#### **TEIGNBRIDGE DISTRICT COUNCIL**

# CONTROL OF POLLUTION ACT 1974, SECTION 61 CONTROL OF NOISE ON CONSTRUCTION SITES:

#### NOTICE IMPOSING REQUIREMENTS.

TO: Mr M Humphries
Galliford Try
A380 SDLR Kingskerswell Bypass
Site Office
Old Newton Road
Kingskerswell, Newton Abbot
Devon TQ12 5LB

Whereas it appears to Teignbridge District Council that works to which Section 61 of the Control of Pollution Act 1974 applies namely:

Particulars of works to be carried out:

as per the attached application from Galliford Try Reference Number: AR0001/s61/0021/Rev 00 Variation Reference: AR0001/s61/0013

at the premises known as:

#### South Devon Link Road

NOTICE is HEREBY GIVEN that the following requirements must be complied with in connection with the carrying out of such works.

- 1. As per the attached application from Galliford Try
- 2. Any emergency deviation from these conditions shall be notified to the undersigned without delay.
- 3. The consent does not of itself constitute any ground of defence against any proceedings instituted under Section 82 of The Environmental Protection Act 1990 (Section 61 (9))
- 4. The best practicable means, as defined in Section 72 of the Control of Pollution Act 1974 to reduce noise shall be employed at all times.
- 5. Plant and machinery shall be properly silenced and maintained in accordance with the manufacturers' instructions.
- 6. Noise impact assessment and the predicted noise thresholds at key receptors are to be conducted over an LAeg(15 min) period.
- 7. During and following the completion of the works the sound level monitoring results to be available to be assessed by Teignbridge Environmental Health.

The consent does not of itself constitute any ground of defence against any proceedings instituted under Section 82 of The Environmental Protection Act 1990 (Section 61 (9)

You may appeal against this notice to the Magistrates' Court within 21 days of service of the notice upon you.

IN the event of an appeal this notice **SHALL NOT** be suspended until the appeal has been abandoned or decided by the Court as in the opinion of the Council.

Signed

Environmental Protection Manager Environment and Safety Services

Dated 18<sup>th</sup> March 2014

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# S61 APPLICATION CONTROL OF POLLUTION ACT 1974

# Variation from section 61 consent.

Out of hour works at Structure 10 and chainage 3500.
AR0001/s61/0013
14/07432/ECNCON
18 <sup>th</sup> to 21 <sup>st</sup> March 2014
07:00-03:00hrs next day; processing finishing at 21:00hrs where possible.
AR0001/s61/0013

#### Description of the works for which the variation is being sought.

Brief description of proposed work.	Structure 10 Ground Improvement Works Structure 10 ground improvement works, on east and west side, within 10m of Torbay railway line. These works are taking place within the 160hr railway possession. The ground improvements involve excavation of existing ground, taking material to store on site and backfill with stockpiled structural material.  Part of the works at Structure 10 ground improvements involves the loading; processing and transport of structural material from around chainage 3500, near Craxford's tip to Structure 10.
State reasons why works cannot be done under terms of original consent.	Current rates of working leave little flexibility in the event of delays. In order to get the works completed additional working hours may be required. This variation is to permit an extension to hours to permit 24/7 working for the four days and three nights between the 18 <sup>th</sup> to 21 <sup>st</sup> March.
	It is possible that 24/7 working will not have to be utilized however if there are any unforeseen issues or geotechnical failure to processed material, it will be used. By having the contingency 24/7 working for Structure 10 works, it minimizes travel disruption and the duration of potential disturbance to residents and the need for further out of hour working during Network Rail possessions at a later date.
	Noise levels will be same as original Section 61 application.  Method of Works set out in Appendix A and site setup is shown in Figure



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	1, 2 and 3. 1.1.8
Describe any changes to hours of working.  1.1.9	Change to contingency 24/7 working.
Describe BPM noise mitigation measures.	Amended BPM measures set out in Appendix B. 1.1.10
Predicted Noise and Vibration Levels	Refer to Appendix C of the s61 Application, as consented.  1.1.11

	For [Contractor]	Approved by [Local authority]
Name:	LEE Humairies	
Signature:	Call-	
Date:	17/3/14	

Conditions:



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# APPENDIX A Method of Works

#### Ground improvements within 10m of Torbay railway line

#### Overview of works

As part of the A380 project, there is a 270m long over rail tunnel to be constructed over Tor line at Aller Meadows. Following ground investigation works along both sides of railway, it was discovered that the structural integrity of the existing underlying ground material, within the rail support zone, is inadequate to support the proposed Aller rail tunnel. In order for the construction of the tunnel to progress, excavation of existing ground and placement of structural backfill mixed with concrete is required.

There is approximately 60m improvement on East side of railway and 300m on the West side. It is anticipated that 30m improvement will be completed per 10 hour shift. Works will start on the northern section on the West side of railway and move gradually southwards. Once the West side improvements have been completed, the plant will move out and start work on the 60m on East side.

The backfill is processed. The backfill material is site won from the excavation near to Maddacombe Road. The material has been stockpiled, slightly north of the main cut. The material requires processing with lime/cement. This improves its strength and engineering properties. Once processed the material must be placed in formation within 6 working hours. The processing takes place in a cutting at chainage 3500 which provides acoustic screening to the west and the east. Once the material has been processed, it will be transported to Structure 10 working compound.

8,000m³ total of processed 6N will be transported during the works; which equates to 25 movements to East side of Structure 10 per haulage lorry and 122 movements to West side of Structure 10 per haulage lorry. It is approximately a 20 minute round lorry movement from loading/processing area to Structure 10 working compound, therefore 3 movements per lorry per hour; 12 movements overall per standard hour.

#### Outline working method

The work activities are as follows:

Ground Improvement Works at Structure 10 (07:00-03:00hrs next day)

- Excavation of existing ground between 1.5-2.5m dependent on level of unstable material using 35T excavator;
- · Excavated material is transported by dumper and stored in site compound;
- Installation of structural fill (cement stabilised) using 20T excavator;
- Compaction of new material in 0.5m layers by Bomag roller.

Loading/Processing Area Works at chainage 3500 (loading and transport activity between 07:00-03:00hrs next day; processing between 07:00-21:00hrs)

- 20T excavator lifting 6N material out over processing area;
- Dozer will then spread the material out;
- · Wirtigen self-propelled soil stabiliser will add cement and lime to the material;
- 20T excavator will load mixed material back into haulage lorry.



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• 8 wheel lorries will transport material to ready-to-use stockpile at Structure 10.

Figure 1 shows overview of works with proposed haul routes for West and East side of Structure 10 works. Figure 2 shows site lay out for Structure 10 works with area of works closest to local resident properties. The works at Structure 10 works location is c.90m to closest resident at Aller Orchard. There is natural screening from railway embankment on the West side of railway. On the East side of railway, acoustic screening will be provided for the 60m stretch of work. Figure 3 shows loading area at chainage 3500, near Craxford's tip. The material processing at around ch. 3500 is naturally screened by earth embankments to the East.

Proposed Plant at Structure 10 works

Equipment	Number	% on- time	Typical Sound pressure level at 10m [dB(A)]	Noise information source	Comment
Ground Improvement Works	munin-				
35T Excavator	1	75	79	BS 5228-1:2009 Table C.2:14	E 21-11-0011-011-01-01-01-01-01-01-01-01-01
20T Excavator	1	75	78	BS 5228-1:2009 Table C.2:3	
30T Dumper	2	75	81	BS 5228-1:2009 Table C.4:1	
Bomag Roller	1	75	73	BS 5228-1:2009 Table C.2:38	
Haulage Lorry	4	25	79	BS 5228-1:2009 Table C.8:20	
Tower Lights	7	100	63	Average of BS 5228-1:2009 Table C.4:76-87	Night time only
6N Loading Area					
35T Excavator	1	50	79	BS 5228-1:2009 Table C.2:14	
30T dumper	1	20	81	BS 5228-1:2009 Table C.4:1	
Bulldozer	1	50	83	BS 5228-1:2009 Table C.5:13	
Wirtigen Concrete mixer	1-0-	75	82	Estimated (based on road planer BS 5228-1:2009 Table C.5:7)	
Haulage Lorry	4	25	79	BS 5228-1:2009 Table C.8:20	
Tower Lights	4	100	63	Average of BS 5228-1:2009 Table C.4:76-87	Nigh time only

APPENDIX C

# Predicted noise thresholds at key receptors

				Co	nstruction Fa	Construction Façade Noise Level dB LAeq.1hr	Level dB LAsc	1,1hr	
		Taçade	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
Receptor Location	Floor	Start	15/3 07:00	16/3 07:00	17/3 07:00	18/3 07:00	19/3 07:00	20/3 07:00	21/3 07:00
rise T	630	End	16/3 03:00	17/3 03:00	18/3 03:00	19/3 03:00	20/3 03:00	21/3 03:00	21/3 16:00
Lanaford Bridge Farm	Ground	South West	62.4	62.1	62.1	62.4	62.4	56.1	56.1
	-	South West	63.1	62.8	62.8	63.1	63.0	57.0	57.0
The Barn Owl	Ground	East	55.5	55.7	56.1	56.9	58.2	64.4	64.4
	First	East	58.1	58.1	58.4	58.9	60.1	65.0	65.0
Aller Orchard	Ground	West	58.1	57.7	58.1	58.9	61.1	70.0	70.0
	First	West	62.6	62.2	62.5	62.4	63.9	70.0	70.0
Elmcroft	Ground	North	8.09	60.1	60.1	60.1	60.2	58.4	58.4
	First	North	61.6	6.09	6.09	6.09	61.0	59.1	59.1
Treetops	Ground	East	62.8	62.7	62.7	62.7	62.7	61.6	61.6
	First	East	63.3	63.3	63.3	63.3	63.3	62.1	62.1
Woodlands	Ground	West	64.1	63.0	63.1	63.1	63.1	62.8	62.8
	First	West	65.4	64.5	64.5	64.5	64.6	64.3	64.3
High View	Ground	West	61.6	61.6	61.6	61.6	61.6	61.6	61.6
	First	West	65.5	65.5	65.5	65.5	65.5	65.4	65.4
Kvnance	Ground	North	62.6	62.5	62.5	62.6	62.6	62.5	62.5
	First	North	67.1	67.1	67.1	67.1	67.1	67.1	67.1
Aller Park Road	Ground	North	59.6	58.4	57.7	57.2	56.8	56.5	56.5
	Liret	North	62.2	61.4	61.0	60.7	60.5	59.4	59.4

Predictions have been undertaken using SiteNoise module of NoiseMap Enterprise version 2.7.1. This software follows the construction noise calculation procedure in British Standard 5228 Code of Practice for Noise and Vibration Control on Construction and Open Sites: 2009. Allowance has been made for natural screening and/or acoustic barriers erected between the works and local receptors. The model takes into account land attenuation and reflection from properties.



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#### APPENDIX B

#### Methods to reduce noise

#### Methods to minimise nuisance

- 1. Prior to works commencing any preparatory engineering works will be undertaken in normal working hours.
- 6N loading/processing works have been located in cutting to improve acoustic screening to local residents.
- 3. Prior to the out of hour works, mobilisation and demobilisation of materials and plant will occur during normal working hours, minimising activity in sensitive periods i.e. only those activities that have to occur out of hours will be undertaken.
- 4. West side Structure 10 haulage will be directed along the site haul route minimising disturbance to local residents. The site haul route is located within a cutting providing partial acoustic screening to the East and South and is located further away from local residents than public highway route.
- 5. East side Structure 10 haulage will be limited to 2 days and 1 night only and will be completed as close to 21:00hrs as possible to minimise disturbance to local residents.
- 6. Acoustic barrier fencing to be erected on 2m heras panels around areas of work as per Figure 2.
- 7. The works will be suspended as soon as the activity is complete.
- 8. Drop heights for excavated material will be minimised where ever possible.
- All tower light plant will be super-silenced and inspected to ensure they are operating appropriately.
- 10. Any idling plant will be turned off when not in use.
- All operatives will be briefed on the measures within this plan and the sensitivity of surrounding properties to noise emissions.

All affected residents will be notified of the nature and need for the works.

#### **Noise/Vibration Monitoring Programme**

Galliford Try will carry out monitoring at regular intervals during these works and on start up of any equipment or new work areas. Attended noise monitoring will be undertaken as close as possible to the receptors identified in Appendix C to assess compliance periodically on each day. 15 minute LAeq readings will be taken at the predefined monitoring receptors, weather and dominant noise source recorded.

To note, the receptor locations on Figure 1 are noise prediction stations. Noise monitoring will be undertaken at compliance points within the site which are as close to the properties as practicably possible.

In addition the works will be assessed by the monitorer to ensure they are being undertaken in accordance with the s61 Application.