

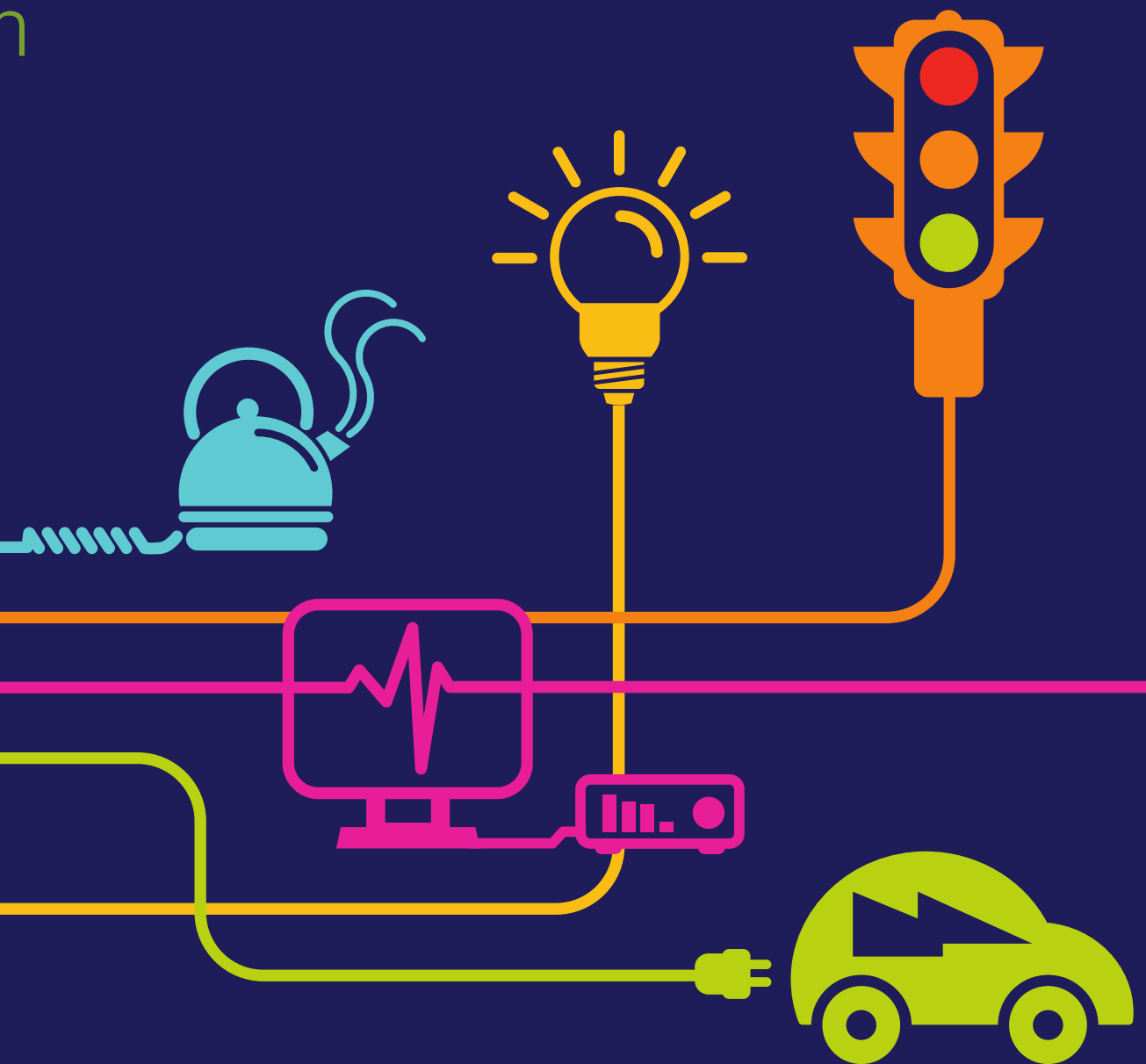
DOCUMENT 5.15.2.11

Assessment of Vibration Effects from Pylon Construction

Chapter 15 – Appendix 11

National Grid (North Wales Connection Project)

Regulation 5(2)(a) including (l) and (m) of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009





North Wales Connection Project

Volume 5

Document 5.15.2.11 Appendix 15.11 Assessment of Vibration Effects from Pylon Construction

National Grid
National Grid House
Warwick Technology Park
Gallows Hill
Warwick
CV34 6DA

Final September 2018

Page intentionally blank

Document Control			
Document Properties			
Organisation		RPS	
Author		Susan Hirst	
Approved by		Phil Evans	
Title		Environmental Statement Appendix 15.11	
Document Reference		Document 5.15.2.11	
Version History			
Date	Version	Status	Description/Changes
September 2018	Rev A	Final	Final for submission

Page intentionally blank

Contents

1. Option A Assessment	1
2. Option B Assessment	4
Figures	7

Page intentionally blank

1. Option A Assessment

Assessment of Vibration Effects from Pylon Construction – Option A								
Receptor	Receptor Type	Receptor Sensitivity	Pylon Working Areas that the Receptor Lies Within	Distance from centre of Working Area to Receptor (m)	PPV (mm/s)	Human Perception	Reinforced or Light Framed Structures / Residential or Light Commercial Type Buildings	Reinforced or Framed Structures / Industrial and Heavy Commercial Buildings
						Magnitude of Effect	Magnitude of Effect	Magnitude of Effect
C5/00419	Shop / Showroom	Low	4AP082	127	0.18	Very Low	Very Low	Very Low
C5/00420	Retail	Low	4AP082	121	0.19	Very Low	Very Low	Very Low
C5/13299	Commercial	Low	4AP082	126	0.18	Very Low	Very Low	Very Low
C5/13300	Commercial	Low	4AP082	116	0.20	Very Low	Very Low	Very Low
R1/00135	Dwelling	Medium	4ZA007	80	0.31	Low	Very Low	Very Low
R1/00144	Dwelling	Medium	4ZA007	153	0.14	Very Low	Very Low	Very Low
R1/00152	Dwelling	Medium	4ZA007	162	0.13	Very Low	Very Low	Very Low
R1/00256	Dwelling	Medium	4ZA010	121	0.19	Very Low	Very Low	Very Low
R1/00289	Dwelling	Medium	4ZA010	114	0.20	Very Low	Very Low	Very Low
R1/00533	Dwelling	Medium	4ZA012	87	0.28	Very Low	Very Low	Very Low
R1/01167	Dwelling	Medium	4ZA015	131	0.17	Very Low	Very Low	Very Low
R1/01193	Dwelling	Medium	4ZA016	44	0.65	Low	Very Low	Very Low
R2/00029	Dwelling	Medium	4ZA026	117	0.20	Very Low	Very Low	Very Low
R2/00029	Dwelling	Medium	4ZA027	139	0.16	Very Low	Very Low	Very Low
R2/00030	Detached	Medium	4ZA027	112	0.21	Very Low	Very Low	Very Low
R2/00076	Dwelling	Medium	4ZA030T	63	0.41	Low	Very Low	Very Low
R2/00076	Dwelling	Medium	4ZA030	69	0.37	Low	Very Low	Very Low
R2/00171	Dwelling	Medium	4ZA031	85	0.29	Very Low	Very Low	Very Low
R2/00331	Detached	Medium	4AP028	117	0.20	Very Low	Very Low	Very Low
R2/00352	Dwelling	Medium	4AP028	154	0.14	Very Low	Very Low	Very Low
R2/00353	Dwelling	Medium	4AP028	74	0.34	Low	Very Low	Very Low

Assessment of Vibration Effects from Pylon Construction – Option A								
Receptor	Receptor Type	Receptor Sensitivity	Pylon Working Areas that the Receptor Lies Within	Distance from centre of Working Area to Receptor (m)	PPV (mm/s)	Human Perception	Reinforced or Light Framed Structures / Residential or Light Commercial Type Buildings	Reinforced or Framed Structures / Industrial and Heavy Commercial Buildings
						Magnitude of Effect	Magnitude of Effect	Magnitude of Effect
R2/00353	Dwelling	Medium	4ZA032	146	0.15	Very Low	Very Low	Very Low
R2/00489	Dwelling	Medium	4ZA032	149	0.15	Very Low	Very Low	Very Low
R2/00845	Dwelling	Medium	4AP035	100	0.24	Very Low	Very Low	Very Low
R2/13706	Caravan	Medium	4AP035	72	0.35	Low	Very Low	Very Low
R3/00137	Dwelling	Medium	4ZA043	175	0.12	Very Low	Very Low	Very Low
R3/00141	Detached	Medium	4AP041	143	0.16	Very Low	Very Low	Very Low
R3/00148	Detached	Medium	4AP043	163	0.13	Very Low	Very Low	Very Low
R3/00259	Detached	Medium	4AP045	133	0.17	Very Low	Very Low	Very Low
R3/00276	Dwelling	Medium	4AP046	138	0.16	Very Low	Very Low	Very Low
R3/00291	Dwelling	Medium	4AP046	118	0.20	Very Low	Very Low	Very Low
R3/00307	Dwelling	Medium	4AP048	139	0.16	Very Low	Very Low	Very Low
R3/00351	Dwelling	Medium	4AP056	129	0.18	Very Low	Very Low	Very Low
R3/00374	Dwelling	Medium	4AP060	99	0.24	Very Low	Very Low	Very Low
R4/01476	Dwelling	Medium	4AP064	77	0.32	Low	Very Low	Very Low
R4/01479	Dwelling	Medium	4AP066	135	0.17	Very Low	Very Low	Very Low
R5/02059	Dwelling	Medium	4AP076	108	0.22	Very Low	Very Low	Very Low
R5/02191	Dwelling	Medium	4AP078	126	0.18	Very Low	Very Low	Very Low
R5/02305	Dwelling	Medium	4AP078	98	0.24	Very Low	Very Low	Very Low
R5/02592	Detached	Medium	4AP083	94	0.26	Very Low	Very Low	Very Low
R5/02593	Detached	Medium	4AP082	105	0.22	Very Low	Very Low	Very Low
R5/02594	Detached	Medium	4AP082	75	0.34	Low	Very Low	Very Low
R5/02601	Dwelling	Medium	4AP082	169	0.13	Very Low	Very Low	Very Low
R5/02602	Dwelling	Medium	4AP082	169	0.13	Very Low	Very Low	Very Low
R5/02603	Detached	Medium	4AP082	169	0.13	Very Low	Very Low	Very Low
R5/02649	Dwelling	Medium	4AP084	131	0.17	Very Low	Very Low	Very Low
R5/02654	Dwelling	Medium	4AP084	138	0.16	Very Low	Very Low	Very Low
R5/07659	Self Contained Flat (Includes	Medium	4AP089	166	0.13	Very Low	Very Low	Very Low

Assessment of Vibration Effects from Pylon Construction – Option A								
Receptor	Receptor Type	Receptor Sensitivity	Pylon Working Areas that the Receptor Lies Within	Distance from centre of Working Area to Receptor (m)	PPV (mm/s)	Human Perception	Reinforced or Light Framed Structures / Residential or Light Commercial Type Buildings	Reinforced or Framed Structures / Industrial and Heavy Commercial Buildings
						Magnitude of Effect	Magnitude of Effect	Magnitude of Effect
	Maisonette / Apartment)							
R5/07660	Detached	Medium	4AP089	165	0.13	Very Low	Very Low	Very Low
R5/08574	Detached	Medium	4AP090	132	0.17	Very Low	Very Low	Very Low
R5/09355	Detached	Medium	4AP091	159	0.14	Very Low	Very Low	Very Low
R5/09356	Caravan	Medium	4AP091	159	0.14	Very Low	Very Low	Very Low
R5/13562	Privately Owned Holiday Caravan / Chalet	Medium	4AP082	94	0.26	Very Low	Very Low	Very Low
R5/13595	Privately Owned Holiday Caravan / Chalet	Medium	4AP082	105	0.22	Very Low	Very Low	Very Low
R5/13711	Residential	Medium	4AP086	152	0.14	Very Low	Very Low	Very Low

2. Option B Assessment

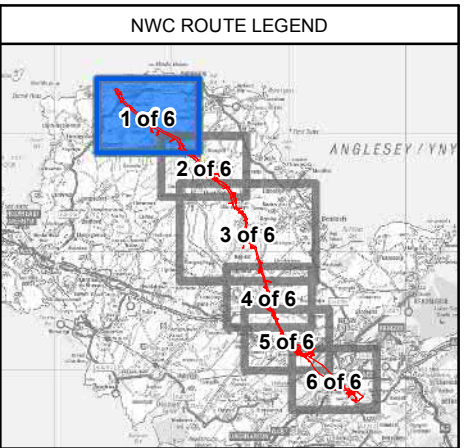
Assessment of Vibration Effects from Pylon Construction – Option B								
Receptor	Receptor Type	Receptor Sensitivity	Pylon Working Areas that the Receptor Lies Within	Distance from centre of Working Area to Receptor (m)	PPV (mm/s)	Human Perception	Reinforced or Light Framed Structures / Residential or Light Commercial Type Buildings	Reinforced or Framed Structures / Industrial and Heavy Commercial Buildings
						Magnitude of Effect	Magnitude of Effect	Magnitude of Effect
C5/00419	Shop / Showroom	Low	4AP082	127	0.18	Very Low	Very Low	Very Low
C5/00420	Retail	Low	4AP082	121	0.19	Very Low	Very Low	Very Low
C5/13299	Commercial	Low	4AP082	126	0.18	Very Low	Very Low	Very Low
C5/13300	Commercial	Low	4AP082	116	0.20	Very Low	Very Low	Very Low
R1/00135	Dwelling	Medium	4ZA007	80	0.31	Low	Very Low	Very Low
R1/00144	Dwelling	Medium	4ZA007	153	0.14	Very Low	Very Low	Very Low
R1/00152	Dwelling	Medium	4ZA007	162	0.13	Very Low	Very Low	Very Low
R1/00256	Dwelling	Medium	4ZA010	121	0.19	Very Low	Very Low	Very Low
R1/00289	Dwelling	Medium	4ZA010	114	0.20	Very Low	Very Low	Very Low
R1/00533	Dwelling	Medium	4ZA012	87	0.28	Very Low	Very Low	Very Low
R1/01167	Dwelling	Medium	4ZA015	131	0.17	Very Low	Very Low	Very Low
R1/01193	Dwelling	Medium	4ZA016	44	0.65	Low	Very Low	Very Low
R2/00029	Dwelling	Medium	4ZA026	117	0.20	Very Low	Very Low	Very Low
R2/00029	Dwelling	Medium	4ZA027	139	0.16	Very Low	Very Low	Very Low
R2/00030	Detached	Medium	4ZA027	112	0.21	Very Low	Very Low	Very Low
R2/00076	Dwelling	Medium	4ZA030T	63	0.41	Low	Very Low	Very Low
R2/00076	Dwelling	Medium	4ZA030	69	0.37	Low	Very Low	Very Low
R2/00171	Dwelling	Medium	4ZA031	85	0.29	Very Low	Very Low	Very Low
R2/00331	Detached	Medium	4AP028	117	0.20	Very Low	Very Low	Very Low
R2/00352	Dwelling	Medium	4AP028	154	0.14	Very Low	Very Low	Very Low
R2/00353	Dwelling	Medium	4AP028	74	0.34	Low	Very Low	Very Low
R2/00353	Dwelling	Medium	4ZA032	146	0.15	Very Low	Very Low	Very Low

Assessment of Vibration Effects from Pylon Construction – Option B								
Receptor	Receptor Type	Receptor Sensitivity	Pylon Working Areas that the Receptor Lies Within	Distance from centre of Working Area to Receptor (m)	PPV (mm/s)	Human Perception	Reinforced or Light Framed Structures / Residential or Light Commercial Type Buildings	Reinforced or Framed Structures / Industrial and Heavy Commercial Buildings
						Magnitude of Effect	Magnitude of Effect	Magnitude of Effect
C5/00419	Shop / Showroom	Low	4AP082	127	0.18	Very Low	Very Low	Very Low
R2/00489	Dwelling	Medium	4ZA032	149	0.15	Very Low	Very Low	Very Low
R2/00845	Dwelling	Medium	4AP035	100	0.24	Very Low	Very Low	Very Low
R2/13706	Caravan	Medium	4AP035	72	0.35	Low	Very Low	Very Low
R3/00137	Dwelling	Medium	4ZA043	175	0.12	Very Low	Very Low	Very Low
R3/00141	Detached	Medium	4AP041	143	0.16	Very Low	Very Low	Very Low
R3/00148	Detached	Medium	4AP043	163	0.13	Very Low	Very Low	Very Low
R3/00259	Detached	Medium	4AP045	133	0.17	Very Low	Very Low	Very Low
R3/00276	Dwelling	Medium	4AP046	138	0.16	Very Low	Very Low	Very Low
R3/00291	Dwelling	Medium	4AP046	118	0.20	Very Low	Very Low	Very Low
R3/00307	Dwelling	Medium	4AP048	139	0.16	Very Low	Very Low	Very Low
R3/00351	Dwelling	Medium	4AP056	129	0.18	Very Low	Very Low	Very Low
R3/00374	Dwelling	Medium	4AP060	99	0.24	Very Low	Very Low	Very Low
R4/01476	Dwelling	Medium	4AP064	77	0.32	Low	Very Low	Very Low
R4/01479	Dwelling	Medium	4AP065	89	0.27	Very Low	Very Low	Very Low
R4/01479	Dwelling	Medium	4AP066	135	0.17	Very Low	Very Low	Very Low
R5/02059	Dwelling	Medium	4AP076	108	0.22	Very Low	Very Low	Very Low
R5/02191	Dwelling	Medium	4AP078	126	0.18	Very Low	Very Low	Very Low
R5/02305	Dwelling	Medium	4AP078	98	0.24	Very Low	Very Low	Very Low
R5/02592	Detached	Medium	4AP083	94	0.26	Very Low	Very Low	Very Low
R5/02593	Detached	Medium	4AP082	105	0.22	Very Low	Very Low	Very Low
R5/02594	Detached	Medium	4AP082	75	0.34	Low	Very Low	Very Low
R5/02601	Dwelling	Medium	4AP082	169	0.13	Very Low	Very Low	Very Low
R5/02602	Dwelling	Medium	4AP082	169	0.13	Very Low	Very Low	Very Low
R5/02603	Detached	Medium	4AP082	169	0.13	Very Low	Very Low	Very Low
R5/02649	Dwelling	Medium	4AP084	131	0.17	Very Low	Very Low	Very Low
R5/02654	Dwelling	Medium	4AP084	138	0.16	Very Low	Very Low	Very Low

Assessment of Vibration Effects from Pylon Construction – Option B								
Receptor	Receptor Type	Receptor Sensitivity	Pylon Working Areas that the Receptor Lies Within	Distance from centre of Working Area to Receptor (m)	PPV (mm/s)	Human Perception	Reinforced or Light Framed Structures / Residential or Light Commercial Type Buildings	Reinforced or Framed Structures / Industrial and Heavy Commercial Buildings
						Magnitude of Effect	Magnitude of Effect	Magnitude of Effect
C5/00419	Shop / Showroom	Low	4AP082	127	0.18	Very Low	Very Low	Very Low
R5/07659	Self Contained Flat (Includes Maisonette / Apartment)	Medium	4AP089	166	0.13	Very Low	Very Low	Very Low
R5/07660	Detached	Medium	4AP089	165	0.13	Very Low	Very Low	Very Low
R5/08574	Detached	Medium	4AP090	132	0.17	Very Low	Very Low	Very Low
R5/09355	Detached	Medium	4AP091	159	0.14	Very Low	Very Low	Very Low
R5/09356	Caravan	Medium	4AP091	159	0.14	Very Low	Very Low	Very Low
R5/13562	Privately Owned Holiday Caravan / Chalet	Medium	4AP082	94	0.26	Very Low	Very Low	Very Low
R5/13595	Privately Owned Holiday Caravan / Chalet	Medium	4AP082	105	0.22	Very Low	Very Low	Very Low
R5/13711	Residential	Medium	4AP086	152	0.14	Very Low	Very Low	Very Low

Figures

Page intentionally blank



LEGEND

ORDER LIMITS

SECTION OUTLINES

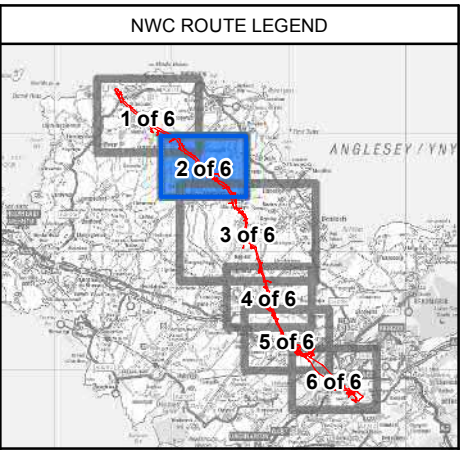
SIGNIFICANCE OF EFFECT:

- Moderate
- Minor
- Negligible

VIBRATION STUDY AREA

A	30/07/2018	ENVIRONMENTAL STATEMENT	JF	SH	PE
Rev	Date	Description	GIS	Chk	App
nationalgrid					
Scheme: NORTH WALES CONNECTION PROJECT					
Document Number: 5.15.2.11					
Document Title: FIGURE A SIGNIFICANCE OF VIBRATION EFFECTS FROM PYLON CONSTRUCTION SECTION A					
Creator:	Date:	Checker:	Date:	Approver:	Date:
JF	30/07/2018	SH	30/07/2018	PE	30/07/2018
Document Type:	Scale:	Format:	Sheets:	Rev:	
FIGURE	1:24,000	A3	1 of 6	A	

Contains OS data © Crown copyright and database right 2018.
Background Mapping Information has been reproduced from the Ordnance Survey map by permission of Ordnance Survey on behalf of The controller of Her Majesty's Stationery Office. © Crown Copyright Ordnance Survey, National Grid Electricity - 100024241. National Grid Gas -100024886.
© Local Government Information House Limited copyright and database rights 2018.



LEGEND

ORDER LIMITS

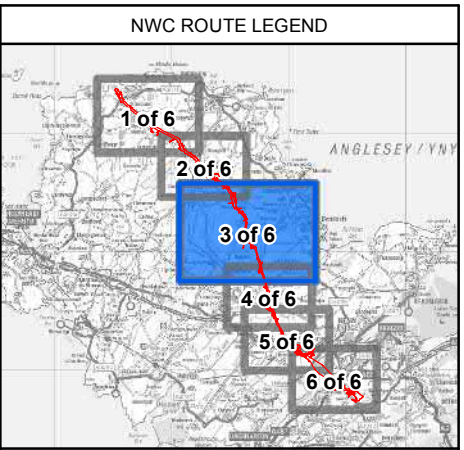
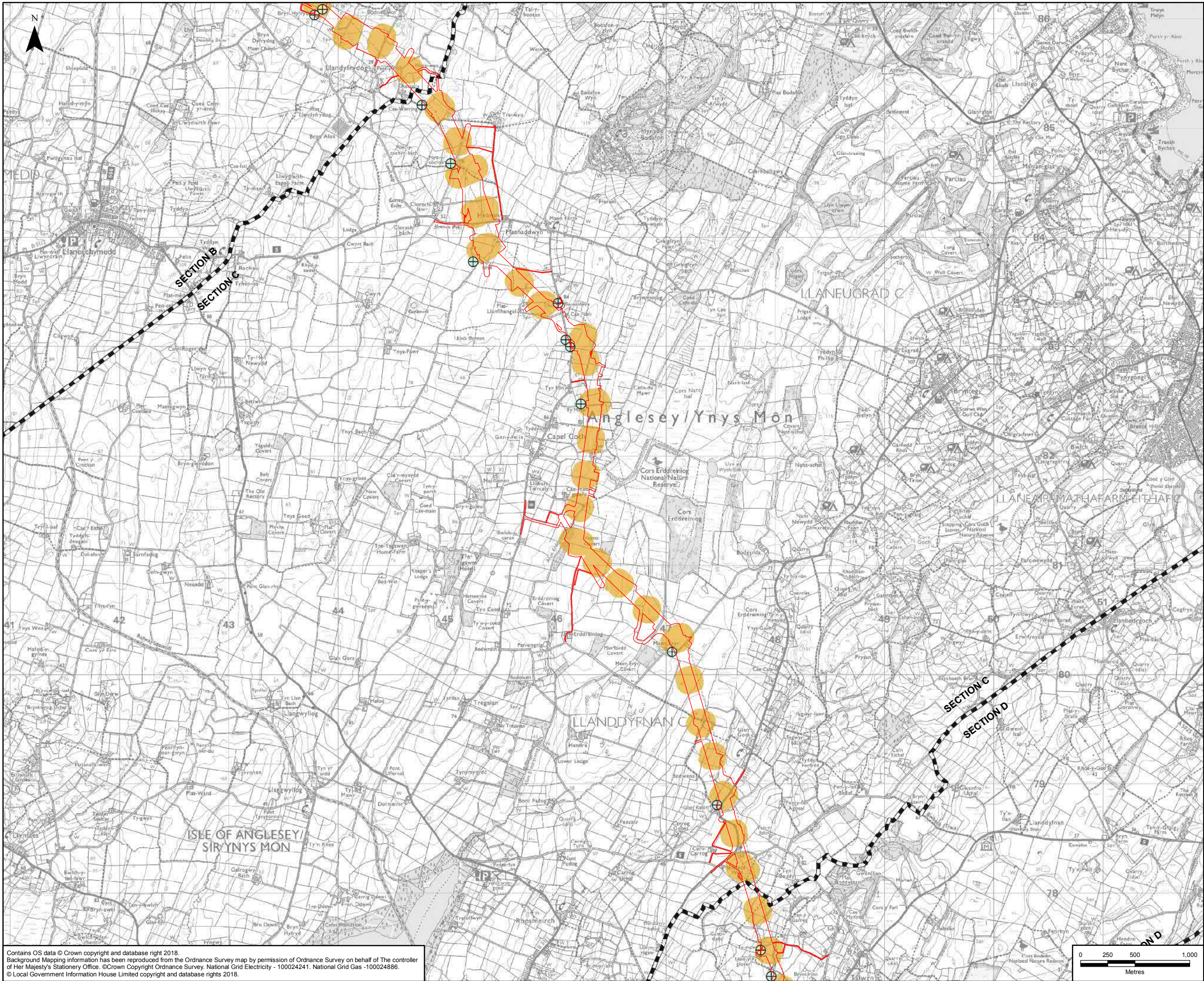
SECTION CUTLINES

SIGNIFICANCE OF EFFECT:

- Moderate
- Minor
- Negligible
- VIBRATION STUDY AREA

A	30/07/2018	ENVIRONMENTAL STATEMENT	JF	SH	PE
Rev	Date	Description	GIS	Chk	App
nationalgrid					
Scheme: NORTH WALES CONNECTION PROJECT					
Document Number: 5.15.2.11					
Document Title: FIGURE A SIGNIFICANCE OF VIBRATION EFFECTS FROM PYLON CONSTRUCTION SECTION B					
Creator:	Date:	Checker:	Date:	Approver:	Date:
JF	30/07/2018	SH	30/07/2018	PE	30/07/2018
Document Type:	Scale:	Format:	Sheets:	Rev:	
FIGURE	1:20,000	A3	2 of 6	A	

Contains OS data © Crown copyright and database right 2018.
Background Mapping Information has been reproduced from the Ordnance Survey map by permission of Ordnance Survey on behalf of The controller of Her Majesty's Stationery Office. © Crown Copyright Ordnance Survey, National Grid Electricity - 100024241. National Grid Gas - 100024886.
© Local Government Information House Limited copyright and database rights 2018.



LEGEND

ORDER LIMITS - OPTION A

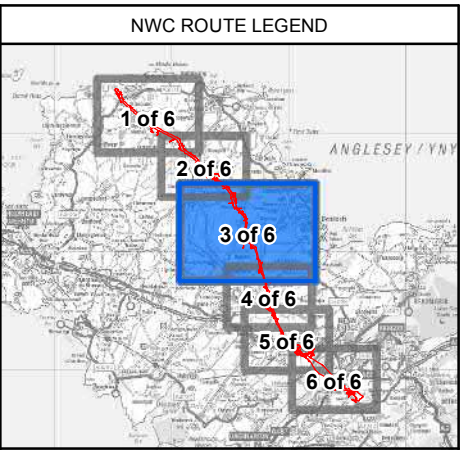
SECTION OUTLINES

SIGNIFICANCE OF EFFECT:

- Moderate
- Minor
- Negligible
- VIBRATION STUDY AREA

Contains OS data © Crown copyright and database right 2018.
Background Mapping Information has been reproduced from the Ordnance Survey map by permission of Ordnance Survey on behalf of The controller of Her Majesty's Stationery Office. ©Crown Copyright Ordnance Survey, National Grid Electricity - 100024241. National Grid Gas -100024886.
© Local Government Information House Limited copyright and database rights 2018.

A	30/07/2018	ENVIRONMENTAL STATEMENT	JF	SH	PE
Rev	Date	Description	GIS	Chk	App
nationalgrid					
Scheme: NORTH WALES CONNECTION PROJECT					
Document Number: 5.15.2.11					
Document Title: FIGURE A SIGNIFICANCE OF VIBRATION EFFECTS FROM PYLON CONSTRUCTION SECTION C OPTION A					
Creator: JF	Date: 30/07/2018	Checker: SH	Date: 30/07/2018	Approver: PE	Date: 30/07/2018
Document Type: FIGURE	Scale: 1:32,000	Format: A3	Sheets: 3 of 6 Option A	Rev: A	



LEGEND

ORDER LIMITS - OPTION B

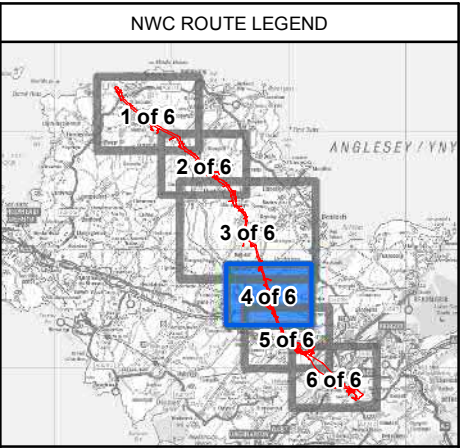
SECTION OUTLINES

SIGNIFICANCE OF EFFECT:

- Moderate
- Minor
- Negligible
- VIBRATION STUDY AREA

Contains OS data © Crown copyright and database right 2018.
Background Mapping Information has been reproduced from the Ordnance Survey map by permission of Ordnance Survey on behalf of The controller of Her Majesty's Stationery Office. © Crown Copyright Ordnance Survey, National Grid Electricity - 100024241. National Grid Gas -100024886.
© Local Government Information House Limited copyright and database rights 2018.

A	30/07/2018	ENVIRONMENTAL STATEMENT	JF	SH	PE
Rev	Date	Description	GIS	Chk	App
nationalgrid					
Scheme: NORTH WALES CONNECTION PROJECT					
Document Number: 5.15.2.11					
Document Title: FIGURE A SIGNIFICANCE OF VIBRATION EFFECTS FROM PYLON CONSTRUCTION SECTION C OPTION B					
Creator: JF	Date: 30/07/2018	Checker: SH	Date: 30/07/2018	Approver: PE	Date: 30/07/2018
Document Type: FIGURE	Scale: 1:32,000	Format: A3	Sheets: 3 of 6 Option B	Rev: A	



LEGEND

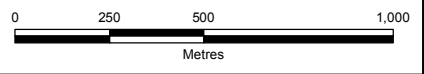
ORDER LIMITS - OPTION A

SECTION OUTLINES

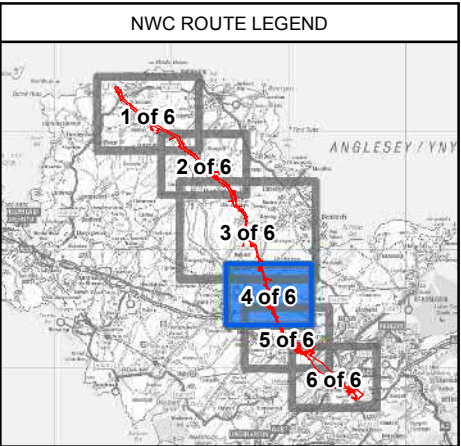
SIGNIFICANCE OF EFFECT:

- Moderate
- Minor
- Negligible
- VIBRATION STUDY AREA

Contains OS data © Crown copyright and database right 2018.
Background Mapping Information has been reproduced from the Ordnance Survey map by permission of Ordnance Survey on behalf of The controller of Her Majesty's Stationery Office. © Crown Copyright Ordnance Survey, National Grid Electricity - 100024241, National Grid Gas - 100024886.
© Local Government Information House Limited copyright and database rights 2018.



A	30/07/2018	ENVIRONMENTAL STATEMENT	JF	SH	PE
Rev	Date	Description	GIS	Chk	App
nationalgrid					
Scheme: NORTH WALES CONNECTION PROJECT					
Document Number: 5.15.2.11					
Document Title: FIGURE A SIGNIFICANCE OF VIBRATION EFFECTS FROM PYLON CONSTRUCTION SECTION D OPTION A					
Creator: JF	Date: 30/07/2018	Checker: SH	Date: 30/07/2018	Approver: PE	Date: 30/07/2018
Document Type: FIGURE	Scale: 1:20,000	Format: A3	Sheets: 4 of 6 Option A	Rev: A	



LEGEND

ORDER LIMITS - OPTION B

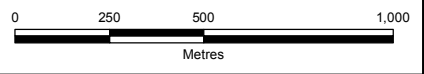
SECTION OUTLINES

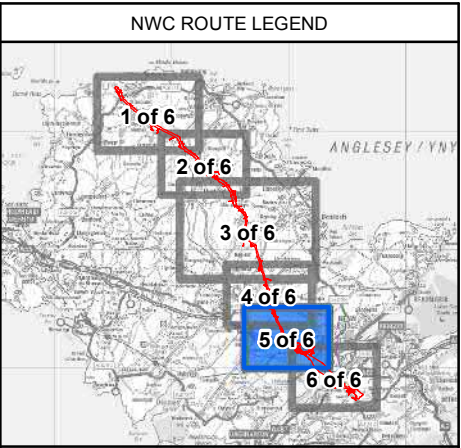
SIGNIFICANCE OF EFFECT:

- Moderate
- Minor
- Negligible
- VIBRATION STUDY AREA

A	30/07/2018	ENVIRONMENTAL STATEMENT	JF	SH	PE
Rev	Date	Description	GIS	Chk	App
nationalgrid					
Scheme: NORTH WALES CONNECTION PROJECT					
Document Number: 5.15.2.11					
Document Title: FIGURE A SIGNIFICANCE OF VIBRATION EFFECTS FROM PYLON CONSTRUCTION SECTION D OPTION B					
Creator:	Date:	Checker:	Date:	Approver:	Date:
JF	30/07/2018	SH	30/07/2018	PE	30/07/2018
Document Type:	Scale:	Format:	Sheets:	Rev:	
FIGURE	1:20,000	A3	4 of 6 Option B	A	

Contains OS data © Crown copyright and database right 2018.
Background Mapping Information has been reproduced from the Ordnance Survey map by permission of Ordnance Survey on behalf of The controller of Her Majesty's Stationery Office. © Crown Copyright Ordnance Survey, National Grid Electricity - 100024241, National Grid Gas - 100024886.
© Local Government Information House Limited copyright and database rights 2018.





LEGEND

ORDER LIMITS

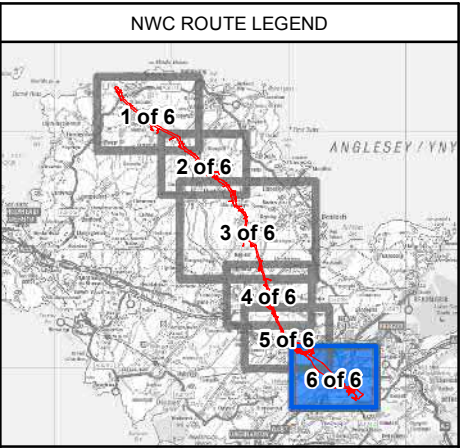
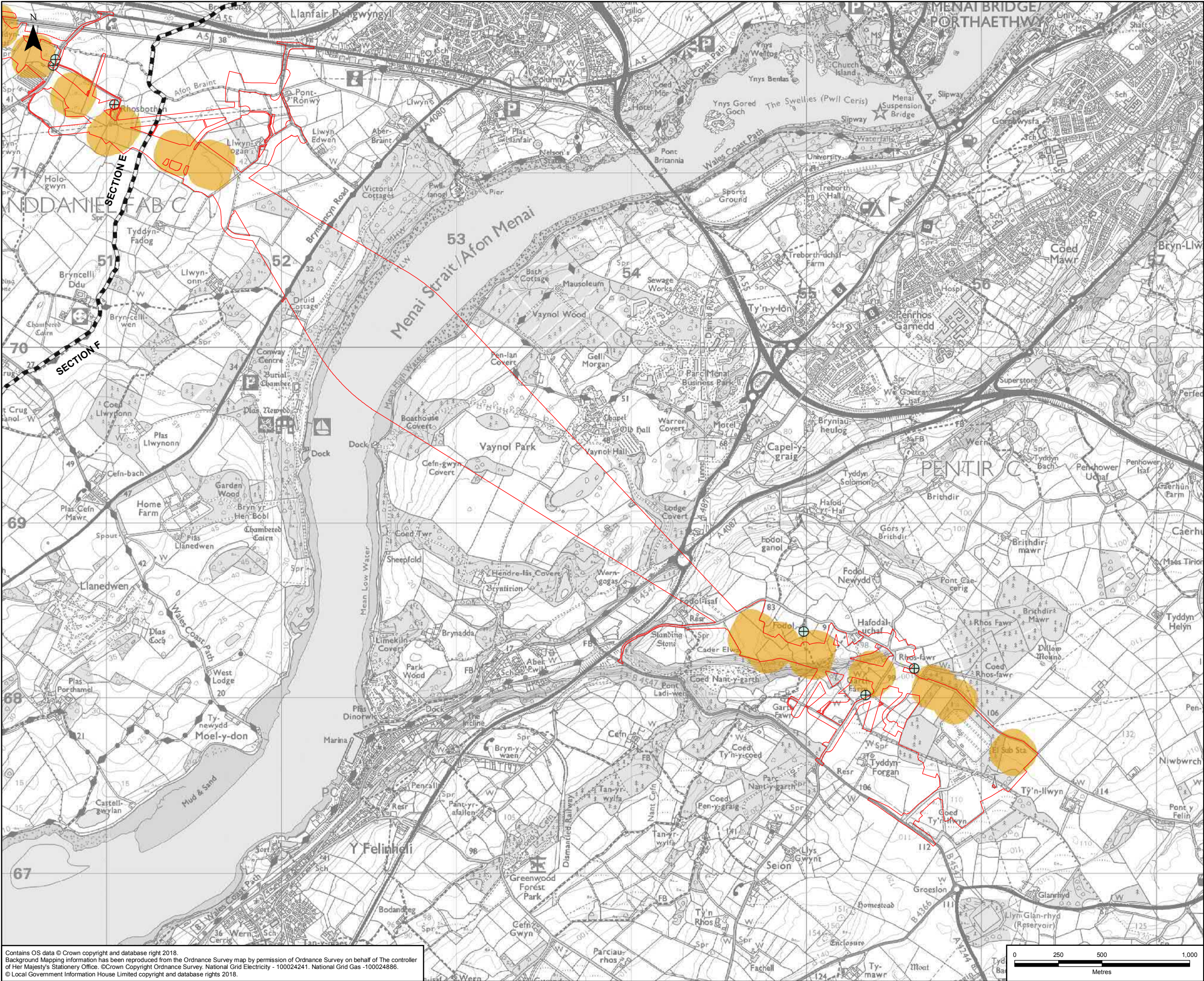
SECTION OUTLINES

SIGNIFICANCE OF EFFECT:

- MODERATE
- MINOR
- NEGLIGIBLE
- VIBRATION STUDY AREA

A	30/07/2018	ENVIRONMENTAL STATEMENT	JF	SH	PE
Rev	Date	Description	GIS	Chk	App
nationalgrid					
Scheme: NORTH WALES CONNECTION PROJECT					
Document Number: 5.15.2.11					
Document Title: FIGURE A SIGNIFICANCE OF VIBRATION EFFECTS FROM PYLON CONSTRUCTION SECTION E					
Creator: JF	Date: 30/07/2018	Checker: SH	Date: 30/07/2018	Approver: PE	Date: 30/07/2018
Document Type: FIGURE	Scale: 1:20,000	Format: A3	Sheets: 5 of 6	Rev: A	

Contains OS data © Crown copyright and database right 2018.
Background Mapping Information has been reproduced from the Ordnance Survey map by permission of Ordnance Survey on behalf of The controller of Her Majesty's Stationery Office. © Crown Copyright Ordnance Survey, National Grid Electricity - 100024241, National Grid Gas - 100024886.
© Local Government Information House Limited copyright and database rights 2018.



LEGEND

ORDER LIMITS

SECTION OUTLINES

SIGNIFICANCE OF EFFECT:

- MODERATE
- MINOR
- NEGLECTIBLE
- VIBRATION STUDY AREA

A	30/07/2018	ENVIRONMENTAL STATEMENT	JF	SH	PE
Rev	Date	Description	GIS	Chk	App

nationalgrid

Scheme: NORTH WALES CONNECTION PROJECT

Document Number: 5.15.2.11

Document Title: FIGURE A
SIGNIFICANCE OF VIBRATION EFFECTS
FROM PYLON CONSTRUCTION
SECTION F

Creator:	Date:	Checker:	Date:	Approver:	Date:
JF	30/07/2018	SH	30/07/2018	PE	30/07/2018
Document Type:	Scale:	Format:	Sheets:	Rev:	
FIGURE	1:20,000	A3	6 of 6	A	

Contains OS data © Crown copyright and database right 2018.
Background Mapping Information has been reproduced from the Ordnance Survey map by permission of Ordnance Survey on behalf of The controller of Her Majesty's Stationery Office. © Crown Copyright Ordnance Survey, National Grid Electricity - 100024241. National Grid Gas -100024886.
© Local Government Information House Limited copyright and database rights 2018.