

National Grid
Cable Tunnel Replacement
Project

Environmental Statement
Volume VI
Appendix 18.6 Preliminary
Highway Impact Assessment
(Gravesend)

December 2023



Quality information

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1 Preliminary Highway Impact Assessment (Gravesend)

Table 1: Preliminary Highway Impact Assessment - Peak Construction Phase (2026) AM

Ref	Location	AM Development Peak (07:00-08:00)								AM Network Peak (08:00-09:00)							
		Baseline		Development		Total		% Increase		Baseline		Development		Total		% Increase	
		HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total
G-RL1	A2 (West)	856	10,944	0	21	856	10,964	0.0%	0.2%	955	9,862	3	3	958	9,865	0.3%	0.0%
G-RL2	M2 (East)	656	8,045	0	6	656	8,052	0.0%	0.1%	712	7,263	3	3	715	7,266	0.4%	0.0%
G-RL3	A289	333	4,676	0	27	333	4,703	0.0%	0.6%	343	4,204	6	6	349	4,210	1.7%	0.1%
G-RL4	A226 (between A289 and Peartree Lane)	48	988	0	27	48	1,015	0.0%	2.7%	38	1,011	6	6	44	1,017	15.9%	0.6%
G-RL5	A226 (between Peartree Lane and Lion Roundabout)	51	1,011	0	27	51	1,038	0.0%	2.7%	39	1,051	6	6	45	1,057	15.5%	0.6%
G-RL6	A226 (between Lion Roundabout and Ordnance Road)	42	917	0	27	42	944	0.0%	2.9%	42	1,119	6	6	48	1,125	14.4%	0.5%
G-RL7	Ordnance Road and Canal Road	48	500	0	27	48	527	0.0%	5.4%	53	618	6	6	59	624	11.3%	1.0%
G-RL8	Norfolk Road and Mark Lane	43	301	0	27	43	328	0.0%	9.0%	48	231	6	6	54	237	12.6%	2.6%
G-RL9	Thames and Medway Canal Road	1	93	0	27	1	120	0.0%	29.1%	1	51	6	6	7	57	588.3%	11.8%
G-RJ1	M2/A2/A289 Junction	935	11,630	0	27	935	11,657	0.0%	0.2%	1,000	10,431	6	6	1,006	10,437	0.6%	0.1%
G-RJ2	A289/A226 Junction	357	5,170	0	27	357	5,197	0.0%	0.5%	362	4,709	6	6	368	4,715	1.7%	0.1%
G-RJ3	A226/ Peartree Lane Signalised Junction	52	1,108	0	27	52	1,135	0.0%	2.4%	41	1,203	6	6	47	1,209	14.7%	0.5%

Ref	Location	AM Development Peak (07:00-08:00)								AM Network Peak (08:00-09:00)							
		Baseline		Development		Total		% Increase		Baseline		Development		Total		% Increase	
		HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total
G-RJ4	A226/ Dering Way/ Lower Higham Road/ Old Road East (Lion) Roundabout	100	2,055	0	27	100	2,082	0.0%	1.3%	71	2,512	6	6	77	2,518	8.4%	0.2%
G-RJ5	A226/Ordnance Road Signalised Junction	85	1,256	0	27	85	1,283	0.0%	2.1%	80	1,619	6	6	86	1,625	7.5%	0.4%
G-RJ6	Mark Lane/Thames and Medway Canal Road Junction	20	246	0	27	20	273	0.0%	11.0%	30	164	6	6	36	170	20.3 %	3.6%

Table 2: Preliminary Highway Impact Assessment - Peak Construction Phase (2026) PM

Ref	Location	PM Network Peak (17:00-18:00)								PM Development Peak (18:00-19:00)							
		Baseline		Development		Total		% Increase		Baseline		Development		Total		% Increase	
		HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total
G-RL1	A2 (West)	531	11,561	2	2	533	11,563	0.4%	0.0%	460	9,298	0	21	460	9,319	0.0%	0.2%
G-RL2	M2 (East)	499	7,833	2	2	501	7,835	0.4%	0.0%	374	5,910	0	6	374	5,917	0.0%	0.1%
G-RL3	A289	138	4,444	4	4	142	4,448	2.9%	0.1%	106	3,523	0	27	106	3,550	0.0%	0.8%
G-RL4	A226 (between A289 and Peartree Lane)	21	1,139	4	4	25	1,143	18.7%	0.4%	19	838	0	27	19	865	0.0%	3.2%
G-RL5	A226 (between Peartree Lane and Lion Roundabout)	21	1,159	4	4	25	1,163	18.7%	0.3%	20	850	0	27	20	877	0.0%	3.2%
G-RL6	A226 (between Lion Roundabout and Ordnance Road)	30	1,188	4	4	34	1,192	13.4%	0.3%	26	989	0	27	26	1,016	0.0%	2.7%
G-RL7	Ordnance Road and Canal Road	20	532	4	4	24	536	19.6%	0.8%	29	445	0	27	29	472	0.0%	6.1%
G-RL8	Norfolk Road and Mark Lane	17	199	4	4	21	203	23.9%	2.0%	16	109	0	27	16	136	0.0%	24.8%
G-RL9	Thames and Medway Canal Road	0	46	4	4	4	50	-	8.7%	0	31	0	27	0	58	-	88.3%
G-RJ1	M2/A2/A289 Junction	581	11,847	4	4	585	11,851	0.7%	0.0%	454	9,843	0	27	454	9,870	0.0%	0.3%
G-RJ2	A289/A226 Junction	149	5,014	4	4	153	5,018	2.7%	0.1%	116	3,942	0	27	116	3,969	0.0%	0.7%
G-RJ3	A226/ Peartree Lane Signalised Junction	23	1,319	4	4	27	1,323	17.1%	0.3%	21	974	0	27	21	1,001	0.0%	2.8%
G-RJ4	A226/ Dering Way/ Lower Higham Road/ Old Road East (Lion) Roundabout	49	2,617	4	4	53	2,621	8.2%	0.2%	43	2,231	0	27	43	2,258	0.0%	1.2%
G-RJ5	A226/Ordnance Road Signalised Junction	44	1,514	4	4	48	1,518	9.1%	0.3%	49	1,365	0	27	49	1,392	0.0%	2.0%

Ref	Location	PM Network Peak (17:00-18:00)								PM Development Peak (18:00-19:00)							
		Baseline		Development		Total		% Increase		Baseline		Development		Total		% Increase	
		HGV s	Total	HGV s	Total	HGV s	Total	HGV s	Total	HGV s	Total	HGV s	Total	HGV s	Total	HGV s	Total
G-RJ6	Mark Lane/Thames and Medway Canal Road Junction	14	90	4	4	18	94	29.3 %	4.4%	14	65	0	27	14	92	0.0%	41.5 %

Table 3: Preliminary Highway Impact Assessment - Peak Construction Phase (2026) 12 hours / 24hr Daily

Ref	Location	12 Hours (07:00-19:00)								24hr Daily							
		Baseline		Development		Total		% Increase		Baseline		Development		Total		% Increase	
		HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total
G-RL1	A2 (West)	10,156	111,303	32	73	10,188	111,376	0.3%	0.1%	9,926	130,414	32	73	9,958	130,488	0.3%	0.1%
G-RL2	M2 (East)	8,272	80,828	32	45	8,304	80,872	0.4%	0.1%	9,679	99,758	32	45	9,711	99,803	0.3%	0.0%
G-RL3	A289	3,406	44,834	64	118	3,470	44,952	1.9%	0.3%	3,532	50,160	64	118	3,596	50,278	1.8%	0.2%
G-RL4	A226 (between A289 and Peartree Lane)	458	11,080	64	118	522	11,198	14.0%	1.1%	465	13,347	64	118	529	13,465	13.8%	0.9%
G-RL5	A226 (between Peartree Lane and Lion Roundabout)	477	11,344	64	118	541	11,462	13.4%	1.0%	484	13,665	64	118	548	13,783	13.2%	0.9%
G-RL6	A226 (between Lion Roundabout and Ordnance Road)	508	11,738	64	118	572	11,856	12.6%	1.0%	515	14,139	64	118	579	14,257	12.4%	0.8%
G-RL7	Ordnance Road and Canal Road	605	7,122	64	118	669	7,240	10.6%	1.7%	549	6,757	64	118	613	6,875	11.6%	1.7%
G-RL8	Norfolk Road and Mark Lane	499	2,856	64	118	563	2,974	12.8%	4.1%	454	2,709	64	118	518	2,827	14.1%	4.4%
G-RL9	Thames and Medway Canal Road	12	634	64	118	76	752	522.8%	18.6%	10	649	64	118	74	767	627.5%	18.2%
G-RJ1	M2/A2/A289 Junction	10,674	117,936	64	118	10,738	118,054	0.6%	0.1%	11,278	139,330	64	118	11,342	139,448	0.6%	0.1%

Ref	Location	12 Hours (07:00-19:00)								24hr Daily							
		Baseline		Development		Total		% Increase		Baseline		Development		Total		% Increase	
		HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total
G-RJ2	A289/A226 Junction	3,635	50,374	64	118	3,699	50,492	1.8%	0.2%	3,765	56,834	64	118	3,829	56,952	1.7%	0.2%
G-RJ3	A226/Peartree Lane Signalised Junction	499	12,830	64	118	563	12,948	12.8%	0.9%	506	15,454	64	118	570	15,572	12.6%	0.8%
G-RJ4	A226/ Dering Way/ Lower Higham Road/ Old Road East (Lion) Roundabout	954	26,236	64	118	1,018	26,354	6.7%	0.4%	968	31,603	64	118	1,032	31,721	6.6%	0.4%
G-RJ5	A226/Ordnance Road Signalised Junction	932	16,037	64	118	996	16,155	6.9%	0.7%	945	19,317	64	118	1,009	19,435	6.8%	0.6%
G-RJ6	Mark Lane/Thames and Medway Canal Road Junction	279	1,703	64	118	343	1,821	22.9%	6.9%	232	1,677	64	118	296	1,795	27.6%	7.0%

