From:	
To:	Hornsea Project Three
Cc:	Sarah Drljaca
Subject:	Registration Number 20010316 - Oulton Parish Council's submission to PINS at Deadline 7
Date:	14 March 2019 11:16:39
Attachments:	Orsted Deadline 7 APPENDIX 1-VISSIM screenshots.docx
	Orsted Deadline 7 Appendix 2-AIL Table.xlsx

## Hornsea Project Three

Oulton Parish Council (OPC) welcomes this opportunity to comment on the current status of traffic and environmental issues since Deadline 6, the ASI on March 5<sup>th</sup> and the Issue Specific Hearing on March 8<sup>th</sup>.

### 1. <u>VISSIM</u>

Since Deadline 6, the Parish Council has had sight of the VISSIM traffic modelling scenarios in video format and the council would like to thank the Applicant for making this possible. These are the "large video files" referred to by the Applicant at 3.21 in Appendix 8 (Main Construction Compound Access Strategy VISSIM Modelling Update) containing the models that sit behind the data that have been received by the ExA and by NCC Highways.

At 4.6 in Appendix 8, the conclusion is reached that:

"VISSIM model for future scenario shows that the entire study network including The Street/B1149 junction would operate satisfactorily with delays of only 38 seconds to the journey from The Street to the B1149."

Please note: a range of screenshots from the VISSIM, with explanatory captions, has been attached in Appendix 1, at the end of this submission.

OPC would like to make the following observations on the scenarios we have studied:

1.1 We are obliged to observe that there are significant inaccuracies in the baseline data used to construct the model of the southern section of The Street, Oulton, such that it renders almost all the data produced as a result of the simulation unreliable at best, and invalid at worst.

1.1.1 The width of the roadway <u>all along its length</u>, from the junction with the B1149 to the site entrance at Saltcarr Farms, appears to have been modelled as if 2 cars, and even a car and an HGV, <u>can pass each other without slowing down</u>. This is quite simply not the case. If it were the case, then there would be very little need for passing bays at all.

Although the width of The Street does vary a little here and there, there is no point along its entire length where a white line has been placed down the middle of the carriageway. This indicates in itself that NCC Highways is of the opinion that the roadway is not wide enough for 2 cars to pass safely without slowing down. This is especially true of the very narrow section immediately to the north of the Old Railway Gatehouse.

1.1.2 Many inaccuracies flow from this baseline modelling error:

- <u>Many of the cars</u> are shown passing each other at speed, thus invalidating the "average delay" data generated by the model;
- Scenarios frequently occur where <u>a car and an HGV</u> pass each other with ease, away from a passing bay. Since this is impossible, "average delay" data is further invalidated;
- Further scenarios occur where <u>2 HGVs pass each other</u> away from passing bays. Since this is impossible, this also and very significantly would impact on the "average delay" data generated.

1.1.2 Vehicle response to the priority signage at the "hump" beside the Railway Gatehouse appears very frequently to malfunction in the VISSIM, such that cars are shown passing each other on the hump, a car and an HGV are shown passing each other on the hump, and even sometimes 2 HGVs are shown passing each other on the hump. These scenarios are neither possible in real life (given the width of the road) nor are they considered to be desirable by the applicant.

1.1.3 The Parish Council is mystified as to how these major inaccuracies can have been allowed to persist within the modelling, but we must stress that the "average delay" data will be significantly distorted because of them. We are obliged therefore to challenge the validity of the Applicant's statement, quoted above, that:

"VISSIM model for future scenario shows that the entire study network including The Street/B1149 junction would operate satisfactorily with delays of only 38 seconds..."

This has not been proven.

1.2 Even with these baseline inaccuracies, which obviously help to 'improve' vastly the apparent flow of all types of traffic along The Street, the VISSIM still generates some pinch points and dysfunction e.g. where too many vehicles are shown following behind each other to be adequately contained in a passing bay when meeting oncoming traffic. Please see Appendix 1 below for a sample screenshot.

1.3 Notwithstanding the above, there is one scenario demonstrated by the VISSIM that does yield some useful information, as it does not involve 2-way competing traffic. A screenshot of this scenario is in Appendix 1 attached below.

1.3.1 The scenario in question is of an <u>Abnormal Indivisible Load</u> (AIL) – in this case a cable drum – leaving the compound, <u>travelling south</u> down The Street and entering the B1149. In this scenario *all* traffic was stopped from travelling north along The Street whilst the abnormal load travelled south. Meanwhile, all traffic on the B1149 was *stopped in both directions*. The abnormal load exited onto the B1149 with the queue of traffic that had built up behind it. When all traffic from The Street had exited, the held traffic on B1149 was released. The observed delay for traffic on B1149 was 5 mins 42 seconds. More alarming even than this, however,

is that during that time, depending on the time of day, the tailback of traffic on the B1149 was between 37 and 67 vehicles, *in each direction*, always including several HGVs.

Clearly, it could never be safe to allow that sort of tailback to build up, so close to the unsighted humpback bridge on the B1149.

# [OPC recommend that NCC Highways view the video format of this AIL scenario in the VISSIM at their earliest opportunity.]

1.3.2 Please note: this <u>southbound</u> AIL scenario is not, to our knowledge, referred to at all in the Appendix 8 document. At 4.7 in App. 8, reference is made only to an AIL travelling "in a <u>northbound</u> direction" - when of course the traffic is only held back further up The Street, but is NOT held back on the B1149, thus producing a much less dangerous scenario. We should hardly need to point out, however, that what goes into the compound must also come out.

It would seem that, in Appendix 8, the southbound AIL scenario has been "scoped out" – much as the noise of the AILs has been "scoped out" of the Noise and Vibration Assessment that will be discussed later.

1.3.3 OPC has to assume that the Applicant is aware that the southbound peak time AIL scenario presents so many dangers to other road users that it would never be permitted, but the council would have appreciated that fact being drawn to our attention, so that we could have had a frank discussion, while NCC were also present, about the likelihood of Abnormal Loads being regularly delivered during the evening and at night. Given the sheer numbers of loads involved, it would probably not be possible to fit them all in to 'quieter' periods of the day.

1.4 OPC seeks, at this late stage, absolute clarification on the exact time-periods being referred to in the various scenarios of "off-peak", "outside normal working hours", "evening" and "night-time" in relation to the movement of Abnormal Indivisible Loads.

1.4.1 We should also not be confused by the word "abnormal" into thinking that these AIL movements will be exceptional or occasional. On the contrary, given the scale of the project (1,121 cable drums = 1,121 AILs) it will be the **norm** that several of them will have to be moved, either separately or in convoys, most weeks, day and/or night, throughout the whole two and a half years.

1.5 The Parish Council would like to draw the ExA's attention at this point to the Table in Appendix 2, attached to this submission. This table has been created by OPC in an attempt to represent, as an indicative illustration, the real <u>density and</u> <u>regularity</u> of these Abnormal Load movements, constrained as they will have to be into the 30-month "active construction period".

The pattern of AIL movements portrayed is based on information provided by the Applicant. 36 cable drums will be delivered to the port every 3 - 5 weeks; the Table illustrates the median scenario of a delivery every 4 weeks. [See Appendix 2]

1.6 In view of all of the above, the Parish Council is now significantly concerned that <u>NCC Highways will be forced</u>, because of the traffic dysfunction that would

otherwise be created, to conclude that this density of AIL movements over such a long period, will have to be permitted <u>only in the evenings and at night</u>. Such a conclusion would have disastrous consequences for the restful sleep of the residents of the Railway Gatehouse, and of hamlets and villages all over North Norfolk as these Abnormal Loads criss-cross the county from port to compound to cable corridor work front.

If the Applicant responds with: "but not all cable drums will go to the Main Construction Compound...", then this will still afford little comfort to the residents disturbed all along the direct route from the port to a particular section of cable corridor. In any case, the Applicant has offered, and we have to consider here, in common with all planning processes, the worst-case scenario.

#### 1.7 Conclusion of this section:

To our great consternation, the Parish Council is finding that the more we learn about the real nature of the types, volumes and movement patterns of the construction traffic for Hornsea Project Three, the more alarmed we are becoming.

How these narrow lanes and small communities can be expected to absorb the sustained impact of the intensity of it – spread throughout a long working day, and probably several nights, for 6 days of every week, and for two and a half years - is barely comprehensible.

#### 2. Noise and Vibration Assessment at The Old Railway Gatehouse

2.1 At the ISH on 8<sup>th</sup> March, OPC sought clarification on the issue of the rationale behind the averaging of daily construction traffic noise over an 18-hour period, even though the additional traffic created by Hornsea Three is proposed to be confined to a shorter working day of 11 hours (excluding mobilisation). The council may have to accept that this is some sort of "standard measure" but is keenly aware that averaging anything over a longer period always conveniently brings the average down.

2.2 The further point made by OPC at the Hearing was that human receptors never actually experience "average" noise but only individual or grouped noise "events", interspersed with silence or lower background noise.

2.3 Both these points were addressed by the Planning Inspector in 2014, when dismissing the Appeal for an AD that proposed to use this same stretch of road as its access route, and to the same site as the compound. [*Ref:APP/K2610/A/14/2212257*]

At point 18 in the Appeal Decision, the Inspector challenges the relevance of using "statistical smoothing" in situations such as this, stating that this approach "understates the effects upon the human receptor of separate, sudden bursts of sound which conventional practice recognises to be potentially disturbing." She goes on to refer to the recently-issued national Planning Practice Guidance on noise, stating that "it does not rely upon numerical measures but on qualitative descriptors". She continues (point 20) that at harvest time "the traffic noise

generated by the appeal proposal would be at the very least *noticeable and intrusive* and...at times *noticeable and disruptive* as perceived by any residential occupiers of the dwelling."

The Inspector concludes (point 21) that the passing of the HGV tractor/trailer combinations would "be likely to result in *material harm* to the living conditions of residential occupiers of the Old Railway Gatehouse, *with reference to noise and disturbance*."

2.4 The response of this Applicant appears to be that because each passing HGV generated by the Hornsea Three proposal will not (on average) be individually more noisy than existing individual HGVs, the project therefore introduces no (or a very low) increase in traffic noise. This approach completely ignores the fact that the increase in total daily *numbers* of HGV traffic movements will be substantial (+118), as will the increase in car movements (+130). *Each* of these additional daily movements will be experienced by the residents as a separate and additional daily noise disturbance.

2.5 Perhaps of even more concern is the fact that, at point 4.25 of Appendix 23 to Deadline 6, the Applicant has chosen to "scope out of this assessment" entirely *the noise generated by Abnormal Indivisible Loads (AIL)* **at night**. The rationale provided for such an omission is given as the fact that, within the OCTMP, the Applicant will have to agree such movements in advance with NCC and that they will commit to notifying OPC and the residents of the Old Railway Gatehouse "of any known night-time AIL movements to minimize the disturbance."

Knowing in advance that one is going to be severely disturbed during the *night, is not the same as having a restful night's sleep*. OPC is again mystified, and struggles to understand how the applicant can allow itself to conflate these two situations.

2.6 In addition - knowing what we now know about AIL movements, as detailed in Section 1 above - it is becoming clear that *noticeable and intrusive* AIL movements are almost certainly going to be passing right next to the Railway Gatehouse *on many nights of every week, of every year, for two and a half years.* 

2.7 Mitigation: the Applicant has proposed as mitigation for the residents of the Gatehouse:

- that the grading of the "hump" outside their house (which will avoid the grounding of Hornsea Three low-loaders) should be finished with a special surface that reduces both traffic noise and vibration;
- and that there will be priority signage on either side of the hump, so that only one vehicle at a time will ever pass right next to their house.

At the Hearing on 8<sup>th</sup> March, we were informed, during the discussion about Cawston, by the EHO from BDC, that the special road surface referred to was only effective in reducing noise and vibration when vehicles were travelling at *more* than 30 mph. In this case, there will be a speed limit of 30 mph introduced for the duration of the construction period, which will negate the beneficial effect of the road surface.

As to the priority signage, this may well create *more* disturbance for the residents, with the constant braking and transmission noises of HGVs stopping and starting.

2.8 At the Hearing on 8<sup>th</sup> March, reference was made by the Applicant to an "offer" of further mitigation measures for the residents. The residents pointed out that such an offer had not yet been made.

2.9 OPC also believes that it would be wise for a structural survey to be carried out on the current condition of the Railway Gatehouse, so that the baseline situation in terms of potential vibration effects can be established.

#### 3. Traffic numbers by type and function

At the Hearing on 8<sup>th</sup> March, the Applicant was asked by the ExA to provide at Deadline 7 a detailed breakdown of the vehicle numbers so far provided for the daily movements generated by the compound.

The suggestion of the ExA was that such a breakdown might include the numbers of vehicles carrying, for example:

- aggregate
- sand
- ducting
- cable (AILs)
- other HGVs
- all other vehicles e.g. cars and vans

- and that separate numbers should be clearly provided for IN and OUT movements.

At the end of the Hearing, the Applicant demurred and indicated that it would be unable to provide such figures.

OPC is obliged to comment that it can in no way understand why such a breakdown of figures should be so difficult for the Applicant, for two reasons:

- this developer is not a novice in the field and has constructed cable corridors before;
- the Applicant has consistently provided to OPC over many months now the daily vehicle movement figures for the compound as 118 HGVs and 130 staff vehicles.

If the Applicant is unable to break these numbers down into different vehicles by

type and function then what are we to understand by this?

Have these numbers not been derived from detailed planning by their construction engineers - and, if not, are they therefore meaningless?

Oulton Parish Council would hope that the ExA will persist in encouraging the Applicant to make sense of its own figures, and to share this understanding with stakeholders.

4. Appendices.

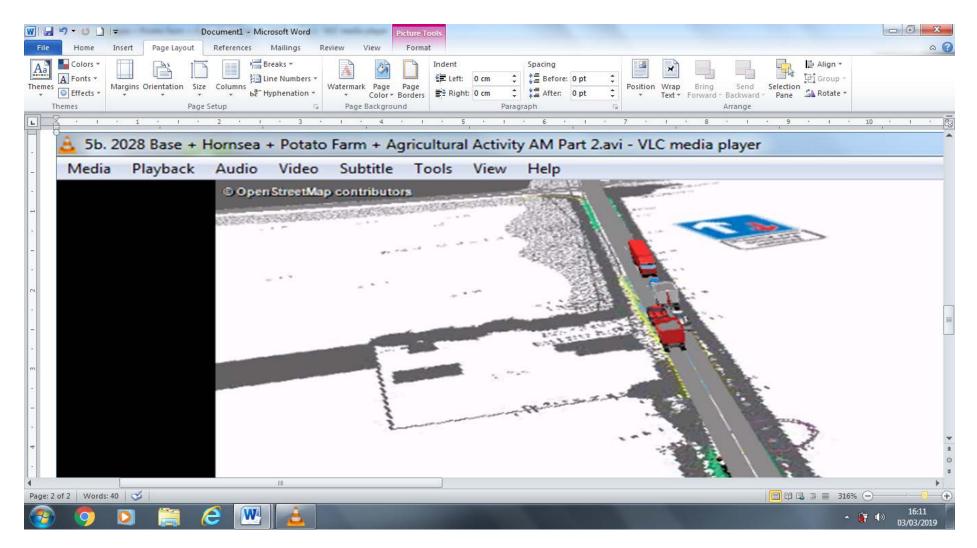
Appendix 1. VISSIM Screenshots/notes.

Appendix 2. Abnormal Indivisible Load (AIL) Data.

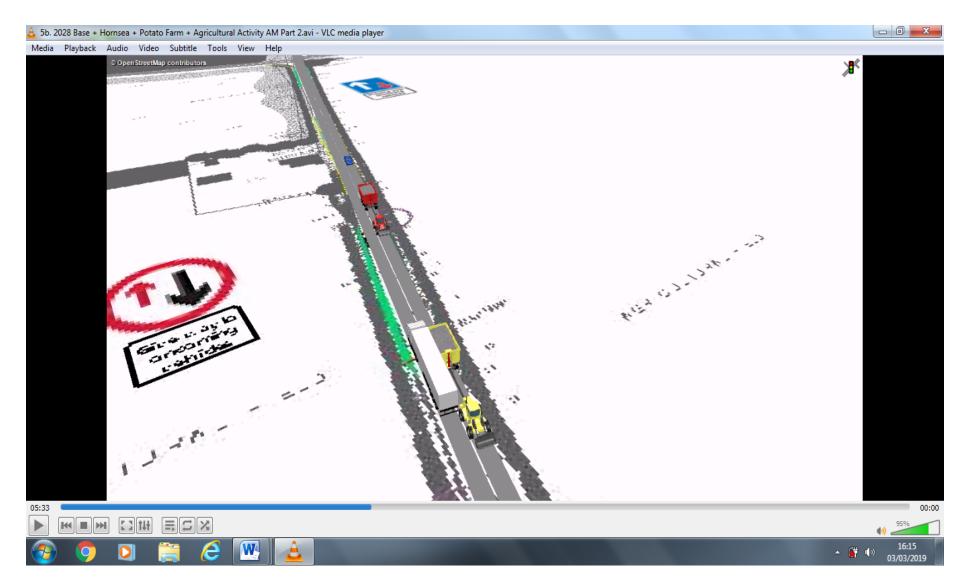
Paul Killingback

Chair

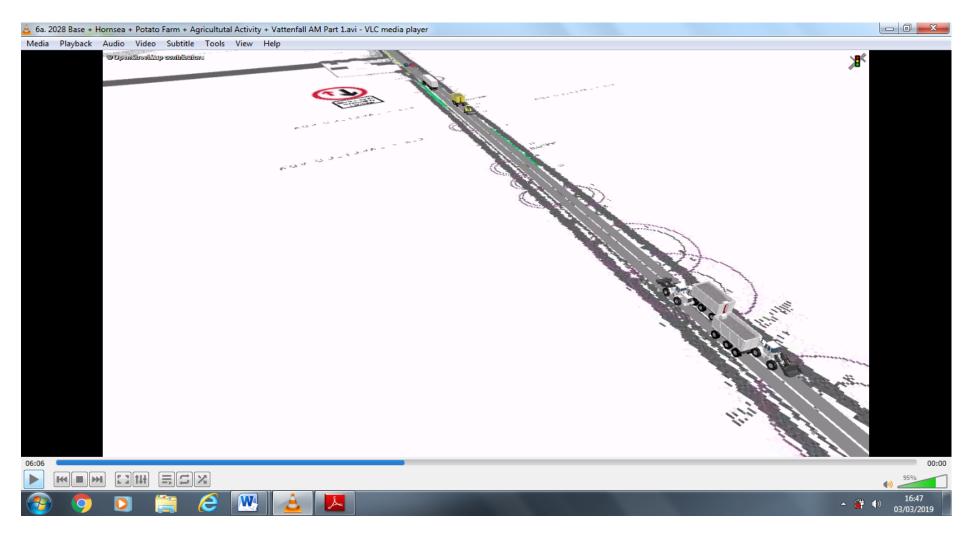
**Oulton Parish Council** 



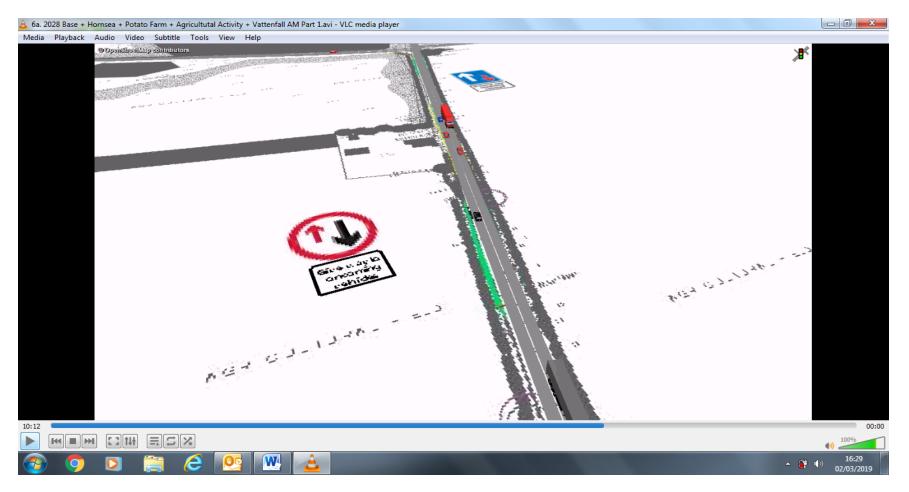
\*Priority signs at the hump next to the Railway Gatehouse not working: it would not be possible for two tractor/trailers or HGVs to pass at this point. The road width at this point is planned to be the same as currently.



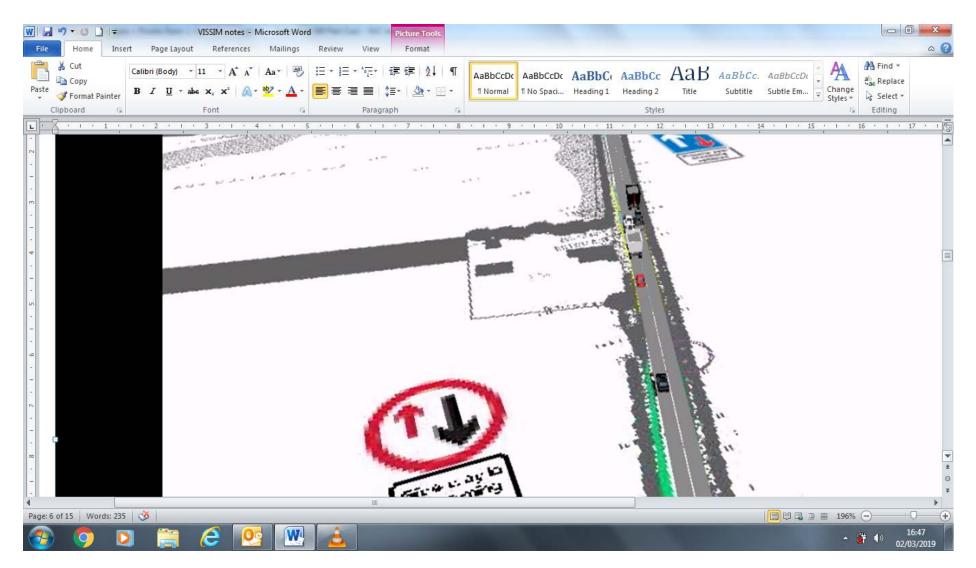
Data input error: one HGV and one tractor/trailer passing each other without use of passing place. This is impossible - the road is too narrow.



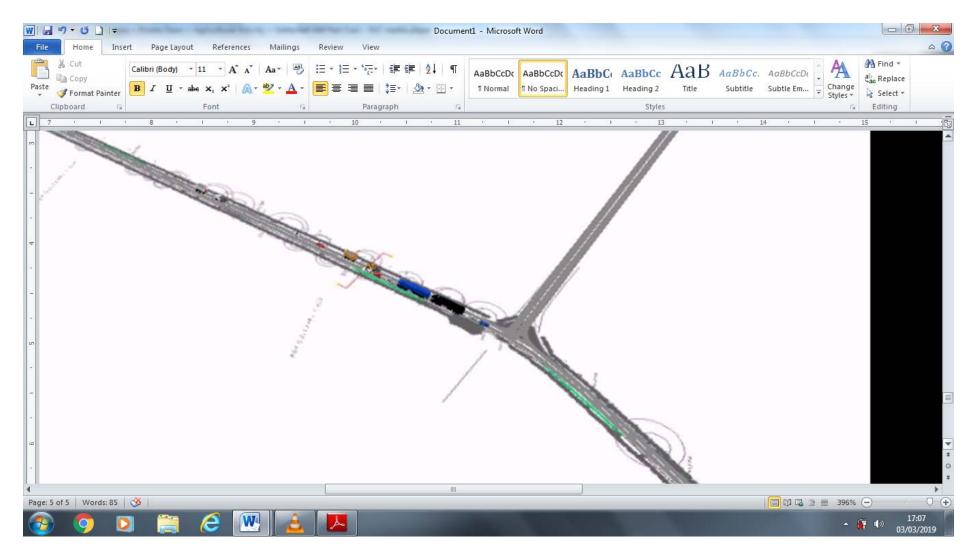
Two tractor trailers passing outside of passing places – this is impossible. [6a 2028 Base + Hornsea + potato Farm + agricultural activity + Vattenfall AM part 1.]



Priority signs not working at the hump: it is impossible for an HGV and a car to pass at that location.



(ABOVE) Two tractors outside old railway gatehouse, potential for vehicles to overrun side of road and, in any case, the road width proposed makes such a passing impossible.



(Above) <u>Enlarged view of bend.</u> [6b 2028 Base + Hornsea + Potato Farm + Agricultural activity + Vattenfall AM part 2]...shows 2 cars 1 HGV in passing place 1 HGV & 2 Cars outside of passing place at bend, waiting for oncoming traffic.(3.33sec)



(7a AM) Screenshot above: Abnormal Load (cable drum on low-loader) having left Main Compound travelling SOUTH, as it approaches the B1149 traffic halted on The Street (then allowed to follow AL) and traffic halted on the B1149. Traffic was stopped at 9.50 on video still waiting at end of video(15.00sec).....5.10secs plus part two of video which ran for a further 32seconds before traffic on B1149 was allowed to move off having waited for traffic exiting The Street behind the abnormal load. Total wait time was <u>5min 42 seconds</u>. <u>Tailbacks on Holt Road:</u> 43 cars/1tractor/trailers in queue from Saxthorpe direction....37 cars /3 HGVs in queue from Cawston roundabout (Humpback Bridge).

(7d PM) This showed an abnormal load leaving the Main Compound peak PM, traffic stopped at the Northern end of 'The Street' and on the B1149 in both directions. Similar timescale as for AM for traffic waiting on the B1149 but observed the traffic in the queue was greater.

Observed 63 cars/6 HGV's from Saxthorpe direction & 67 cars/ 8 HGV's from Cawston roundabout direction.

TABLE SHOWS											
	re needed for the p	•									
36 cable drums arrive at a port and are delivered to the Main Construction Compound.											
The 36 cable drums are delivered TO the Main Construction Compound at a rate of 8-12 a day over 3-5 days											
The cable drums are then delivered to the cable route FROM the main compound over three week before the next shipment arrives This is a 4 week scenario to fit 1,121 cable drum delivery into the 30 month active construction period.											
This is a 4 week scer	hario to fit 1,121 cab	le drum delivery int	o the 30 month active	re construction period.							
week 1		week 3		week 5							
36 cable drums IN		12 c/drums OUT	12 c/drums OUT	36 cable drums IN							
week 6		week 8	week 9	week 10							
12 c/drums OUT	-	12 c/drums OUT		12 c/drums OUT							
week 11		week 13	week 14	week 15							
12 c/drums OUT	-	36 cable drums	-	12 c/drums OUT							
week 16		week 18	week 19	week 20							
12 c/drums OUT	36 cable drums IN	-	-	12 c/drums OUT							
week 21		week 23	week 24	week 25							
36 cable drums IN	-	12 c/drums OUT	12 c/drums OUT	36 cable drums							
week 26		week 28	week 29	week 30							
12 c/drums OUT	-	12 c/drums OUT		12 c/drums OUT							
week 31		week 33	week 34	week 35							
12 c/drums OUT	-		12 c/drums OUT	12 c/drums OUT							
week 36		week 38	week 39	week 40							
12 c/drums OUT	36 cable drums IN	-	-	12 c/drums OUT							
week 41		week 43	week 44	week 45							
36 cable drums IN	-	12 c/drums OUT	12 c/drums OUT	36 cable drums IN							
week 46		week 48	week 49	week 50							
12 c/drums OUT	-	12 c/drums OUT	36 cable drums	12 c/drums OUT							
week 51		week 53		week 55							
12 c/drums OUT	-	36 cable drums IN	12 c/drums OUT	12 c/drums OUT							
week 56		week 58	week 59	week 60							
12 c/drums OUT	36 cable drums IN		-	12 c/drums OUT							
week 61		week 63	week 64	week 65							
36 cable drum IN	12 c/drums OUT	12 c/drums OUT	12 c/drums OUT	36 cable drums IN							
week 66		week 68	week 69	week 70							
12 c/drums OUT	12 c/drums OUT	12 c/drums OUT	36 cable drums IN	12 c/drums OUT							
week 71		week 73	week 74	week 75							
12 c/drums OUT			-	12 c/drums OUT							
week 76		week 78	week 79	week 80							
12 c/drums OUT	36 cable drums IN	12 c/drums OUT	-	12 c/drums OUT							
week 81	week 82	week 83	week 84	week 85							
36 cable drums IN	-	12 c/drums OUT	12 c/drums OUT	36 cable drums							
week 86		week 88	week 89	week 90							
12 c/drums OUT	12 c/drums OUT	12 c/drums OUT		12 c/drums OUT							
week 91	week 92	week 93	week 94	week 95							
12 c/drums OUT	12 c/drums OUT	36 cable drums	12 c/drums OUT	12 c/drums OUT							
week 96	week 97	week 98	week 99	week100							
12 c/drums OUT	36 cable drums IN	12 c/drums OUT	-	12 c/drums OUT							
week 101	week 102	week 103	week 104/2nd Yr	week 105							
36 cable drums IN	12 c/drums OUT	12 c/drums OUT	12 c/drums OUT	36 cable drums IN Second Secon							
week 106	week 107	week 108	week 109	week 110							
12 c/drums OUT	12 c/drums OUT	12 c/drums OUT	36 cable drums IN	12 c/drums OUT							
week 111	week 112	week113	week 114	week 115							
12 c/drums OUT	12 c/drums OUT	36 cable drums IN	12 c/drums OUT	12 c/drums OUT							
week 116	week 117	week 118	week119	week120							
12 c/drums OUT	36 cable drums IN	12 c/drums OUT	12 c/drums OUT	12 c/drums OUT							

week 121	week 122	week 123	week 124	week 125		
36 cable drums IN	12 c/drums OUT	12 c/drums OUT	12 c/drums OUT	36 cable drums IN		
week 126	week 127	week 128	week 129	week 130/6mth		
12 c/drums OUT	12 c/drums OUT	12 c/drums OUT	///////////////////////////////////////	30 MONTHS		