

East Anglia THREE

# Appendix 27.11

Assignment of HGV and employee  
traffic to the highway network (Single  
Phase)

**Environmental Statement**

Volume 3

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East Anglia THREE Limited  
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Appendix 27.11 - Single Phase

Table 1 - HG V distribution to primary CCSs

HG V direction Flow	Compound	Access Road Name	Origin	%	Total daily HG V deliveries (one-way)*	Links																																																											
						1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30																														
IN to CCS	E	Top Street (Access S)	A12 south	60%	215				129.0																																																								
			A14 north	30%		64.5	64.5						129.0	129.0					129.0	129.0																																													
			A14 south	10%				64.5						64.5	64.5					64.5	64.5										64.5																																		
	B	Paper Mill Lane (Access AF)	A12 south	60%	131				78.6	78.6	78.6					21.5																																																	
			A14 north	30%		39.3																																																											
			A14 south	10%			13.1	13.1				13.1																											39.3																										
					346																														131																														215

\*Numbers obtained from Appendix 27.09 Table 23b

Table 2 - HG V distribution to secondary CCSs

HG V direction Flow	Section	Accesses	Destination Link	%	Total daily HG V deliveries (one-way)*	Links																																																											
						1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30																														
OUT to Secondary CCS	1	A, B, C	29		22																														22.0	22.0	22.0																												
	2	D, E, F, G	12		27									27.0	27.0			27.0	27.0																																														
	3	H, I, J, K	13		33											33.0	33.0			33.0	33.0																																												
	4	L, M, N, O, P	30		56																															56.0																													
	5	Q, R, S, T	28		22																															22.0																													
	6	U, V	19		18																															18.0																													
	7	W, X, Y, Z, AA, AB	20		37																															18.0																													
	8	AC, AD	21		41			41.0	41.0			41.0																								37.0																													
	9	AE, AF, AG, AH, AI	6 & 7		21								21.0	21.0																							41.0																												
	10	AJ, AK	7		26								26.0	26.0																																																			
	11	AL	7		43								43.0	43.0																																																			
					346																														131																														215

\*Numbers obtained from Appendix 27.09 Table 23b

Table 3 - HG V distribution back from secondary CCSs

HG V direction Flow	Section	Origin Link	Destination	%	Total daily HG V deliveries (one-way)*	Links																																																																																									
						1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30																																																												
Exit to Wider Network	1	29	A12 south	60%	22				13.2										13.2	13.2																	13.2																																																										
			A14 north	30%		6.6	6.6															6.6	6.6														6.6																																																										
			A14 south	10%				6.6																														6.6																																																									
	2	12	A12 south	60%	27				16.2																													16.2																																																									
			A14 north	30%		8.1	8.1																														8.1																																																										
			A14 south	10%				8.1																															8.1																																																								
	3	13	A12 south	60%	33				19.8																													19.8																																																									
			A14 north	30%		9.9	9.9																															9.9																																																									
			A14 south	10%				9.9																															9.9																																																								
	4	30	A12 south	60%	56				33.6																													33.6																																																									
			A14 north	30%		16.8	16.8																															16.8																																																									
A14 south			10%				16.8																															16.8																																																									
5	28	A12 south	60%	22				13.2																													13.2																																																										
		A14 north	30%		6.6	6.6																															6.6																																																										
		A14 south	10%				6.6																															6.6																																																									
6	19	A12 south	60%	18				10.8																													10.8																																																										
		A14 north	30%		5.4	5.4																															5.4																																																										
		A14 south	10%				5.4																															5.4																																																									
7	20	A12 south	60%	37				22.2																													22.2																																																										
		A14 north	30%		11.1	11.1																															11.1																																																										
		A14 south	10%				11.1																															11.1																																																									
8	21	A12 south	60%	41			24.6	24.6	24.6																												24.6																																																										
		A14 north	30%		12.3	12.3																															12.3																																																										
		A14 south	10%				4.1																															4.1																																																									
9	6 & 7	A12 south	60%	21			12.6	12.6	12.6	12.6	12.6	12.6																									12.6																																																										
		A14 north	30%		6.3	6.3																																6.3																																																									
		A14 south	10%				2.1																																2.1																																																								
10	7	A12 south	60%	26			15.6	15.6	15.6																												15.6																																																										
		A14 north	30%		7.8	7.8																																7.8																																																									
		A14 south	10%				2.6																																2.6																																																								
11	7	A12 south	60%	43			25.8	25.8	25.8																												25.8																																																										
		A14 north	30%		12.9	12.9																																12.9																																																									
		A14 south	10%				4.3																															4.3																																																									
					346																														208																														59																														99

\*Numbers obtained from Appendix 27.09 Table 23b

Table 4 - Total HG V movements (Table 1 + 2 + 3)

Total daily HG V movements - two way	Links																													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
	208.0	337.0	82.0	313.0	416.0	283.0	180.0	0.0	414.0	414.0	121.0	54.0	66.0	463.0	430.0	154.0	0.0	0.0	110.0	74.0	82.0	0.0	0.0	0.0	203.0	44.0	44.0	44.0	44.0	112.0

Table 5 - In-migrant employees distribution to/from primary CCSs / Direct to section (vehicles)

In-migrant % 66%  
Employee to car ratio 2.5

Employee direction flow	Compound / Section	Access Road Name	Origin	% #	Daily employee vehicle movements (two-way)**	Links																																			
						1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30						
Arrival/departure to primary CCS	E	Top Street (Access S)	A12 south (Colchester)	8.5%	160					13.6							13.6	13.6				13.6	13.6																		
			A14 north (Stowmarket)	0.0%																0.0				0.0																	
			B1438 (Woodbridge)	7.4%																											0.0	0.0		0.0							
			A14 south (Felixstowe)	10.6%													17.0								17.0	17.0											11.9				
			A1214 (Ipswich)	25.5%																					40.8	40.8							40.8								
			A12 north (Saxmundham)	47.9%																					76.6	76.6	76.6														
	B	Paper Mill Lane (Access AF)	A12 south (Colchester)	34.4%		34				11.8		11.8	11.8	11.8																											
			A14 north (Stowmarket)	6.5%			2.2																																		
			A1438 (Woodbridge)	4.3%				1.5	1.5					1.5																											
			A14 south (Felixstowe)	14.0%				4.8		4.8			4.8						4.8	4.8	4.8					1.5													1.5		
			A1214 (Ipswich)	34.4%				11.8	11.8				11.8																												
			A12 north (Saxmundham)	4.3%			1.5																																		
Arrival/departure direct to section	8	Witnesham Road (Access AC & AD)	B1113 south (Hadley)	2.2%	21					7.3	7.3	7.3	0.7	0.7																											
			A12 south (Colchester)	34.4%			1.4	1.4	1.4																																
			A14 north (Stowmarket)	6.5%																																					
			A1438 (Woodbridge)	4.3%																																					
			A14 south (Felixstowe)	14.0%																	3.0																			0.9	
			A1214 (Ipswich)	34.4%																																					
	11	Bullen Lane (Access AL)	A12 north (Saxmundham)	4.3%		24																																			
			B1113 south (Hadley)	2.2%																																					
			A12 south (Colchester)	34.4%						0.5	0.5					0.5																									
			A14 north (Stowmarket)	6.5%			1.5									1.5																									
			A1438 (Woodbridge)	4.3%				1.0	1.0																																
			A14 south (Felixstowe)	14.0%				3.3																																	

\*\* Numbers obtained from Appendix 27.09 Table 24b and multiplied by the percentage of in-migrant workers (66%) to total workers

# Numbers obtained from Appendix 27.03 Table 2 and 4

Table 6 - Resident employees distribution to/from primary CCSs / Direct to section (vehicles)

Resident workers % 34%  
Employee to car ratio 2.5

Employee direction flow	Compound / Section	Access Road Name	Origin	% ##	Daily employee vehicle movements (two-way)**	Links																																				
						1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30							
Arrival/departure to primary CCS	E	Top Street (Access S)	A12 south (Colchester)	43.6%	82					35.9												35.9	35.9																			
			A14 north (Stowmarket)	19.8%																																						
			B1438 (Woodbridge)	4.0%																					16.3	16.3																
			A14 south (Felixstowe)	2.0%																																				3.3		
			A1214 (Ipswich)	21.8%														1.6								1.6	1.6															
			A12 north (Saxmundham)	8.9%																																						
	B	Paper Mill Lane (Access AF)	A12 south (Colchester)	40.3%		18				7.1		7.1	7.1	7.1																												
			A14 north (Stowmarket)	3.0%			0.5																																			
			A1438 (Woodbridge)	17.0%				3.0	3.0																																	
			A14 south (Felixstowe)	28.7%				5.1			5.1																															
			A1214 (Ipswich)	5.0%				0.9	0.9																																	
			A12 north (Saxmundham)	1.0%			0.2																																			
Arrival/departure direct to section	8	Witnesham Road (Access AC & AD)	B1113 south (Hadley)	5.0%	11																																					
			A12 south (Colchester)	40.3%						4.4	4.4	4.4																														
			A14 north (Stowmarket)	3.0%			0.3	0.3	0.3																																	
			A1438 (Woodbridge)	17.0%																																						
			A14 south (Felixstowe)	28.7%																																						
			A1214 (Ipswich)	5.0%																																						
	11	Bullen Lane (Access AL)	A12 north (Saxmundham)	1.0%		12																																				
			B1113 south (Hadley)	5.0%																																						
			A12 south (Colchester)	40.3%						0.5	0.5																															
			A14 north (Stowmarket)	3.0%			0.4																																			
			A1438 (Woodbridge)	17.0%				2.1	2.1																																	
			A14 south (Felixstowe)	28.7%				3.5																																		

\*\* Numbers obtained from Appendix 27.09 Table 24b and multiplied by the percentage of resident workers (34%) to total workers

## Numbers obtained from Appendix 27.04 Table 2 and 4



**Table 17 - In-migrant employees distribution to/from Substation (vehicles)**

In-migrant % 66%  
\*Employee to car ratio 2.5

Employee direction flow	Section	Access Road Name	Origin	% #	Daily employee vehicle movements (two-way)**	Links																														
						1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Arrival/departure to Substation	11	Bullen Lane (Access AL)	A12 south (Colchester)	34.4%	40																															
			A14 north (Stowmarket)	6.5%		2.6																														
			A1438 (Woodbridge)	4.3%			1.7											1.7																		
			A14 south (Felixstowe)	14.0%			5.5																													
			A1214 (Ipswich)	34.4%			13.6	13.6																												
			A12 north (Saxmundham)	4.3%			1.7																													
			B1113 south (Hadley)	2.2%																																

\*\* Numbers obtained from Appendix 27.09 Table 26a and multiplied by the percentage of in-migrant workers (66%) to total workers  
# Numbers obtained from Appendix 27.03 Table 2 and 4

**Table 18 - Resident employees distribution to/from Substation (vehicles)**

Resident workers % 34%  
\*Employee to car ratio 2.5

Employee direction flow	Section	Access Road Name	Origin	% ##	Daily employee vehicle movements (two-way)**	Links																															
						1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		
Arrival/departure to Substation	11	Bullen Lane (Access AL)	A12 south (Colchester)	40.3%	20																																
			A14 north (Stowmarket)	3.0%		0.6																															
			A1438 (Woodbridge)	17.0%			3.5	3.5																													
			A14 south (Felixstowe)	28.7%			5.8																														
			A1214 (Ipswich)	5.0%			1.0	1.0																													
			A12 north (Saxmundham)	1.0%			0.2																														
			B1113 south (Hadley)	5.0%																																	

\*\* Numbers obtained from Appendix 27.09 Table 26a and multiplied by the percentage of resident workers (34%) to total workers  
## Numbers obtained from Appendix 27.04 Table 2 and 4

**Table 19 - Total employee movements (Tables 17 + 18)**

	Links																														
Daily total employee vehicle movements - two way	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
	5	53	20	33	22	0	60	0	11	11	11	0	0	5	0	0	0	2	0	0	0	0	20	2	2	3	0	0	5	0	0

**Table 20 - Total movements (Tables 16 + 19)**

	Links																													
Daily total combined HGV & employee vehicle movements - two way	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
	13	71	20	51	37	26	86	0	14	14	14	0	0	5	0	0	0	2	0	0	0	20	2	2	11	0	0	5	0	0

**Table 21 - PM Peak Hour**

Daily total Peak HGV Movements	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
	1.0	1.0	0.0	1.0	1.0	2.0	0.0	0.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0

**Table 22 - Employee Peak Hour**

Daily total Peak Employee Vehicle Movements	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
	3.0	27.0	10.0	17.0	11.0	0.0	30.0	0.0	6.0	6.0	6.0	0.0	0.0	3.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	10.0	1.0	1.0	2.0	0.0	0.0	3.0	0.0	0.0

**Table 23 - Combined Peak Hour**

Daily Combined Peak Hour HGV & Employee Movements - Two way	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
	4.0	28.0	10.0	18.0	12.0	2.0	30.0	0.0	7.0	7.0	7.0	0.0	0.0	3.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	10.0	1.0	1.0	3.0	0.0	0.0	3.0	0.0	0.0

Appendix 27.11 ends here