



DCO Submission

Environmental Statement

Chapter 5: Noise and Vibration

Appendix 5.11: Mainline Rail Information and Predictions

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On behalf of

Oxfordshire Railfreight Limited

Prepared by Vanguardia
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Tables 1 and 2 below present the assumed flow of trains forming the basis of the mainline rail assessment for the day and night-time assessment respectively. To provide a worst-case, there is no projected increase in non-development traffic on the line between the baseline year and the future year with full development (as any increase in the non-development traffic could reduce the impact of development traffic). Tables 1 and 2 below also present the total number of flows and projected direction of travel assumed in the assessment.

Table 1 Assumed mainline rail sources during the daytime assessment period

Trains Serving	Train Type (Rail sources from CRN)		No of Trains of Each Type - Daytime									
			Baseline		OY DM		OY DS		FY DM		FY DS	
			N	S	N	S	N	S	N	S	N	S
Chiltern Main Line	Passenger	Class 67 with 6 Mk III carriages	7	8	7	8	7	8	7	8	7	8
		Class 168 /170 with 8 carriages	49	50	49	50	49	50	49	50	49	50
		Class 66 plus 8 LUL carriages	0	1	0	1	0	1	0	1	0	1
OxSRFI	Freight	Class 66 with 37 Composite braked wagons	-	-	-	-	3	1	-	-	15	5

Table 2 Assumed mainline rail sources during the night-time assessment period

Trains Serving	Train Type (Rail sources from CRN)		No of Trains of Each Type – Night-time									
			Baseline		OY DM		OY DS		FY DM		FY DS	
			N	S	N	S	N	S	N	S	N	S
Chiltern Main Line	Passenger	Class 67 with 6 Mk III carriages	3	3	3	3	3	3	3	3	3	3
		Class 66 plus 8 LUL carriages	1	-	1	-	1	-	1	-	1	-
OxSRFI	Freight	Class 66 with 37 Composite braked wagons	-	-	-	-	3	1	-	-	3	1

Appendix 5.11 Mainline Rail Information and Predictions

Table 3 Predicted noise impact from the change in mainline rail sources, during the day in the Opening Year

Receptor		Predicted L _{Aeq,16hr} (dB) from Railway Noise		Do Something Effect Level	Change DS - DM	Impact Magnitude	Significant? (see Table 5.19)	
		Name	Height (m)					OY DM
R00 Property in Woods - South		1.5	48.2	48.2	<LOAEL	0.0	-	No
R02 Forge Place - West		1.5	23.6	24.3	<LOAEL	0.7	-	No
R03 100 East Street - South		1.5	27.5	28.4	<LOAEL	0.9	-	No
R05-N Crossroads Farm - North		1.5	43.8	44.4	<LOAEL	0.6	-	No
R06-E Quarry Cottages - East		1.5	34.6	34.9	<LOAEL	0.3	-	No
R06-S Quarry Cottages - South		1.5	37.3	37.7	<LOAEL	0.4	-	No
R27-E Upland Cottage - East		1.5	29.2	29.1	<LOAEL	-0.1	-	No
R27-S Upland Cottage - South		1.5	34.6	34.5	<LOAEL	-0.1	-	No
R27-W Upland Cottage - West		1.5	34.3	34.2	<LOAEL	-0.1	-	No
R42-S 40 Middleton Road South		1.5	49.3	49.5	<LOAEL	0.2	-	No
R42-W 40 Middleton Road - West		1.5	46.5	46.8	<LOAEL	0.3	-	No
R43 Homelands Farm - South		1.5	40.8	41.3	<LOAEL	0.5	-	No
04 Ardley Woods		1.5	38.0	38.4	<LOAEL	0.4	-	No
05 Ardley Fields Quarry		1.5	52.0	52.2	Between LOAEL and SOAEL	0.2	Negligible	No
08 Upper Heyford Airfield		1.5	31.7	28.6	<LOAEL	-3.1	-	No
Notes: DM = Do Minimum, DS = Do Something; OY = Opening Year, FY = Future Year								

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Table 4 Predicted noise impact from the change in mainline rail sources, during the day in the Future Year (site fully operational)

Receptor		Predicted L _{Aeq,16hr} (dB) from Railway Noise		Do Something Effect Level	Change DS - DM	Impact Magnitude	Significant? (see Table 5.19)	
		Name	Height (m)					FY DM
R00 Property in Woods - South		1.5	48.2	48.2	<LOAEL	0.0	-	No
R02 Forge Place - West		1.5	23.6	26.3	<LOAEL	2.7	-	No
R03 100 East Street - South		1.5	27.5	30.3	<LOAEL	2.8	-	No
R05-N Crossroads Farm - North		1.5	43.8	46.1	<LOAEL	2.1	-	No
R06-E Quarry Cottages - East		1.5	34.6	34.9	<LOAEL	0.3	-	No
R06-S Quarry Cottages - South		1.5	37.3	37.8	<LOAEL	0.5	-	No
R27-E Upland Cottage - East		1.5	29.2	29.1	<LOAEL	-0.1	-	No
R27-S Upland Cottage - South		1.5	34.6	34.5	<LOAEL	-0.1	-	No
R27-W Upland Cottage - West		1.5	34.3	34.2	<LOAEL	-0.1	-	No
R42-S 40 Middleton Road South		1.5	49.3	50.3	Between LOAEL and SOAEL	1.0	Negligible	No
R42-W 40 Middleton Road - West		1.5	46.5	47.7	<LOAEL	1.2	-	No
R43 Homelands Farm - South		1.5	40.8	42.1	<LOAEL	1.3	-	No
04 Ardley Woods		1.5	38.0	38.4	<LOAEL	0.4	-	No
05 Ardley Fields Quarry		1.5	52.0	52.2	Between LOAEL and SOAEL	0.2	Negligible	No
08 Upper Heyford Airfield		1.5	31.7	29.4	<LOAEL	-2.3	-	No
Notes: DM = Do Minimum, DS = Do Something; OY = Opening Year, FY = Future Year								

Appendix 5.11 Mainline Rail Information and Predictions

Table 5 Predicted noise impact from the change in mainline rail sources, during the night in the Opening Year and Future Year

Receptor		Predicted L _{Aeq,8hr} (dB) from Railway Noise		Do Something Effect Level	Change DS - DM	Impact Magnitude	Significant? (see Table 5.20)
Name	Height (m)	OY DM	OY/F YDS				
R00 Property in Woods - South	4.5	44.1	44.0	Between LOAEL and SOAEL	-0.1	Negligible	No
R02 Forge Place - West	4.5	17.4	22.9	<LOAEL	5.5	-	No
R03 100 East Street - South	4.5	21.0	27.4	<LOAEL	6.4	-	No
R05-N Crossroads Farm - North	4.5	38.7	43.7	Between LOAEL and SOAEL	5.0	Major Adverse	No
R06-E Quarry Cottages - East	4.5	28.3	28.7	<LOAEL	0.4	-	No
R06-S Quarry Cottages - South	4.5	31.2	32.3	<LOAEL	1.1	-	No
R27-E Upland Cottage - East	4.5	22.4	22.4	<LOAEL	0	-	No
R27-S Upland Cottage - South	4.5	28.3	28.2	<LOAEL	-0.1	-	No
R27-W Upland Cottage - West	4.5	28.1	28.1	<LOAEL	0.0	-	No
R42-S 40 Middleton Road - South	1.5	42.1	45.6	Between LOAEL and SOAEL	3.5	Moderate Adverse	No
R42-W 40 Middleton Road - West	1.5	39.4	42.9	Between LOAEL and SOAEL	3.5	Moderate Adverse	No
R43 Homelands Farm - South	4.5	34.7	38.4	<LOAEL	3.7	-	No
04 Ardley Woods	1.5	30.8	31.3	<LOAEL	0.5	-	No
05 Ardley Fields Quarry	1.5	44.8	45.1	Between LOAEL and SOAEL	0.3	Negligible	No
08 Upper Heyford Airfield	1.5	24.4	24.1	<LOAEL	-0.3	-	No
Notes: DM = Do Minimum, DS = Do Something; OY = Opening Year, FY = Future Year There is no difference in the rail movements between the Do Something Opening Year and Do Something Future Year Scenarios							