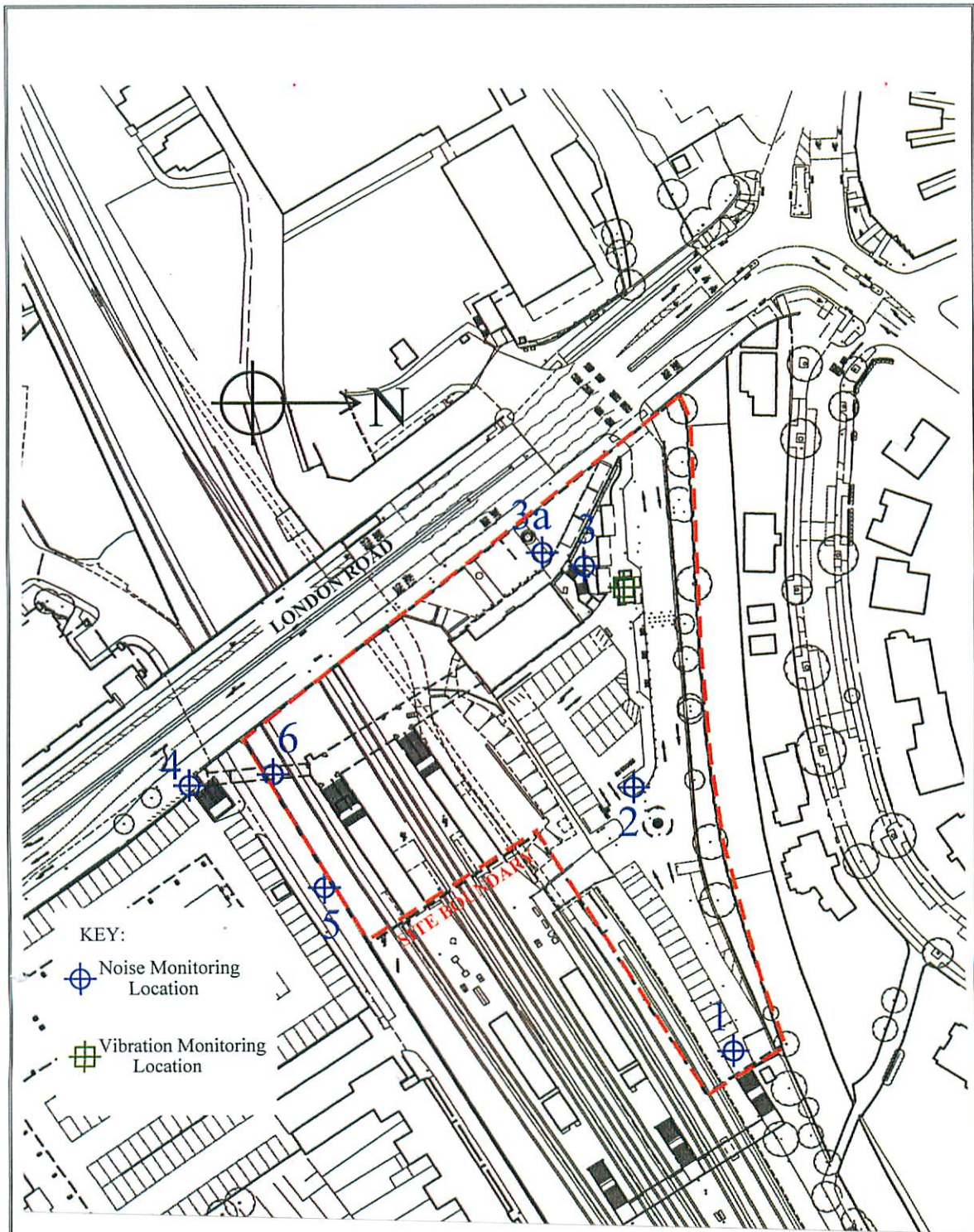

Appendix E-1: Noise and Vibration Monitoring Locations

Appendix E-2: Calibration Certificates

Appendix E-3: Noise Monitoring Results

Appendix E-4: Vibration Monitoring Results

Appendix E-1: Noise and Vibration Monitoring Locations



Based on Rolfe Judd drawing number 4674/Z6(10)P00 Revision A 'Existing Plan at Platform Level Ground Floor' May 2010

SOLUM REGENERATION LP

TWICKENHAM STATION, LONDON ROAD, TWICKENHAM, GREATER LONDON TW1 3SX

Noise and Vibration

Fig. 10-1 EXISTING SITE LAYOUT WITH NOISE AND VIBRATION MONITORING LOCATIONS



August 2010

Not to Scale

Appendix E-2: Calibration Certificates

Acoustic Calibration Services Limited,
Unit 6F, Diamond Industrial Centre,
Works Road, Letchworth Garden City,
Hertfordshire SG6 1LW



Tel: 01462-610085/87 Fax: 01462-610087
e-mail: cal@acousticcalibration.co.uk
web: www.acousticcalibration.co.uk

CERTIFICATE OF CALIBRATION

Model: CEL-490.C1

Serial No: 129580

Organisation: Environmental Assessment Services Ltd., London Road,
Hickstead, Haywards Heath, West Sussex RH17 5LZ

Job Number: 1843

Customer Order Reference: EAS/CAL/1

The Sound Level Meter was assessed for conformance with International Standards *IEC60651* and *IEC60804* using test procedures described in *BS 7580* Part 1. The meter claims Type 1 accuracy conformance and it was against these requirements that all the results were evaluated.

The sound level meter was connected to a CEL-495 preamplifier Serial No. 000758 and a CEL-251 measurement microphone Serial No. 0748. The microphone has a nominal capacitance of 18 pF and the device used to apply electrical signals to the preamplifier was of the same nominal capacitance.

CEL-110/1 Acoustic Calibrator Serial No: 119427 was utilised in establishing the initial acoustic calibration setting.

The sound level meter passed all applied tests with no deviations from Type 1 specification, in accordance with *IEC 60651* and *IEC 60804*. Accordingly, the meter meets the requirements of *BS 7580* Part 1.

The sound level meter should be set to read 114.0dB when used with the associated acoustic calibrator, microphone and preamplifier as detailed above at reference atmospheric pressure.

All ACSL's calibration instrumentation is fully traceable to National Standards. The acoustic references are calibrated by laboratories which are UKAS accredited for the purpose.

Certificate No: 13461
Date of Issue: 23rd July, 2010

Signature: 
Print Name: Trevor Lewis

Acoustic Calibration Services Limited,
Unit 6F, Diamond Industrial Centre,
Works Road, Letchworth Garden City,
Hertfordshire SG6 1LW



Tel: 01462-610085/87 Fax: 01462-610087
e-mail: cal@acousticcalibration.co.uk
web: www.acousticcalibration.co.uk

CERTIFICATE OF CALIBRATION

Model: CEL-110/1

Serial Number: 119427

Organisation: Environmental Assessment Services Ltd., London Road
Hickstead, Haywards Heath, West Sussex RH17 5LZ

Job Number: 1843

Customer Order Reference: EAS/CAL/1

The acoustic calibrator was run for a period of time until a stable level was measured. The output level was compared to the certified level of the laboratory measurement references. The measurements were repeated 5 times and the average value calculated.

The ambient temperature during calibration was $27 \pm 1^\circ\text{C}$.
The barometric pressure was 101.2 to 101.3 kPa.

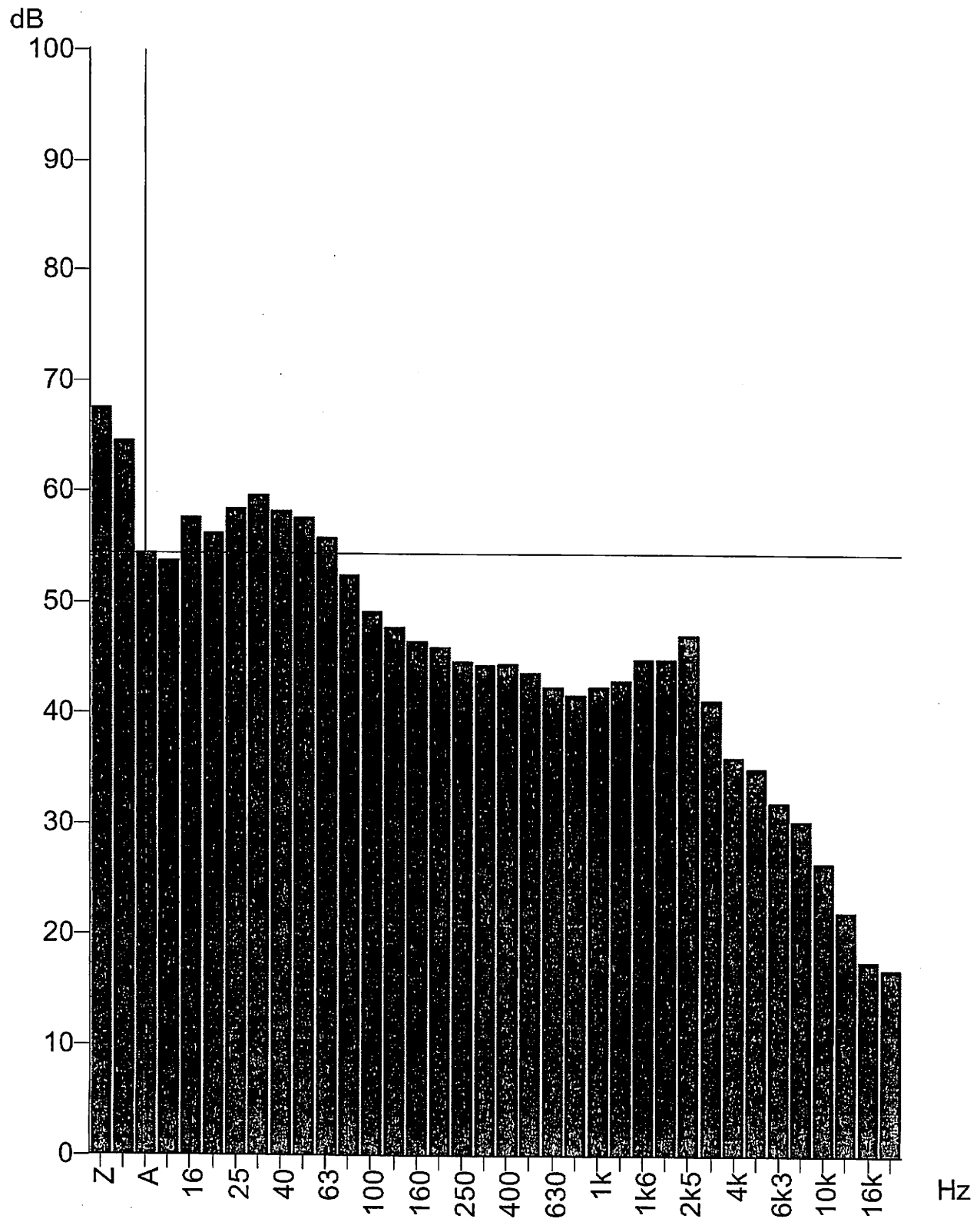
**The output of the acoustic calibrator when applied to the CEL 251 is 114.0dB or 94.1dB.
The output frequency signal of the acoustic calibrator is 1000Hz.**

All ACSL's calibration instrumentation is fully traceable to National Standards. The acoustic references are calibrated by laboratories which are UKAS accredited for the purpose.

Certificate No: 13460
Date of Issue: 23rd July, 2010

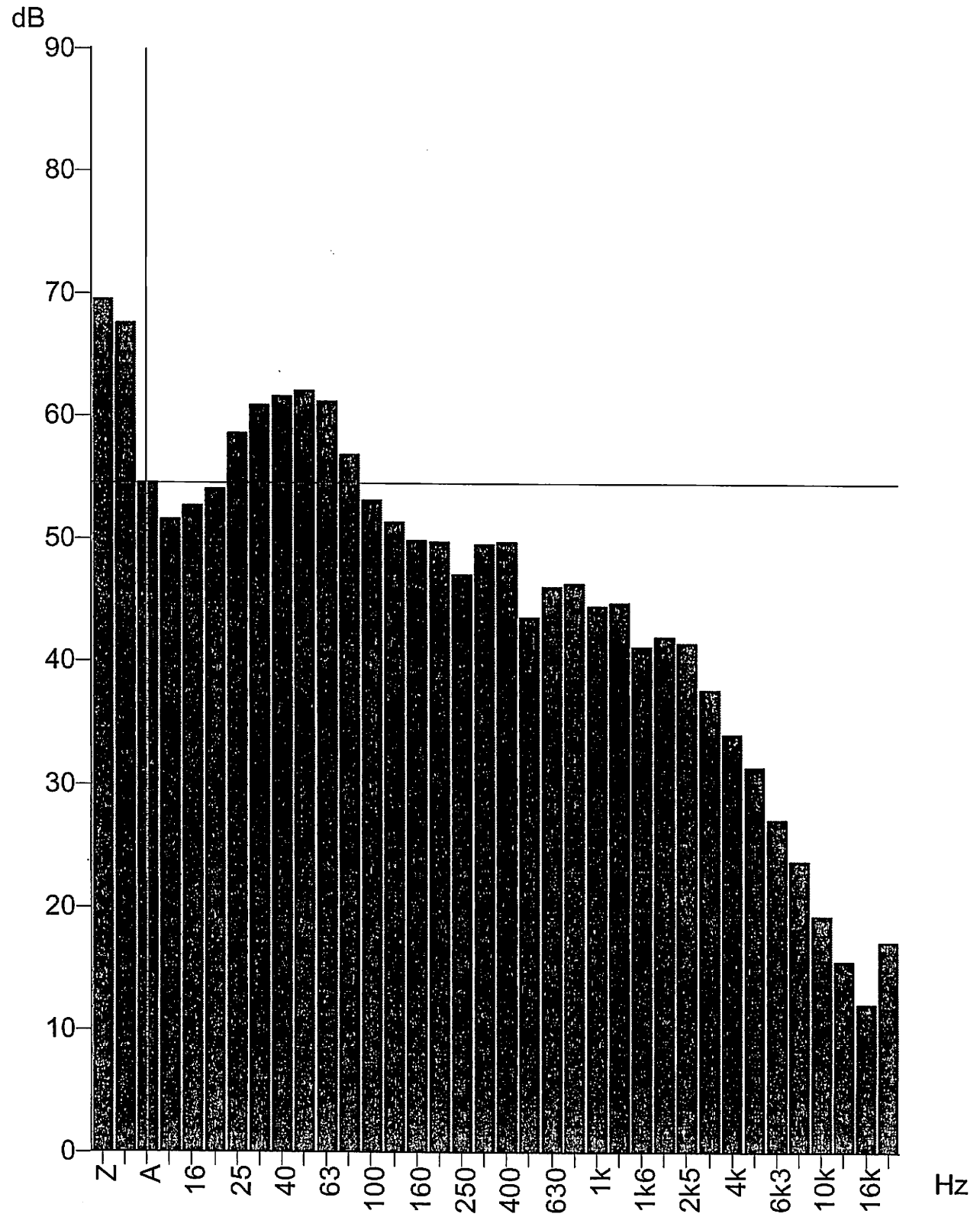
Signature: 
Print Name: Trevor Lewis

Appendix E-3: Noise Monitoring Results



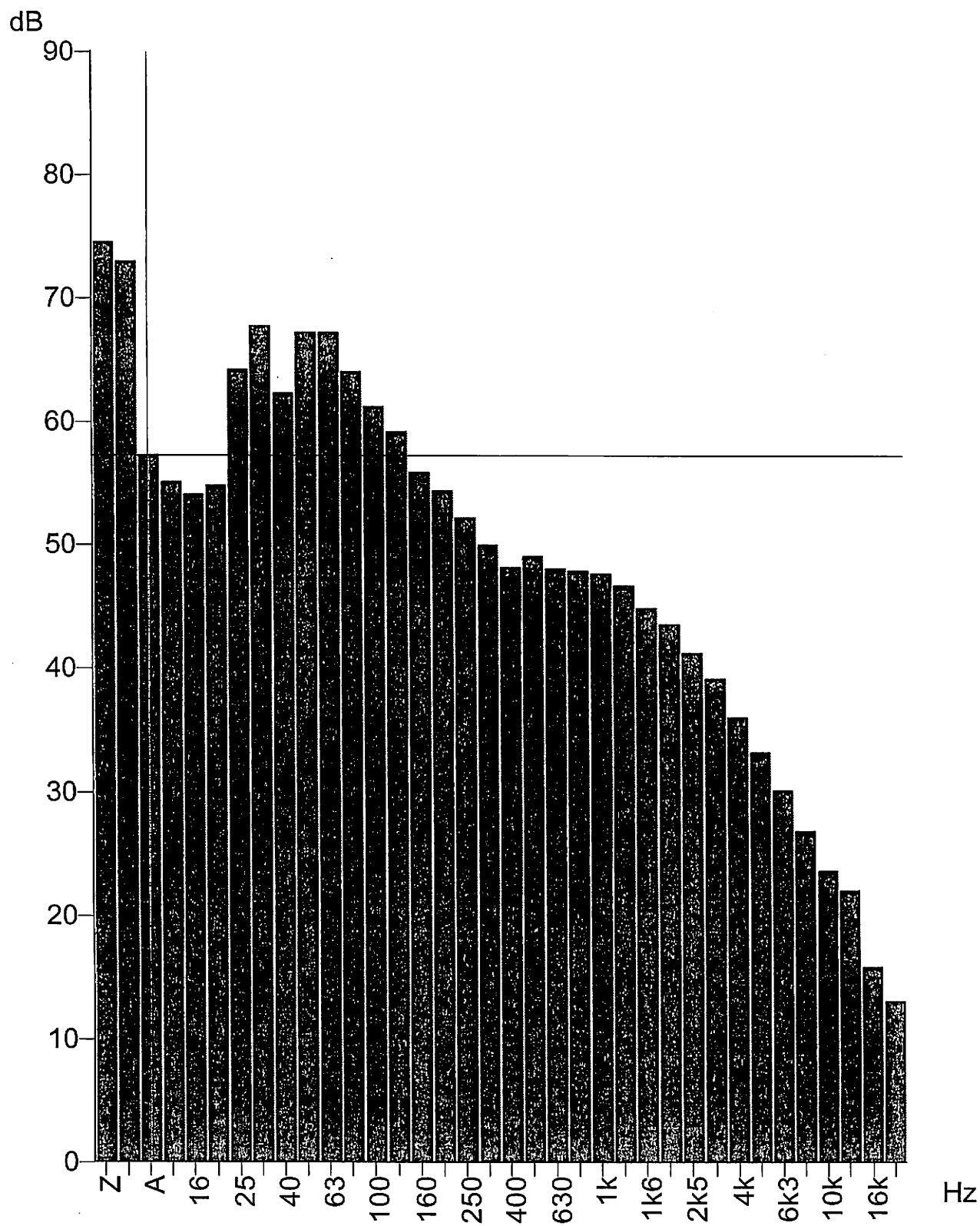
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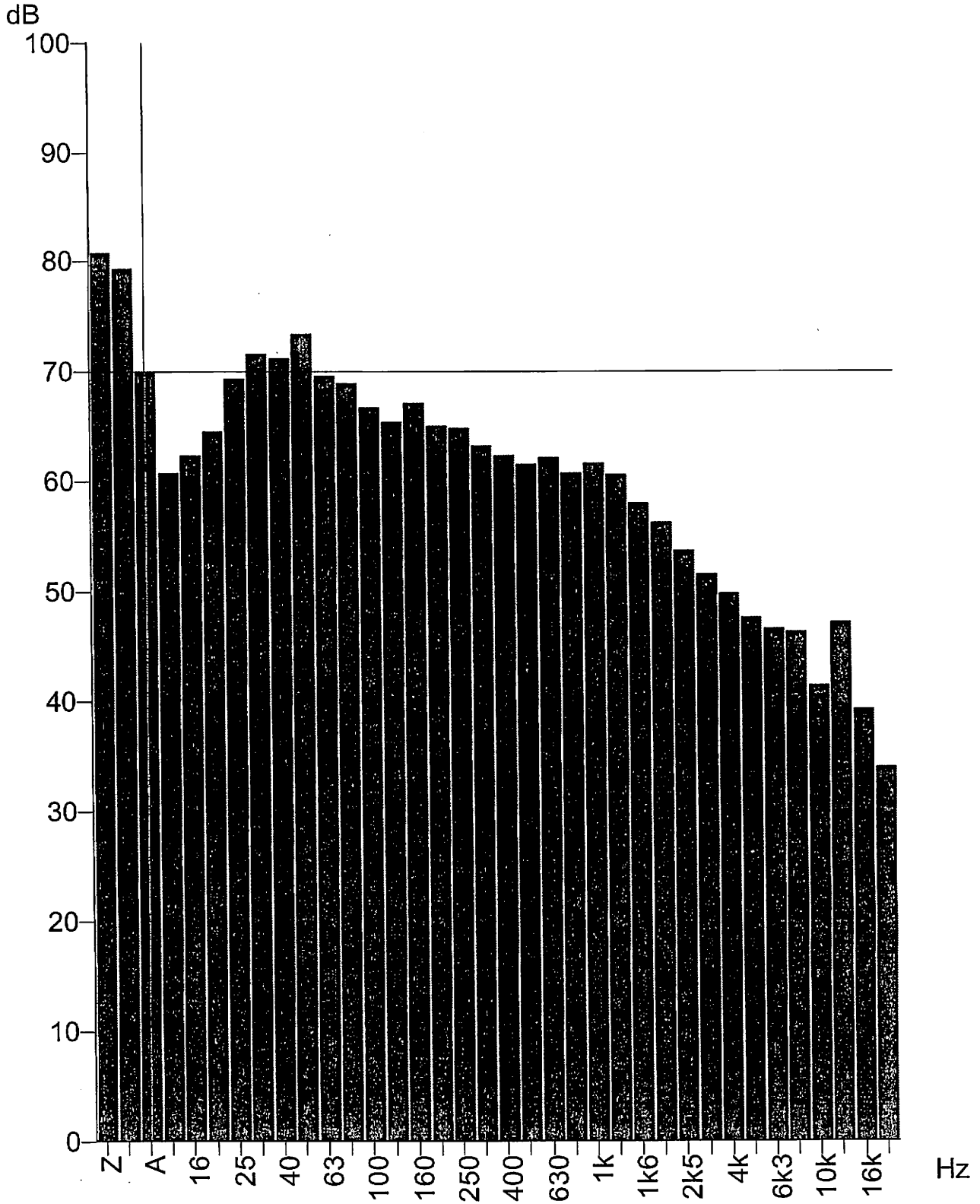
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Cursor: 27/05/2010 11:25:56, Band = Broadband, Level = 54.6 dB, Flags: -----



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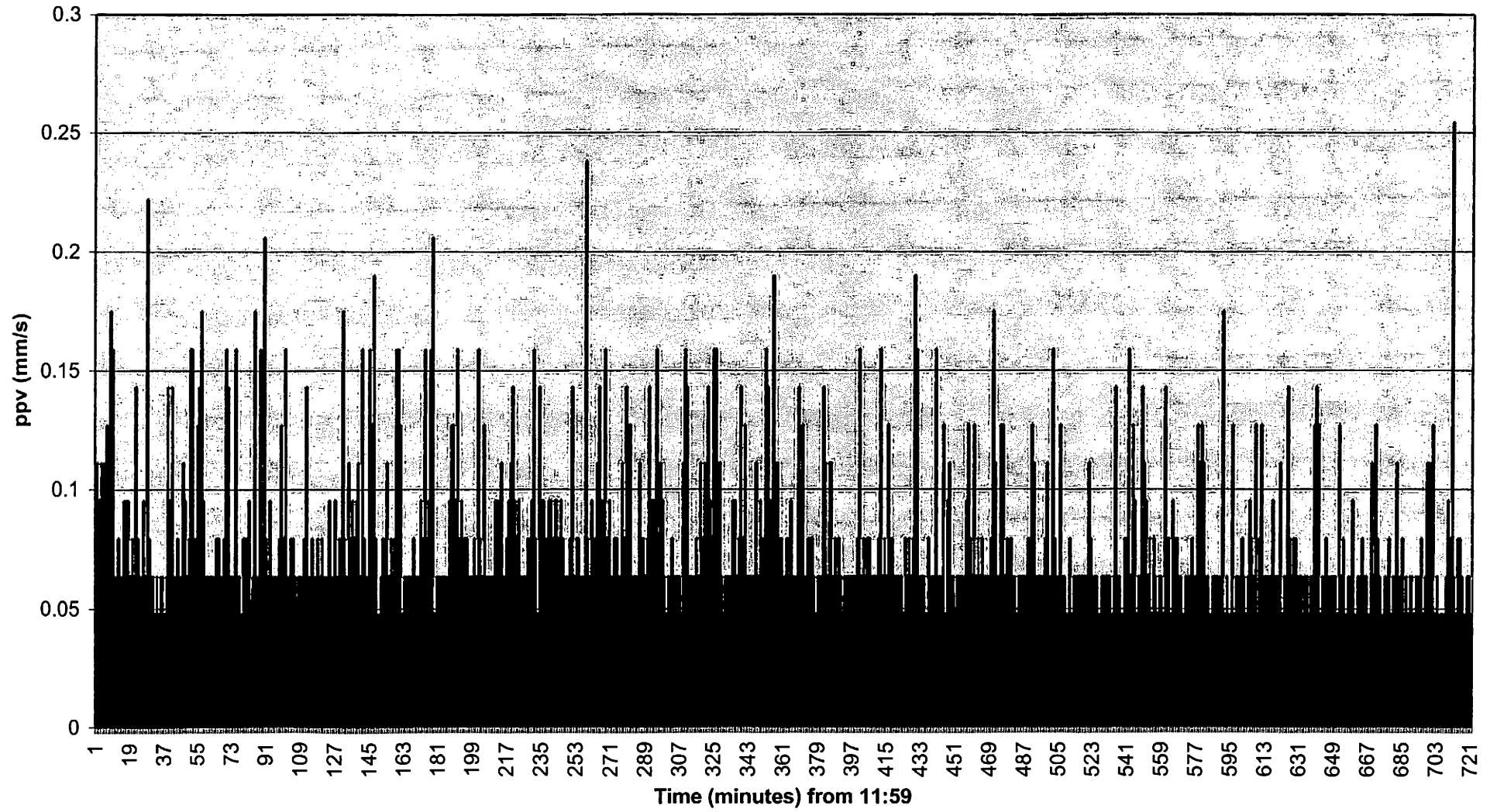


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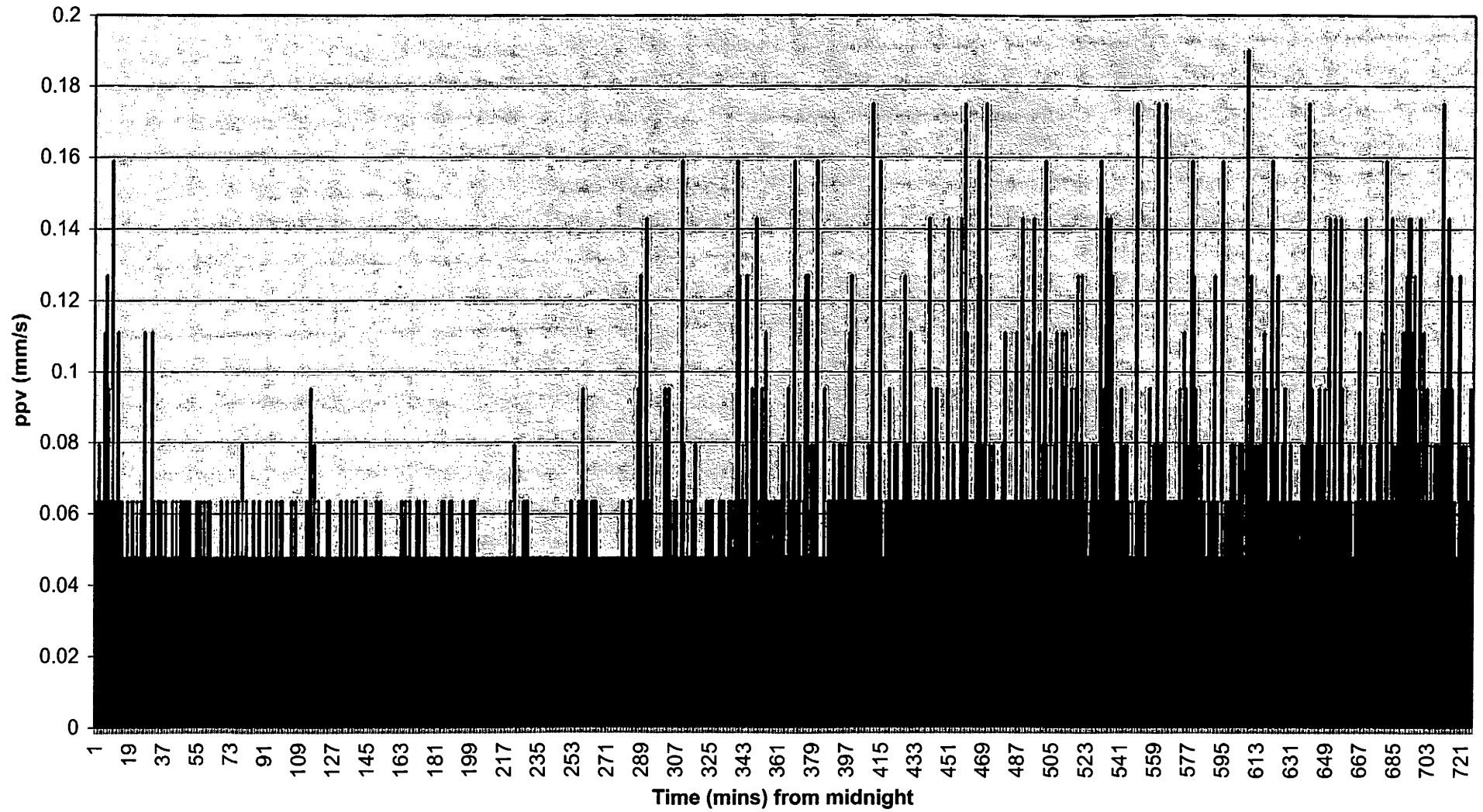
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Appendix E-4: Vibration Monitoring Results

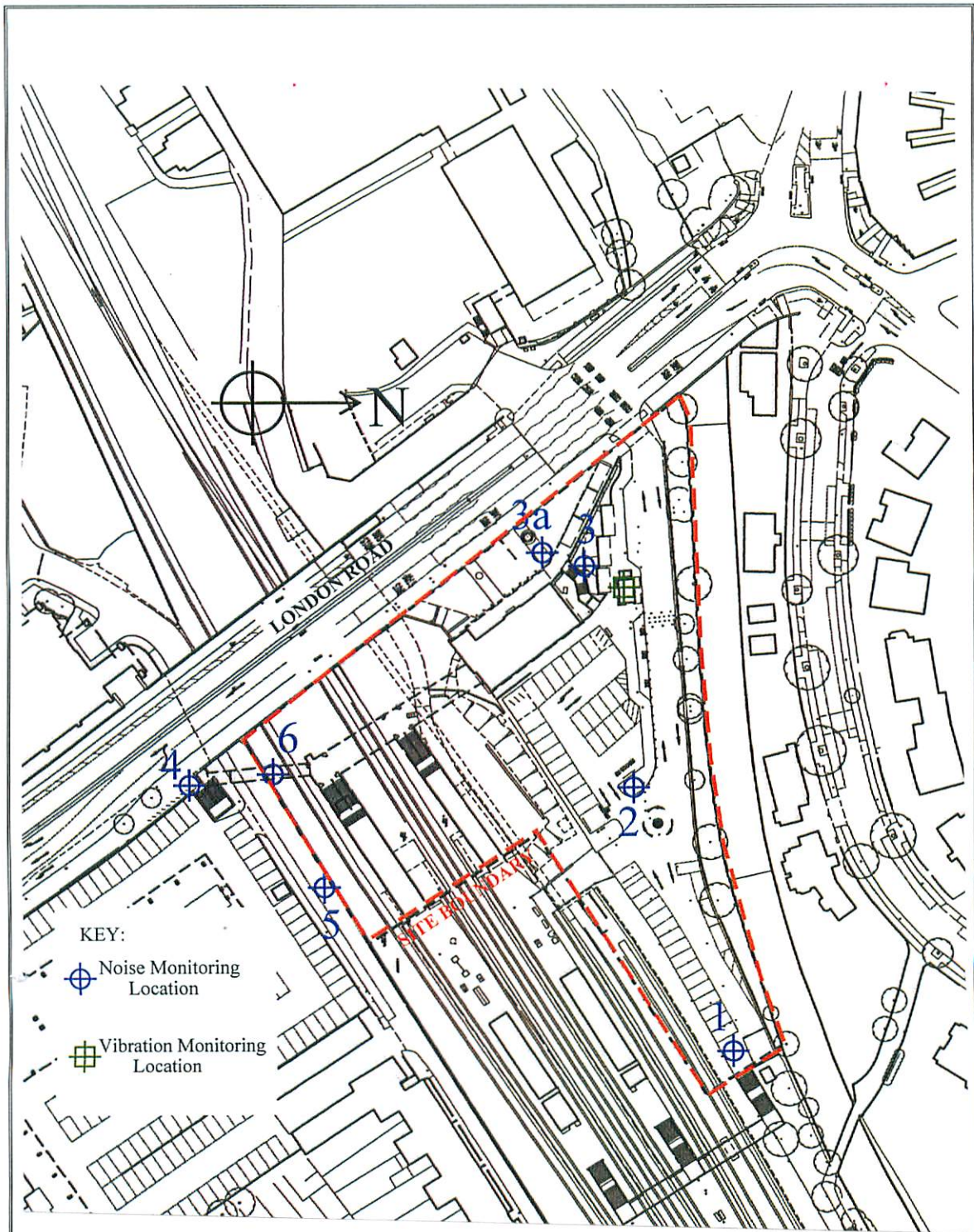
Twickenham 16 June 2010



Twickenham vibration 17 June 2010



Appendix E-1: Noise and Vibration Monitoring Locations



Based on Rolfe Judd drawing number 4674/Z6(10)P00 Revision A 'Existing Plan at Platform Level Ground Floor' May 2010

SOLUM REGENERATION LP

TWICKENHAM STATION, LONDON ROAD, TWICKENHAM, GREATER LONDON TW1 3SX

Noise and Vibration

Fig. 10-1 EXISTING SITE LAYOUT WITH NOISE AND VIBRATION MONITORING LOCATIONS



August 2010

Not to Scale

Appendix E-2: Calibration Certificates

Acoustic Calibration Services Limited,
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e-mail: cal@acousticcalibration.co.uk
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CERTIFICATE OF CALIBRATION

Model: CEL-490.C1

Serial No: 129580

Organisation: Environmental Assessment Services Ltd., London Road,
Hickstead, Haywards Heath, West Sussex RH17 5LZ

Job Number: 1843

Customer Order Reference: EAS/CAL/1

The Sound Level Meter was assessed for conformance with International Standards *IEC60651* and *IEC60804* using test procedures described in *BS 7580* Part 1. The meter claims Type 1 accuracy conformance and it was against these requirements that all the results were evaluated.

The sound level meter was connected to a CEL-495 preamplifier Serial No. 000758 and a CEL-251 measurement microphone Serial No. 0748. The microphone has a nominal capacitance of 18 pF and the device used to apply electrical signals to the preamplifier was of the same nominal capacitance.

CEL-110/1 Acoustic Calibrator Serial No: 119427 was utilised in establishing the initial acoustic calibration setting.

The sound level meter passed all applied tests with no deviations from Type 1 specification, in accordance with *IEC 60651* and *IEC 60804*. Accordingly, the meter meets the requirements of *BS 7580* Part 1.

The sound level meter should be set to read 114.0dB when used with the associated acoustic calibrator, microphone and preamplifier as detailed above at reference atmospheric pressure.

All ACSL's calibration instrumentation is fully traceable to National Standards. The acoustic references are calibrated by laboratories which are UKAS accredited for the purpose.

Certificate No: 13461
Date of Issue: 23rd July, 2010

Signature: 
Print Name: Trevor Lewis

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e-mail: cal@acousticcalibration.co.uk
web: www.acousticcalibration.co.uk

CERTIFICATE OF CALIBRATION

Model: CEL-110/1

Serial Number: 119427

Organisation: Environmental Assessment Services Ltd., London Road
Hickstead, Haywards Heath, West Sussex RH17 5LZ

Job Number: 1843

Customer Order Reference: EAS/CAL/1

The acoustic calibrator was run for a period of time until a stable level was measured. The output level was compared to the certified level of the laboratory measurement references. The measurements were repeated 5 times and the average value calculated.

The ambient temperature during calibration was $27 \pm 1^\circ\text{C}$.
The barometric pressure was 101.2 to 101.3 kPa.

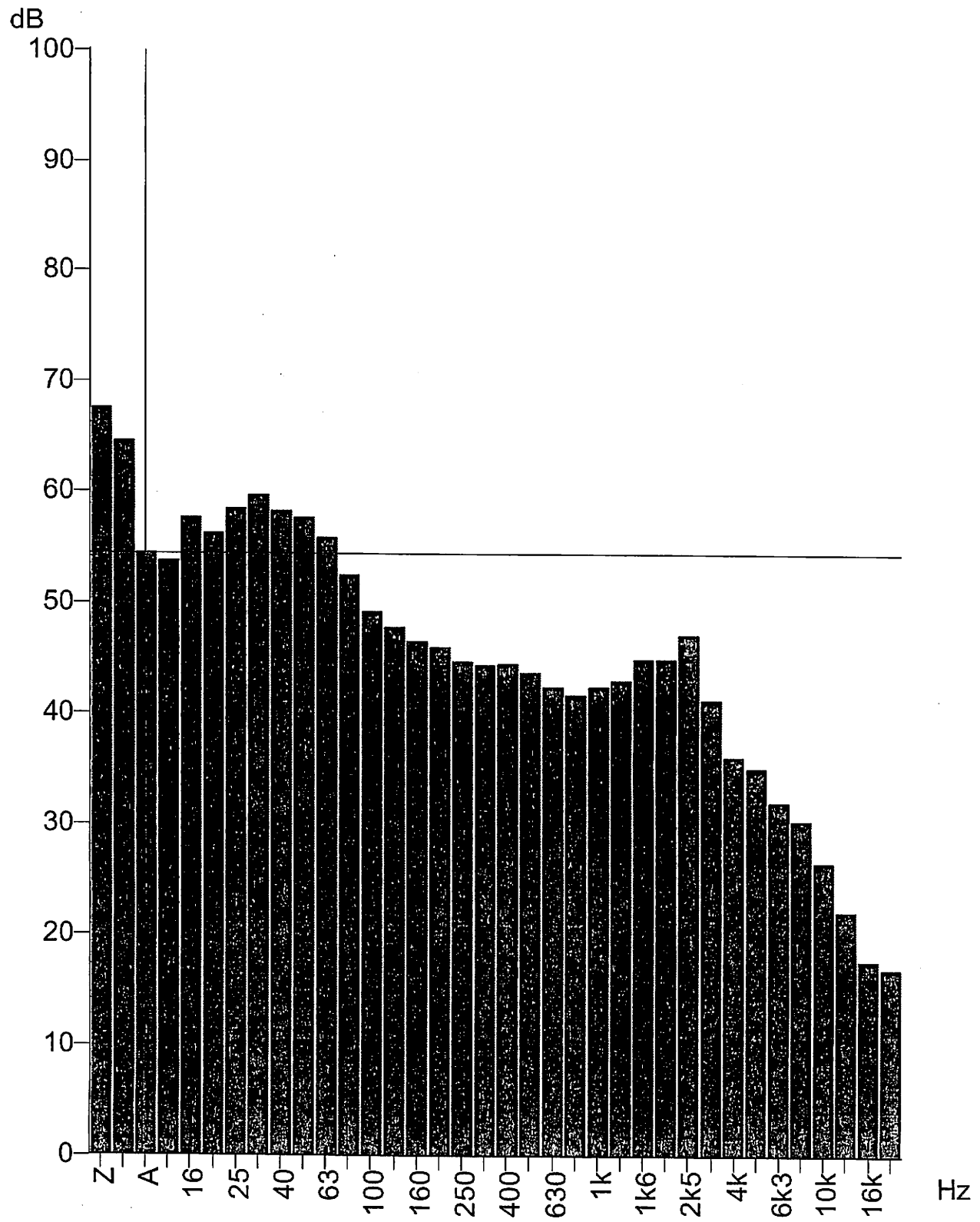
**The output of the acoustic calibrator when applied to the CEL 251 is 114.0dB or 94.1dB.
The output frequency signal of the acoustic calibrator is 1000Hz.**

All ACSL's calibration instrumentation is fully traceable to National Standards. The acoustic references are calibrated by laboratories which are UKAS accredited for the purpose.

Certificate No: 13460
Date of Issue: 23rd July, 2010

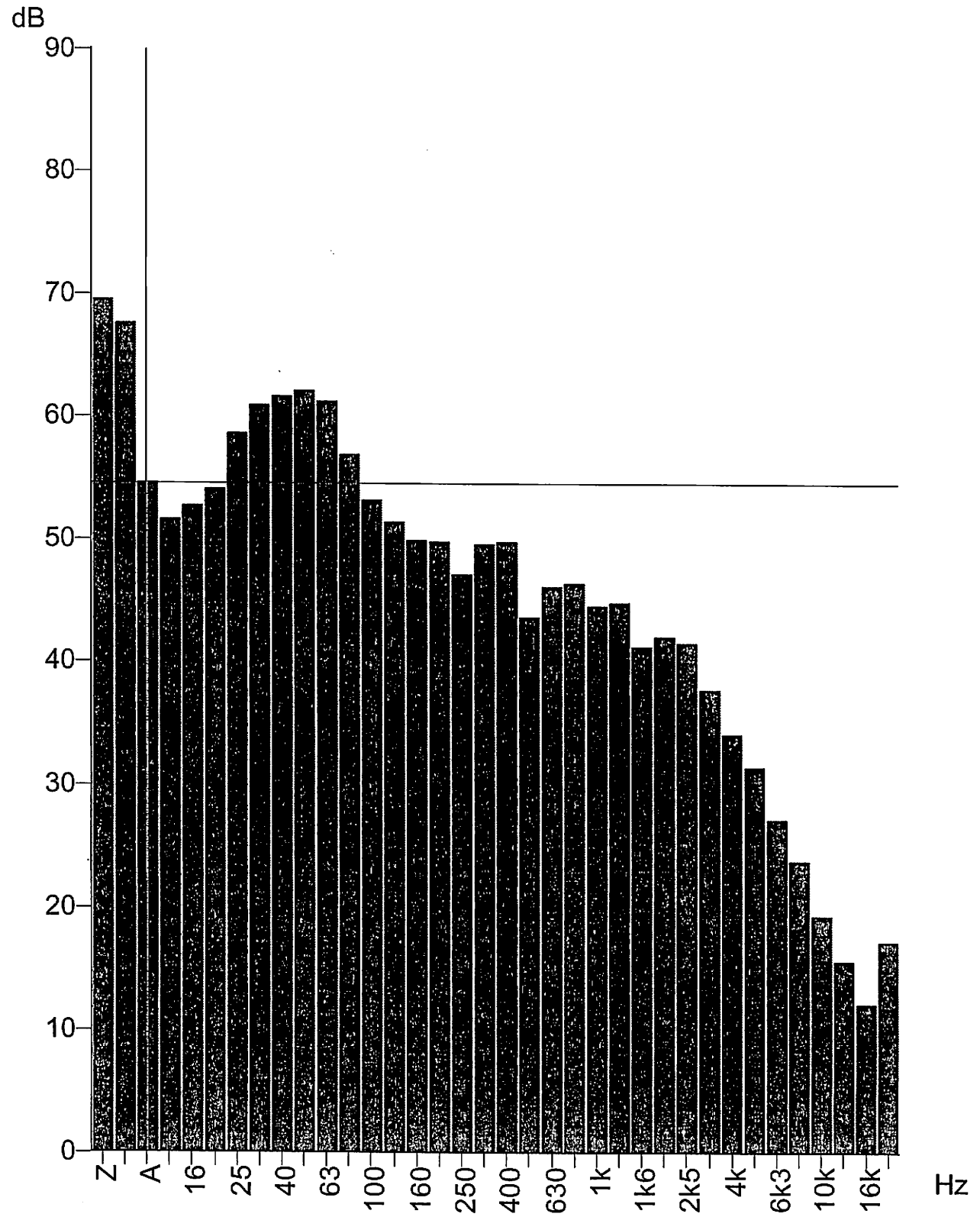
Signature: 
Print Name: Trevor Lewis

Appendix E-3: Noise Monitoring Results



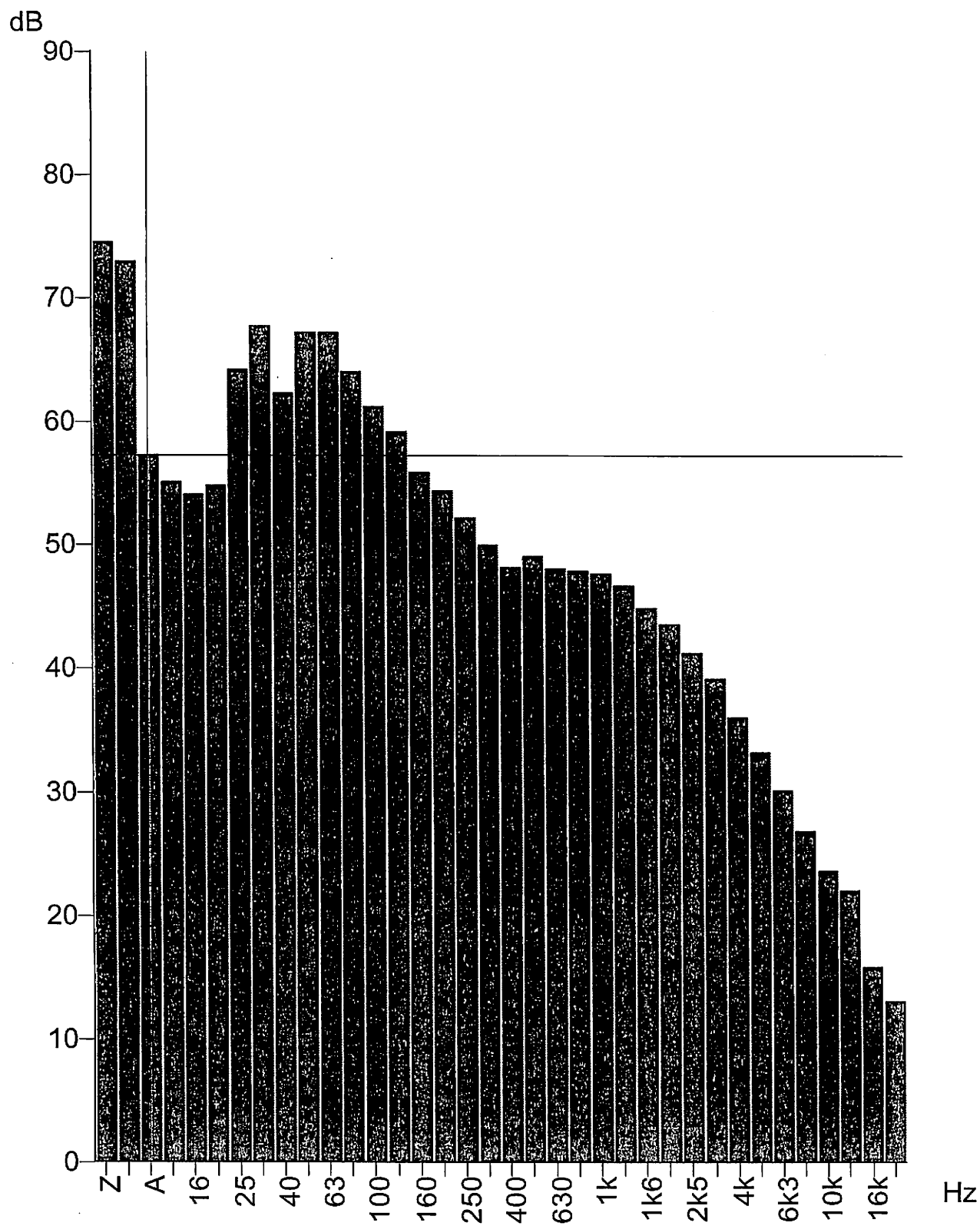
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Function = LZeq dB

Cursor: 27/05/2010 11:06:14, Band = Broadband, Level = 54.5 dB, Flags: -----



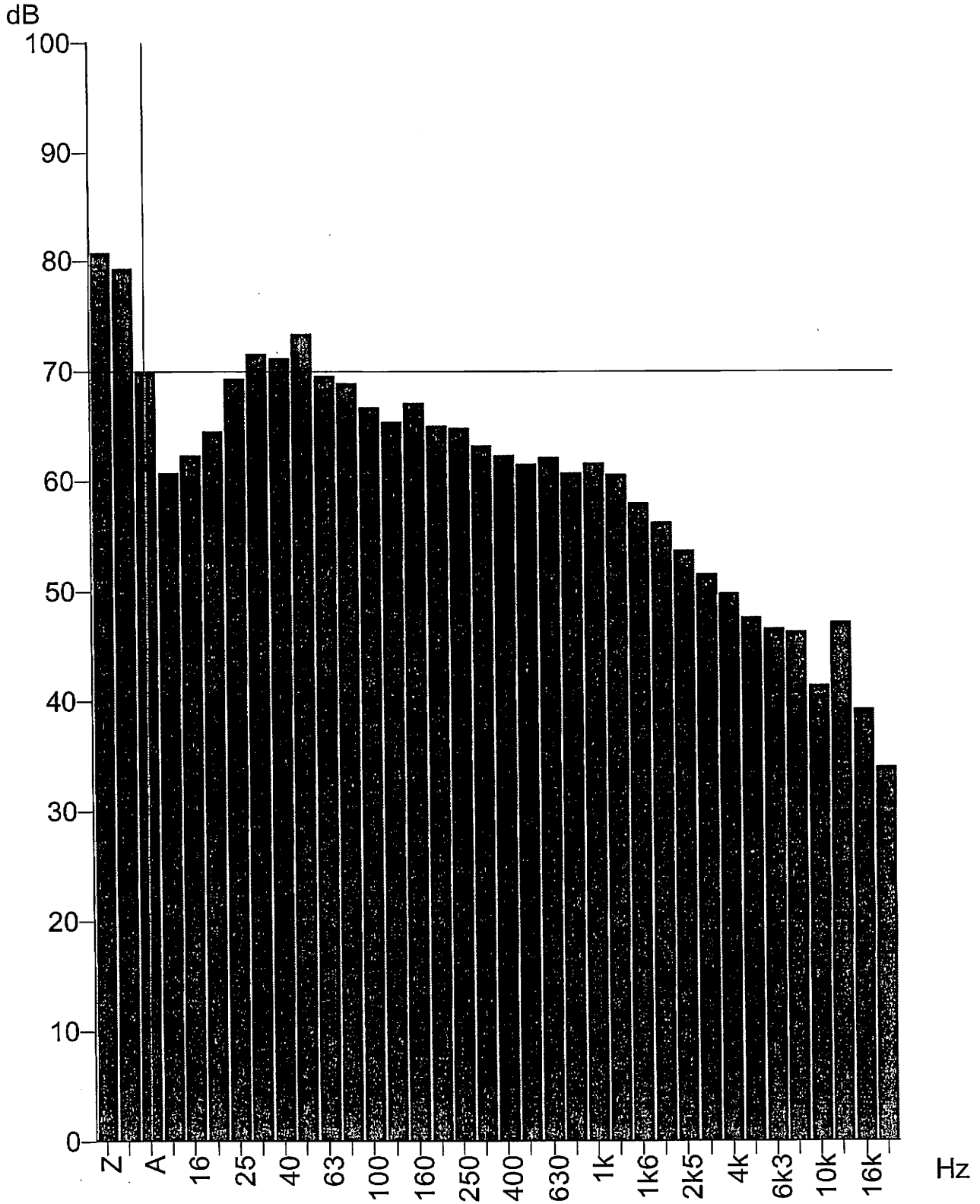
c:\documents and settings\all users.windows\documents\shared
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Function = LZeq dB

Cursor: 27/05/2010 11:25:56, Band = Broadband, Level = 54.6 dB, Flags: -----



c:\documents and settings\all users\windows\documents\shared
documents\twickenham3.dta
Function = LZeq dB

Cursor: 27/05/2010 11:46:48, Band = Broadband, Level = 57.3 dB, Flags: -----

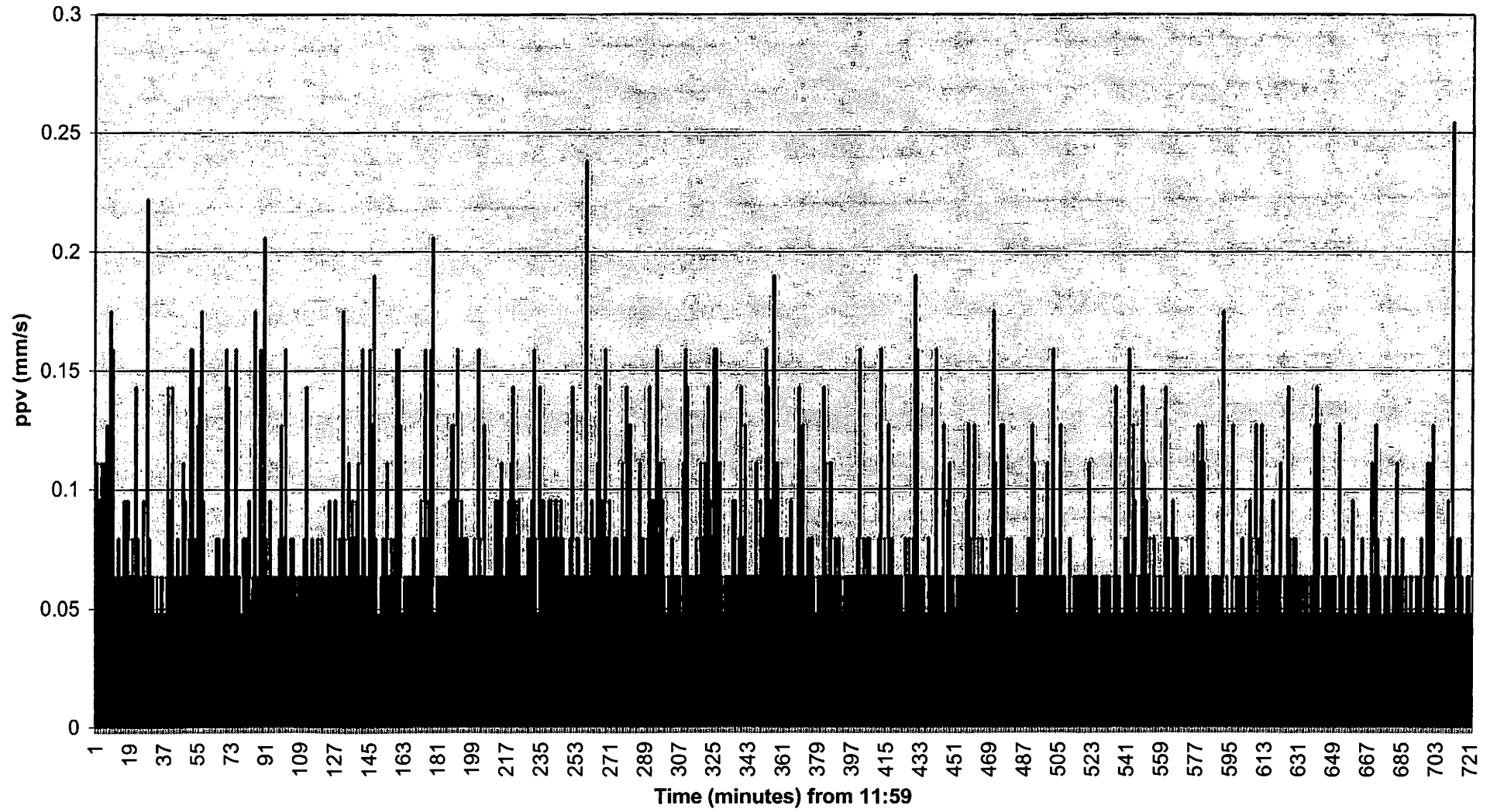


c:\documents and settings\all users.windows\documents\shared
documents\twickenham4.dta
Function = LZeq dB

Cursor: 27/05/2010 12:05:43, Band = Broadband, Level = 70.0 dB, Flags: -----

Appendix E-4: Vibration Monitoring Results

Twickenham 16 June 2010



Twickenham vibration 17 June 2010

