic gearboxes should be restricted from deliveries to the site if this failure to gain road surface traction in inclement weather conditions and on a steep gradient is characteristic of these types of vehicles.
6.4 Given the circumstances of the incident it would be advisable for large HGVs to have an agreed holding place (lay-by) if the driver was required to phone ahead to advise of an imminent delivery that required help.
6.5 Notwithstanding 6.4 above if larger HGVs are to be used in all road and weather conditions then it may be advisable to conduct a carriageway inspection of Panorama Road including ice-monitoring.
6.6 The author agrees that the route would benefit from the introduction of a number of traffic signs and road markings (refer Chapter 9).
6.7 Whilst the need of some form of control of potentially opposing HGVs movements on the narrow section of Panorama Road between the second bend and the California Quarry entrance is appreciated, the use of temporary traffic signals could be compromised by the difficulty in calculating the amount of southbound (uphill) 'green time' that would be required to allow a large fully laden HGV to pass.

7 COMMENTS ON THE HIGHWAY SAFETY IMPLICATIONS OF THE PLANNING APPLICATION DOCUMENTS (PURBECK DC 6/2013/0456)
7.1 In order to better understand the highway implications of the planning consent as referred in (Purbeck DC 6/2013/0456) I have perused the online documentation where it would appear that there are two main outstanding highway implications of the consent. These are as follows:-
7.2 The time limitations for deliveries to California Quarry along Panorama Road in the conditions of approval do not specify that they should not operate during the start and end of the school day. During the site visit conducted by the report team on $25^{\text {th }}$ September 2014 a school child and her parent were observed on Panorama Road (refer 4.7 above). It is also understood that school children make use of the swimming pool at the holiday home park (refer 4.8 above). Based on this evidence it would appear that the planning consent as it stands could allow the potential for conflicts to occur between school children travelling to and from local schools from Panorama Road or school children travelling to and from local schools to the swimming pool at the holiday home park.
7.3 It is noted that some of the proposed delivery vehicles to and from the site of California Quarry on Panorama Road will be 'Low loaders'. Given the vertical profile of Panorama Road as identified during the site visit on the $25^{\text {th }}$ September 2014, particularly on the section between the second bend and the entrance to California Quarry, there could be the potential for grounding of such vehicles at hill crests along this section of the route which could lead to such a vehicle becoming stranded. Should this occur then its recovery could lead to damage to the carriageway and the potential creation of a hazard to passing vehicles, and pedestrians and in particular, riders of two wheeled vehicles.
7.4 The Grant of Planning Permission document dated $4^{\text {th }}$ December 2013 can be found at (Appendix F).

## PERSONA MUURY COLISION ANAYESB

8.1 Detailed personal injury collision records have not been obtained from Dorsei County Council for Panorama Road. However, the author has been able to check collision records held on 'Crashmap', where, up unta the end of 2013 no personal injury collisions had been recorded on Panorama Road. It should be noted however that as a private road Panorama Road may have had personal injury collisions or damage onfy collisions that have not been reported to the Police.

9 SUGGESTED ROAD SAFETY RISK IMPROVEMENTS FOR PROPOSED ROUTE FOR HGVS ALONG PANORAMA ROAD
9.1 There are a number of potential road safety issues / risks identified in Sections 4, 5, 6 and 7 above with respect to the proposed access route for HGVs along Panorama Road to and from California Quarry. These potential issues / risks and some suggested road safety improvements are listed below:-
9.2 Panorama Road between the first bend and the entrance to California Quarry is not suitable for two-way simultaneous HGV traffic in its existing layout. A minimum carriageway width of 5.5 metres should be provided for two way traffic (greater at bends) where possible and where not possible traffic control should be introduced (see 9.15 below).
9.3 If there is a likelihood of abnormal loads needing to access the site, particularly during set up and de commissioning then these will pose significant further issues in their own right including the method by which they can negotiate the public highway en-route to Panorama Road. These factors will need to be established and put together in the form of suitable Travel Plan for such deliveries.
9.4 At the entrance to California Quarry on the east side of Panorama Road visibility is restricted to the south on emerging from the quarry access road by hedging. Whilst it is appreciated that traffic movements from this direction will be limited as this is a no through road it was noted during the site visit that the route is also used by dog walkers, joggers, cyclists and farm vehicles on what appears to be a regular basis. As such, the hedge should be cut back and maintained on a regular basis.
9.5 Given the ambiguity of the current speed limit the notional 20 mph speed limit on Panorama Road should be formalised and accompanied by the appropriate road markings and upright traffic signs that comply with current regulations.
9.6 Parking on Panorama Road on the eastbound approach to the second bend adjacent to Plantation Close results in vehicles having to pass on the opposite side of the carriageway to negotiate the bend (see 4.19 above). This has the potential for head-on conflicts to occur with vehicles travelling north to west around the bend in the opposite direction. As such, an appropriate length of waiting restrictions should be introduced on the north side of Panorama Road on the eastbound approach to the bend.
9.7 The inability of certain vehicles to gain traction in certain weather conditions on the steep gradient of Panorama Road after the second bend should now result in the Polished Stone Value (PSV) of the carriageway at this point to be established. If this found to be inadequate, (a PSV greater than 65 is recommended at this location) then an appropriate length of High Friction Surfacing (HFS) should be introduced.
9.8 Should it be necessary to close Panorama Road in the event of an abnormal load being required to access the site then such a closure would need to have a
comprehensive publicity compaign as it would be likely to cause significant disruption to the local community, shools and Bay View Holiday Home Park. If would also be necessary to give sufficient advance notice of such an operation and when implemented it would require the manned operation of road closures and footway accesses along the entife route to California Quarry.
9.9 Nowithstanding 9.8 above should an abnomal load be required to access the site then it would be necessary to enforce temporary parking restrictions on the agreed access route which will need to be timed appropriately following adequate advance notice to local schools, business and residential premises en-rouke.
9.10 Notwithstanding 9.5 above it is felt that delivery Drivers should have a compulsory speed limit imposed which would be particularly important for Drivers leaving the ste and travelting down the steep gradient of Panorama Road. The actual current speed limit as it stands on the steep gradient section of Panorama Road is not clear but is likely to be interpreted as derestricted. As such, a mandatory 20 mph speed limit should be introduced.
9.11 Following the incident on the $6^{\text {in }}$ November 2013 HGVs with automatic gearboxes should be restricted from deliveries to the site if this failure to gain road surface traction in inclement weather conditions and on a steep gradient is characteristic of these types of vehicles.
9.12 Notwithstanding 9.11 above if other large (particularly heavily laden) vehicles are going to have a problem negotiating the route up the gradient of Panorama Road in certain road and weather conditions then it should be rescheduled to a more appropriate time or arrive in smaller delivery vehicles that can negotiate the steep gradient of Panorama Road in all road and weather conditions without incident. Alternatively, all haulage operations should be restricted to summer months when ice and rain is unlikely to be a problem for large HGVs negotiating the steep gradient of Panorama Road.
9.13 The route to and from California Quarry should include a number of traffic sign improvements to include gradient signs if appropriate (greater than $10 \%$ refer Traffic Signs Manual Chapter 4), sharp bend signs on both approaches to both bends, Keep in Low gear signs on the northbound approach to the second bend, 'Pedestrians in carriageway' warning signs at appropriate points along the route, signing for pedestrians emerging from the various footpaths onto Panorama Road to be alert for vehicles, 'Chevron' signs on the apex's to both bends visible from both approaches and the formalisation of a 20 mph speed limit for Panorama Road in the form of the appropriate upright traffic signs and road markings (refer Traffic Signs Regulations and General Directions 2002 and Chapter 5 of The Traffic Signs Manual 2003).
9.14 The need of some form of control of potentially opposing HGVs movements on the narrow section of Panorama Road between the second bend and the California Quarry entrance is essential. Whilst the use of temporary traffic signals would appear to be one solution these could be compromised by the difficulty in
calculating the amount of southbound (uphill) 'green time' that would be recuited to allow a large fully laden HGV to pass. Nonetheless an attemative method shon of widening the entre route or providing a significant number of additional passing places seems unfeasible.
9.15 To prevent potential contliots with school children and parents bravelling to and from school or the swimming baths then all deliveries should be restricted outside of these time periods.
9.16 Given the undulating vertical prome of the steep gradient on Panorama Road between the second bend and the entrance to California Quarry which includes a number of hill crests the ground clearance of low loaders should be checked against the vertical profile of Panorama Road before they are despatched to make deliveries.
9.17 To prevent pedestrians from walking in the carriageway after the first bend a new footway should be constructed making use of either the northern or southern verge of Panorama Road to connect with an existing pedestrian route at the apex of the second bend. Any new pedestrian crossing point provided as part of these works should ensure that adequate intervisibility is maintained for both drivers and pedestrians.
9.18 The integrity of the existing vehicle restraint system (VRS) an the northern side of Panorama Road between the two bends should be checked by an appropriately qualified engineer and if necessary improvements / replacements carried out.
9.19 All HGV deliveries to and from the site should be accompanied where appropriate by suitable number of banksmen.
9.20 The Author has considered the potential for the introduction of an arrester bed oft the steep gradient of the northbound section of Panorama Road towards the second bend. However, it is recommended that the suitabitity and practicality of such as device in this location is the subject of a further report from a suitably qualitied Highway Design Engineer, (refer TA 57/87 of The Design Manual for Roads and Bridges (DMRB)).

## ABCUT THE AUTHOR

David is a motivated and focussed professional engineer who established his own consultancy business David A Graham Associates (DAGA) Lid in February 2006 following a long career working for Local Government and Private Consultancies. DAGA specialises in Road Safety and Traffic Engineering. Since 2006 DAGA has established itself as one of the leading independent providers of Road Safety Audit in the UK enjoying an enviable reputation. David has himself conducted more than 700 road safety audits and assessments.

During the 30 years that David has worked in the industry he has had the chance to absorb many changes and developments in Traffic and Road Safety Engineering gaining substantial national and international experience. He has acted as an Expert Witness in a number of Highway related cases. He has written and presented many papers at IHE functions, Aston University, City of Edinburgh Museum, Celtic Manor Wales etc. In 2013 David wrote a Road Safety Plan Synopsis for the Government of Mauritius. Having managed Home Zone development for Bristol City Council from 2002-2005 gaining 2 front page cover features in Surveyor magazine in 2006 he wrote an IHE CPD approved 1 day course entitled 'A Practitioners Guide to Home Zones' which was well received by clients in Bristol, Birmingham and London. On the broader subject of traffic and road safety engineering David also wrote and edited a six chapter course for Bath Highways Open Tech entitied 'Sustainable Transport Initiatives' covering the new developments arising from the Government white paper 'A New Deal for Transport'

He also tries to give something back to the industry and has been both a Mentor and Reviewer for IHE for sorne years for candidates looking to achieve I Eng registration. In summary David is an experienced road safety and traffic engineer. He is a Chartered Engineer and holds a number of Professional Memberships (see below) and regularly provides road safety engineering services to local authorities, private consultancies and private individuals.

## Professional Memberships:

a. Incorporated Engineer (IEng),
b. Fellow of the Institute of Highways Engineers (FIHE),
c. Chartered Member of The Institute of Logistics and Transport (CMILLT),
d. Nember of the Chartered Instutute of Highwas and Transportation (MCIHT)
e. Member of the Society of Road Safety Auditors (MSoRSA)
f. Registered Road Satety Auditor (RegRSA(IHE: ))
g. Holder of a Highways Agency Approved Certificate of Competence in Road Safety Audit

APPENDIX A:
PHOTOGRAPHS


Pic 1: Panorama Road looking east along Priests Road


Pic 2: Priests Road looking south into Panorama Road


Pic 3: Panorama Road looking west along Priests Road


Pic 4: Panorama Road looking north towards Priests Road


Pic 5: Panorama Road looking north towards Priests Road


Pic 6: Panorama Road looking south towards the left hand bend at Swanage Bay View Holiday Home Park Access


Pic 8: Panorama Road looking west towards Swanage Bay View Holiday Home Park Access


Pic 9: Panorama Road looking east towards the bend to the right at the corner property in Plantation Close



Pic 13: Panorama Road looking south towards the bend to the left at the comer property in Plantation Close


Pic 14: Panorama Road looking south uphill past the bend to the right at the corner property in Plantation Close



Pic 16: Panorama Road looking north downhill towards the bend to the left at the corner property in Plantation Close







## APPENDIX B:

## AERIAL VIEW OF

 PANORAMA ROAD SWANAGE

## APPENDIX C:

HEAVY GOODS VEHICLE INFORMATION


The maximum width of an articulated HGV is 2.6 m (Refrigerated trailer / unit), 2.55 metres (other trailers / units), which excludes wing mirrors. The maximum length is 18.75 metres although showman's vehicles can be longer.

## APPENDIX D:

FILE NOTE OF THE MEETING ON 25/09/13
RE: TRAFFIC MANAGEMENT

# File Note on Meeting at Swanage Town Council, 

Attendees: Dr M Ayres, Town Clerk, Swanage Town Council Ms A Patrick, Councillor, Swanage Town Council Mr W Trite, Councillor, Swanage Town Council Mr R Elliott, R Elliott Associates Ltd

Venue: Swanage Town Council, The Town Hall, High Street, Swanage, Dorset, BH19 2NZ

Date: 25 September 2013

## Purpose of Meeting:

To discuss traffic routing, traffic management and timing in respect of a planning application to drill an exploratory borehole at California Quarries, Swanage.

Report on Meeting:

| ITEM | ACTION |
| :---: | :---: |
| RE explained that the routing for the site traffic had been fully assessed and took the same route as that used by existing traffic associated with California Quarries. The amount of traffic generated by the project varies according to the phase of the project. <br> There are different phases in the project:- <br> - Site Construction - Stone delivered using the existing traffic movements by Suttles. <br> Low loader with Excavator; <br> Material deliveries (Membranes, concrete and manhole rings), about 8 in niumber; <br> - Mobilisation of drilling rig - Worst case 7 days of deliveries, spaced to avoid congestion on roads and site; <br> - Drilling the borehole - Max 10 weeks drilling with 2 or 3 lorries per day after the initial setting up; <br> - De-mobilisation of the drilling rig - as for mobilisation; <br> - Testing - Initial set up of about 10 HGV, then $1 / 2$ per week; <br> - Suspension of the well prior to either reinstatement or submission of a further planning application no traffic. <br> RE noted that the scheme was practicable without significant disruption to residents because the delivery of stone to the site would utilise Suttles lorries that are currently empty when they come to California Quarry. By using them to deliver the stone, no extra traffic movements would be generated by the delivery of stone to the site. <br> Traffic Management: <br> The most critical phase for traffic would be during rig movements. Traffic management would be put in place to ensure that traffic along the route was controlled to avoid congestion and to maintain safety. |  |


| 3484 Highways Minutes of Meeting | 1 | R Elliott Assoicates Limited |
| :--- | :--- | :--- |


| ITEM | ACTION |
| :---: | :---: |
| Preliminary proposals include for a person on the junctions of.- <br> High Street Steer Road; <br> Steer Road/Wills Road; <br> Wills Road/Priests Road: <br> Priests Road/Panorama Road. | $R E$ infrastrata |
| During the delivery of the largest loads, a ban on parking along the access route would be necessary. AP asked that this be limited to specific times rather than a blanker ban for 7 days. | Infrastrata |
| The presence of schools in the area, whih children walking to and from school, and congestion caused by cars in the High Street when colleciting or dropping children off, required care in organising deliveries. | Infrastrata |
| Timing: |  |
| RE confimed that construction would be likely to stari in Jan 2014, provided consents and fromalites had been compleled. (This would avoid road closures before Christmas when British Gas are replacing infrastucture in Swanage) | Infrastratal <br> RE |
| Particular points to note: |  |
| MA confmed that Swanage Town Council have an advisory 20 mph speed limit in force on Panorama Road. RE said this would be included on driver advice cards. |  |
| WT and AP asked about communication with residents. RE confirmed that residents along the access route would have a leafiet drop informing them of the timescale eio. |  |
| MA asked for Swanage Town Council io be provided with a timeline of the works once the consent has been granted. |  |
| AF noted that Bay View Caravan Park has occasional deliveries of new caravans and they should be consulted to avoid confict between different delivery veluicles. |  |
| Bay View Caravan Park has a swimming pool that is extensively used by the local schools, primary and secondary. Liaison is required with the schools to avoid deliveries when school children are scheduied to cross the access rouie |  |

[^0]
## APPENDIX E:

FILE NOTE OF THE MEETING ON 20/05/14 WITH SUTTLES
蹋踇。

Re：Panorama Road，Swanage

## Attendees：

Martin Ayres，Town Clerk
Geoff Brookes，Operations Manager
Niki Clark，Management Support Officer
Chris Suttle，Chairman，Sutte Group
Nick Crocker，Quarry Manager，California Fam Quarry
Simon Clabbum，Director of Quarrying，Suttes（which includes Company Health \＆Safery Pollcy and Risk Assessment）

Mr Chris Suttle advised at the meeting that Suttes have been stone merchants in the area since 1939，buying and selling stone from around the UK as well as Purbeck Stone from their own quarries．

They do not import from China at present，however，there has been recent customer demand for Indian Sandstone which is $75 \%$ cheaper than Purbeck Stone and is received in containers at Southampton docks．Southampton then use a freight haulier to deliver the shipment to the quarry．

The demand is declining for this type of stone and atthough they do not intend to increase or continue with this type of import，they do not wish to lose the ability to do so either．There were only 2 shipments brought in last year and so far there are only 2 shipments due this year．

It was explained that this trade was at its height in the early to mid－2000＇s and it is not company policy to continue this range in future．It was pointed out that most of the Sandstone they bring in，and have brought in in the past into Southampton，goes directly to customers and does not come to California Quarry，but a small amount，i．e．currently two lorry loads per annum（a total of around 45 tonnes）come to Califomia Quarry to be transhipped to their customers who buy both Purbeck stone and Indian sandstone from them． The incident which occurred at the sharp bend in Panorama Road on $6^{\text {th }}$ November 2013 involving an articulated vehicle delivering a shipment of Indian Sandstone to the California Farm quarry site was discussed and a letter was provided by Simon Clabburn addressed to Nick Crocker from the haulage company confirming that the shipment was correctly stowed on the vehicle，however，the delivery was rumning late that day due to the exceptional weather conditions and a number of traffic incidents between Southampton and Bournemouth．This resulted in the vehicle arriving in the dark，on a road which had surface water and greasy conditions．
The vehicle had an automatic gearbox and could not engage in these conditions，making movement up the hill impossible and to go backwards would not have been the safest manoeuvre．The decision was taken by Suttes to assist the vehicle by towing it up the hill （four members of the quarry staff are trained in towing vehicles）and we were advised that this procedure was undertaken by a very experienced member of the team．It was considered to have been a straightforward towing operation．
The haulage company has confimed that this type of vehicle will not be used for any future deliveries to the site．

Simon Clabbum confirmed that the inciden was investigated by him at the time and the quary"s Health and Safety procedures for towing reviewed.
In tuture, if a heavily laden articulated lory is expected then they would be happy to arrange for the driver to call them when nearing Panorama Road and the quary could then provide a banks man on the bend accordingly.
Simon commented that they have never had such an incident happen previously and that if anyone has any concerns over quarry operations then he would be happy to meet and discuss these in person.
Further comments were nade/discussed regarding Planning Permissions and road use as follows:

- 6 HGV 's permitited per day - no limit on other vehicles
- Currently the quarry actually transports/utilises only circa $1.5 \%$ of their Permission
- It was advised that concerns were expressed by Suttles at the time of the application for Planning Permission for Plantation Close regarding building on or close to long established access roads to quarries
- They have made regular use of the road since they have been in situ - high-sided articulated lorries as well as flat-bed lorries
- There had also been regular use of road with similar vehicles previously by BP when they were also at the site
- The closure of the former tip/household recycling site was also discussed, the impact of which had seen a significant reduction in the usage of Panorama Road - these facilities had been open 7 days per week with local residents using cars/trailers to bring their waste along Panorama Road to the tip site, and HGV's being used on an almost daily basis to take this waste away for recycling/disposal

Discussion held as to what could be done to alleviate safety concems of local residents. Council Representatives and Suttes Representatives both agreed forward actions as follows:

- Joint Risk Assessment (Swanage Town Council/Suttles) to be underaken of road use to confirm/highlight any issues
- Swanage Town Council to look into signage - possibilities: sharp bend, low gear, 20 MPH
- Suttles agreed to look at sharing cost of the above jointly with Swanage Town Council
- Swanage Town Council to contact InfraStrata - bring concems to them, discuss measures to overcome residents' concerns, BP's previous traffic management scheme (temporary lights) when HGV's going up/down at same time, monitoring of wear \& tear, share of cost of any infrastructure improvements

We confimm that this is a true and accurate copy of our discussions held on Tuesday $20^{\text {th }}$ May 2014.

Signed:

## APPENDIX F: <br> GRANT OF PLANNING PERMISSION 04/12/13

## Dorset County Council

County Hall, Colliton Park
Dorchester
Dorset DT1 1XJ
Tel : 01305 or 01202251000
Minicom: 01305267933
We welcome calls via text Relay
Email: planning@)dorsetcc.gov.uk
DX: DX 8716 Dorchester
Web Site: wnu dose foryoucom

## TOWN \& COUNTRY PLANNING ACT 1990

TOWN \& COUNTRY PLANNING
(DEVELOPMENT MANAGEMENT
PROCEDURE) ORDER 2010

## GRANT OF PLANNING PERMISSION <br> LOCATION OF <br> DEVELOPMENT: <br> California Quarry, Panorama Road, Swanage, Dorset, BH1920S

SIGNED
Head of Planning
DATED: 4 December 2013
TO: Mr Paul Foster
Barton Willmore
St Andrews House
Si Andrews Road
Cambridge CB4 IWB

Please See Overleaf
Town \& Country Planning Act 1990
Town \& Country Plamning
(Development Management
Procedure) Order 2010

GRANT OP PLANNHNG PRRMHSSION
LOCATION OT DEVELOPMENT:

Califomia Quary, Panorama Road, Swanage, Dorset,
BH19 2QS
DESCRIPTION OF DEVELOPMENT:
Temporary planning permission for the construction of a wellsite, with associated portable cabins for the storage of equipment and for staff accommodation, the drilling of an
exploratory borehole undertaking of producion tests and retaing the site and wellhead valve assembly gear for evaluation of a conventional hydrocarbon reservoit.

In pursuance of their powers under the above mentioned Act the DORSET COUNTY COUNCIL being the Local Plaming Authorty, HEREBY GRANT PLANNING PERMISSION for the development described above in accordance with the details given in the application number above and subject to the following 20 conditions:-

## Time Limit-Implementation

I The development to which this permission relates must be begun no later than three years beginning with the date on which this permission is granted.

## Reason

This condition is required to be imposed by Section 91 of the Town and Country Planning Act 1990 (as amended).

Temporary Time Limit

2 Exploration and evaluation of hydrocarbons shall be for a limited period ending 3 years after the commencement of drilling operations, or by 30 September 2019, whichever is the sooner. By this date the site shall be cleared of all plant, equipment structures, debris and anything else used to support hydrocarbon development, and the site shall be restored to wildflower limestone grassland.

## Reason

The site is in a sensitive rural location, within the $A O N B$, and with nature conservation designations in close proximity, where development is to be strictly controlled. This scheme has only been supported based on the specific case put forward for exploration and appraisal of the mineral reserve, and to comply with Policies 67 and 68 (Lydrocarbons exploration and appraisal) of the Dorset Minerals and Waste Local Plan 1999.

Development in accordance with the details submited and the approved plans

3 Unless agreed in writing with the Mineral Planning Authority (MPA) the development hereby permitted shall not be carried out except in complete accordance with the details supplied within the application, including the Planning and Sustainability Statement, the Assessment of Transport \& Planning, Assessment of Environmental Noise Emissions prepared by ACIA and the submitted plans as specified below:

Site Location Plan 3484. P 01 March 2013
Site of Application 3484 P 02 March 2013
Existing Ground Plan 3484 P 03 March 2013
Proposed Site Layout - Construction 3484 P 04. March 2013
Proposed Site Layout - Drilling Mode 3484 P 05 March 2013
Proposed Site Layout - Lighting Layout 3484 P 06 March 2013
Proposed Site Layout - Testing Mode 3484 P 07 March 2013
Proposed Site Layout - Retention Mode 3484 P 08 March 2013
Proposed Public Access Plan 3484 P 09 March 2013

Sections - Existing Ste 3484 P 10 March 2013
Sections Drilling Mode 3484 P 11 March 2013
Sections - Site Retention Mode 3484 P 12 March 2013
Sections - Site Construction 3484 P 13 March 2013

Reason
For the avoidance of doubt and to control the scope and extent of the developmen in the interests of protecting the character and appearance of the surrounding landscape and to comply with Policy 6 (Relating to Applications Outside the Preferted Areas) of the Dorset Minerals Local Plan 1999.

Noise mitigation and limits
4 Noise mitigation measures and maximum predicted noise levels for each phase of operations shall be in accordance with the Assessment of Environmental Noise Emissions Report number $2648.01 /$ ifb dated 14 June 2013 undertaken by AClA .
The maximum night time noise levels (22:00-07:00) at the nearest noise sensitive property (Calfornia Barn) shall not exceed 38 dB LAeq, 5 min . The maximum daytime limit for any operations at the site shall be 50 dB LAeq. The measured at the nearest noise sensitive property (Calformia Barn).

## Reason

To protect the amenties of the surounding area, nearby residential properties and to comply with the intentions of Policy 6 (Relating to Applications Outside the Preferred Areas) of the Dorset Minerals Local Plan.

## Noise Monitoring

5 Prior to the commencement of development hereby approved, a sheme for monitoring moise levels arising from the site shall be submited in writigg and approved by the MPA. The scheme shall provide for:
(i) Attended measurements by a competent person at the nearest noise sensitive propery (Califomia Ban) and at Souherd Famhouse.
(ii) Details of equipment proposed to be used for monitoring.
(iii) Monitoring shall be undertaken when the main tems of plant and machinery are in operation during daytime operational hours on an occasion during the first week of the construction phase. Further montoring shall be undertaken for 24 his during the first week of the drilling phase.
(iv) The logging of all weather conditions, approximate wind speed and direction and both on site and off site events occurring during measurements including 'phased out' extraneous noise events.
(v) Monitoring results to be forwarded to the MPA within 2 days of measurement.

The scheme shall then be implemented in accordance with the approved details.
In the event that noise limits specified in condition 4 are exceeded, the activity which is the cause of the noise exceedence shall be suspended until appropriate mitigation measures are employed, unless otherwise agreed in writing by the MPA for safety or operational reasons. A further noise monitoring exercise shall be undertaken within two days of the recommencement.
of the activity to ensure compliance with condition 4.

Reason
To protect the amenties of the surounding area, nearby residential properies and to comply with the intentions of Policy 6 (Relating to Applications Outside the Prefered Areas) of the Dorset Minerals Local Plan 1999.

Noise - Plan Maintenance

6 All vehicles, plane and machinery operated within the site shall be maintained in accordance with the manufacturer's specification at all times, and shall be fitted with and use effective silencers.Blank

Reason
To protect the amenities of the surrounding area, nearby residential properties and to comply with the intentions of Policy 6 (Relating to Applications Outside the Preferted Areas) of the Dorset Minerals Local Plan 1999.

Noise - vehicle reversing warning
7 Prior to the commencement of operations details of the proposed arrangements for ensuring that reversing plant vehicles do not emit warning noise that would have an adverse impact on residential or rural amenity shall be submitted in writing and approved by the MPA. Once approved in writing by the MPA the arrangements shall be implemented and maintained throughout the life of the development.

## Reason

To protect the amenities of the surrounding area, nearby residential properties and to comply with the intentions of Policy 6 (Relating to Applications Outside the Preferred Areas) of the Dorser Minerals Local Plan 1999.

## Access and Highway Mitgation Measures

8 The access and highway mitigation measures as detalled in the Assessment of Transport and Traffic repor dated 30 July 2013 submitted with the application shall be complied with in full for the duration of the development unless otherwise approved in writing by the MPA.

Reason
In the interests of highway safety in accordance with Policy 6 (Relating to Applications Outside the Preferred Areas) and Policies 10 and 11 (Transport) of the Minerals and Waste Local Plan 1999.

Access

9 All vehicles leaving the site shall be in a condition such that they do not deposit mud or other debris on the Public Highway.

## Reason

In the interests of highway safety and to comply with the intentions of Policy 6 (Relating to Applications Outside the Prefered Areas) of the Minerals and Waste Local Plan 1999.

Limitation on Hous of Working
10 All construction activities, including the preparation of the ste for the production of hydrocarbons, any earthmoving, restoration works or the movement of HGV vehicles to and from the site, shall take place only withim the following hours:

0700-1730 Monday to Friday. 0700-1300 on Saturday and, at no time on Sundays, Bank or Public Holidays.
The assembly or dismanting of the drilling rig and its associated equipment, and the site preparation, construction and dismanting of the production testing equipment (but not their operation) shall take place only within the following hours:
0700-1900 Monday to Friday,
0700-1900 on Saturday and,
at no time on Sundays, Bank or Public Holidays.

## Reason

To protect the amenities of the surrounding area, nearby residential properties and to comply with the intentions of Policy 6 (Relating to Applications Outside the Preferred Arcas) of the Dorset Minerals Local Plan 1999.

Limitation of construction and drilling operations
II Construction and ditling operations shall only take place between the 1 September and 31 March unless otherwise approved by the MPA.

Reason
To reduce disturbance to the surounding area and to comply with the intentions of Policy 6 (Relating to Applications Outside the Prefered Areas) of the Dorse Minerals Local Plan 1999.

## Hydraulic Fracturing (Fracking)

12 No hydraulic fracturing (fracking) techniques shall be employed as part of this exploratory and appraisal well development

## Reason

To ensure the MPA secures the appropriate controls having regard to the environmental and amenity interests of the locality in accordance with Policies 6 and 69 of the adopted Dorset Minerals \& Waste Local Plan 1999 and Policies DM1, DM2, DM3, DM4, DM5 and HY2 of the Bournemouth, Dorset and Poole Minerals Strategy Pre-Submission Draft.

## Lighting

13 Unless otherwise approved in writing by the MPA, the lighting at the site shall be limited to that proposed in paragraphs $4.29-4.33$ and 4.50 in the planning and sustainability statement (dated July 2013) submited with the application and plan 6484 P06 dated March 2013

Reason
To minimise the impace of any lighting on the sumounding area and to comply with Policy 6 (Relating to Applications Outside the Prefered Areas) of the Dorser Minerals and Waste Local Plan 1999.

Site Contamment/pollution safeguards
14 Any facilities for the storage of oils, fuels or chemicals shall be sited on impervious bases and surrounded by impervious bund walls. The volume of the bunded compound should be at least equivalent to the capacity of the tank plus $10 \%$. If there is multiple tankage, the compound should be at least equivalent to the capacity of the largest tank, or the combined capacity of interconnected tanks, plus $10 \%$. All filling points, vents gauges and sight glasses must be located within the bund. The drainage system of the bund shall be sealed with no discharge to any watercourse, land or underground strata. Associated pipe work should be located above ground, where possible, and protected from accidental damage. All filling points and tank overflow pipe outlets should be detailed to discharge downwards into the bund.

## Reason

To prevent pollution of the water environment in accordance with Policy 6 (Relating to Applications Outside the Preferred Areas) of the Minerals and Waste Local Plan 1999.

Site contaimment/pollution safeguards
15 All plant, machinery and materials associated with the development shall, at all times, be kept within the bunded area of the site as identified on the approved plans.

Reason
To prevent pollution and to comply with the intentions of Policy 6 (Relating to Applications Outside the Prefered Areas) of the Minerals Local Plan 1999.

## Uncontrolled Releases

16 The MPA shall be notified as soon as is practical following any uncontrolled release of hydrocarbons or fluid which has the potential to cause pollution to the enviromment. The initial notification shall include a description of the measures being put in place by the operato to remediate any pollution present. Provision shall be made for the inspection of the site and affected area by representatives of the MPA as soon as is practicable. If subsequently required by the MPA the operator shall prepare and provide the MPA with a report detailing the following:

- A detailed description of the cause of the incident and associated factors contributing to the release.
- The mapping of the known extent of contamination.
- A description of the contaminants released and the quantities released.
- A review of the measures taken to remediate any pollution.
- A methodology for the on going monitoring of environmental affects.
- Procedures to be pur in place for the prevention of further potential release.

The report shall be agreed in writing by the MPA and be implemented as approved.

Reason
To protect groundwater from the risk of pollution and io comply with the intentions of Policy 6 (Relating to Applications Outide the Prefered Areas) of the Dorset Minerals and Waste Local Plan 1999.

Restoration

17 Within 6 montas of the date of this pemission a scheme for the restoration of the site, including timescales for the work to be undertaken shall be subminted in writing to the MPA. Once approved in writing the scheme shall be implemented in full in accordance with the approved details and in accordance with the following schedule:

- If no hydrocarbons are discovered as a result of the exploratory drilling, restoration works shall be completed within 6 months of the cessation of drilling operations.
- If after the evaluation and appraisal phase of the development it is concluded that the hydrocarbon reserves are uneconomic to exploit, restoration works shall be completed within 12 months of the cessation of the evaluation and appraisal operations.
- If no application for a production facility is received restoration shall be completed within 3 years of the commencement of exploratory driling operations or by 30 September 2019, whichever is the sooner.
- If an application for a production facility at the site is refused and no planning appeal is lodged restoration works shall be completed within 12 months of the date of refusal.


## Reason

To ensure that the site is adequately restored after the completion of work in accordance with Policy 67 (Exploration) and Policy 72 (Restoration) of the Dorset Minerals and Waste Local Plan 1999.

## Aftercare

18 Within 6 months of the date of this permission a scheme for aftercare of the site that promotes nature conservation through a restoration strategy shall be summited for the approval of the MPA. The scheme shall provide for a three year period of atercare following the restoration of the site, specifying the steps to be taken and the period during which they are to be taken, and who will be responsible for taking those steps. The scheme shall provide for any dramage measures and for an annual meeting between the applicants, MPA and any other body appointed by either party. Once approved in writing the scheme shall be implemented in full in accordance with the approved details.

## Reason

To ensure that the site is adequately restored after the completion of work in accordance with Policy 67 (Exploration) and Policy 72 (Restoration) of the Dorset Minerals and Waste Local Plan 1999.

## Construction Envirommental Management Plan (CEMP)

19 No development approved by this permission shall be commenced until a Construction Environmental Management Plan, incorporating pollution prevention measures, has been submitted to and approved by the Local Planning Authority. The plan shall subsequently
be implemented in acordance with the approved details and agreed timetable.
Reason
To prevent pollution of the water enviromment
Dust and NOx Mitigation Measures and Monitoring
During the construction drilling and restoration phases of the development the dust and air quality mititigation measures and air quality monitoring shall be undertaken in accordance with paragraph 6.2 of the Air Quality Assessment report dated 19 September (prepared by URS) submitted in support of the application.

Reason
To prevent air poltution and to comply with the intentions of Policy 6 (Relating to Applications Outside the Preferred Areas) of the Minerals Local Plan 1999. Statement of Positive Involvement
In accordance with paragraphs 186 and 187 of the NPPF the council, as local planning authority, takes a positive and proactive approach to development proposals focused on solutions. The council worked with the applicant/agent in a positive and proactive manner by; Providing a pre-application advice service updating the applicant/agent of any issues as they arose in the processing of the application, suggesting solutions to potential planning issues and providing the applicant with the opportunity to address issues so that a positive recommendation to grant permission could be given.

INFORMATIVE NOTES
Safeguards should be impiemented during the construction phase to minimise the risks of pollution from the development. Such safeguards should cover:

- the use of plan and machinery
- oils/chemicals and materials
-- the use and routing of heavy plant and vehicles
- the location and form of work and storage areas and compounds
-- the control and removal of spoil and wastes.
The applican should refer to the Environment Agency's Pollution Prevention Guidelines at: http://www.enviromment-agency.gov.uk/business/topics/pollution/39083.aspx.
The EA request that you provide them with the detail of the bentonite mat you intend to use so they can check it is suitable.

Environmental Permit
Onshore oil and gas exploratory activities will require environmental permits issued under the Enviromental Permiting Regulations and other permissions from the EA, depending on the methods used and the geology of the site. These environmental permits will ensure that there is no pollution of the local environment.

Draft guidance has been produced for oil and gas operators regarding the types of environmental permits that can be found at:
http://www.environment-agency.gov.uk/business/sectors/148556.aspx
All oil and gas exploration involving drilling a borehole or involving any kind of well stimulation will need a mining vaste permit. This will cover the management of extractive
wastes which may include drill cutings, spen drill muds and drill fluids, flowback fuids, waste gases and any wastes leh underground.

You are also likely to require a permit if large quantities of gas are to be flared and for groundwater activities* depending on the local hydrology.

* Groundwater activities are covered by schedule 22 of EPR 2.010. We expect the applicant to inform us of any activities that could involve the discharge of pollutants into groundwater (a "groundwater activity') and the nature of these polutants, so that we can decide whether the activity needs to have a permit. The EA have powers under regulation 60 of EPR 2010 to require such information.

If exploratory operations involve any kind of well stimulation that produces of or gas then it's highly likely the activities will require a permit for managing naturally occurring radioactive material (NORM) wastes, for example flow-back water, sediments and scales. This will include the reinjection of produced water.

## INFORMATIVE

This activity will require Pemiting under the Envirommental Permiting Regulations 2012. The Enviromment Agency is required to consider all forms of pollution when issuing an environmental Pemit. If a permit is issued for this ste, it will require the operator to take all appropriate measures to prevent pollution from the activity.

The EA recommend you go through the requirements of each potential application with them at the pre-application stage so that you can eliminate those permissions that don't apply and understand what information is required for those that do. This will save them and you time and money when the relevant applications are submitted. If the EA don't have the necessary information, they will either not accept the applications or will have to go back to you to request more information.

Before drilling a borehole you need to provide the EA with a notice of intention under section 199
of the Water Resources Act 1991 (as amended by the Water Act 2003) by completing form WR11.
You can obtain a copy of this form by calling us on 03708506506 or by contacting our local office.
The EA recommend that drilling should not begin until one month after notice is served. The only exception is in cases of emergency, which we believe is unlikely to apply to oil and gas exploratory operations. This time limit applies even when you have obtained all the other permissions from the EA and so the they recommend completing form WRII early on in the permitting process.

The EA will ask for a detailed Method Statement to accompany the WRII form giving infomation on:

- well drilling
- well casing
- storage of substances including fuel and chemicals
- your proposed Drilling Mud Management Plan

See section 225 of the EA technical gudance, IPPC S 102 Gasification Liquefaction and Refining Sector for detals of the gypes of measures they will be looking for to prevent fughive emissions to surace water or groundwater from your proposed oporations. 11 of 33.


If you're applying for permission to both drill and stimulate a borehole, you'll need to include infomation on the chemicals you propose to use in the well stimulation process in the Method Statement and form WRII. This will altow the EA to decide whether the proposed borehole construction, casing and completion are adequate to prevent unacceptable risks to the environment.

## NOTE TO APPLICANT

Further details including application documents and Planning Officers report with the reasons for the grant of consent, can be viewed at htip://countyplanning.dorseforyou.com/ePlanningOPS/loadFullDetails.do?aplid=5117

## NOTES

1. This permission does not carry any approval or consent which may be required under any enactment, bye-raw, order or regulation (eg., in relation to Building Regulations or the Diversion of Footpaths etc) other than Section 57 of the Town and Country Planning Ack. 1990.
2. If the applicant is aggrieved by the decision of the local planning authority to refuse permission or approval for the proposed development, or to grant permission or approval subject to conditions, he may appeal to the Secretary of State for the Environment in accordance witl Section 78 (I) of the Town and Country Planning Act, 1990 , within six months of receipt of this notice. (Appeals may be made on-line at the following url:
 use the online service, please contact the The Planning Inspectorate Customer Services Tean on 01173726372 for a paper form.

The Planning Inspectorate address is Department of the Environment, Temple Quay House, 2 The Square, Temple Quay, BRISTOL BSI GPN). The Secretary of State for the Enviromment has power to allow a longer period for the giving of a notice of appeal, but he will not normally be prepared to exercise this power unless there are special circumstances which excuse the delay in giving notice of appeal. The Secretary of State for the Environment need not consider an appeal if it seems to him that permission for the proposed development could not have been granted by the local planning authority, or could not have been so granted otherwise than subject to the conditions imposed by them, having regard to the statutory requirements, to the provisions of the Development Order and to any other direction given under the Order. Please note, only the applicant possesses the right of appeal.
3. If permission to develop land is refused or granted subject to conditions, whether by the local planning authority or by the Secretary of State for the Environment, and the owner of the land claims that the land has become incapable of reasonably beneficial use in its existing state and cannot be rendered capable of reasonably beneficial use by the carrying out of any development which has been or would be permitted, he may serve on the county district in which the land is situated, a purchase notice requiring that council to purchase his interest in the land in accordance with the provisions of Part VI of the Town and Country Planning Act, 1990.
4. In cerain circumstances, a clam may be made aganst the local planning authority for compensation where pemission is refused or granted subject to conditions by the Secreary of State for the Environment on appeal or on a reference of the application to him. The circumstances in which such compensation is payable are set out in Section 114 and related provisions of the Town and Coumtry Plaming Act. 1990 .
5. Commencement of development: The attention of the applicant/developer is drawn to the fact that development pursuant to this plaming permission may not lawfully conmence unless and untilall pre-start conditions have first been approved or agreed in writing. The applicantdeveloper or their agent should accordingly be aware of their responsibility here. If you have not already done so, you are advised to put arrangements in place for the timely submission of these and to check that there are no omissions in terms of the details required

## APPENDIX G:

EMAIL FROM MR J DANIELS (LOCAL RESIDENT) DATED (17/11/14)

| Stibjer: | Re: videctranomanatame |
| :---: | :---: |
| Date: |  |
| Wrom: |  |

To.

## 


david,
here is a very low res version of the sample clips from the track, this is a very small selection over a very shor time period but am sure you will agree that if a couple of these movements coincided then there is likely to be a fatality, note trucks in the middle of the road, motorbikes going up round the comer at hight on the wrong side of the road, some muppet in a land rover doing repeat 3 point turns on the comer before nearly running into a transit van at the narrowest point on the track. pedestrians have no where to go in the absence of a footpath and should an hgv lose brakes or control there is no run off. the footage i have is much higher resolution but the next size up is 35 mb so probably too big to email. the footage remains my copyright but i am happy for you to use it for the purposes of yout assessment. i play it using the vic application, please let me know asap if it is not viewable. if views well in fast forward. i welcome meeting you on site if you are able to get that approved and i am happy for you to call to discuss an details which would help insure against public satety.
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