TEIGNBRIDGE DISTRICT COUNCIL

CONTROL OF POLLUTION ACT 1974, SECTION 61

CONTROL OF NOISE ON CONSTRUCTION SITES:

NOTICE IMPOSING REQUIREMENTS.

TO: Mr Ian Yelf
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/s61/0001/Rev 0009

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 LAeq(1hour) 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 23rd October 2013

GallifordTry	**A380 South Devon Link Road**	Doc.No: AR0001/s61/0009 Rev. No : 00 Date : 07/10/13

s61 APPLICATION CONTROL OF POLLUTION ACT 1974

APPLICATION FORM FOR APPROVAL

Reference No : AR0001/s61/0009/Rev 00	**TITLE:** Utility Works along Torquay Road

	YES	**NO**
Works within Normal Working hours only		X
Reason for application	Out of hour works associated with utility diversion works on a live carriage way.	

We hereby submit this s61 Application covering the construction activities / works listed below in accordance with Appendix 1/9 to the Specification and certify that the methods, plant and steps to minimise noise (including vibration) are best practicable means in accordance with section 72 of the *Control of Pollution Act 1974* and section 79(9) of the *Environmental Protection Act 1990* and are fully in accordance with the Contract.

Galliford Try Representative

Signed: Ian Yelf

Name: Ian Yelf ..... Date: 17.10.13

1. Address or location of proposed works	Road diversion across Torquay Road opposite Addison Road, outlined in Figure 1.
2. Name and address of main Contractor **Responsible Person.** **Telephone No.**	Galliford Try A380 SDLR Kingskerswell Bypass Site Office Old Newton Road Kingskerswell Newton Abbot TQ12 5LB ian.yelf@gallifordtry.co.uk T: 01626 357729
3. Particulars of works to be carried out	Utility works over 3 consecutive week nights.
4. Methods to be used in each stage of development	Refer to Appendix A.
5. Duration and hours of works	Refer to Appendix A
6. Number, type and make of plant and machinery	Refer to Appendix A.
7. Proposed steps to minimise noise and vibration	Refer to Appendix B.
8. Predicted Noise Levels	Refer to Appendix C.
9. Predicted Vibration Levels	The equipment to be used in these activities are not considered to generate appreciable levels of vibration and therefore no assessment has been undertaken.
10. Site Plan	Figure 1 Location of utility works and receptors.
11. Consultees	Devon County Council Teignbridge District Council
12. Other Information	Galliford Try Public Liaison Team will be delivering letters to all effected residents nearby to the works. It will also be published on the South Devon Link Road website prior to works.
13. List of Plans and documents attached	Figure 1 - Out of Hour Utility Works and receptors.

APPENDIX A
- Method of Works

Utility Works on a live carriage way

Overview of works
To widen the A380 from Newton Abbot to Kingskerswell requires existing utilities to be diverted under the live carriage way. As part of the project commitments Devon County Council will only permit flows of traffic to be impacted by construction works outside of normal working hours (which are 0700 to 1900) Monday to Saturday.

As a consequence, where works require disruption to traffic flow we are only able to work in evening (1900 to 2100 hrs), night time or on Sundays. The justification for conducting these works over week nights is purely because of traffic congestion. A traffic diversion is not able to be put in place at this particular location. This was the case back in April during Penn Inn roundabout utility diversion works where Sunday traffic congestion ran all the way back through Kingskerswell and up Hamlin Way. In order for this situation to not happen again, it has been decided that weekday night time working is appropriate.

Western power utility diversion will be conducted crossing under the existing carriage on the A380: adjacent to Addison Road. This utility diversion is specifically electricity ducts. The location of these works is shown in Figure 1.

These works require the construction of piping and ducting below the carriageway. The possibility of undertaking the works by non-intrusive means has been evaluated and discounted. The only method would involve directional drilling, and this is not deemed possible due to the presence of existing utilities at various depths, potential unknown utilities and any collapse of the roadway. As a consequence the only method is open cut of the carriage way and subsequently the works will have to be undertaken outside of normal working hours.

During the works, traffic management will be instigated over a 400 m section of road. In line with the Highways Act, vehicles will be managed by traffic lights enabling only single flow of traffic on one carriage way.

This frees up one carriage way for construction. Works must be fully completed on one carriage way, traffic flow switched before works commence on the other.

Outline working method
The work sequence over one night is as follows:

Phase 1
- Install traffic management at 1930 hours where possible (30 minutes);

Phase 2
- Cut the asphalt with road saw and curbs with consaw – this activity will be limited to 19:30-21:00hrs;
- Excavate asphalt and road formation layer to required depth and haul to main site for re-use (1 hour);

- Although it will be minimised as far as practicable, a breaker may need to be deployed to remove any concrete obstruction encountered (as determined necessary);

Phase 3 – excavation & reinstatement

- Once formation depth is achieved an aggregate bed will be lain and compacted. The ducts and piping will be installed and the roadstone replaced. This will involve aggregate delivery from the main compound, compaction using the wacker plate (with compressor) and an excavator (1 hour);
- Once close to the existing road surface asphalt will be placed, rolled and compacted by wacker plate as necessary and curb stones placed (1 hour). Mixer wagons will deliver lean mix concrete for the replacement of the curbstone and pavement.

Proposed programme

To minimise the potential for disturbance the works are proposed to commence on Monday 4th November from 1900 hours. Works will continue for a 12 hour period. This period is much longer than set out in the outline working method above to ensure contingency allowance; and the operation to be conducted safely and diligently during the night. To minimise the nuisance as much as possible, the works will still be conducted as quickly as possible. Traffic management will be put in place where possible after 1930 hours. The works are anticipated to be completed over three nights (Monday 4th, Tuesday 5th and Wednesday 6th November). Each night, a section of 7.5m road will be open cut, ducting laid and backfilled. This 3 night systematic approach ensures safe working and enough time to backfill and blacktop before the morning. Wednesday 6th November is a contingency date.

Proposed Plant at each location for Utility Works

Equipment	Number	% on-time	Typical Sound pressure level at 10m [dB(A)]	Noise information source	Comment
Phase 1					
Delivery Lorry	1	25	82	Average of BS 5228-1:2009 Table C.11:4-20	Vehicle will be turned off when not used.
Phase 2					
20 tonne excavator	1	75	78	BS 5228-1:2009 Table C.2:3	
+ breaker attachment	1		88	BS 5228-1:2009 Table C.5:1	To be avoided where possible
12 tonne excavator	2	75	88	BS 5228-1:2009 Table C.5:1	
+ breaker attachment	1		69	BS 5228-1:2009 Table C.2:25	To be avoided where possible
Road saw	1	25	87	BS 5228-1:2009 Table C.5:36	
Concrete saw	1	25	87	BS 5228-1:2009 Table C.5:36	
1m wide planer	1	10	82	BS 5228-1:2009 Table C.5:7	
8 wheel lorry	1	25	79	BS 5228-1:2009 Table C.8:20	
Lighting tower and generator		100	63	Average of BS 5228-1:2009 Table C.4:76-87	Only to be used during evening and night time hours.
Phase 3					
20 tonne excavator	1	75	77	BS 5228-1:2009 Table C.2:19	
12 tonne excavator	2	75	69	BS 5228-1:2009 Table C.2:25	
8 wheel lorry	2	25	79	BS 5228-1:2009 Table C.8:20	
Wacker plate	1	50	80	BS 5228-1:2009 Table C.2:41	
Compressor	1	50	65	BS 5228-1:2009 Table C.5:5	
Roller	1	50	73	BS 5228-1:2009 Table C.2:38	
Lighting tower and generator	1	100	63	Average of BS 5228-1:2009 Table C.4:76-87	Only to be used during evening and night time hours.

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.
2. All affected residents will be notified of the works.
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. All operatives will be briefed on the measures within this plan and the sensitivity of surrounding properties to noise emissions.
5. Noisy activities, mainly the road cutting and breaking out in Phase 1 will be limited to finishing by 21:00hrs minimising the noisiest activity to the least sensitive period of the night time period.
6. All 3 phases of the operation to be screened by acoustic barrier along the eastern façade, reducing noise emissions towards the properties. The acoustic barriers will be moveable and follow the works over the 2 nights, placed as close to the noise source as possible.
7. Drop heights for excavated material will be minimised where ever possible.
8. All generators and compressors plant will be super-silenced and inspected to ensure they are operating appropriately.
9. Any idling plant will be turned off when not in use.

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.

APPENDIX C

- Predicted noise thresholds at key receptors

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. No allowance has been made for natural screening or manmade structures between the works. The model takes into account land attenuation and reflection from properties.

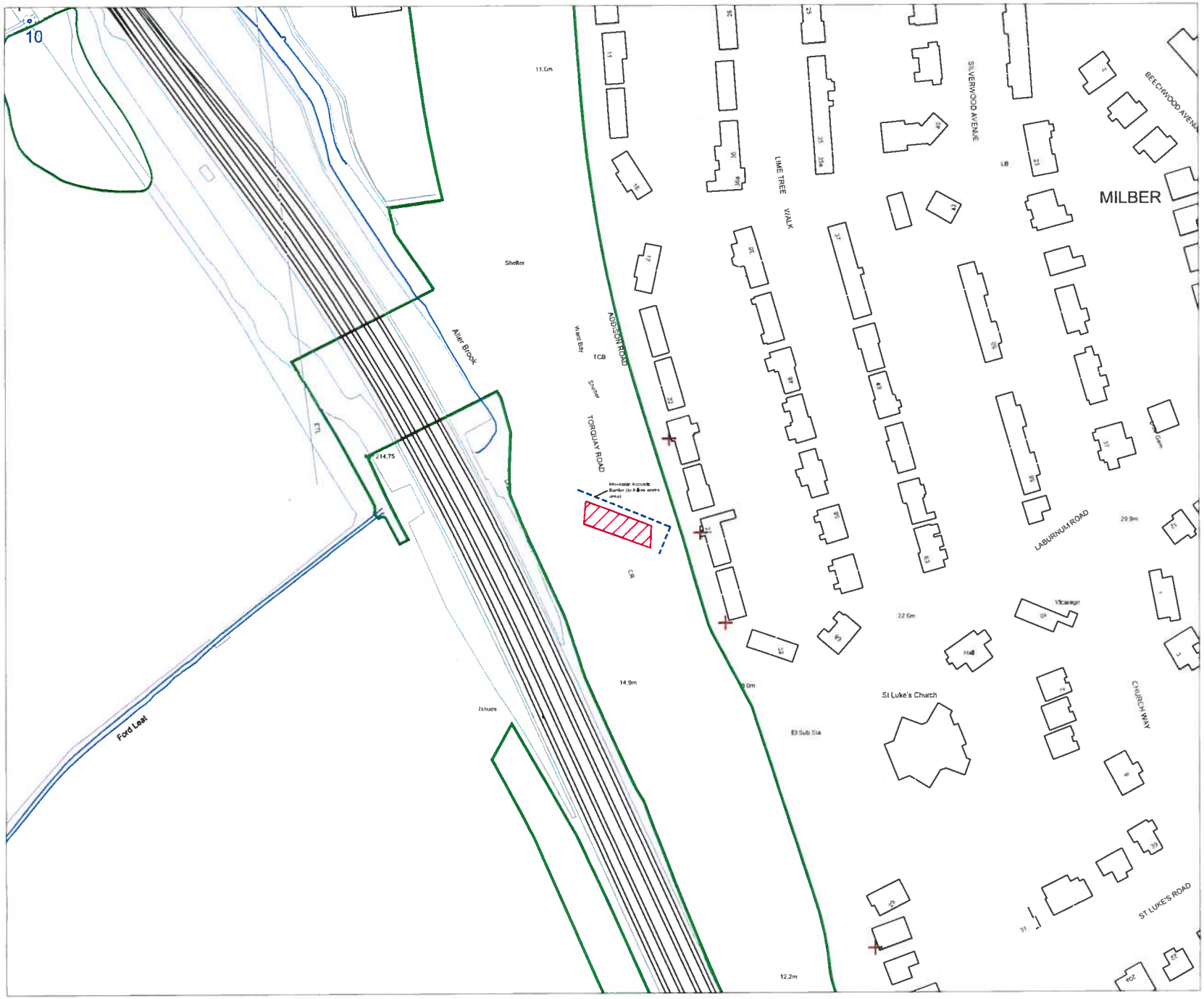
Table 1. Noise levels during utility works in residential areas off Torquay Road

Receptor Location	Façade	Construction Façade Noise Level dB $L_{Aeq,T}$					
		North Phase 1		North Phase 2		North Phase 3	
		Highest	Average	Highest	Average	Highest	Average
30 Addison Road	South West	63.6	59.6	70.5	66.5	69.4	65.4
27 Addison Road	South West	70.1	63.5	77.0	70.4	75.9	69.3
23 Addison Road	South West	63.0	61.6	69.9	68.5	68.8	67.4
27 St Lukes Road	South West	50.1	49.2	57.0	56.1	55.9	55.0
21 St Lukes Road	South West	48.4	47.6	55.3	54.5	54.2	53.4

Notes: Levels assume 5dB reduction from 2m high heras acoustic barriers.

From predictions properties fronting Addison Road are anticipated to exceed the defined thresholds. Noise insulation will be offered where there are 10 exceedances in any 15 consecutive days.

A cumulative number of exceedances will be maintained by the site team.



KEY

- Noise Prediction Stations
- Utility Works
- Acoustic Barrier

Rev.	Details	Drawn / Chkd.	Date

Project
123213
A380 Bypass
Newton Abbot

Title
Noise Monitoring Compliance Stations
and Utility Works along Torquay Road

AA Environmental Limited
Units 4 to 8
Cholswell Court
Shippon Abingdon
Oxon OX13 6HX
T (01235) 536042
F (01235) 523849
info@aae-ltd.com
www.aae-ltd.com

Scale	Date	Drg. No.	Rev.
1:1250 @ A3	Oct'13	Figure 1	
	Drawn: RC / Chkd: ML		

APPENDIX B
- Methods to reduce noise

Methods to minimise nuisance

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4. All operatives will be briefed on the measures within this plan and the sensitivity of surrounding properties to noise emissions.
5. Noisy activities, mainly the road cutting and breaking out in Phase 2 will be limited to finishing by 21:00hrs minimising the noisiest activity to the least sensitive period of the night time period.
6. All 3 phases of the operation to be screened by acoustic barrier along the eastern façade, reducing noise emissions towards the properties. The acoustic barriers will be moveable and follow the works over the 2 nights, placed as close to the noise source as possible.
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